INLAND COUNTIES
EMERGENCY MEDICAL AGENCY
*Serving*
San Bernardino, Inyo & Mono Counties

# POLICY AND PROTOCOL MANUAL

# JULY 1, 2026

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# AEMT CERTIFICATION

## I. PURPOSE

To define requirements for the certification/recertification of an eligible applicant as an Advanced Emergency Medical Technician (AEMT) recognized in the State of California by the ICEMA Medical Director.

## II. ELIGIBILITY

To be eligible for initial certification, an applicant shall meet the following requirements:

- Possess a current EMT certificate in the State of California and an AEMT course completion record or other documented proof of successful completion of the topics contained in an approved AEMT training program.
- Complete a criminal record clearance by the Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI). Refer to ICEMA Reference #1070 - Criminal History Background Checks (Live Scan).
- Meet one of the following criteria:
  - Pass the National Registry of Emergency Medical Technicians (NREMT) - AEMT written and skills examination, possess a current and valid NREMT - AEMT card and documentation of successful completion of an AEMT course.
  - Pass the National Registry of Emergency Medical Technicians (NREMT) - AEMT written and skills examination and possess a current and valid out-of-state AEMT certification card.
  - Possess a current and valid NREMT - AEMT card.
  - Possess a current and valid out-of-state or NREMT - AEMT certification or EMT-P license.
  - Possess a valid California license as a Physician, Registered Nurse, or a Physician Assistant and:
    - Documentation that applicant's training included the required course content contained in the U.S. Department of Transportation (DOT) National EMS Education Standards.
    - Documentation of five (5) ALS contacts in a prehospital field internship.

**NOTE**: An applicant currently licensed in California as an EMT-P is deemed to be certified as an AEMT with no further testing required **except** when the EMT-P license is under suspension. In the case of an EMT-P license under suspension, the EMT-P shall apply to ICEMA for AEMT initial certification.

## III. PROCEDURE

**Initial Certification**

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov, that includes:
  - Copy of a valid government issued photo identification.
  - Copy of valid EMT certification card issued in California.
  - Copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Health Care Provider CPR card or equivalent. Online course is acceptable with written documentation of skills portion.
  - Copy of completed Live Scan form.
  - Copy of valid NREMT - AEMT card.
  - Confirmation that the applicant is not precluded from certification for reasons defined in the California Health and Safety Code, Section 1798.200
  - Disclosure of any certification or licensure action taken against any health-related certification/license (EMT, AEMT, EMT-II or EMT-P). This includes any denial of certification by a local EMS agency (LEMSA), or in the case of an EMT-P, licensure denial/action by the California Emergency Medical Services Authority (EMSA), active investigations and actions taken in other states.
- Submit the established ICEMA and State EMSA fee. Fees paid for certification are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.

  **NOTE**: If the applicant is not currently an ICEMA certified EMT, the State EMSA will require a new Live Scan for ICEMA and an initial State EMSA fee.
- The AEMT shall be responsible for notifying ICEMA of any and all changes in name, employer, email and/or mailing address within 30 calendar days of change. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.
- The AEMT shall be responsible for notifying ICEMA of any and all subsequent arrests and/or convictions, during the certification period.
- Comply with other reasonable requirements, as may be established by ICEMA.

Effective Dates

The effective date of certification shall be the date the card is issued. The expiration date shall be the last day of the month two (2) years from the effective date.

**Recertification**

To recertify as an AEMT, an applicant shall:

- Possess a current AEMT certification issued in California.

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov, that includes:
  - Copy of a valid government issued photo identification.
  - Copy of valid AEMT certification card issued in California, unless certified by ICEMA.
  - Copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross Professional Rescuer CPR card or equivalent. Online course is acceptable with written documentation of skills portion.
  - Copy of completed AEMT skills competency verification form, EMSA-AEMT.
  - Skills competency shall be verified by direct observation of an actual or simulated patient contact. Skills competency shall be verified by an applicant who is currently certified or licensed as an AEMT, EMT-P, Registered Nurse, Physician Assistant, or Physician and who shall be designated as part of a skills competency verification process approved by ICEMA.
  - Proof of at least 36 hours of continuing education (CE) hours from an approved CE provider.
  - Confirmation the applicant is not precluded from certification for reasons defined in the California Health and Safety Code, Section 1798.200.
  - Disclosure of any certification or licensure action taken against any health-related certification/license (EMT, AEMT, EMT-II or EMT-P). This includes any denial of certification by a LEMSA, or in the case of an EMT-P, licensure denial/action by the EMSA, active investigations and actions taken in other states.
- Submit the established ICEMA and State EMSA fee. Fees paid for certification are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.

  **NOTE**: If the applicant is not currently an ICEMA certified EMT, the EMSA will require a new Live Scan for ICEMA and an initial State EMSA fee.
- The AEMT shall be responsible for notifying ICEMA of any and all changes in name, employer, email and/or mailing address within 30 calendar days of change. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.
- The AEMT shall be responsible for notifying ICEMA of any and all subsequent arrests and/or convictions, during the certification period.
- Comply with other requirements as may be set forth herein.

Effective Dates

If the AEMT recertification requirements are met within six (6) months prior to the expiration date, the effective date of certification shall be the date immediately following the expiration date of the current certificate. The certification expiration date will be the final day of the final month of the two (2) year period.

If the AEMT recertification requirements are met greater than six (6) months prior to the expiration date, the effective date of certification shall be the date the card is issued. The expiration date shall be the last day of the month two (2) years from the effective date.

**Expiration While Deployed for Active Duty**

An applicant who is deployed for active duty with a branch of the Armed Forces of the United States, whose AEMT certificate expires during the time the applicant is on active duty or less than six (6) months from the date the applicant is deactivated/released from active duty, may be given an extension of the expiration date of his/her AEMT certificate for up to six (6) months from the date of the applicant's deactivation/release from active duty in order to meet the renewal requirements for his/her AEMT certificate upon compliance with the following provisions:

- Provide documentation from the respective branch of the Armed Forces of the United States verifying the applicant's dates of activation and deactivation/release from active duty.

- If there is no lapse in certification, meet the requirements of "Recertification" section of this policy. If there is a lapse in certification, meet the requirements listed in the "Recertification After Lapse in Certification" section of this policy.

- Provide documentation showing that the CE activities submitted for the certification renewal period were taken not earlier than 30 days prior to the effective date of the applicant's AEMT certificate that was valid when he/she was activated for duty and not later than six (6) months from the date of deactivation/release from active duty.

- For an applicant whose active duty required him/her to use his/her AEMT skills, credit may be given for documented training that meets the requirements contained in ICEMA Reference #2020 - EMT Continuing Education Requirements while the applicant was on active duty. The documentation shall include verification from the applicant's Commanding Officer attesting to the classes attended.

**Recertification After Lapse in Certification**

The following requirements shall apply to an applicant whose AEMT certification has lapsed to be eligible for recertification:

- Lapse of less than six (6) months:

  Complete all requirements under AEMT Recertification above.

- Lapse of six (6) months or more, but less than 12 months:

  - Complete all requirements under AEMT Recertification above.

  - Complete an additional 12 hours of continuing education for a total of 48 hours of training.

- Lapse of 12 months or more, but less than 24 months:

  - Complete all requirements under AEMT Recertification above.

  - Complete an additional 24 hours of continuing education for a total of 60 hours of training.

- Pass the NREMT - AEMT certifying exam.

- Lapse of 24 months or more:
  - Complete an entire AEMT course, **and**
  - Comply with all requirements of Initial Certification as set forth in this policy.

Effective Dates

The effective date of certification shall be the date the card is issued. The expiration date shall be the last day of the month two (2) years from the effective date.

## IV. REFERENCES

| Number | Name |
|---|---|
| 1070 | Criminal History Background Checks (Live Scan) |
| 2020 | EMT Continuing Education Requirements |

# EMT CERTIFICATION

## I. PURPOSE

To define requirements for certification/recertification of an eligible applicant as an Emergency Medical Technician (EMT) recognized in the State of California.

## II. ELIGIBILITY

To be eligible for initial certification, an applicant shall meet the following requirements:

- Be 18 years of age or older.
- Complete a criminal record clearance by the Department of Justice (DOJ) and the Federal Bureau of Investigation (FBI). Refer to ICEMA Reference #1070 - Criminal History Background Checks (Live Scan) prior to application for certification.
- Meet one of the following criteria:
  - Pass the National Registry of Emergency Medical Technicians (NREMT) - EMT written and skills examination, possess a current and valid NREMT - EMT card and documentation of successful completion of an initial EMT course (California or out-of-state) within two (2) years of the date of application, **or**
  - Pass the NREMT - EMT written and skills examination within two (2) years from the date of application for EMT certification and possess a current and valid out-of-state EMT certificate, **or**
  - Possess a current and valid NREMT - EMT, Advanced EMT (AEMT), or Paramedic (EMT-P) certificate, **or**
  - Possess a valid out-of-state AEMT or EMT-P certificate, **or**
  - Possess a current and valid California AEMT or a current and valid California EMT-P license.

**NOTE**: An EMT shall only be certified by one (1) certifying entity during a certification period.

## III. PROCEDURES

**<u>Initial Certification</u>**

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov, that includes:
  - A copy of a valid government issued photo identification.
  - A copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Healthcare Provider card or equivalent.
  - A copy of completed Live Scan form.
  - A copy of a valid certification as listed in Section II above.

- Disclose any prior and/or current certification, licensure, or accreditation actions:
  - Against an EMT, or AEMT certificate, or any denial of certification by a local EMS agency (LEMSA), including any active investigations.
  - Against an EMT-P license, or any denial of licensure by the authority, including any active investigation.
  - Against any EMS related certification or license of another state or other issuing entities, including denial and any active investigations, **or**
  - Against any health-related license.
- Disclose any pending or current criminal investigations.
- Disclose any prior convictions.
- Disclose each certifying entity or LEMSA to which the applicant has applied for certification in the previous 12 months.

- Submit the established ICEMA and State EMSA fee. Fees paid for certification are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.
- The EMT shall be responsible for notifying the certifying entity of her/his proper and current mailing address and shall notify the certifying entity in writing within 30 calendar days of any changes of the mailing address, giving both the old and the new address, and EMT registry number. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.
- The EMT shall be responsible for notifying ICEMA of any and all subsequent arrests and/or convictions, during the certification period.
- Comply with other requirements as may be set forth herein.

Effective Dates

The effective date of initial certification shall be the day the certificate is issued. The expiration date for an initial EMT certificate shall be the last day of the month two (2) years from the effective date of the initial certification.

**Recertification**

To recertify as an EMT, an applicant shall:

- Possess a current EMT certification issued in California.
- Meet one (1) of the following continuing education (CE) requirements:
  - Successfully complete a 24-hour refresher course from an approved EMT training program within the 24 months prior to applying for renewal, or
  - Obtain at least 24 hours of CE, within the 24 months prior to applying for renewal, from an approved CE provider.

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov, that includes the requirements listed in Section III above.

- Complete the criminal history background check requirements when changing certifying entities. Refer to ICEMA Reference #1070 - Criminal History Background Checks (Live Scan).

- Submit a completed skills competency verification form, EMSA-SCV (01/17).

- Skills competency shall be verified by direct observation of an actual or simulated patient contact. Skills competence shall be verified by an individual who is currently certified or licensed as an EMT, AEMT, EMT-P, Registered Nurse, Physician's Assistant, or Physician and who shall be designated by an EMS approved training program, or an EMS service provider. Verification of skills competence shall be valid for a maximum of two (2) years for the purpose of applying for recertification.

- Starting July 1, 2019, EMTs renewing their certification for the first time shall submit documentation of successful completion of the following training at an approved EMT training program or approved CE provider:

  - The use and administration of Naloxone or another opioid antagonist.

  - The use and administration of Epinephrine by auto-injector.

  - The use of a glucometer.

- Submit the established ICEMA and State EMSA fee. Fees paid for certification are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.

  **NOTE**: If the applicant is not currently an ICEMA certified EMT, the EMSA will require a new Live Scan for ICEMA and an initial State EMSA fee.

- The EMT shall be responsible for notifying the certifying entity of her/his proper and current mailing address and shall notify the certifying entity in writing within 30 calendar days of all changes of the mailing address, giving both the old and the new address, and EMT registry number. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.

**Expiration While Deployed for Active Duty**

A California certified EMT who is a member of the Armed Forces of the United States and whose certification expires while deployed on active duty, or whose certification expires less than six (6) months from the date they return from active duty deployment, with the Armed Forces of the United States, shall have six (6) months from the date they return from active duty deployment to complete requirements for recertification noted above.

In order to qualify for this exception, the applicant shall:

- Submit proof of his or her membership in the Armed Forces of the United States, **and**

- Submit documentation of his or her deployment starting and ending dates.

- CE credit may be given for documented training that meets the requirements of the California Code of Regulations, Title 22, Division 9, Chapter 11.

- The CE documentation shall include verification from the individual's Commanding Officer attesting to the training attended.

Effective Dates

- If the EMT renewal requirements are met within six (6) months prior to the expiration date, the effective date of renewal shall be the date immediately following the expiration date of the current certificate. The certification expiration date will be the last day of the month, two (2) years from the effective date.

- If requirements are met more than six (6) months prior to the expiration date, the effective date of renewal shall be the date the applicant satisfactorily completes all renewal requirements and has applied for certification. The certification expiration date will be the last day of the month two (2) years from the effective date.

**Reinstatement of an Expired California EMT Certificate**

The following requirements apply to applicants who wish to be eligible for reinstatement after their California EMT certificates have expired:

- Lapse of less than six (6) months the applicant must complete all requirements in Section III, under Recertification above.

- Lapse of six (6) months or more, but less than 12 months:

  - Complete all requirements in Section III, under Recertification above.

  - Complete one (1) of the following CE requirements:

    - Successfully complete a 24-hour refresher course from an approved EMT training program, and 12 hours of CE, within the 24 months prior to applying for reinstatement, **or**

    - Obtain at least 36 hours of CE, within the 24 months prior to applying for reinstatement, from an approved CE provider.

- Lapse of 12 months or more:

  - Complete all requirements in Section III, under Recertification above.

  - Complete one (1) of the following continuing education requirements:

    - Successfully complete a 24-hour refresher course from an approved EMT training program, and 24 hours of CE, within the 24 months prior to applying for reinstatement, **or**

    - Obtain at least 48 hours of CE, within the 24 months prior to applying for reinstatement, from an approved CE provider.

- Pass the National registry cognitive and psychomotor exams, within two (2) years of the date of application for EMT reinstatement unless the individual possesses a current and valid EMT, AEMT, or EMT-P National Registry Certificate or a current and valid AEMT certificate or EMT-P license.

## IV. REFERENCES

| **Number** | **Name** |
|---|---|
| 1070 | Criminal History Background Checks (Live Scan) |

# EMT-P ACCREDITATION

## I. PURPOSE

To define the accreditation and reverification requirements for an eligible applicant to practice as an Emergency Medical Technician - Paramedic (EMT-P) within the ICEMA region.

## II. ELIGIBILITY

- Possess a current California EMT-P License.
- Current employment as an EMT-P by an authorized Advance Life Support (ALS) service provider or by an EMS provider that has formally requested ALS authorization in the ICEMA region.

## III. PROCEDURE

**Accreditation/Reverification**

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov that includes:
  - Copy of a valid government issued photo identification.
  - Copy of a valid California EMT-P license.
  - Copy of completed EMT-P skills competency verification form, or electronic verification from employer that skills competency was completed.
  - Skills competency shall be verified by direct observation of an actual or simulated patient contact. Skills competency shall be verified by an applicant who is currently certified or licensed as an EMT-P, Registered Nurse, Physician Assistant, or Physician and who shall be designated as part of a skills competency verification process approved by ICEMA.
  - Copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Healthcare Provider card or equivalent. Online course is acceptable with written documentation of skills portion.
  - Copy of a valid American Heart Association Advanced Cardiac Life Support (ACLS) card. ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor. American Red Cross Advanced Life Support (ALS) provider card will be recognized, and online course is acceptable with written documentation of skills portion.
- Submit the established ICEMA fee. Fees paid for accreditation are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.
- The EMT-P shall be responsible for notifying ICEMA of any and all changes in name, employer, e-mail and/or mailing address within 30 calendar days of change. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.

**NOTE**: If ICEMA accreditation has lapsed for more than one (1) year, the applicant must comply with the initial accreditation procedure.

**Initial Accreditation**

- Pass the ICEMA EMT-P accreditation written examination with a minimum score of 80 percent (80%).
  - A candidate who fails to pass the ICEMA written examination on the first attempt will have to pay the ICEMA approved fee and re-take the exam with a minimum passing score of 85 percent (85%).
  - A candidate who fails to pass the ICEMA written examination on the second attempt will have to pay the established ICEMA fee and provide documentation of eight (8) hours of remedial training in ICEMA protocols, policies/procedures given by their EMS/QI Coordinator and pass the ICEMA exam with a minimum passing score of 85 percent (85%).
  - If the candidate fails to pass the ICEMA written examination on the third attempt, the candidate will be ineligible for accreditation for a period of six (6) months, at which time candidate must reapply and successfully complete all initial accreditation requirements.

ICEMA accreditation will be effective from the date all requirements are verified and expires on the same date as the California EMT-P license, provided all requirements continue to be met.

MICN AUTHORIZATION - Base Hospital, Administrative, Flight Nurse, Critical Care Transport

## I. PURPOSE

To define the requirements required for a Registered Nurse (RN) to obtain a Mobile Intensive Care Nurse (MICN) authorization within the ICEMA region.

## II. POLICY

- All RNs working in a capacity that will require them to provide Advanced Life Support (ALS) services or to issue ICEMA protocol directed instructions to emergency medical services (EMS) field personnel within the ICEMA region shall submit a completed application and meet criteria established by the ICEMA Medical Director.

- All MICNs shall notify ICEMA of any and all changes in name, email and/or mailing address within 30 calendar days of change. This notification/change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.

- All MICNs shall notify ICEMA immediately of termination of their employment with an approved entity and/or employment by another ICEMA approved base hospital and/or non-base hospital employer. If employment with an approved EMS provider is terminated, the MICN authorization will be rescinded unless proof of other qualifying employment is received by ICEMA within 30 days.

- MICNs may hold authorization in multiple categories but must apply and submit all required documentation. MICN authorization may be added to or converted to another MICN category by meeting all requirements for authorization in that category.

## III. PROCEDURE

**General Procedures for MICN Authorization/Reauthorization**

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov for each MICN category applied for that includes:

  - Copy of a valid government issued photo identification.

  - Copy of a valid California RN license.

  - Proof of completion of an ICEMA approved MICN course with a passing score of at least 80 percent (80%). (MICN-BH Initial Authorization Only).

  - Proof of completion of ICEMA approved EMT-P protocol test (Initial Authorization Only).

  - Proof of completion of field care audits (3 hours annually), Skills training, and participate in 1 8-hour ride-out every two years.

  - Copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Healthcare Provider card or equivalent. Online course is acceptable with written documentation of skills portion.

- Copy of a valid American Heart Association Advanced Cardiac Life Support (ACLS) card or Red Cross Advanced Cardiac Life Support (ACLS) card. ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor.

- Submit the established ICEMA fee. Additional categories may be applied for without additional fee. Authorization cards issued within six (6) months of nursing license expiration are exempt from reauthorization fee. Fees paid for authorization are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.

**MICN Authorization by Challenge**

- Meet one (1) of the following eligibility requirements:

  - MICN in another county if approved by the ICEMA Medical Director.

  - An eligible RN who has been a MICN in ICEMA region who has let authorization lapse longer than six (6) months.

  The MICN that is challenging authorization will be required to complete the required skills training, ride outs, field care audits, and take the ICEMA written exam with a passing score of 80 percent (80%), unless waived by the ICEMA Medical Director,

ICEMA authorization will be effective from the date all requirements are verified and expire on the same date as the California RN license, provided all requirements continue to be met.

# RCP AUTHORIZATION

## I. PURPOSE

To define requirements for authorization/reauthorization of an eligible applicant as a Respiratory Care Practitioner (RCP) while working for an approved specialty care transport provider in the ICEMA region.

## II. ELIGIBILITY

- Possess a current California RCP license.
- Current employment as an RCP by an ICEMA approved Advanced Life Support (ALS) or Basic Life Support (BLS) service provider.
- RCPs shall have a minimum of two (2) years' critical care respiratory care experience in an acute care hospital within 18 months prior to initial application.

## III. PROCEDURE

**Authorization/Reauthorization**

- Submit a completed online application using the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov that includes:
  - Copy of a valid government issued photo identification.
  - Copy of a valid California RCP license.
  - Copy of a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Healthcare Provider card or equivalent.
  - Copy of a valid American Heart Association Advanced Cardiac Life Support (ACLS) card. ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor.
- Submit any established ICEMA fees. Fees paid for authorization are not refundable or transferable. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.
- The RCP shall be responsible for notifying ICEMA of any and all changes in name, employer, email and/or mailing address within 30 calendar days of change. This notification change may be made through the ICEMA EMS Credentialing portal found on the ICEMA website at ICEMA.sbcounty.gov.
- ICEMA authorization will be effective from the date all requirements are verified and expires on the same date as the California RCP license, provided all requirements continue to be met.

EMT/AEMT INCIDENT INVESTIGATION, DETERMINATION OF ACTION, NOTIFICATION, AND ADMINISTRATIVE HEARING PROCESS

## I. PURPOSE

To establish a policy and procedure governing reportable situations and the evaluation and determination regarding whether or not disciplinary cause exists.

## II. POLICY

Any information received from any source, including discovery through medical audit or follow-up on complaints, which suggests a violation of, or deviation from, State or local EMS laws, regulations, policies, procedures or protocols will be evaluated pursuant to this policy and consistent with the California Code of Regulations, Title 22, Division 9, Chapter 6.

## III. PROCEDURE

**Responsibilities of Relevant Employer**

- Under the provisions of the California Code of Regulations and this policy, relevant employers:
  - May conduct investigations to determine disciplinary cause.
  - Upon determination of disciplinary cause, the relevant employer may develop and implement a disciplinary plan, in accordance with the California Emergency Medical Services Authority (EMSA) Model Disciplinary Orders and Conditions of Probation for EMT and Advanced EMTs (EMSA Document No. 134).
- The relevant employer shall submit that disciplinary plan to ICEMA along with the relevant findings of the investigation related to disciplinary cause, within three (3) working days of adoption of the disciplinary plan.
- The employer's disciplinary plan may include a recommendation that the medical director consider taking action against the holder's certificate to include denial of certification, suspension of certification, revocation of certification, or placing a certificate on probation.
- The relevant employer shall notify the ICEMA Medical Director within three (3) working days after an allegation has been validated as potential for disciplinary cause.
- The relevant employer shall notify the ICEMA Medical Director within three (3) working days of the occurrence of any of following:
  - The employee is terminated or suspended for a disciplinary cause,
  - The employee resigns or retires following notification of an impending investigation based upon evidence that would indicate the existence of a disciplinary cause, or
  - The employee is removed from employment-related duties for a disciplinary cause after the completion of the employer's investigation.

**Jurisdiction of the ICEMA Medical Director**

- The ICEMA Medical Director, or in the case where the certificate was issued by a non-local EMS agency (LEMSA) within the ICEMA region, shall conduct investigations to validate allegations for disciplinary cause when the EMT or AEMT is not an employee of a relevant employer or the relevant employer does not conduct an investigation. Upon determination of disciplinary cause, the ICEMA Medical Director may take certification action as necessary against a certificate holder.

- The ICEMA Medical Director may, upon determination of disciplinary cause and according to the provisions of this policy, take certification action against an EMT or AEMT to deny, suspend, revoke, or place a certificate holder on probation, upon the findings of any of the actions listed in the California Health and Safety Code, Section 1798.200 (c) and for which any of the following conditions are true:

  - The relevant employer, after conducting an investigation, failed to impose discipline for the conduct under investigation, or the ICEMA Medical Director makes a determination that discipline imposed by the relevant employer was not in accordance with the Model Disciplinary Orders (MDOs) and the conduct of the certificate holder constitutes grounds for certification action.

  - The ICEMA Medical Director determines, following an investigation conducted in accordance with this policy, that the conduct requires certification action.

- The ICEMA Medical Director, after consultation with the relevant employer or without consultation when no relevant employer exists, may temporarily suspend, prior to a hearing, a certificate holder upon a determination of the following:

  - The EMT or AEMT has engaged in acts or omissions that constitute grounds for revocation of the certificate; and

  - Permitting the EMT or AEMT to continue to engage in certified activity without restriction poses an imminent threat to public health and safety.

- If the ICEMA Medical Director takes any certification action, ICEMA shall notify the State EMS Authority of the findings, the certification action taken and enter the information into the State Registry.

**Evaluation of Information**

- A relevant employer who receives an allegation of conduct listed in the California Health and Safety Code, Section 1798.200 (c) and the allegation is validated, shall notify the ICEMA Medical Director, within three (3) working days, of the certificate holder's name, certification number, and the allegation(s).

- When ICEMA receives a complaint against a certificate holder, ICEMA shall forward the original complaint and any supporting documentation to the relevant employer for investigation, if there is a relevant employer, within three (3) working days of receipt of the information. If there is no relevant employer or the relevant employer does not wish to investigate the complaint, the ICEMA Medical Director shall conduct the investigation.

- The relevant employer or ICEMA Medical Director shall conduct an investigation of the allegations in accordance with the provisions of this policy, if warranted.

**Investigations Involving Firefighters**

- The rights and protections described in Chapter 9.6 of the Government Code shall only apply to a firefighter during events and circumstances involving the performance of his or her official duties.

- All investigations involving certificate holders who are employed by a public safety agency as a firefighter shall be conducted in accordance with Chapter 9.6 of the Government Code, Section 3250 et. seq.

**Due Process**

The certification action process shall be in accordance with Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

**Determination of Action**

- Certification action shall be taken as a result of the findings of the investigation.

- Upon determining the disciplinary or certification action to be taken, the relevant employer or ICEMA Medical Director shall complete and place in the personnel file or any other file used for any personnel purposes by the relevant employer or ICEMA, a statement certifying the decision made and the date the decision was made. The decision must contain findings of fact and a determination of issues, together with the disciplinary plan and the date the disciplinary plan shall take effect.

- In the case of a temporary suspension order pursuant to the California Code of Regulations, Section 100209 (c), it shall take effect upon the date the notice required by the California Code of Regulations, Section 100213, is mailed to the certificate holder.

- For all other certification actions, the effective date shall be 30 days from the date the notice is mailed to the applicant for, or holder of, a certificate unless another time is specified or an appeal is made.

**Temporary Suspension Order**

- The ICEMA Medical Director may temporarily suspend a certificate prior to hearing if, the certificate holder has engaged in acts or omissions that constitute grounds for denial or revocation according to Section 100216(c) of the California Code of Regulations and if in the opinion of the ICEMA Medical Director permitting the certificate holder to continue to engage in certified activity would pose an imminent threat to the public health and safety.

- Prior to, or concurrent with, initiation of a temporary suspension order of a certificate pending hearing, the ICEMA Medical Director shall consult with the relevant employer.

- The notice of temporary suspension pending hearing shall be served by registered mail or by personal service to the certificate holder immediately, but no longer than three (3) working days from making the decision to issue the temporary suspension. The notice shall include the allegations that allowing the certificate holder to continue to engage in certified activities would pose an imminent threat to the public health and safety Within three (3) working days of the initiation of the temporary suspension by ICEMA, ICEMA and relevant employer shall jointly investigate the allegation in order for the ICEMA Medical Director to make a determination of the continuation of the temporary suspension.

- All investigatory information, not otherwise protected by the law, held by ICEMA and the relevant employer shall be shared between ICEMA, the relevant employer and the certificate holder via facsimile transmission or overnight mail relative to the decision to temporarily suspend.

- ICEMA shall serve within 15 calendar days an accusation pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code (Administrative Procedures Act).

- The temporary suspension order shall be deemed vacated if ICEMA fails to serve an accusation within 15 calendar days or fails to make a final determination on the merits within 15 calendar days after the Administrative Law Judge (ALJ) renders a proposed decision.

**Final Determination of Certification Action**

Upon determination of certification action following an investigation, and appeal of certification action pursuant to the California Code of Regulations, Section 100211.1, if the respondent chooses, the ICEMA Medical Director may take the following final actions on an EMT or AEMT certificate:

- Place the certificate holder on probation
- Suspension
- Denial
- Revocation

**Placement of a Certificate Holder on Probation**

The ICEMA Medical Director may place a certificate holder on probation any time an infraction or performance deficiency occurs which indicates a need to monitor the certificate holder's conduct in the EMS system, in order to protect the public health and safety. The term of the probation and any conditions shall be in accordance with the MDOs. The ICEMA Medical Director may revoke the EMT or AEMT certificate if the certificate holder fails to successfully complete the terms of probation.

**Suspension of a Certificate**

- The Medical Director may suspend an individual's EMT or AEMT certificate for a specified period of time for disciplinary cause in order to protect public health and safety.
- The term of the suspension and any conditions for reinstatement shall be in accordance with the MDOs.
- Upon the expiration of the term of suspension, the individual's certificate shall be reinstated only when all conditions for reinstatement have been met. The ICEMA Medical Director shall continue the suspension until all conditions for reinstatement have been met.
- If the suspension period will run past the expiration date of the certificate, the EMT or AEMT shall meet the recertification requirements for certificate renewal prior to the expiration date of the certificate.

**Denial or Revocation of a Certificate**

- The ICEMA Medical Director may deny or revoke any EMT or AEMT certificate for disciplinary cause that has been investigated and verified by application of this policy.

- The ICEMA Medical Director shall deny or revoke any EMT or AEMT certificate if any of the following apply to the applicant:

  - Has committed any sexually related offense specified under Section 290 of the Penal Code.

  - Has been convicted of murder, attempted murder, or murder for hire.

  - Has been convicted of two (2) or more felonies.

  - Is on parole or probation for any felony.

  - Has been convicted and released from incarceration for said offense during the preceding 15 years for the crime of manslaughter or involuntary manslaughter.

  - Has been convicted and released from incarceration for said offense during the preceding 10 years for any offense punishable as a felony.

  - Has been convicted of two (2) or more misdemeanors within the preceding five (5) years for any offense relating to the use, sale, possession, or transportation of narcotics or addictive or dangerous drugs.

  - Has been convicted of two (2) or more misdemeanors within the preceding five (5) years for any offense relating to force, threat, violence, or intimidation.

  - Has been convicted within the preceding five (5) years of any theft related misdemeanor.

  **NOTE**: "Felony" or "offense punishable as a felony" refers to an offense for which the law prescribes imprisonment in the state prison as either an alternative or the sole penalty, regardless of the sentence the particular defendant received.

- The ICEMA Medical Director may deny any application for certification or revoke an EMT or AEMT certificate if any of the following apply to the applicant:

- Has committed any act involving fraud or intentional dishonesty for personal gain within the preceding seven (7) years.

- Is required to register pursuant to the California Health and Safety Code, Section 11590.

- Sections 1 and 2 above shall not apply to convictions that have been pardoned by the Governor and shall only apply to convictions where the applicant/certificate holder was prosecuted as an adult.

- Sections 1 and 2 shall not apply to those EMTs or AEMTs who obtain their EMT or AEMT certificate prior to July 1, 2010; unless:

  - The certificate holder is convicted of any misdemeanor or felony after July 1, 2010.

- The certificate holder committed any sexually related offense specified under Section 290 of the Penal Code.

- The certificate holder failed to disclose to the certifying entity any prior convictions when completing his/her application for initial EMT or AEMT certification or certification renewal. Nothing in this Section shall negate an individual's right to appeal a denial of an EMT certificate pursuant to this policy.

- Certification action by the ICEMA Medical Director shall be valid statewide and honored by all certifying entities for a period of at least 12 months from the effective date of the certification action. An EMT or AEMT whose application was denied, or an EMT or AEMT whose certification was revoked by a medical director shall not be eligible for EMT or AEMT application by any other certifying entity for a period of at least 12 months from the effective date of the certification action. EMT or AEMTs whose certification are placed on probation must complete their probationary requirements with the LEMSA that imposed the probation.

**Notification of Final Decision of Certification Action**

- For the final decision of certification action, the ICEMA Medical Director shall notify the applicant/certificate holder and his/her relevant employer(s) of the certification action within 10 working days after making the final determination.

- The notification of final decision shall be served by registered mail or personal service and shall include the following information:

  - The specific allegations or evidence which resulted in the certification action.

  - The certification action(s) to be taken, and the effective date(s) of the certification action(s), including the duration of the action(s).

  - Which certificate(s) the certification action applies to in cases of holders of multiple certificates.

  - A statement that the certificate holder must report the certification action within 10 working days to any other LEMSA and relevant employer in whose jurisdiction s/he uses the certificate.

# CRIMINAL HISTORY BACKGROUND CHECKS (LIVE SCAN)

## I. PURPOSE

To provide information for Department of Justice (DOJ) and Federal Bureau of Investigation (FBI) background checks for applicants applying for certification/recertification as an Emergency Medical Technician (EMT) or Advanced Emergency Medical Technician (AEMT) recognized in California.

## II. GENERAL INFORMATION

Effective July 1, 2010, all EMTs/AEMTs must have a criminal history background check (Live Scan) on file with the certifying entity.

### Live Scan Forms

Live Scan forms can be printed from the ICEMA website at ICEMA.sbcounty.gov. **It is important that the information be entered onto the form exactly as outlined in the instructions. Failure to do so will require Live Scan resubmission and additional fees.**

Forms are also available at the Live Scan agencies. If printing from the ICEMA website, applicant must print three (3) completed copies: one for the Live Scan agency, one for ICEMA, and one for the applicant.

### Fees

For a list of current fees charged by the DOJ/FBI, go to http://oag.ca.gov/fingerprints/publications/contact.php. Fees related to certification are listed under "Certificates/Licenses/Permits". Additionally, each Live Scan agency charges a "rolling fee" that varies. Applicant is required to pay these fees to the Live Scan agency when submitting fingerprints.

### Live Scan Agencies

A listing is available on the ICEMA website at ICEMA.sbcounty.gov and includes hours of operation, cost, whether an appointment is necessary, and acceptable methods of payment.

### Conviction History

ICEMA will review all criminal convictions to determine EMT/AEMT certification eligibility. Decisions will be based on applicable State statutes and regulations and a careful review of documentation. If an applicant is denied, he/she has the right to request a hearing. In addition to certification actions, an EMT/AEMT certificate may be suspended or revoked based upon criminal history information. Applicants with a criminal conviction or who are involved in an active prosecution may experience a delay. Applicants should submit a written explanation explaining the case and copies of court documents to facilitate the decision process. For further information, refer to ICEMA Reference #1060 - EMT/AEMT Incident Investigations, Determination of Action, Notification, and Administration Hearing Process.

### What to Submit with Your Certification Application

Applicants must submit a copy of the Live Scan form with their certification paperwork. For additional certification information, refer to ICEMA Reference #1020 - EMT Certification and #1010 - AEMT Certification.

## III. REFERENCES

| Number | Name |
|---|---|
| 1010 | AEMT Certification |
| 1020 | EMT Certification |
| 1060 | EMT/AEMT Incident Investigations, Determination of Action, Notification, and Administration Hearing Process |

# EMT-P STUDENT FIELD INTERNSHIP REQUIREMENTS

## I. PURPOSE

To define the requirements for an Emergency Medical Technician - Paramedic (EMT-P) student intern to obtain a field internship in the ICEMA region.

**NOTE**: ICEMA approved preceptors are available to all training programs. ALS service providers may not reserve preceptors for specific training programs.

## II. PRECEPTOR ELIGIBILITY

In order for an EMT-P preceptor to maintain a current preceptor status, the EMT-P must precept at least one (1) student within the 2-year period following the completion of the ICEMA approved preceptor training workshop. If the EMT-P preceptor does not precept a student within that two (2) year time frame, they will need to re-take an ICEMA approved workshop or they will be removed from the approved preceptor roster. Continual preceptorship of at least one (1) student in the subsequent two (2) year cycles will maintain current preceptor status without requiring attendance at another ICEMA approved preceptor training workshop.

## III. EMT-P STUDENT INTERN ELIGIBILITY

- To be eligible for an EMT-P student field internship within the ICEMA region, an EMT-P student intern must:
  - Be currently enrolled in and have successfully completed the didactic and clinical rotations of an approved EMT-P training program.
  - Possess a valid American Heart Association BLS Healthcare Provider, American Red Cross BLS Healthcare Provider card or equivalent.
  - Possess a valid American Heart Association Advanced Cardiac Life Support (ACLS) card.
  - Be currently certified as an EMT, a California AEMT, or be registered as an EMT-Intermediate with the NREMT.
  - Have completed their hospital clinical shifts within the previous 90 days.

**NOTE**: CPR, ACLS, and EMT certification must be maintained throughout all phases of training.

## IV. PROCEDURE

**<u>ICEMA Approved EMT-P Training Program Student Intern</u>**

- The Program Director or clinical coordinator must submit the following documentation for each student interning in the ICEMA region:
  - The name of the qualified ICEMA preceptor and the name of the student they are assigned to. The program director or clinical coordinator must inform ICEMA of any changes in the assigned preceptor and/or ALS provider hosting the internship.

- A letter verifying the training program administered an exam on ICEMA's policies and protocols and that the student successfully passed the exam.
- The completed ICEMA Course Completion Record showing the date the student completed the clinical shifts (field internship must begin within 90 days from the end of the clinical rotation).
- Copy of a current EMT, California AEMT certification or NREMT EMT-Intermediate.
- Copy (front and back) of a valid American Heart Association BLS Healthcare Provider, American Red Cross Professional Rescuer CPR card or equivalent. Online course is acceptable with written documentation of skills portion.
- Copy (front and back) of a valid American Heart Association Advanced Cardiac Life Support (ACLS) card. ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor.

**Out-of-Region EMT-P Training Program Student Intern**

- The Program Director or clinical coordinator must submit the following documentation for each student interning in the ICEMA region:
  - A copy of the signed agreement between the training program and the approved ALS service provider hosting the internship.
  - The name of the qualified ICEMA preceptor and the name of the student they are assigned to. The program director or clinical coordinator must inform ICEMA of any changes in the assigned preceptor and/or ALS service provider hosting the internship.
  - The completed ICEMA Course Completion Record showing the date the student completed the clinical shifts (field internship must begin within 90 days from the end of the clinical rotation).
  - Copy of a current EMT, California AEMT certification or NREMT EMT-Intermediate.
  - Copy (front and back) of a valid American Heart Association BLS Healthcare Provider, American Red Cross Professional Rescuer CPR card or equivalent. Online course is acceptable with written documentation of skills portion.
  - Copy (front and back) of a valid American Heart Association Advanced Cardiac Life Support (ACLS) card. ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor.
  - Evidence of an orientation to the ICEMA region, including policies and procedures.
- After ICEMA has approved all documents, the EMT-P student intern must schedule and pass the ICEMA EMT-P accreditation written examination with a minimum score of 80 percent (80%).

- A candidate who fails to pass the ICEMA EMT-P accreditation written examination on the first attempt will be required to re-take the exam with a minimum passing score of 85 percent (85%).

- Notification of the examination results shall be provided to the program director of the EMT-P training program.

- An out-of-region EMT-P student intern may not begin internship prior to successfully passing the ICEMA written examination.

CONTINUING EDUCATION PROVIDER REQUIREMENTS

## I. PURPOSE

To define the requirements for approval of continuing education (CE) providers within the ICEMA region, as specified in the California Code of Regulations, Title 22, Division 9, Chapter 11, EMS Continuing Education.

## II. POLICY

- When two (2) or more CE providers cosponsor a course, only one (1) approved provider number may be used for that course, class or activity.
- The State EMS Authority (EMSA) shall be the agency responsible for approving CE providers for statewide public safety agencies and CE providers whose headquarters are located out-of-state if not approved by the Continuing Education Coordinating Board for Emergency Medical Services (CECBEMS) or approved by the EMS offices of other states or courses in physical, social or behavioral sciences offered by accredited colleges and universities.
- An approved CE provider may sponsor an organization or individual located within California that wants to provide a single activity or course. The CE provider shall be responsible for ensuring the course meets all requirements and shall serve as the CE provider of record. The CE provider shall review the request to ensure that the course/activity complies with the minimum requirements.

## III. PROCEDURE

- To become an approved CE provider, an organization or individual shall submit an application packet at least 60 days prior to the date of the first educational activity. The application packet shall include:
  - Name and address of the applicant.
  - Name of the program director, program clinical director, and contact person, if other than the program director or clinical director.
  - Type of organization requesting approval.
  - Program director and clinical director resumes, including copies of all licenses/certifications and evidence of 40 hours in teaching methodology for the program director.
  - Established ICEMA fee. ICEMA fees are published on the ICEMA website at ICEMA.sbcounty.gov.
- The applicant will be notified in writing within 14 working days that their request was received and informed if any information is missing.
- Notice of approval or disapproval of the application will be made in writing to the applicant within 60 calendar days of receipt of the completed application.

- If the application is approved, an EMS CE provider number will be issued and valid for four (4) years.

- If an application is disapproved and the organization or individual elects to submit a new application, the application packet must include all items listed in Section I, Item 1 above.

## IV. MAINTAINING RECORDS

- All records will be maintained by the CE provider for four (4) years, and shall include:

  - Complete outlines for each course given including a brief overview, instructional objectives, comprehensive topical outline, method of evaluation and a record of participant performance.

  - Record of time, place, date and CE hours granted for each course.

  - A resume and copies of licenses/certifications for all instructors.

  - Originals of class rosters (hard copies).

- Submit an ICEMA approved CE roster:

  - Signed by course participants, including the name and license/certification/ accreditation number of each participant. Signing for another individual is strictly prohibited and subject to actions against certification or licensure.

  - A line should be drawn through any empty lines after the last attendee has signed the roster.

  - Copies of class rosters shall be sent to ICEMA within 15 days of class completion. These rosters shall be considered final, and revisions will not be accepted.

  - A record of all CE certificates issued.

- CE providers will notify ICEMA within 30 calendar days of any changes in name, address, and telephone number of the program director, clinical director or contact person.

- All records shall be made available to ICEMA upon request.

- The Clinical Director shall submit a complete list of courses with the number of individuals attending each course on a monthly basis to ICEMA on the ICEMA approved form. The form shall be submitted to ICEMA by the 10$^{th}$ of every month for the previous month. If no classes were taught, submit form with “No Classes This Month”

- It is the responsibility of the CE provider to submit an application for renewal with the established ICEMA fee at least 60 calendar days prior to the expiration date in order to maintain continuous approval.

- All CE provider requirements required by State legislation must be met and maintained.

# EMT CONTINUING EDUCATION REQUIREMENTS

## I. PURPOSE

To define requirements for continuing education for certified Emergency Medical Technicians (EMTs) in the ICEMA region, per California Code of Regulations, Title 22, Division 9, Chapter 11, EMS Continuing Education.

## II. POLICY

To maintain certification, an EMT shall:

- Obtain at least 24 hours continuing education hours (CEHs) from an approved continuing education provider, or
- Complete a 24-hour refresher course meeting National Standard Curriculum from an approved EMT training program.
- Complete a verification of skills competency, EMSA Form SCV.

## III. PROCEDURE

- CEHs may be earned by any of the following methods:
  - Each hour of structured clinical or field experience when monitored by a preceptor assigned by an EMS training program, EMS provider, hospital or alternate base hospital approved according to this section.
  - Each hour of media based/serial production CE, e.g., films, videos, audiotape programs, magazine articles offered for CE credit, home study, computer simulations or interactive computer modules. A maximum of 12 CEHs may be obtained in a 24-hour period.
  - Classroom, didactic and/or skills laboratory experience with direct instructor interaction.
  - Organized field care audits of patient care reports.
  - Advanced topics in subject matter outside the scope of practice of the certified or licensed EMS field personnel but directly relevant to emergency medical care.
  - Courses offered by accredited universities and colleges, including junior and community colleges. Acceptable courses include physical, social or behavioral sciences, e.g., anatomy, physiology, sociology, psychology). Credit shall be given on the following basis:
    - One academic quarter unit shall equal 10 CEHs.
    - One academic semester unit shall equal 15 CEHs.
  - Structured clinical experience, with instructional objectives, to review or expand the clinical expertise of the individual.

- At least sixteen (16) hours of required CEHs must come from courses involving medical management of patients. Non-medical EMS system courses (e.g., ICS, HazMat FRO, Vehicle Extrication, Rope Rescue, etc.) will be limited to eight (8) hours maximum per certification cycle.

- Precepting EMS students or EMS field personnel as a hospital clinical preceptor, as assigned by the EMS training program, EMS provider, hospital or base hospital. In order to receive CEHs for precepting, all the requirements for a course including objectives and student evaluations of the preceptors must be met. CEHs for precepting are limited to a maximum of 50 percent (50%) of required CEHs per licensure/certification cycle for all EMS field personnel.

- At least 50 percent (50%) of the required CEHs must be in an instructor-based format, where an instructor is readily available to the student to answer questions, provide feedback, (e.g., on-line CE course where an instructor is available to the student). ICEMA shall determine whether a CE course, class or activity is instructor based.

- An instructor for a CE course, class or activity will earn credit equal to the same number of CEHs applied to the course, class or activity. This shall be documented on a separate roster, clearly labeled “Instructor”, and include the course name. Credit will be given, one (1) time only, for each specific course during an EMT certification period.

- Credit may be given for taking the same CE course, class or activity no more than two (2) times during a single EMT certification period.

- At the time of the educational event, the student must sign and provide certification/licensure number on the Continuing Education Course Roster. Failure to do so will result in loss of CE credit.

- An individual shall provide proof of approved CEHs obtained to ICEMA upon request and at the time of application.

- An individual who is currently licensed in California as a paramedic (EMT-P), or certified as an EMT-II, or who has been certified within six (6) months of the date of application, may be given credit for CEHs earned as an EMT-P or AEMT to satisfy the CE requirement for EMT recertification.

- CE credit may be obtained at any time throughout the current EMT certification period.

# PUBLIC SAFETY FIRST AID TRAINING PROGRAM APPROVAL

## I. PURPOSE

To define the requirements for Public Safety First Aid and CPR training program approval within the ICEMA region, as specified in the California Code of Regulations, Title 22, Division 9, Chapter 1.5, First Aid and CPR Standards and Training for Public Safety Personnel.

## II. POLICY

- A program in public safety first aid, including CPR and AED, shall comply with either:
  - A course of at least 21 hours in first aid equivalent to the standards of the American Red Cross and Healthcare provider level CPR and AED equivalent to the standards of the American Heart Association in accordance with the course content contained in Section 10017 of the above code, **or**
  - U.S. Department of Transportation's emergency medical responder (EMR) course which includes first aid practices, CPR and AED.

## III. PROCEDURE

- For those programs requiring approval by ICEMA the following shall be submitted to ICEMA (form available on the ICEMA website at ICEMA.sbcounty.gov):
  - Name of the sponsoring institution, organization, or agency.
  - Detailed program outline.
  - Final written examination with pre-established scoring standards.
  - Skills competency testing criteria, with pre-established scoring standards.
  - Name and qualifications of instructor(s).
- The applicant will be notified in writing within 21 working days that their request was received and informed if any information is missing.
- Notice of approval or disapproval of the application will be made in writing to the applicant.
- If the application is approved, the training program will be valid for four (4) years.
- ICEMA must be notified of any program changes within 30 calendar days.

# PUBLIC SAFETY OPTIONAL SKILLS COURSE APPROVAL

## I. PURPOSE

To define the requirements for Public Safety Optional Skills Course approval within the ICEMA region, per the California Code of Regulations, Title 22, Division 9, Chapter 1.5, First Aid and CPR Standards and Training for Public Safety Personnel.

## II. PROCEDURE

- Submit an original application indicating the type of optional skills course. The Public Safety Optional Skills Approval Application is available on the ICEMA website at ICEMA.sbcounty.gov.
- For those courses requiring approval by ICEMA, the following shall be submitted:
  - Name of the sponsoring institution, organization, or agency.
  - Detailed course outline.
  - Final written examination with pre-established scoring standards.
  - Skills competency testing criteria, with pre-established scoring standards.
  - Name and qualifications of instructor(s).
- The applicant will be notified in writing within 21 working days that the request was received and informed if any information is missing.
- Notice of approval or disapproval of the application will be made in writing to the applicant.
- If the application is approved, the course will be valid for four (4) years.
- ICEMA must be notified of any course changes within 30 calendar days.

## III. TRAINING/RETRAINING

Training in each optional skill shall consist of a minimum of one (1) hour presentation and shall result in the public safety personnel being competent in the performance of the optional skill and administration of the associated medication. The training shall include but not be limited to:

- Common causative agents.
- Associated signs and symptoms.
- Assessment findings.
- Need for appropriate personal protective equipment and scene safety awareness.

- Profile of medication administered to include:
  - Drug classification.
  - Mechanisms of drug action.
  - Indications and contraindications.
  - Dose and route of administration.
  - Side/adverse effects.
- Administration of the medication to include:
  - Site selection and administration.
  - Medical asepsis.
  - Disposal of contaminated items and sharps.

At the completion of this training, the student shall complete a competency based written and skills examination for administration of the medication that includes:

- Assessment of when to administer medication.
- Managing a patient before and after administering the medication.
- Using universal precautions and body substance isolation procedures during medication administration.
- Demonstrating aseptic technique during medication administration.
- Demonstrating preparation and administration of parenteral medications by a route other than intravenous.
- Proper disposal of contaminated items and sharps.

TACTICAL CASUALTY CARE TRAINING PROGRAMS AND COURSES

## I. PURPOSE

To define the requirements for Tactical Casualty Care (TCC) course approval within the ICEMA region.

## II. POLICY

- Only ICEMA approved training programs or Continuing Education (CE) providers may apply for TCC course approval.
- Training/CE program provider shall be responsible for validating instructor qualifications. Each TCC course must have a principal instructor that is knowledgeable and proficient in the skills taught and have either education or experience in teaching adult learners.
- ICEMA may request additional materials or documentation related to course curriculum or staff qualifications.
- Notice of approval or disapproval of the application will be made in writing to the applicant.
- Training course approval is valid for four (4) years from the date of approval.
- Course renewal must be initiated at least 60 days prior to expiration for continued approval.
- ICEMA must be notified of any changes within 30 calendar days.
- Noncompliance with any criterion, unapproved change in course, use of unqualified teaching personnel or noncompliance with the *California Tactical Casualty Care Training Guidelines* (EMSA #370, June 2017) or this policy may result in denial, probation, suspension or revocation of the course approval.
- Continuing Education (CE) credits may be awarded by approved training program providers that meet the following:
  - ICEMA approved CE training program provider per California Code of Regulations, Title 22, Division 9, Chapter 11, EMS Continuing Education, and

## III. PROCEDURE

- Submit an original application for those programs and courses requiring approval, as specified in the *California Tactical Casualty Care Training Guidelines: Tactical First Aid/Tactical Emergency Medical Support (TEMS) First Responder Operations (FRO) Tactical Lifesaver/Tactical Emergency Medical Support (TEMS) Technician* (EMSA #370, June 2017). The Tactical Casualty Care Training Program and Courses Application is available on the ICEMA website at ICEMA.sbcounty.gov.
- For those courses requiring approval by ICEMA, the following shall be submitted:
  - Name of the sponsoring institution, organization, or agency and type of training program and courses.

- Course schedule with hourly distribution.
- Detailed course outline that meets or exceeds the applicable course content identified in the following sections of the *California Tactical Casualty Care Training Guidelines* (EMSA #370, June 2017):
  - Tactical First Aid/TEMS FRO (4 hours) - Section 3
  - Tactical Lifesaver/TEMS Technician Couse (40 hours) - Section 4
- Detailed course curriculum.
- Skill competency testing criteria, with pre-established scoring standards (list of psychomotor skills).
- List of tactical medical scenarios.
- Final written examination and pre-established scoring standard for those programs with courses approved for CE credits.
- Name and qualifications of instructors/resumes (if CEs are provided, refer to ICEMA Reference #2010 - Continuing Education Provider Requirements).

## IV. REFERENCE

| **Number** | **Name** |
|---|---|
| 2010 | Continuing Education Provider Requirements |

# LICENSURE CHANGES - 9-1-1 RECEIVING HOSPITALS

## I. PURPOSE

To establish a policy and procedure for 9-1-1 receiving hospitals to down-license or close emergency departments or identified specialized services and provide a mechanism for ICEMA to evaluate and report on the potential impact on the Emergency Medical Services (EMS) system within the ICEMA region.

## II. POLICY

- Hospitals with a basic or comprehensive emergency department permit provide a unique service and an important link to the community in which they are located. In certain instances, the withdrawal or reduction of these services may have a profound impact on the emergency medical services available to the community at large and to the EMS system.

- Every effort should be made to ensure that emergency medical services considered essential be continued until emergency care can be provided by other facilities or until EMS providers can adjust deployment of resources to accommodate anticipated needs.

- ICEMA should have sufficient time and opportunity to examine the impact that down-licensing or closure of an emergency department will have on a community before any changes are finalized. Such an examination shall be referred to as an EMS Impact Evaluation.

- Hospitals can be prioritized utilizing objective criteria, referred to as the EMS Impact Evaluation Rating Instrument, to determine the relative level of essential value a hospital has within the system. This rating can be used to ascertain whether ICEMA will request the Licensing and Certification Division, operating as agents of the California Department of Public Health (CDPH), to delay approval of a request to down license or to close an emergency department or the specialized services outlined in Principle #3 above.

## III. PROCEDURE

- Any hospital proposing to downgrade or eliminate emergency services in its facility shall provide a 90-day written notice to CDPH, ICEMA and all health service plans under contract with the hospital.

- The hospital shall provide public notice of the intended change in a manner that is likely to reach a significant number of residents of the community serviced by that facility.

- ICEMA, in consultation with appropriate healthcare providers, shall complete an EMS Impact Evaluation. The report shall include, but not be limited to, the following areas:

  - Geography: Service area population density, travel time and distance to the next nearest facility, number and type of other available emergency services, availability of EMS resources.

  - Base Hospital Designation: Number of calls; impact on patients, EMS personnel, and other base hospitals.

- Level of Care: Assessment of level of emergency services provided, (i.e., basic, standby) and next nearest availability.
- Trauma Care: Number of trauma patients; impact on other hospitals, trauma centers, and trauma patients.
- Specialty Services Provided: Neurosurgery, obstetrics, burn center, pediatric critical care, etc., and the next nearest availability.
- Patient Volume: Number of patients annually, both 9-1-1 transports and walk-ins.
- Notification of the Public: Process to be used: public hearing, advertising, etc.; ensure that all appropriate healthcare providers are consulted with.
- Availability of EMS Care: Availability of Advanced Life Support level EMS care and air ambulance resources.
- Public and Emergency Provider Comments: Obtained through local EMS committees and public hearing.
- Recommendations: Shall include a determination of whether the request for reduction or elimination of emergency services should be approved or denied.

- Within 60 days of notification, ICEMA shall:
  - Ensure planning or zoning authorities have been notified.
  - Conduct at least one (1) public hearing on the proposed changes.
  - Submit an impact evaluation report to the local Emergency Medical Care Committee and the ICEMA Board of Directors for approval.
- If ICEMA determines that additional time is needed to allow for EMS system reconfiguration or planning to occur in order to accommodate the license change requested by the hospital, a written request for up to an additional 60-calendar day delay in responding to the hospital's application may be requested by ICEMA and shall be considered by CDPH.
- If ICEMA determines that approval of the downgrade or closure of the facility would have either no impact or a negligible impact on the EMS system, a written statement to that effect shall be submitted.
- If ICEMA determines that the down-licensing or closure of a hospital emergency department or the closing of obstetrical, neurosurgical, burn services, or neonatal intensive care units will significantly impact the EMS system, ICEMA shall establish the reason or reasons a hospital has applied to do so and shall attempt to determine whether any system changes may be implemented to either maintain the hospital service within the system or develop strategies for accommodating the loss of the emergency department, or other identified specialized service to the system.

BASE HOSPITAL DESIGNATION

## I. PURPOSE

To establish standards for the designation of an acute care hospital as a base hospital.

## III. POLICY

A. ICEMA will utilize the following criteria for the selection and designation of base hospitals:

1. The ICEMA Medical Director or designee shall evaluate existing and potential base hospitals, following the criteria established and recommended to the ICEMA Medical Director. All hospitals desiring potential base hospital designation must submit a request in writing to ICEMA expressing their desire to be evaluated and documenting adherence and acceptance of the requirements as outlined in this document.

2. **Minimum Requirements**

a. Be licensed by the State Department of Health Services as a general acute care hospital.

b. Be accredited by Centers for Medicare and Medicaid Services approved deeming authority.

c. Have a special permit for Basic or Comprehensive Emergency Medical Service pursuant to the provisions of Division 5 or have been granted approval by the California Emergency Medical Services Authority (EMSA) for utilization as a base hospital pursuant to the provisions of Section 1798.101 of the California Health and Safety Code.

d. Have a written agreement with ICEMA indicating the concurrence of hospital administration, the medical staff and the Emergency Department (ED) staff, to meet the requirements for program participation as defined in the California Health and Safety Code, Division 2.5, and ICEMA.

e. Agree to abide by the letter and intent of California Health and Safety Code, Division 2.5, and/or subsequently chaptered laws of the State of California, and criteria established by ICEMA.

f. Accept such treatment guidelines for advanced life support (ALS) procedures as may be developed and implemented by ICEMA.

g. Agree to acquire, utilize and maintain two-way telecommunications equipment as specified by ICEMA, capable of direct two-way voice communication with ALS field units assigned to the hospital. (This may include monetary contributions to a communications fund to maintain base hospital repeaters, etc.)

h. Maintain written policies and procedures pertinent to the EMS program within the ED with documentation that these policies and procedures were reviewed and approved by the hospital's Interdisciplinary Committee.

i. Agree not to transfer from one hospital to another any patient who has been treated by an EMT-P unless or until, in the judgment of the base hospital ED physician, such a patient is medically stable to be transferred and/or such transfer is in the best interest medically of the patient. Such transfers must be accepted by the receiving hospital in accordance with deeming authority, the California Code of Regulations (Title 22) and ICEMA policies and protocols.

j. Agree to maintain the ReddiNet system providing the necessary ICEMA required documentation.

k. Notwithstanding the hospital's capabilities to comply with the provisions of these criteria, ICEMA shall designate base hospitals only after considering the overall objectives to minimize duplication of elements of the EMS system that result in needless expenditure of health care or associated resources.

## III. OPERATING PRINCIPLES

1. The following principles shall guide coordination of base hospital components of the local EMS system:

   a. The ICEMA Medical Director may update base hospital criteria as necessary.

   b. No base hospital shall advertise that it is a base hospital, nor shall it use its base hospital designation for the purpose of circumventing effective and efficient patient flow patterns.

   c. Patient designation will be directed by the base hospital ED physician or the MICN in conjunction with the base hospital ED physician **(unless otherwise requested by the patient or the patient's family).**

   d. It is the responsibility of the base hospital ED physician or MICN to contact the receiving hospital ED physician/nurse as soon as possible during the direction of ALS intervention to provide the receiving hospital with information regarding patient condition and ALS interventions, when the ALS provider is unable themselves to do so due to time constraints, patient condition, radio communication failure.

   e. The attending physician at the receiving hospital where a patient is transported may request copies of voice records maintained on a patient by the base hospital. The request must be in writing.

2. **Quality Control and Evaluation**

   The hospital must:

   a. Cooperate with and assist the ICEMA Medical Director in data collection and evaluating performance and cost effectiveness of the EMS system. All ALS level calls must be logged and the logs kept for review. All ALS level calls must be recorded, and those recordings kept for a minimum of seven (7) years (or one year past the age of majority) along with copies of the EMS Patient Record and the MICN Prehospital Record.

   b. Agree to maintain and make available to ICEMA any and all relevant records for program monitoring and evaluation of the EMS system.

c. Permit and assist in the announced and/or unannounced survey/inspection of facilities, records and staff at reasonable times, by the ICEMA Medical Director, or designee.

d. Be evaluated at least every two (2) years or as determined necessary by the ICEMA Medical Director or designee.

e. Abide by criteria established by ICEMA. Implementation of revised criteria must specify implementation dates and/or deadlines.

3. **Staffing**

The hospital must:

a. Have in-house emergency physician coverage available twenty-four (24) hours per day, seven (7) days per week. The physician must be currently licensed in the State of California, assigned to the ED; available at all times to provide immediate medical direction to the MICN or ALS field personnel. The physician must have experience in and knowledge of base hospital radio operations and ICEMA policies and protocols. All ED physicians must maintain current ACLS certification.

b. Have at least one (1) certified MICN or ED physician on duty in the ED, the majority of the time. ICEMA strongly encourages at least one (1) MICN on duty at all times. **(ICEMA must be notified in the event that 24-hour coverage by at least one (1) MICN is not provided, to assure that nurses giving direction to field personnel are trained and certified as MICNs by ICEMA.)**

c. Have a full-time physician Director of the ED who is currently licensed in the State of California, who is certified or prepared for certification by the American Board of Emergency Medicine, a physician on the hospital staff, experienced in emergency medic al care, and be regularly assigned to the ED. In addition, this physician shall document experience in and knowledge of base hospital radio operations, ICEMA policies and procedures, and shall be responsible for overall medical direction and supervision of the EMT-P Program with the base hospital's area of responsibility, including review of EMS patient care records with personnel involved. The base hospital medical director shall be responsible for reviewing on a monthly basis the EMS patient care records supplied through the quality improvement (QI) process for all patients that are not transported to a general acute care hospital. Documentation of conclusions reached as a result of this review must be submitted to ICEMA monthly. The base hospital medical director shall be responsible for reporting deficiencies in patient care to ICEMA.

(The hospital may designate a Prehospital Liaison Physician who is a physician currently licensed in the State of California and is regularly assigned to the ED to assist the base hospital medical director to fulfill the aforementioned responsibilities to the EMS system.)

d. Identify a MICN with experience in and knowledge of base hospital's radio operations and ICEMA policies and protocols as a Prehospital Liaison Nurse (PLN) to assist the base hospital medical director and/or the Prehospital Liaison Physician in the medical direction and supervision of ALS personnel.

4. **Continuing Education and In-service Training**

The hospital must:

a. In cooperation with other hospitals, training institutions, ICEMA, and EMS providers provide continuing education for physicians, MICNs and other EMS field personnel in accordance with the criteria established by ICEMA.

b. Provide supervised clinical training for both ALS students as well as currently certified ALS field personnel assigned to that base hospital.

c. In cooperation with other hospitals and EMS providers, provide for organized field audits in accordance with the ICEMA QI Plan for MICNs and other certified personnel in order to review field care and improve field operations. These field audits must be in accordance with the criteria established by the ICEMA QI Plan.

d. Provide monthly base hospital meetings for the purpose of reviewing field care and/or providing didactic continuing education approved by ICEMA.

e. Provide orientation regarding the EMS system to appropriate hospital employees. Ensure that ED personnel are involved both as instructors and as students in continuing education and in-service programs.

5. **General**

The hospital must:

a. Provide regularly scheduled ED physician and nurse meetings to discuss ED responses and care.

b. Ensure that there is a liaison between hospital personnel and EMS field personnel (PLN or ED medical director).

c. Establish and implement an internal system for critiquing the results of ALS intervention while auditing the quality of care provided.

d. Provide a statement describing committee representation and attendance to all ICEMA required physician and nurse committee meetings (base hospital QI meetings, EMS nurses, ED physicians, etc.).

e. Coordinate and cooperate with designated receiving hospitals in accordance with guidelines implemented by ICEMA.

6. It is the responsibility of the base hospital medical director and/or the ED nursing supervisor to notify the ICEMA Medical Director of any deviation from the aforementioned base hospital criteria.

7. **Suspension and/or Revocation of Base Hospital Designation**

ICEMA may suspend or revoke the approval of a base hospital at any time for failure to comply with the applicable policies, procedures and regulations.

## IV. BASE HOSPITAL CRITERIA FOR DESIGNATION OF HOSPITAL LICENSED AS STAND-BY - MONO COUNTY

"BASE HOSPITAL" upon designation by ICEMA and upon completion of a written contractual agreement with ICEMA, is responsible for directing the Advanced Life Support System or Limited Advanced Life Support System and EMS system assigned to it by ICEMA.

The base hospital will supervise EMS treatment, triage ALS transport/limited (LALS) transport, and monitor personnel program compliance by direct medical supervision for ALS/LALS unit providing services in Mono County.

The designation as a base hospital shall be for no longer than two (2) years.

## V. SCOPE OF SERVICES TO BE PROVIDED

The base hospital responsibilities shall include, but not be limited to the following:

1. Orientation of entire base hospital staff to ALS/LALS program.

2. Formation and/or continuation of network with associated receiving hospital in the region.

3. On-line medical direction for treatment, triage and transport of ALS/LALS patients according to ICEMA protocol.

4. Transmission of patient care information on each ALS/LALS run to associated receiving hospital via direct dial or dedicated phone line.

5. Weekly case review by the base hospital medical director and PLN.

6. Provision of monthly case review conference for EMS and hospital team, and regular in-hospital clinical experience.

7. Maintenance of EMS system’s records including patient care and AEMT/EMT-P competency files.

8. Training of new EMS field personnel through monitoring field performance and direct observation through ride along.

## VI. HOSPITAL EMERGENCY MEDICAL SERVICES

1. Scope of services to be offered:

    a. Include appropriate policies and procedures

    b. Include By-Laws, vitaes and job descriptions

2. Agreement to provide ICEMA with data compatible with existing base hospital data collection and future data collection requirements established either by ICEMA or the EMSA.

3. Policy for billing receiving centers to recover cost of supplies and drugs distributed to ALS/LALS units.

4. Letter of commitment to meet present and future base hospital requirements and maintain records.

5. Hospital policy and procedures regarding Quality Assurance (QA) Audits of EMS field personnel and medical direction personnel duties.

## VII. PROVISIONS APPLICABLE TO CONTRACT FOR BASE HOSPITAL SERVICES IN MONO COUNTY UTILIZING LICENSED STAND-BY FACILITY

1. **Status of Provider/Contractor**

   The provider shall be an independent contractor, wholly responsible for the manner in which it performs and will assume exclusively the responsibility for the acts of its employees who will not be entitled to any rights and privileges of ICEMA employees, nor will they be considered in any manner to be ICEMA employees.

2. **Services**

   The provider shall maintain facilities and equipment and operate continuously with at least the number and kind of staff required for the provision of services. Such services shall include at least those described in "Scope of Services" above.

3. **Licenses and Standards**

   The provider's personnel shall possess appropriate licenses and certificates and be qualified in accordance with applicable statutes and regulations. The provider shall obtain, maintain, and comply with all necessary governmental authorizations, permits and licenses required to conduct its operations. In addition, the provider shall comply with all applicable Federal, State and ICEMA policies and procedures, rules, regulations, and orders in its operations including compliance with all applicable safety and health requirements as to provider's employees.

## VIII. MINIMUM REQUIREMENTS

1. Be licensed by the State Department of Health Services as a general acute care hospital.

2. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.

3. Have a special permit for Stand-By Emergency Medical Service.

4. Have a written agreement with ICEMA indicating the commitment of hospital administration, the medical staff and the ED staff, to meet the requirements for program participation as defined in the California Health and Safety Code, Division 2.5, and ICEMA.

5. Agree to abide by the letter and intent of the California Health and Safety Code, Division 2.5, and/or subsequently chaptered laws of the State of California, and criteria established by ICEMA.

6. Accept such treatment guidelines for EMS procedures as may be developed and implemented by ICEMA.

7. Agree to acquire, utilize and maintain communications equipment as specified by ICEMA capable of direct two-way voice communication with EMS field units assigned to the hospital.

8. Maintain written policies and procedures pertinent to the EMS program within the ED with documentation that these policies and procedures were reviewed and approved by the hospital's Medical Staff Committee.

9. Agree not to transfer from one hospital to another any patient who has been treated by an AEMT/EMT-P unless or until, in the judgment of the base hospital ED physician, such a patient is medically stable to be transferred and/or such transfer is in the best interest medically of the patient. Such patients must be accepted by the receiving hospital in accordance with deeming authority and Title 22.

## IX. OPERATING PRINCIPLES

1. The following principles shall guide coordination of base hospital components of the EMS system:

   a. The ICEMA Medical Director may update base hospital criteria as necessary.

   b. No base hospital shall advertise that it is a base hospital, nor shall it use status for the purpose of circumventing effective and efficient patient flow patterns.

   c. Patient designation shall be directed by the base hospital physician or MICN in conjunction with the base hospital physician, unless otherwise requested by the patient or the patient's family.

   d. MICN standing orders shall be developed by the base hospital and approved by ICEMA.

   e. It is the responsibility of the base hospital ED physician or MICN to contact the receiving hospital ED physician or nurse as soon as possible during the direction of ALS/LALS intervention to provide the receiving hospital with information regarding patient condition and ALS/LALS interventions.

   f. The attending physician at the receiving hospital where a patient is transported may request copies of voice and records maintained on a patient by the base hospital. The request must be in writing.

   g. The base hospital shall ensure that a mechanism exists for the initial supply of pharmacological agent (including narcotics and controlled substances) to be utilized by ALS/LALS field personnel during the treatment of patients according to policies and procedures established by ICEMA.

## X. QUALITY CONTROL AND EVALUATION

The hospital shall:

1. Cooperate with and assist the ICEMA Medical Director in data collection, performance and cost effectiveness of the EMS system. All ALS/LALS calls must be logged and the log kept for review. All ALS/LALS level calls must be recorded, and those recordings kept for a minimum of seven (7) years (or one year past the age of majority) along with copies of the EMS Patient Record and the MICN Prehospital Record.

2. Agree to maintain and make available to ICEMA any and all relevant records for program monitoring and evaluation of the EMS system.

3. Permit and assist in the announced and/or unannounced survey/inspection of facilities, records and staff at reasonable times, by the ICEMA Medical Director or designee.

4. Be evaluated at least every two (2) years and/or as needed by the ICEMA Medical Director or designee.

5. Abide by criteria established by ICEMA. Implementation of revised criteria must specify implementation dates and/or deadlines.

## XI. STAFFING

The hospital shall:

1. Have Emergency Physician coverage immediately available twenty-four (24) hours per day, seven (7) days per week. Immediately available means available in the Emergency Department within twenty (20) minutes upon notification.

   The physician must be currently licensed in the State of California, assigned to the Emergency Department, available at all times to provide immediate medical direction to the MICN or ALS/LALS personnel when situation not covered by MICN Standing Orders. Hospital policy for providing immediate medical direction when the ED Physician is not in-house must be submitted to ICEMA for approval.

   All ED Physicians must maintain current ACLS Certification and be knowledgeable in radio operations and current policies.

2. Have a full-time physician Director of the Emergency Department who is currently licensed in the State of California, a physician on the hospital staff, experienced in emergency medical care, and regularly assigned to the Emergency Department. This physician Director shall have experience in and knowledge of base hospital radio operations, ICEMA policies and procedures, and shall be responsible for overall medical direction and supervision of the EMT-P/EMT-II program within the base hospital's area of Responsibility, including review of EMS Patient Care Records and critique with personnel involved. The physician Director shall be responsible for reviewing on a monthly basis the EMS Patient Care Records for all patients that are not transported to a general acute care hospital. Documentation of conclusions reached as a result of this review must be submitted to ICEMA monthly. The physician Director shall be responsible for reporting deficiencies in patient care to ICEMA.

   Physician Director to fulfill the aforementioned responsibilities.

3. Have at least one (1) Mobile Intensive Care Nurse (MICN) or ED physician on duty in the hospital assigned to the radio communications center and readily available to the Emergency Department. In the event that an ED physician is not on duty, there shall be immediately available direct voice contact with ALS/LALS personnel by the ED physician for the purposes of medical direction. ICEMA must be notified in the event that 24-hour coverage by at least one (1) MICN is not provided. Nurses giving direction to ALS/LALS personnel must be trained and certified as MICNs by ICEMA.

4. Identify a MICN with experience in and knowledge of base hospital radio operations and ICEMA policies and procedures as a Prehospital Liaison Nurse (PLN) to assist the physician director in the medical direction and supervision of ALS/LALS personnel.

## XII. CONTINUING EDUCATION AND IN-SERVICE TRAINING

The hospital shall:

1. In cooperation with other hospitals, training institutions, ICEMA and ALS/LALS providers, provide continuing education for physicians, MICNs and field personnel in accordance with criteria established by ICEMA.

2. Provide supervised clinical training for both ALS/LALS students, as well as currently certified ALS/LALS personnel assigned to that base hospital.

3. In cooperation with other hospitals and ALS/LALS providers, provide for organized field audits at least six (6) times annually for MICNs and other certified personnel in order to review field care and improve field operations. These field audits must be in accordance with the criteria established by ICEMA.

4. Provide monthly base hospital meetings for the purpose of reviewing field care and/or providing didactic continuing education approved by ICEMA.

5. Provide orientation regarding the EMS system to appropriate hospital employees.

6. Ensure that ED personnel are involved both as instructors and as students in continuing education and In-service Programs.

## XIII. GENERAL

The hospital shall:

1. Provide regularly scheduled ED physician and nurse meetings to discuss ED responses and care.

2. Ensure that there is a liaison between hospital personnel and the EMS field personnel.

3. Establish and implement an internal system for critiquing the results of ALS/LALS intervention while auditing the quality of care provided.

4. Designate committee representation to ICEMA. Regular attendance at Physician and Nurse Committee meetings is mandatory.

5. Coordinate and cooperate with designated receiving hospitals in accordance with guidelines implemented by ICEMA.

**IT IS THE RESPONSIBILITY OF THE BASE HOSPITAL MEDICAL DIRECTOR AND/OR THE ED NURSING SUPERVISOR TO NOTIFY THE ICEMA MEDICAL DIRECTOR OF ANY DEVIATION FROM THE AFOREMENTIONED CRITERIA.**

**ICEMA MAY SUSPEND OR REVOKE THE APPROVAL OF A BASE HOSPITAL AT ANY TIME FOR FAILURE TO COMPLY WITH THE APPLICABLE POLICIES, PROCEDURES AND REGULATIONS.**

ADOPTION OF POLICIES AND PROTOCOLS

## I. PURPOSE

To establish procedures for the review of EMS system policies and patient care/treatment protocols.

The ICEMA Medical Director and EMS Administrator are responsible for the development and approval of policies and protocols that establish operating procedures and medical control according to State regulations. ICEMA recognizes that stakeholder collaboration is an essential component of policy and protocol development and accepts input from the Medical Advisory Committee (MAC), standing ICEMA subcommittees and/or other interested parties through a review process as established below. EMS stakeholder input is advisory to ICEMA for the formulation of these policies, protocols and procedures and the final authority rests with the ICEMA Medical Director and EMS Administrator.

## II. POLICY

- ICEMA will review all EMS system policies and protocols, as necessary, to ensure time critical and appropriate changes.
- ICEMA will solicit input from appropriate external agencies, organizations and established advisory committees such as those listed below, as necessary:
  - Medical Advisory Committee (MAC)
  - Pediatric Advisory Committee
  - ST Elevation Myocardial Infarction QI Committee (STEMI QI)
  - Stroke QI Committee (Stroke QI)
  - Trauma Advisory Committee (TAC)
    (Joint San Bernardino County and Riverside County Quality Improvement Committee)
- ICEMA will review EMS system policies and protocols as required. Changes that may occur without specific input from committees include, but are not limited to:
  - Changes in wording necessary to clarify the objective.
  - Changes in the listed order or numbering necessary for clarity or flow.
  - Changes to assure policy or protocol continuity and consistency.
  - Changes required to comply with State and local laws and/or regulations to maintain public health and safety.
  - Correction of typographical, grammar, spelling or formatting errors.
  - Changes required for medical control or to maintain system integrity.

- ICEMA will prepare a detailed grid of proposed policy and protocol changes for input from MAC.

- ICEMA will consider all relevant input presented to it before accepting, amending or deleting any EMS system policy or protocol, but the authority for final determination remains with the Medical Director and EMS Administrator.

- ICEMA will submit changes in EMS system policies and protocols to public comment as noted below under Section V - Notification and Public Comment Period.

- EMS system policies and protocols, approved by the Medical Director and EMS Administrator, shall become effective no later than 30 days after the date of approval except as noted under Section IV - Emergency Policies and Protocols.

## III. REQUEST FOR REVIEW OF EMS SYSTEM POLICIES/ PROTOCOLS

- Any interested party may request a review of EMS system policies or protocols as provided in this section. Such requests shall be in writing and clearly and concisely state:

  - The substance or nature of the requested review.

  - The reason for the request.

  - Any supporting documentation and/or research that would support the request.

- Upon receipt of a written request for the review of a policy or protocol, ICEMA will notify the petitioner or group in writing of the receipt of the request and then shall, within 30 business days, either deny the request, in writing, indicating why the agency has reached such a decision or schedule the policy or protocol for review, in the appropriate committee(s), in accordance with this policy.

- ICEMA may grant or deny such a request or take such other action as it may determine to be warranted and will notify the petitioner in writing of such action.

## IV. EMERGENCY POLICIES AND PROTOCOLS

- If ICEMA determines that an emergency policy or protocol is necessary for the immediate preservation of the public health and safety or general welfare, a policy or protocol may be changed as an emergency action.

- Any finding of an emergency will include a written statement describing the specific facts showing the need for immediate action. The statement and the policy or protocol shall be immediately forwarded to MAC and EMS providers (as appropriate). The emergency policy or protocol will become effective no sooner than five (5) days following dissemination to the committee, unless there is an immediate need determined by ICEMA.

- Policies or protocols adopted under the emergency provision shall remain in effect until reviewed by the appropriate committee.

## V. NOTIFICATION AND PUBLIC COMMENT PERIOD

- Consistent with a policy of encouraging the widest possible notification and distribution to interested persons, ICEMA will:

  - Post proposed changes to policies or protocols on the ICEMA website at ICEMA.sbcounty.gov at least 30 days prior to the MAC meeting. The notice of change will include a statement of the time and place of proceedings for public comment.

  - E-mail notification of proposed changes to members of the Emergency Medical Care Committee (EMCC), MAC.

  - E-mail notification of proposed changes to each EMS provider.

  - E-mail notification of proposed changes to any person who has filed a request for notification with ICEMA.

  - Conduct official public comment during the MAC meeting.

- The provisions of this section shall not be construed in any manner to invalidate a policy or protocol due to perceived inadequacy of the notice.

- When necessary to fulfill its responsibilities, ICEMA will revise and/or initiate policies or protocols without following this process. Any oversight in notification described above shall not invalidate any action taken by ICEMA pursuant to this policy.

RADIO COMMUNICATION

## I. PURPOSE

To define the requirements for communication reports between EMS field personnel and hospitals. The purpose of communication between EMS field personnel and hospitals is to relay essential information to allow the hospital to prepare for the patient, and as necessary, to allow a base hospital to provide medical direction and consultation to the EMS field personnel.

## II. PROCEDURE

### A. General Guidelines

- The communication report should be brief, concise, and include only the information that impacts the care of the patient in the field, and when the patient initially arrives in the hospital.
- It should not include unnecessary information or impede the EMS field personnel's focus on patient care.
- The communications report is not intended to be the complete patient report nor is it equivalent to the "face-to-face" report to the Emergency Department (ED) staff at the hospital.
- Communication reports should be given to the hospital by EMS field personnel while on scene, or as soon as possible after departing the scene.
- Transport of unstable patients or patients meeting Trauma Triage Criteria shall not be delayed for a communications report.
- Base hospital physicians may give medically appropriate orders within the ICEMA Policy and Protocol Manual.
- EMS field personnel may only accept orders from base hospitals within the ICEMA region.
- Patient names shall not be given over the radio except at the request of the base hospital physician, and with the prior approval of the patient.

### B. Basic Life Support (BLS) Units

BLS communication reports contain minimal information since BLS units:

- Cannot be diverted; and
- Cannot carry out medical direction orders.

BLS communications reports contain:

- The EMS unit identifier, and that it is a BLS report.
- The patient's age, sex, chief complaint/injury, and estimated time of arrival (ETA).

- Vital signs, Glasgow Coma Scale, and other pertinent signs/ symptoms and information.

**C. Advanced Life Support (ALS) Units**

Receiving Hospital:

Receiving hospital communication reports are for informing the receiving hospital (base hospital or otherwise) of incoming patients **not** requiring medical direction orders or consultation.

Receiving hospital communications reports contain:

- The EMS unit identifier, that it is a receiving hospital report, and the EMS field personnel's name/certification level.
- The patient's age, sex, chief complaint/injury and ETA.
- Information that impacts patient care.

Base Hospital:

Base hospital communication reports are for:

- Requesting consultation or medical direction orders from a base hospital.
- Informing or consulting with a specialty base hospital (Trauma, STEMI, stroke center, etc.).
- Unsuccessful procedures per ICEMA Reference #11020 - Procedure - Standard Orders.
- All patients that are not being transported by ambulance that have received ALS interventions. Base hospital contact shall be made while the EMS field personnel is on scene (if safe) per ICEMA Reference #6080 – Patient refusal of care-Adult.
- All patients under nine (9) years old that are not transported by ambulance (parent or guardian refusal). Base hospital contact shall be made while the EMS field personnel are on scene (if safe) per ICEMA Reference #6070 - Care of Minors in the Field.
- Interfacility transfers needing medications and/or a destination change per ICEMA Reference #8010 - Interfacility Transfer Guidelines.
- Multiple Casualty Incidents (MCI) per ICEMA Reference #8090 - Medical Response to a Multiple Casualty Incident.

Base hospital communications reports shall contain:

- The EMS unit identifier, that it is a base hospital report, and the EMS field personnel's name/certification level.
- The severity of the patient, and if the patient is a "specialty care" patient (Trauma, STEMI, stroke, etc.).

- Patient age, sex, general appearance, weight in kilos, and level of responsiveness (or Glasgow Coma Scale when appropriate).
- Chief complaint/injuries, and mechanism of injury/patient situation.
- Vital signs, cardiac monitor reading, and remarkable physical exam findings.
- Pertinent medical history.
- Prior to contact treatment initiated and patient response.
- Information that impacts patient care.
- ETA.

Base hospitals will provide:

- Contact time, and the name of the Mobile Intensive Care Nurse (MICN) (and base hospital physician when present).
- Consultation and medical direction orders appropriate to the patient's condition and within the ICEMA Policy and Protocol Manual.
- Acknowledgement of prior to contact medications and patient response.

**D. <u>EMS Aircraft Transports</u>**

In San Bernardino County, the San Bernardino County Communications Center (Comm Center) will assign the destination hospital for trauma patients when a request for EMS aircraft is received.

- When possible, Comm Center will notify the ground and air transportation provider of the assigned destination hospital.
- Trauma base hospital contact should be made as soon as practical by the ground EMS field personnel or the flight crew.
- Whenever possible, **Trauma base hospital contact will be made with the Trauma Center that will actually be receiving the patient.**
- Upon arrival of the EMS aircraft, the ground EMS field personnel will give a patient report to the flight crew, and include:
  - The assigned destination hospital (if known).
  - If Trauma base hospital contact has been made (and with which Trauma base hospital); and
  - If the assigned destination hospital was changed (and the reason for the change).
- The flight crew will contact the actual receiving Trauma Center to:
  - Request a landing pad assignment.

- Provide a patient report, or update on patient condition; and
- Inform them if Trauma base hospital contact was originally made with a different Trauma base hospital.

If the original Trauma base hospital contact was made with a different Trauma base hospital, the actual receiving Trauma Center will notify the original Trauma Base of the change in destination.

**E. Interfacility Transfer (ICEMA Reference #8010 - Interfacility Transfer Guidelines)**

Interfacility transport patients with a deteriorating condition significant enough to require medication administration and/or a destination change require base hospital contact.

- EMS field personnel may initiate prior to contact protocols and shall make base hospital contact. The base hospital will be notified of the status change of the patient, the medications administered prior to contact and any need for further orders or destination changes.
- The base hospital shall notify both the referral hospital and the original receiving hospital of a destination change.
- The base hospital will include an evaluation of any destination change in the base hospital CQI report.

## III. REFERENCES

| Number | Name |
|---|---|
| 6070 | Care of Minors in the Field |
| 8010 | Interfacility Transfer Guidelines |
| 8080 | Medical Response to a Multiple Casualty Incident |
| 11020 | Procedure - Standard Orders |

CONTROLLED SUBSTANCE

## I. PURPOSE

To establish minimum requirements and accountability for ICEMA approved advanced life support (ALS) providers to procure, stock, transport, and use controlled substances in compliance with the Federal Controlled Substances Act.

## II. POLICY

- ALS providers shall have a formal agreement with a qualified Medical Director or a drug authorizing physician who agrees to purchase controlled substances using the appropriate DEA registration number and forms. This physician will retain ownership, accountability and responsibility for these controlled substances at all times.

- **ALS providers shall develop policies compliant with The Controlled Substances Act Title 21, United States Code (USC) and California Code of Regulations Title 22, Division 9, Chapter 4, Article 7, Section 100168**. These policies must ensure that security mechanisms and procedures are established for controlled substances, including, but not limited to:

  - Controlled substance ordering and order tracking
  - Controlled substance receipt and accountability
  - Controlled substance master supply storage, security and documentation
  - Controlled substance labeling and tracking
  - Vehicle storage and security
  - Usage procedures and documentation
  - Reverse distribution
  - Disposal
  - Re-stocking

  Additionally, the policies must ensure that mechanisms for investigation and mitigation of suspected tampering or diversion are established, including, but not limited to:

  - Controlled substance testing
  - Discrepancy reporting
  - Tampering, theft and diversion prevention and detection
  - Usage audits

- The ALS provider's medical director or drug authorizing physician must be a physician licensed to practice medicine in the State of California and must apply and obtain a valid DEA registration number for the ALS provider they propose to purchase controlled substances for. If a physician has agreements with multiple ALS providers, separate DEA registration numbers are required for each individual EMS provider. Physicians should not use their personal DEA registration number that they use for their clinical practice.

## III. PROCEDURE

All controlled substances shall:

- Be purchased and stored in tamper evident containers.
- Be stored in a secure and accountable manner.
- Be kept under a "double lock" system at all times.
- Be reconciled at a minimum every 24 hours or at any change of shift or change in personnel.

## IV. REQUIRED DOCUMENTATION

- ALS providers must maintain a log of all purchased controlled substances for a period of no less than two (2) years.
- All controlled substance usage will be documented on all electronic patient care reports (ePCR).
- EMS provider's medical director must determine the manner by which unused and expired controlled substances are discarded. The practice must be in compliance with all applicable local, state, and federal regulations and the process should be clearly stated in the EMS provider's controlled substances policy.
- In the event of breakage of a narcotic container an incident report will be completed and the damage reported to the appropriate supervisor.
- Discrepancies in the narcotic count will be reported immediately to the appropriate supervisor, and a written report must be submitted.

## SAMPLE - Daily Log

Provider Name: _____

Month: _____Year: ___

| | **Date** | **Double lock in place?** | **Ketamine** | **Midazolam 5 mg** | **Fentanyl** | **Drug administered; amount given/wasted; ePCR #; patient name; date/time; medic name** | **Duty Medic** | **Captain or Supervisor** |
|---|---|---|---|---|---|---|---|---|
| 1 | | Yes/No | Amount ___ | Amount ____ | Amount ____ | | Can Not Be Same Signature | Can Not Be Same Signature |
| 2 | | Yes/No | Amount ___ | Amount ____ | Amount ____ | | Can Not Be Same Signature | Can Not Be Same Signature |

## SAMPLE - Master Controlled Substance Inventory Log

| Date/Time | Lot # | Ketamine Quantity | Midazolam Quantity | Fentanyl Quantity | Outdated Destroyed | Action: Inventory, Restock, Dispensed, Inventory Total | Signatures of Personnel<br>I certify that we have counted and found correct all controlled substances listed. | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | Signature | Signature |
| | | | | | | | | |
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# GROUND BASED AMBULANCE RATE SETTING (San Bernardino County)

**APPROVED BY ICEMA BOARD OF DIRECTORS ON MAY 8, 2012 (formerly Reference No. 5080)**

## I. PURPOSE

To establish the maximum charges that San Bernardino County ground transport providers may charge for the care and transport of patients and outline the mechanism for calculating annual ground ambulance rates.

## II. POLICY

No ambulance service shall charge more than the following rates:

1. RATES FOR ONE (1) PATIENT: The schedule of maximum rates that may be charged for ambulance service for one (1) patient shall be reviewed by ICEMA on an annual basis.

2. RATES FOR MULTIPLE PATIENTS:

   a. Each additional stretcher or gurney patient carried at the same time may be charged the full base rate for the response to the call and half the mileage rate.

   b. Each additional sit-up patient shall be charged half the base rate for response to the call and half the mileage rate.

   c. The provider may prorate all mileage charges between all patients transported so that all patients are charged the same fee for mileage.

   d. This section does not apply to contractual agreements.

3. NO CHARGE TRANSPORTS: No charge shall be made for transporting uninjured or well persons who accompany a patient.

4. COMPUTATION OF RATES: All rates are to be computed from the time the ambulance arrives for hire until the ambulance delivers the patient to the appropriate destination, and is discharged by the patient or his representative, attending physician, or emergency receiving facility.

5. FEES FOR SERVICE, SUPPLIES AND EQUIPMENT:

   a. When a ground ambulance has been dispatched and ambulance personnel and/or equipment are directly involved with patient care in situations where an EMS aircraft transports, then the ambulance service shall be entitled to charge an appropriate fee for its service, supplies and equipment.

   b. Under no circumstances shall EMS transport personnel dispatched on an emergency 9-1-1 call attempt to collect for the service prior to the delivery of the patient at an appropriate medical facility.

## III. PROCEDURE

1. ANNUAL RATE ADJUSTMENT: At the direction of ICEMA, the ambulance rates established under this section shall apply to all providers of ground based ambulance services.

   a. ICEMA shall be responsible for calculating rate adjustments.
   b. The Consumer Price Index (CPI) adjustment shall be calculated by March 15 of each year. The CPI used shall be compiled and reported by the Bureau of Labor Statistics for the preceding 12-month period (January through December) utilizing the "Annual" column of the adjustment year. The following CPI selections shall be utilized:

      - All Urban Consumers
      - Not Seasonally Adjusted
      - Western Region, Los Angeles, Riverside, Orange Counties, CA
      - Medical Index
      - Transportation Index

      The CPI adjustment shall be effective as of the first day of July of each year.

   c. If selected CPIs are discontinued or revised, another government index or computation which replaces it shall be used in order to obtain substantially the same result.

   d. The current rates shall be adjusted for changes in the CPI as set forth herein. The adjustments shall be made on July 1 of each year based upon the change in the CPI from January 1 of the preceding year to December 31 of the same calendar year.

      The CPI adjustment shall be determined by taking the difference between the annual CPI's *(previous and adjustment years)* then by multiplying the result by zero point zero five (0.05) for the Transportation Index. The same process is applied to the Medical Index multiplying the result by zero point ninety-five (0.95). The two (2) sums are then added together and multiplied by one point five (1.5) to arrive at the total amount of the change in CPI for the annual base rate comparison. Yearly CPI adjustments shall not exceed five percent (5%) or less than zero for any single year.

2. ANNUAL RATE COMPARISON STUDY: The maximum base rates shall be reviewed in accordance with the following procedures, and adjusted annually, if appropriate, on July 1 every year. In conjunction with the rate adjustment and pursuant to Section 31.0820(e), the local EMS agency (ICEMA) shall review the ALS and BLS ground ambulance base rates of counties with similar demographics to determine the ALS and BLS average base rates in effect for these counties as of the review date.

   If the San Bernardino County rates are at the average or greater, no adjustment to the ambulance rates will be made under this provision. If the San Bernardino County rates are less than the average, an appropriate adjustment to the ambulance rates shall be made to bring them towards the average. No ambulance rate comparison adjustment shall be greater than five percent (5%).

3. MILEAGE CHARGE RATE ADJUSTMENT: In addition to, and not in lieu of, annual CPI adjustments may be made, in an amount equal to the ambulance providers' extraordinary increase or decrease in fuel costs using the following CPI selections:

   - Average Price Data
   - A421 Los Angeles-Riverside-Orange County, CA
   - Table, 7471A
   - Gasoline, all types, per gallon/3.785 liters

   This value will be reduced by the corresponding sub-value in the CPI transportation index used above in the annual comparison.

4. EXTRAORDINARY RATE ADJUSTMENTS:

   a. Extraordinary cost increases or decreases shall be subject to ICEMA Governing Board approval.

   b. Requests must be made in writing and use most recent specific CPI and include the previous calendar year plus the sum of the most recent CPI for the current year, divided by the number of total months, for an average.

   c. Extraordinary cost rate increase requests may be requested quarterly and will be reviewed within thirty (30) days of receipt. Any approved implementation will become effective upon the beginning of the next calendar quarter and will not be retroactive.

   d. The ambulance provider must demonstrate actual and substantial financial hardship as a result of factors beyond its reasonable control and provide records deemed necessary to verify such hardship. This procedure may also be used to obtain rate adjustments due to changes in the CPI that are greater than the five percent (5%) cap under the yearly CPI adjustment, above.

   e. ICEMA, at the time of any extraordinary adjustment under subsection (1), above, shall request an audit of books and records of an ambulance service provider for the purpose of verifying revenue and cost data specifically associated with the extraordinary rate increase request. Audits shall be carried out by a person selected and approved by ICEMA. If ICEMA and ambulance service provider cannot agree on a person to perform the audit, then the audit shall be carried out by a Certified Public Accountant selected by the ICEMA Executive Director.

      Any charge, cost or fee, shall be paid by the ambulance service provider. ICEMA may deny any adjustment if an audit is requested and not produced. Every audit shall be done promptly and within thirty (30) days of submission.

# ATTACHMENT A

## ICEMA Exemption Criteria List

## Performance Based Contracts/ MOUs

## Effective 2022

**To be used for flagging purposes- these are not automatic exemptions**

**THE EXEMPTION REQUEST MUST BE THE SOLE REASON FOR THE LATE RESPONSE**

| Exemption Code | Type | Definition | Minimum Supporting Information (All exemptions require reporting of point of origin of responding unit.) |
|---|---|---|---|
| **13** | **Incorrect Information** | Any significant change(s) in response location initiated by the caller or dispatch agency, which directly affects the ability of the unit to meet the response requirement. | Time of notification of location change and notifying agency. CAD, recording, Automatic Vehicle Location (AVL) if available. |
| **14** | **Mechanical Failure** | Unit unable to respond due to non-preventable mechanical failure. | Critical failure report. |
| **16** | **Off Road Incidents** | Extended response time area with no road access to patient involved in off road incident. | Latitude/ Longitude or Thomas Brother map grid, CAD, voice recording, AVL, if available. |
| **17** | **Hospital Bed Delay** | Delays of greater than 25 minutes that are the result of a prolonged drop-off of a previous transport (e.g., bed delay), outside the control of the provider. This time does not include time needed by provider to get ready to respond. Requires more than one unit be on bed delay at time of call and system level depletion due to bed delay must be at least 20%. | Name of facilities and number of units at each facility experiencing prolonged drop off. System level at time of call. Thomas Brother's map grid location of responding unit. Screen shot, CAD, voice recording, AVL, if available. |
| **19** | **Road Closure/ Construction** | Unavoidable delays caused by unscheduled road construction or closure. Only one (1) exemption can be requested for each construction/closure location/event unless no other route is available. | Name of road and nearest cross street. Latitude/ Longitude or Thomas Brother map grid, CAD, voice recording, AVL, if available. |
| **20** | **Second Unit or Subsequent** | More than one unit to the same location. | Incident number of first unit on-scene. CAD tape. |
| **21** | **Traffic** | Any significant, unscheduled, unanticipated delay caused by traffic where a sufficient alternate route was not available (e.g., auto accident on a freeway, major prolonged gridlock, train). | Name of road and nearest cross street. Latitude/ Longitude or Thomas Brother map grid, CAD, voice recording, AVL, if available. |
| **24** | **Weather** | Any unusual weather conditions (e.g., major flooding, dense fog, snow accumulation, icy conditions, etc.) in the area affecting transport, which could impair or create significant unsafe driving conditions. | Type of weather, name of road and nearest cross street. Latitude/ Longitude or Thomas Brother map grid, CAD, Voice recording, AVL, if available. |
| **99** | **Other** | Any other mitigating circumstances falling outside the list of exemptions that may impede the response of a unit. The reason must be explained in exemption report. This exemption is to be used only when the reason is outside of the control of the provider; accident (provider not at fault), disaster, MCI, upgraded, downgraded, etc. | Documentation sufficient to justify request. Latitude/ Longitude or Thomas Brother map grid, CAD, voice recording, AVL, if available. |

**Rural Wilderness EOAs Only**

# ATTACHMENT A

| | | | |
|---|---|---|---|
| **15** | **Mutual Aid** | Rural/Wilderness Areas Only. Mutual aid provided to outside jurisdiction or mutual aid requested within jurisdiction of provider, if mutual aid exemptions are specifically referenced in Performance Based Contract (PBC) or MOU. | Incident number and unit number for units on other calls. CAD, voice recording, AVL, if available. |
| **23** | **Unavailable Ambulance** | Rural/ wilderness areas only. Delayed response time due to ambulance unavailability due to response to other 9-1-1 calls or having to respond from outside of the operating area due to patient transport. | Incident number and unit number for units on other calls. CAD, voice recording, AVL, if available. |

# AMBULANCE EXEMPTION POLICY

## I. PURPOSE

To define the process for ambulance exemption approval and response time compliance.

## II. POLICY/PROCEDURE

### A. RESPONSE TIME MANAGEMENT

Ambulance dispatch CAD data and the FirstWatch On-line Compliance Utility (OCU) program shall be used to calculate response times. Until such time as the OCU provides performance data directly to ICEMA, ambulance providers shall submit a monthly report to ICEMA in a manner specified by the ICEMA Administrator in accordance with contractual obligation and this policy.

Ambulance Response Time measures are designed to provide the appropriate prehospital clinical care in a time frame that is appropriate to the patient situation and set forth in contract with the ambulance contractor. Response Time shall be measured in minutes and integer (whole) seconds and compliance determined on a fractile percentage basis in accordance with the ambulance contract.

Ambulance providers shall commit to employ whatever level of resources is necessary to achieve the contractual response time requirements for ambulance service requests located within each EOA. Once the ambulance provider has determined the level of resources necessary to achieve the contractual Response Time requirements for each EOA, but in no case exceeding thirty (30) days from the effective date of this policy, the ambulance provider shall provide an ongoing current deployment plan for review and approval by ICEMA.

## III. CALCULATION OF RESPONSE TIMES

### A. START OF RESPONSE TIMES:

1. Calculation of Response Time shall begin when the following information, is transmitted to the assigned ambulance provider's communications center:

   a. Exact address or descriptive location such as building or landmark, intersection, or freeway / highway location.

   b. For dispatching agencies that are designated secondary PSAPs, the response time calculation will start after pre-dispatch questioning and/or caller instruction is completed (including approved EMD steps if used), and the call is in queue to send to the responding unit. For agencies that are not designated as a secondary PSAP, the response time calculation will start when the call is received from the secondary PSAP."

   c. If an ambulance is not available at the time that the ambulance provider dispatch center receives the call, the dispatcher will make a note in the automated dispatch system record that no ambulance was available.

2. Each incident is a separate response: Each incident will be counted as a single response regardless of the number of units that are utilized.

3. The Response Time of the ambulance provider's first arriving emergency ambulance will be used to compute ambulance Response Time for that incident.

**B. STOP OF RESPONSE TIMES:**

a. The time stamp in provider's CAD that indicates that the responding crew has advised, either electronically or verbally via radio or telephone communications, that they have arrived at the assigned address/location.

b. If the responding crew arrives on the scene of the incident but fails to transmit this information to providers dispatch, a geofence distance from the incident address within 100 meters where 0.00 m.p.h. would be recognized as ON SCENE or policy when crew pushes "On Scene" which is defined as fully stopped (wheels not in motion or 0.00 m.p.h.) at the location where it shall be parked during the incident shall be used.

c. In the case of encumbered/restricted access to the patient, the term "On Scene" shall be understood to mean the time the emergency ambulance arrives at the restricted access point, e.g., staging area at the gate of a closed gated area, or rendezvous point to be escorted to the patient by another individual.

d. At the time that dispatch notifies the assigned ambulance to cancel its response.

**C. RESPONSE TIME CORRECTIONS AND EXEMPTIONS**

1. Ambulance provider may request Response Time Correction(s) of arrival on scene time(s). In incidents when the assigned ambulance crew fails to report their arrival on scene, the time of the next communication to dispatch by crew or other on scene personnel that indicates that the ambulance has already arrived at the scene shall be used as the arrival on scene time. Alternatively, on scene time may be validated by CAD timestamp and Global Positioning System (GPS) based on Automatic Vehicle Location (AVL) technology playback.

a. In some cases, certain specified responses will be corrected by ICEMA and thereby deemed as compliant responses to be included in Response Time compliance calculations. These Response Time Correction(s) will be for good cause only, as reasonably determined by ICEMA. The burden of proof that there is good cause for the correction shall rest with the ambulance provider.

b. Ambulance provider shall file a request for each desired Response Time Correction or Exemption monthly with ICEMA via the online compliance utility (OCU) within 15 business days from the end of the compliance period or in a written report until OCU is established. Such request shall list the date, the time, and the specific circumstances causing the delayed response. ICEMA contract monitor personnel shall grant or deny corrections to performance standards and shall advise the ambulance provider utilizing the OCU.

c. Until such time as the OCU provides performance data directly to ICEMA, the Ambulance provider shall submit these requests in a report to ICEMA in a manner specified by ICEMA contract monitor personnel in accordance with the

standard data formatting outlined in the ICEMA Response Time Submissions Guideline (8/30/2013).

Response time exemptions include, and are limited to:

See Attachment A (ICEMA Exemption List)

## D. RESPONSE TIME EXEMPTIONS

1. Ambulance provider shall maintain sufficient resources to achieve the specified Response Time Standards. Ambulance provider shall be responsible for prudent and reasonable planning and action related to system deployment as set forth in the provider's contract. In the monthly calculation of Ambulance provider's performance to determine compliance with Response Time Standards, every request for ambulance service from the primary or secondary PSAP shall be included. Exemptions may be made on specified responses which will be excluded from Response Time compliance calculations and liquidated damages. It is the Ambulance provider's responsibility to demonstrate good cause for the Exemption. Ambulance provider may request that a response be excluded from the calculation of Response Time Standards, if that call meets the criteria defined below. If ICEMA contract monitor personnel grants an Exemption, the call will be neither late nor compliant and the call will be removed from the compliance calculation. Ambulance provider shall file a request for each desired Response Time Exemption monthly with ICEMA via the OCU within 15 business days of the end of the previous month. Such request shall list the specific Exemption Code from attachment A along with the date, time, and specific circumstances causing the delayed response. ICEMA contract monitor personnel shall grant or deny Exemptions to performance standards and shall so advise the Ambulance provider. ICEMA contract monitor personnel will respond to Exemption requests utilizing the OCU. Until such time as the OCU provides performance data directly to ICEMA, the Ambulance provider shall submit these requests in a report to ICEMA in a manner specified by ICEMA contract monitor personnel.

## E. RESPONSE TIME REPORTING REQUIREMENTS

1. Response Time performance reporting requirements and documentation of incident time shall include, but is not limited to:

    a. Time call received by ambulance dispatch center from a Secondary PSAP. In the case where the secondary PSAP is dispatching its own ambulance, the time when the incident is sent to queue for dispatching.

    b. Time ambulance crew assigned.

    c. Time enroute to scene

    d. Arrival on scene time or canceled enroute.

    e. Total on scene time.

    f. Time canceled on scene or enroute to transport destination.

    g. Total time to transport to destination:

    h. Arrival time at the destination.

i. Time available at the destination (i.e., return to in service status).

2. Ambulance provider must synchronize its clocks with the Universal Time Coordinated (UTC) according to Pacific Standard Time PST. UTC is the basis for civil time. This 24-hour time standard is kept using highly precise atomic clocks combined with the earth's rotation.

## F. SUPPORTING DOCUMENTATION

1. Requests for Exemptions should include documentation to support the request.

   This report shall include but is not limited to:

   - Run number with response date and time
   - Unit number
   - Units on duty across all of provider's EOA's at time of call
   - Number of available units across all EOA's (Level number) at time of call
   - Deployment Plan
   - Busy units
   - Exemption code / reason and note

**Requests for Ambulance Patient Offload Delay (APOD) should also include:**

- Units on bed delay
- Unit numbers
- Unit destination
- Time call was received
- Time arrived at destination
- Transfer of care time
- Time the unit is back in service
- Number of deployed units
- Level of service (ALS or BLS)
- Deployment plan with baseline percentage of fully staffed units
- Shift start
- Shift end

**ICEMA may request the following verification tools:**

- CAD snapshot
- Posting locations
- Map or description of route taken by responding unit

## III. DEFINITIONS

**Ambulance Patient Offload Delay (APOD):** The occurrence of a patient remaining on the ambulance gurney and/or the emergency department has not assumed responsibility for patient care beyond the local emergency medical system authority approved ambulance patient offload time.

**Exemption:** Any response or group of responses that should be exempt from response time standards due to unusual circumstances beyond a provider's reasonable control.

**Response Time Performance Requirement:** The overall response time performance requirement for services under contractual agreement is intended to ensure that the provider responds to each incident with an appropriate resource in accordance with ICEMA policies and procedures. The standards set forth herein establish the level of response time performance required by provider for calls within the designated EOA.

**Response Time Performance Calculation:** Response times are measured and calculated on a fractile basis using CAD data, where available.

**Computer Aided Dispatch (CAD):** A combination of hardware and software that provides data entry, makes resource recommendations, and notifies and tracks those resources before, during, and after emergency 911 calls, preserving records of those emergency 911 calls and status changes for later analysis

**CAD to CAD:** A dedicated electronic connection between two or more CAD systems that provides a reciprocal flow of specified data elements that can populate designated fields in each of the connected CAD systems.

**Automatic Vehicle Locating (AVL):** A Global Positioning System based tool used for determining the precise geographic location of a vehicle or other resource, and transmitting this information to dispatchers, supervisors and/or into a CAD or other tracking/recording system.

**Automatic Vehicle Locating (AVL) Playback:** A software program that uses historic AVL records from tracked vehicles to plot a path in a mapping environment showing the routes and speed that the vehicle traveled during a specific time.

**Recognition Time:** Time that an incident is recognized as a reportable emergency.

**Date Incident Report:** The date the call is received by the Public Service Answering Point or other designated entity.

**Time Incident Reported- Primary PSAP:** Time call is first received by the Primary Public Safety answering Point.

**Time Dispatch Notified- Secondary PSAP:** Time call is first received by the Secondary Public Safety answering Point.

**Call in dispatch queue**: The point in time where pre-dispatch questioning/EMD is completed, and the call is ready to be dispatched to a response unit.

**Date Unit Notified:** Date response unit is notified by EMS dispatch.

**Time Unit Notified:** Time response unit is notified by the EMS dispatch.

**Time Unit Responding:** Time that the response unit begins physical motion, i.e., wheels begin to turn.

**Time Arrival at scene/Staging:** Time EMS unit stops physical motion at scene or staging area, i.e., wheels stop turning.

**Time Unit Left Scene:** Time when the response unit begins physical motion from scene, i.e., when the wheels begin to turn.

**Time Arrival at Destination:** Time when patient arrives at destination or transfer point, i.e., wheels stop turning.

**Time of Receipt of Patient at receiving Facility:** Time when receiving facility or transfer agency accepts transfer and care of the patient.

**Time back in Service- Not Available:** Time response unit back in service and not available for response.

**Time back in Service- Available:** Time response unit back in service and available for response.

**Time Unit Canceled Enroute:** Time provider agency dispatch is notified that call is canceled.

**Time Unit Upgraded Code 3:** Time when provider agency dispatch is notified that response is upgraded to code 3 from Code 2.

**Time Unit Downgraded Code 2:** Time when provider agency dispatch is notified that response is downgraded to code 2 from Code 3.

**PSAP (**Public Safety Answering points): Answering location for 911 calls originating in a given area.

ICEMA Response Time Submissions Guideline (8/30/2013) File Format:

| |
|---|
| **BUCode** |
| **ResponseDate** |
| **MapBook** |
| **Response_Area** |
| **ServiceType** |
| **Unit_Number** |
| **Run_Number** |
| **ResponseTimecode** |
| **OperatingArea** |
| **OnsetDateTime** |
| **RecognitionTime** |
| **PrimaryPSAP** |
| **DispNtfScnd** |
| **Time_Call_Received** |
| **Time_Assigned** |
| **Time_Enroute** |
| **Time_At_Scene** |
| **ArrivePatient** |
| **Time_Depart_Scene** |
| **Time_Arrived_Destination** |
| **RecFac** |
| **BackInService** |
| **Time_Call_Cleared** |
| **Time_Call_Canceled** |
| **Time_Upgrade** |
| **Time_Downgrade** |
| **Exemption_Reason** |
| **Exemption_Note** |
| **Longitude** |
| **Latitude** |

# PARAMEDIC VACCINATION

## I. PURPOSE

To develop a program that utilizes ICEMA accredited paramedics (EMT-Ps) during an H1N1 Public Health Emergency to administer H1N1 and/or seasonal flu vaccine injections.

## II. POLICY

The decision to activate this policy will be incident dependent, time limited and based on guidance from the ICEMA Medical Director and/or designee, and in collaboration with the local Health Officer as deemed necessary or essential for successful vaccination programs in emergency situations.

## III. OBJECTIVE

Train EMT-Ps to administer H1N1 and/or seasonal flu vaccinations to qualified emergency medical services (EMS) healthcare workers quickly and efficiently. Qualified EMS healthcare workers are defined as those EMS field personnel who have direct patient care responsibilities.

## IV. TRAINING

- H1N1 flu prophylaxis and vaccination training for the EMT-P will be provided by EMS providers and consist of a self-directed review of EZIZ or EMSA developed training modules that cover:
  - Infectious Diseases and Influenza
  - Principles of Vaccinations
  - Medication Profile - Vaccinations
  - Review of Anaphylaxis
  - Required Documentation
  - Related Policies, Protocols and Procedures
  - Role of EMS in a Public Health Emergency Vaccination Program
  - Vaccine Handling and Storage
- All records will be maintained by the continuing education (CE) provider for four (4) years, and shall include:
  - Complete outlines for the course given, including a brief overview, instructional objectives, comprehensive topical outline, method of evaluation and a record of participant performance.
  - Record of time, place and date each course is given and the number of CE hours granted.
  - An ICEMA approved roster signed by course participants to include name and license number of the individuals.

- After completing the training and successfully passing a written exam, the EMT-P will be certified to administer H1N1 prophylaxis flu medications and/or seasonal flu vaccinations within the ICEMA region. EMT-Ps will not be allowed to administer the vaccine until rosters are sent to ICEMA. The rosters may be faxed or e-mailed to ICEMA.

## V. QUALITY IMPROVEMENT

- ICEMA, Public Health or EMS provider's supervisory staff will monitor EMT-Ps to ensure that individuals receiving medications/vaccinations are being assessed for any adverse effects or allergic reactions at each vaccination location.

- Proper use of personal protective equipment (PPE) by the vaccinators will be monitored by the supervisors at each vaccination location.

# CHEMPACK DEPLOYMENT

## I. PURPOSE

To identify the ownership, criteria for deployment, procedure and personnel authorized to deploy the ChemPack and specify record keeping requirements during deployment and return of unused medications and supplies to the host sites.

## II. OWNERSHIP AND ADMINISTRATION

The ChemPack program is run by the Centers for Disease Control and Prevention (CDC) Office of Public Health Preparedness and Response (PHPR), Division of Strategic National Stockpile. The CDC maintains ownership and provides overall management of the ChemPack (coordinates exchanges of expired/recalled drugs, training, information sharing).

San Bernardino County Department of Public Health (SBCDPH) administers the ChemPack locally and is responsible to notify the California Department of Public Health (CDPH) and CDC of deployment. Each ChemPack is housed at host sites in strategic locations throughout the county.

Inland Counties Emergency Medical Agency (ICEMA) is responsible for all operational activities once a ChemPack is deployed.

## III. CHEMPACK DEPLOYMENT INDICATORS/AUTHORIZATION

The criteria for deploying a ChemPack include, but are not limited to, the following:

- Real or suspected release of nerve agents, organophosphates or carbamates that affect or may affect a population greater than the antidotes available within the local emergency response or hospital system.
- A multiple casualty incident involving victims with signs and symptoms of nerve agent or organophosphate exposure.
- A credible threat of an imminent incident likely to require the use of ChemPack assets.
- Preplanned staging at or near large events/mass gathering where the possibility of a major nerve agent or organophosphate exposure exists.
- A mutual aid request from neighboring counties, regions, the State, or the federal government.

The following may authorize ChemPack deployment:

- The Incident Commander (IC) on scene of a nerve agent or organophosphate exposure.
- The primary or secondary communication center receiving the call from the IC on scene of a nerve agent or organophosphate exposure.
- San Bernardino County Medical Health Operational Area Coordinator (MHOAC) or designee.
- ICEMA EMS Duty Officer.

- San Bernardino County Office of Emergency Services (SBCOES) when EOC is activated.
- San Bernardino County Department of Public Health.

## IV. PROCEDURE FOR CHEMPACK DEPLOYMENT

- The primary communications center or IC shall:
  - Identify that a condition exists for the deployment of a ChemPack using the indicators listed above.
  - Obtain an estimated number of patients affected.
  - Forward request for ChemPack deployment to Comm Center.
- Comm Center shall:
  - Query CAD for closest EMS ChemPack.
  - Contact Sheriff or closest, most appropriate air or ground agency for transport.
  - Comm Center shall contact the ChemPack host site(s) by phone to inform them that the medication in the ChemPack is being deployed. The amount of medication deployed is based on increments of 50 patients (adult or pediatric) obtained from the communication center or field IC.
  - Comm Center shall use the following script when calling the host site:

    **"This is Comm Center. We have received a request from (<u>requesting agency</u>) to deploy the ChemPack stored at your facility. Please prepare medications per the ChemPack pharmaceutical packaging protocols for (<u>number of</u>) adult patients and/or (<u>number of</u>) pediatric patients for pick-up by (<u>name of agency) for transport</u>."**
  - Contact the ICEMA Duty Officer via phone at 909-208-8618 for all ChemPack deployments.
- ICEMA shall:
  - Coordinate the management of the ChemPack resources in a protracted nerve agent or organophosphate incident when multiple scenes or hospitals are involved or for pre-deployment.
  - On notification of deployment of the ChemPack, the ICEMA Duty Officer will contact the following:
    - MHOAC (for the affected County)
    - SBCOES Duty Officer: 909-356-3911
    - REMSA MHOAC: 951-830-8041, if there is no answer contact REMSA Duty Officer at 951-712-3342
    - SBCDPH Duty Officer: 909-677-7168

## V. CHEMPACK DEMOBILIZATION PROCEDURES

- The on scene IC or MHOAC may halt deployment at any time based on unmet criteria or suitability as additional information becomes available.
- Once deployed, the IC and/or receiving facility shall ensure that all unused medications from the ChemPack and chain of custody forms are returned to the SBCDPH Preparedness and Response Office. The chain of custody shall be maintained.
- The on scene IC and/or hospital shall notify the SBCDPH Duty Officer of the return of unused medications and supplies.

## VI. BOOKKEEPING DURING CHEMPACK UTILIZATION

Each ChemPack has an inventory of all medication and supplies. EMS field and hospital personnel accepting and transferring ChemPack supplies must use the approved ChemPack Deployment Inventory and Movement Tracking form (currently OSP 15-136681).

The EMS provider requesting and receiving the ChemPack shall maintain accurate records following the Standardized Emergency Management System (SEMS)/National Incident Management System (NIMS) model that includes:

- Incident name and number.
- Incident commander and agency name.
- Time of ChemPack request and deployment.
- Individual or entity who authorized ChemPack deployment.
- Name and title of person receiving deployment.
- Number and types of ChemPack contents used.
- Number of patients involved in the incident.
- Time and name of the SBCDPH Duty Officer that was notified of return.

SPECIALTY AND OPTIONAL SCOPE PROGRAM APPROVAL

## I. PURPOSE

To provide guidelines for the application and renewal of advanced life support (ALS) or basic life support (BLS) specialty or optional scope of practice programs.

See below for list of programs:

**Emergency Medical Dispatch (EMD) Program**: The reception, evaluation, processing and provision of dispatch life support; management of requests for emergency medical assistance; ongoing evaluation and improvement of the emergency medical dispatch process. (See ICEMA Reference #4090 - Emergency Medical Dispatch Center Requirements.)

**Mobile Medic Specialty Program**: A specialty program that utilizes boats, bicycles, motorcycles, golf carts and/or powered all-terrain vehicles or for ALS or BLS response designed to deliver EMT, AEMT, and/or EMT-P to the scene of injury and/or transport a patient from the scene of injury to other awaiting EMS units.

**Optional Scope Program**: Any EMT/AEMT/EMT-P program that may require approval from the ICEMA Medical Director to function outside of the basic scope of practice that is not initiated region-wide.

**Public Safety AED Service Provider**: A specialty program for public safety personnel. (See ICEMA Reference #15060 - Public Safety AED Service Provider.)

**Specialty Program**: Any program that may require approval from the ICEMA Medical Director to function due to regulations or any variance from standard ICEMA policies or protocols either in equipment or procedures.

**Tactical Medicine for Special Operations**: A specialty program that meets all the prerequisites established by POST/EMSA for the delivery of emergency medical care during law enforcement special operations. (See ICEMA Reference #4080 - Tactical Medicine for Special Operations.)

## II. POLICY

- All EMS providers interested in providing ALS specialty or EMT optional scope programs shall submit an application that will undergo a review process to determine eligibility.
- All specialty programs must submit a new application and be approved every two (2) years.
- All local optional scope programs must submit a new application and be approved at least every three (3) years or concurrently with State approval of the ICEMA Local Optional Scope of Practice whichever is sooner.
- An electronic patient care report (ePCR) must be initiated whenever contact is made with a patient. Patients refusing care or declining further care after treatment must sign a refusal of care and/or Against Medical Advice form.
- If paper downtime forms are utilized, EMS providers are required to submit an approved ePCR by the end of shift or within 24 hours of the close of the event (whichever is less).

- Prior to base contact protocols will be followed. If further treatment is needed, radio contact with the base hospital should be established as soon as possible.

- All ePCRS utilizing a specialty program will be reviewed by the EMS provider as part of its Continuous Quality Improvement program. Review or submission of additional criteria may be required.

- EMS field personnel must accompany the patient to the hospital if utilizing optional scope medications or devices that the transporting EMS field personnel are not authorized to use.

## III. PROCEDURE FOR SPECIALTY AND OPTIONAL SCOPE PROGRAM APPROVAL

- Submit an original application to ICEMA indicating the type of program. The Specialty and Optional Scope Program Approval Application is available on the ICEMA website at ICEMA.sbcounty.gov.

- Submit a copy of the proposed or renewal program which shall include:

  - A statement demonstrating a need for the program.

  - A description of the geographic area within which the specialty program will be utilized.

  - A detailed description of the operation of the program, such as special events, 24/7 and how the program will be implemented.

  - A description of how the program will interface with the EMS system and 9-1-1.

  - A detailed description of the training program. For optional scope programs, include provisions for written test and demonstration of skills competencies.

  - A detailed list of employees participating in this program. If there are changes in employees, ICEMA must be notified in writing within 10 days.

  - A detailed description of any deviations from the Standard Drug and Equipment List, how equipment and drugs will be stored and/or transported and a program for maintenance of the equipment.

  - A process for the reporting of any deviations or adverse events.

  - A quality improvement plan or an amendment to the EMS providers' Quality Improvement Plan that describes the quality improvement process for the specialty program. The plan must comply with all provisions of the ICEMA Quality Improvement Plan and include provisions for 100% review of all patient care reports in which the specialty or optional scope program was attempted or utilized.

  - ICEMA may require the collection and submission of additional criteria as necessary.

- Additional procedures for Mobile Medic Specialty Programs:
  - A statement indicating compliance with Department of Motor Vehicles rules for personal safety equipment and/or vehicle registration if applicable.
  - A list of type of vehicles utilized (bicycles, motorcycles, ATV).
  - Type of interim patient care report utilized and process for transfer of patient care documents in the field.
  - Type of communication devices utilized and the interface with ALS provider and transport.
- Additional procedures for Impedance Threshold Device (ITD) Specialty Programs:
  - Prior to deployment and utilization of ITDs, providers must demonstrate high performance compression fraction of at least 80% without the use of an automatic compression device either through retrospective or concurrent audits for six (6) months.
  - ITD must be used in conjunction with high performance CPR and may be used with automatic compression devices.
  - Submit initial/renewal course outline for approval to include:
    - Indications for use and when to remove the device for both basic and advanced airways.
    - Use of two-person bag-valve-mask ventilation when used in the absence of an advanced airway to ensure adequate seal to maintain the intended effect of the device.
    - Use in conjunction with high performance CPR, keeping compression rates between 100 - 120 per minute.
- Additional procedures for Local Optional Scope programs:
  - Authorization for EMTs or EMT-Ps to practice optional skills is limited to those whose certificate or license is active and who are employed by an ICEMA authorized EMS provider.
  - Initial training to include not less than five (5) hours with skills competency demonstration once every one (1) year.
  - Comply with State regulations for optional skills training and demonstration of competency.

## IV. DRUG AND EQUIPMENT LISTS

- Equipment and supplies carried and utilized by specialty program personnel shall be consistent and compatible with the drugs and equipment normally carried by ALS units.
- Equipment and supplies shall be based on the appropriate level of personnel utilized for the particular event.

## V. REFERENCES

| Number | Name |
|---|---|
| 4080 | Tactical Medicine for Special Operations |
| 4090 | Emergency Medical Dispatch Center Requirements (San Bernardino County Only) |
| 15060 | Public Safety AED Service Provider |

# ST ELEVATION MYOCARDIAL INFARCTION CRITICAL CARE SYSTEM DESIGNATION

## I. PURPOSE

To establish standards for the designation of an acute care hospital as a ST Elevation Myocardial Infarction (STEMI) Receiving Center.

## II. POLICY

Hospital requirements for Inland Counties Emergency Medical Agency (ICEMA) STEMI Receiving Center designation:

- Must be a full service general acute care hospital approved by ICEMA as a 9-1-1 receiving hospital.
- Must have a licensure as a Cardiac Catheterization Laboratory (Cath Lab).
- Must be accredited by the American College of Cardiology (ACC) or The Joint Commission (TJC) as a Chest Pain Center with Primary Percutaneous Coronary Intervention (PCI).
- Must have a Cardiovascular surgical services permit.
- Must be in compliance with all requirements listed in the California Code of Regulations, Title 22, Division 9, Chapter 7.1, STEMI Critical Care System Regulations.

## III. STAFFING REQUIREMENTS

The hospital will have the following positions filled prior to becoming a STEMI Receiving Center:

- Medical Directors

  The hospital shall designate two (2) physicians as co-directors who are responsible for the medical oversight and ongoing performance of the STEMI Receiving Center program. One (1) physician shall be a board-certified interventional cardiologist with active Percutaneous Coronary Intervention (PCI) privileges. The co-director shall be a board-certified emergency medicine physician with active privileges to practice in the emergency department.

- STEMI Program Manager

  The hospital shall designate a qualified STEMI Program Manager. This individual is responsible for monitoring and evaluating the care of STEMI patients, the coordination of performance improvement and patient safety programs for the STEMI critical care system in conjunction with the STEMI medical director. The STEMI Program Manager must be trained or certified in critical care nursing or have at least two (2) years dedicated STEMI patient management experience.

- On-Call Physician Consultants and Staff

  On-call physicians, consultants, and staff must be promptly available within 30 minutes from notification. A daily roster must include the following: on-call physician, consultants, and staff:

- Interventional Cardiologist with privileges in PCI procedures.
- Cardiovascular Surgeon with privileges in Coronary Artery Bypass Grafting.
- Cath Laboratory Team.
- Hemodynamic support device nurse or technologist.

- Registrar

  To ensure accurate and timely data submission, hospitals must have a dedicated registrar to submit required data elements.

  - Depending on the volume, this position may be shared between specialty cares.
  - Failure to submit data as outlined above may result in probation, suspension, fines or rescission of STEMI Receiving Center Designation.

## IV. INTERNAL STEMI RECEIVING CENTER POLICIES

The STEMI Receiving Center must have:

- The capability to provide STEMI patient care 24 hours per day, seven (7) days per week.
- A single call alert/communication system for notification of incoming STEMI patients, available 24 hours per day, seven (7) days per week (i.e., in-house paging system).
- A process for the treatment and triage of simultaneously arriving STEMI patients.
- A fibrinolytic therapy protocol to be used only in unforeseen circumstances when PCI of a STEMI patient is not possible.
- Prompt acceptance of STEMI patients from STEMI Referral Hospitals that do not have PCI capability. To avoid prolonged door to intervention time the STEMI base hospitals are allowed to facilitate redirection of STEMI patients to nearby STEMI receiving centers physician to physician contact must be made when redirecting patients.
- Acknowledgement that STEMI patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).

## V. DATA COLLECTION

All required data elements shall be collected and entered in an ICEMA approved STEMI registry on a regular basis and submitted to ICEMA for review. All hospitals including STEMI receiving centers must participate in Cardiac Arrest Registry to Enhance Survival (CARES).

## VI. CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRAM

STEMI Receiving Centers shall develop an on-going CQI program which monitors all aspect of treatment and management of suspected STEMI patients and identify areas needing improvement. The program must, at a minimum, monitor the following parameters:

- Morbidity and mortality related to procedural complications.

- Detail review of cases requiring emergent rescue Coronary Artery Bypass Graph (CABG).
- Tracking of door-to-dilation time and adherence to minimum performance standards set by ICEMA policy, contractual agreement, California Regulations, and the ACC.
- Detailed review of cases requiring redirection of EMS STEMI patients to other STEMI Receiving Centers as a result of over capacity and prolonged delay of door-to-intervention time.
- Active participation in each ICEMA STEMI CQI Committee and STEMI regional peer review process. This will include a review of selected medical records as determined by CQI indicators and presentation of details to peer review committee for adjudication.
- Provide Continuing Education (CE) opportunities twice per year for emergency medical services (EMS) field personnel in areas of 12-lead ECG acquisition and interpretation, as well as assessment and management of STEMI patients.
- Programs in place to promote public education efforts specific to cardiac care.

## VII. PERFORMANCE STANDARD

Designated STEMI Receiving Centers must comply with the California Code of Regulations, Title 22, Division 9, Chapter 7.1, STEMI Critical Care System, ICEMA policies, and the ACC performance measures, that exist and may change in the future.

## VIII. AMBULANCE PATIENT OFFLOAD DELAY

- All designated facilities shall maintain compliance with ICEMA APOD Policy 8100.

## IX. DESIGNATION

- The STEMI Receiving Center applicant shall submit a Letter of Intent to ICEMA, outlining the purpose of the application, proposed timeline, and intended goals.
- The STEMI Receiving Center applicant shall be designated after satisfactory review of written documentation, a potential site survey by ICEMA, and completion of a board approved agreement between the STEMI Receiving Center and ICEMA.
- Initial designation as a STEMI Receiving Center shall be in accordance with terms outlined in the agreement.
- Failure to comply with the approved agreement, or ICEMA policy may result in probation, suspension, fines or rescission of STEMI Receiving Center designation.

## X. REFERENCES

| Number | Name |
|---|---|
| 8050 | Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 8100 | Ambulance Patient Offload Delay (APOD) |

# EMT-P BLOOD DRAW FOR CHEMICAL TESTING AT THE REQUEST OF A PEACE OFFICER

## I. PURPOSE

To allow ICEMA accredited paramedics (EMT-Ps), not employed by fire departments, to withdraw blood samples at the request of a sworn peace officer for the purpose of chemical testing from persons suspected of driving under the influence.

**Per California Vehicle Code 23158 (k): paramedics employed by fire departments are not allowed to draw blood for a peace officer.**

## II. POLICY

Upon completion of an agreement with the employing ALS provider and with the approval of ICEMA, allow EMT-Ps to draw blood at the request of law enforcement for chemical testing.

**At no time will the request for blood draw for alcohol level take precedence over the medical treatment of the patient.**

## III. PROCEDURE

An EMT-P, at the request of law enforcement, may draw blood for chemical testing if the following conditions are met:

- The employing ALS provider received ICEMA approval following submittal for a Specialty/Optional Scope Program to draw blood at the request of law enforcement.
- The request must be in writing from the peace officer.
- Blood draw kits will be supplied by the law enforcement agency.
- The procedure will be performed based on standard practice, pursuant to the directions on the supplied kit (Benzalkonium Chloride) and documented as such. The obtained sample will be the property of the arresting officer.
- A patient care record must be completed for all requests and include, at a minimum, the following information:
  - Patient name
  - Sex
  - Date and time
  - Name of requesting peace officer
  - Brief medical history including medications and allergies
  - Vital signs

- In the narrative section include the following information:
  - Kit number and/or case number
  - EMT-P name
  - For initial and subsequent needle sticks include time, date, site and skin preparation used, and location of blood draw.
  - The patient's consent for the procedure and the peace officer's request for the procedure.

- Base hospital contact is not required unless there is a medical necessity.

## IV. CONTRAINDICATIONS

- Expired laboratory tubes.
- Patient history of an allergy to the antiseptic used in the kit, or to Betadine. The EMT-P must refuse the request to draw and inform the peace officer of the situation.
- If the patient is on anti-coagulant therapy, direct pressure will be held on the site for at least one (1) full minute. A pressure dressing will be applied.
- No blood draws will be performed on patients with hemophilia.
- No blood draws will be performed on combative persons.
- If the patient refuses the blood draw for any reason, the EMT-P will document and stop procedure immediately. The EMT-P is not allowed to draw blood on a struggling or restrained patient. The patient must be cooperative.

## V. TRAINING

EMT-Ps will be required to participate in a training program focusing on proper preparation of the blood draw site and required documentation.

Additional documentation:

- A log will be kept of all blood draws for DUI by the EMT-P's employer for quality improvement (QI) purposes.
- The EMT-P should provide his or her name and any other information needed to complete the Blood Draw Request Form from the law enforcement agency.

FIRELINE EMT-P

## I. PURPOSE

To provide guidance and medical oversight for an ICEMA paramedic (EMT-P) deployed to function as a Fireline paramedic (EMPF).

This protocol is for use by authorized EMPFs during fire suppression activities and treatment of fire suppression personnel only.

## II. REQUIREMENTS

- Must be a currently licensed EMT-P in California.
- Must be currently accredited EMT-P in the ICEMA region.
- Must be currently employed by an ICEMA approved ALS provider.
- The EMPF will follow FIRESCOPE Fireline Emergency Medical Technician ICS 702 Position Manual and all other ICS protocols.
- The EMPF will check in and obtain briefing from the Logistics Section Chief or the Medical Unit Leader, if established. Briefing will include current incident situation, anticipated medical needs, and local emergency medical system orientation.
- The EMPF will provide emergency medical treatment to personnel operating on the fireline.
- The EMPF will follow ICEMA prior to contact protocols if unable to contact the assigned base hospital.
- The EMPF may not perform skills outside of the ICEMA scope of practice.

## III. PROCEDURE

- The EMS provider will notify ICEMA of the deployment of the EMPF to an incident. Use the Fireline Paramedic (EMPF) Deployment Notification form, which is on the ICEMA website at ICEMA.sbcounty.gov.
- The EMPF will carry inventory in the advanced life support (ALS) pack as per the inventory list below (see Section IV. Fireline EMT-P (ALS) Pack Inventory. Inventory will be supplied and maintained by the employing ALS provider. Additional items for restock should also be maintained and secured in a vehicle or in the Medical Unit trailer.
- Incident Medical Units may not have the capability of resupplying controlled substances (narcotics). EMS providers should stock sufficient quantities of medical supplies and medications, especially controlled substance medications, to assure adequate supplies and medications.
- Narcotics must be under double lock and maintained on the EMPF person or secured in his/her vehicle at all times as per the ICEMA Drug and Equipment List.

- EMPF may carry an inventory of controlled substances (i.e., Fentanyl, Ketamine and Midazolam) if authorized by the employing ALS provider's Medical Director. The authorizing Medical Director is responsible to assure full compliance with all federal and state laws relating to purchase, storage and transportation of controlled substances. Only controlled substances approved for use in the ICEMA region may be carried and their use must be in accordance with current ICEMA patient care protocols.

- Radio communication failure protocols will not be used. Prior to base hospital contact protocols will be followed. If further treatment is needed, radio contact with the base hospital should be established as soon as possible.

- Documentation of patient care must follow ICEMA protocol utilizing the electronic patient care report (ePCR), if available, or a paper O1A form. All PCRs will be reviewed by the ALS provider and ICEMA for quality improvement (QI) purposes.

- A EMPF will be paired with a Fireline EMT (EMTF) or another EMPF who will assist with basic life support (BLS) treatment and supplies.

## IV. FIRELINE EMT-P (ALS) PACK INVENTORY

**Minimum Requirements**: The weight of the pack will dictate if the EMT-P chooses to carry additional ALS supplies.

### MEDICATIONS/SOLUTIONS

| Medications/Solutions | ALS |
|---|---|
| Albuterol Solution 2.5 mg<br>Handheld Nebulizer or Multidose Inhaler | 4 |
| Atropine Sulfate 1 mg | 2 |
| Ipratropium Bromide Solution 0.5 mg<br>Handheld Nebulizer or Multidose Inhaler | 4 |
| Lidocaine 100 mg IV pre-load | 2 |
| Aspirin 80 mg chewable | 1 bottle |
| Dextrose 10%/250 ml (D10W 25 gm) IV/IO Bolus | 1 |
| Diphenhydramine 50 mg | 4 |
| Epinephrine 1: 10,000 1 mg | 2 |
| Epinephrine 1: 1000 1 mg | 4 |
| Glucagon 1 mg | 1 |
| Naloxone 2 mg | 2 |
| Nitroglycerin - Spray 0.4 metered dose and/or tablets (tablets to be discarded 90 days after opening) | 1 (equivalent of 10 patient doses) |
| Saline 0.9% IV 1000 ml may be divided in two 500 ml bags or four 250 ml bags. | |
| Tranexamic Acid (TXA) 1 gm | 1 |

### CONTROLLED SUBSTANCE MEDICATIONS

| Controlled Substance Medications<br>MUST BE DOUBLED LOCKED | ALS |
|---|---|
| Midazolam | 20 mg |
| Fentanyl (amount determined by the medical director) | 200 - 400 mcg |
| Ketamine | 120 - 1000 mg |

## ALS AIRWAY EQUIPMENT

| Airway Equipment | ALS |
|---|---|
| Endotracheal Tubes - 6.0, 7.0 and/or 7.5 cuffed with stylet | 1 each |
| Laryngeal blades - #0, #1, #2, #3, #4 curved and/or straight | 1 each |
| Laryngoscope handle with batteries - or 2 disposable handles | 1 each |
| ET Tube holder | 1 |
| End Tidal CO2 Detector | 1 |
| Needle Cricothyrotomy Kit | 1 |
| Needle Thoracostomy Kit | 1 |

## IV/MEDICATION ADMINISTRATION SUPPLIES

| IV/Medication Administration Supplies | ALS |
|---|---|
| IV administration set macro drip | 2 |
| Venaguard | 2 |
| Alcohol preps | 6 |
| Betadine swabs | 4 |
| Tourniquet | 2 |
| Razor | 1 |
| Tape | 1 |
| IV catheters - 14, 16, 18 and 20 gauge | 2 |
| 10 cc syringe | 2 |
| 1 cc TB syringe | 2 |
| 18 gauge needle | 4 |
| 25 gauge needle | 2 |

## MISCELLANEOUS EQUIPMENT

| Miscellaneous | ALS |
|---|---|
| Sharps container | 1 |
| Narcotic storage per protocol | |
| EMPF pack inventory sheet | 1 |
| Patient care report or ePCR (Toughbook) | |
| AMA forms | 3 |

| Equipment | ALS |
|---|---|
| Compact AED or compact monitor defibrillator combination | |
| Appropriate cardiac pads | |
| Pulse oximetry (optional) | |
| Glucometer, test strips and lancets | 4 |

The BLS pack and supplies will be carried by the EMTF or accompanying EMPF. Personal items and supplies cannot be carried in either the ALS pack or the BLS pack.

STROKE CRITICAL CARE SYSTEM DESIGNATION

## I. PURPOSE

To establish standards for the designation of an acute care hospital as a Stroke Receiving Center.

## II. POLICY

Hospital requirements for Inland Counties Emergency Medical Agency (ICEMA) Stroke Receiving Center designation:

- Must be a full service general acute care hospital approved by ICEMA as a 9-1-1 receiving hospital.
- Must have certification as an Acute Ready, Primary, Thrombectomy Capable, or Comprehensive Stroke Center by The Joint Commission (TJC), Healthcare Facilities Accreditation Program (HFAP), or Det Norske Veritas (DNV) and proof of re-certification every two (2) years.
- Must be in compliance with all requirements listed in the California Code of Regulations, Title 22, Division 9, Chapter 7.2, Stroke Critical Care System for the requested level of designation.

## III. STAFFING REQUIREMENTS

The hospital will have the following positions filled for all levels of designation prior to becoming a Stroke Receiving Center.

- Medical Directors

  The hospital shall designate two (2) physicians with hospital privileges as co-directors who are responsible for the medical oversight and ongoing performance of the Stroke Receiving Center program. One (1) physician shall be board certified or board eligible by the American Board of Medical Specialties or American Osteopathic Association, neurology or neurosurgery board. The co-director shall be a board certified or board eligible emergency medicine physician.

- Stroke Program Manager

  The hospital shall designate a qualified Stroke Program Manager. This individual is responsible for monitoring and evaluating the care of Stroke patients, the coordination of performance improvement and patient safety programs for the Stroke critical care system in conjunction with the Stroke medical director. The Stroke Program Manager must be trained or certified in critical care nursing or have at least two (2) years dedicated to Stroke patient management experience.

- On-Call Physicians Specialists/Consultants

  On-call physicians, consultants, and staff must be promptly available within 30 minutes from notification. A daily roster must include the following: on-call physician, consultants, and staff:

  - Radiologist experienced in neuroradiologic interpretations.

- On-call Neurologist and /or tele-neurology services available twenty-four (24) hours per day; seven (7) days per week.

- Registrar

  To ensure accurate and timely data submission, hospitals must have a dedicated registrar to submit required data elements.

  - Depending on the volume, this position may be shared between specialty cares.

  - Failure to submit data as outlined above may result in probation, suspension, fines or rescission of Stroke Receiving Center Designation.

## IV. INTERNAL STROKE RECEIVING CENTER POLICIES

All levels of designation must have internal policies for the following:

- Stroke Team alert response policy upon EMS notification of a “Stroke Alert”.
- Rapid assessment of stroke patient by Emergency and Neurology Teams.
- Prioritization of ancillary services including laboratory and pharmacy with notification of “Stroke Alert”.
- Arrangement for priority bed availability in Acute Stroke Unit or Intensive Care Unit (ICU) for “Stroke Alert” patients.
- A process for the treatment and triage of simultaneously arriving stroke patients.
- If neurosurgical services are not available in-house, the Stroke Receiving Center must have a rapid transfer agreement in place with a hospital that provides this service. Stroke Receiving Centers must promptly accept rapid transfer requests. Additionally, the Stroke Receiving Center must have a rapid transport agreement in place with an ICEMA approved EMS transport provider for that Exclusive Operation Area (EOA).
- Acknowledgement that stroke patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).
- Emergent thrombolytic and tele-neurology protocol to be used by Neurology, Emergency, Pharmacy and Critical Care Teams.
- An alert/communication system for notification of incoming stroke patients, available 24 hours per day, seven (7) days per week (i.e., in-house paging system).

## V. DATA COLLECTION

Designated Stroke Receiving Centers shall report all required data as determined by ICEMA and the Stroke Committee.

## VI. CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRAM

Stroke Receiving Centers shall develop an on-going CQI program which monitors all aspects of treatment and management of stroke patients and identify areas needing improvement. The program must, at a minimum, monitor the following:

- Morbidity and mortality related to procedural complications.
- Review of all transfers.
- Tracking door-to-intervention times and adherence to minimum performance standards.
- Active participation in ICEMA Stroke CQI Committee and Stroke regional peer review process. This will include a review of selected medical records as determined by CQI indicators and presentation of details to peer review committee for adjudication.
- Provide Continuing Education (CE) opportunities twice per year for referral hospitals and EMS field personnel in areas of pathophysiology, assessment, triage and management for stroke patients and report annually to ICEMA.
- Lead public stroke education and illness prevention efforts and report annually to ICEMA.

## VII. PERFORMANCE STANDARDS

Designated Stroke Receiving Centers must comply with the California Code of Regulations, Title 22, Division 9, Chapter 7.2, Stroke Critical Care System, ICEMA policies, and the Performance Measures set forth by the accrediting agencies identified in Section II, that exist and may change in the future.

## VIII. AMBULANCE PATIENT OFFLOAD DELAY

- All designated facilities shall maintain compliance with ICEMA APOD Policy 8100.

## IX. DESIGNATION LEVELS

- The Stroke Receiving Center applicant shall submit a Letter of Intent to ICEMA, outlining the purpose of the application, proposed timeline, and intended goals.
- **Acute Stroke Ready Hospital**: A hospital able to provide the minimum level of critical care services for stroke patients in the emergency department and are paired with one or more hospitals with a higher level of stroke services.
- **Primary Stroke Center:** A hospital that treats acute stroke patients and identifies patients who may benefit from transfer to a higher level of care when clinically warranted.
- **Thrombectomy-Capable Stroke Center:** A primary stroke center with the ability to perform mechanical thrombectomy for the ischemic stroke patient when clinically warranted.
- **Comprehensive Stroke Center:** A hospital with specific abilities to receive, diagnose, and treat all stroke cases and provide the highest level of care for stroke patients.

**Acute Stroke Ready Hospitals**

To be considered for Acute Stroke Ready hospital designation, multiple variables will be taken into consideration and will be determined by the ICEMA Medical Director:

- What are the current needs of the community?
- How will this impact the overall care in the system?
- What is the location of the hospital, is there a prolonged distance to a primary thrombectomy or comprehensive stroke center?

The hospital must meet the following minimum criteria:

- Written transfer agreements.
- Written policies and procedures for emergent stroke services to include written protocols and standardized orders.
- A data-driven, continuous quality improvement process.
- Neuro imaging services (CT or MRI) with interpretation of imaging available 24 hours a day, seven (7) days a week, and 365 days a year.
- Laboratory services to include blood testing, electrocardiography, and x-ray services 24 hours a day, seven (7) days a week and 365 days a year.
- Provide IV thrombolytic treatment.
- A clinical Stroke Team available to see patient (in person or by tele-health) within 20 minutes of arrival to ED.

**Primary Stroke Centers**

- Stroke diagnosis and treatment capacity 24 hours a day, seven (7) days a week.
- A clinical Stroke Team available to see in person or via telehealth, a patient identified as a potential stroke patient within 15 minutes following patient's arrival.
- Neuro imaging services capability that is available 24 hours a day, seven (7) days a week.
- Two (2) CT scanners and one (1) MRI scanner.
- Neuro imaging initiated within 25 minutes following arrival to ED.
- Laboratory services that are available 24 hours a day, seven (7) days a week.

**Thrombectomy Capable Centers** (in addition to Primary Stroke Center Requirements)

- The ability to perform mechanical thrombectomy for the treatment of ischemic stroke 24 hours a day, seven (7) days a week.
- Neuro interventionalist.

- Neuro radiologist.
- The ability to perform advanced imaging 24 hours a day, seven (7) days a week.

**Comprehensive Centers** (in addition to Primary and Thrombectomy Center Requirements)

- Neuro-endovascular diagnostic and therapeutic procedures available 24 hours a day, seven (7) days a week.
- Advanced imaging available 24 hours a day, seven (7) days a week.
- A stroke patient research program.
- A neurosurgical team capable of assessing and treating complex stroke and stroke-like syndromes.
- A written call schedule for attending neurointerventionalist, neurologist, or neurosurgeon providing availability 24 hours a day, seven (7) days a week.

## X. DESIGNATION

ICEMA designation as an Acute Stroke Ready Hospital, Primary, Thrombectomy Capable, or Comprehensive Stroke Center will be determined based on need and volume in the community. Designation will not be determined by current accreditation only; however, Stroke Receiving Centers must be accredited at least at an equivalent designation level being requested.

- The Stroke Receiving Center applicant shall be designated by ICEMA after satisfactory review of written documentation, a potential site survey and completion of an agreement between the hospital and ICEMA.
- Documentation of current certification as an Acute Ready Hospital, Primary Stroke Center Thrombectomy Capable Stroke Center or Comprehensive Stroke Center by TJC, HFAP or DNV.
- Initial designation as a Primary, Thrombectomy, Capable or Comprehensive Stoke Center shall be in accordance with terms outlined in the agreement.
- Failure to comply with the approved agreement, or ICEMA policy may result in probation, suspension, fines or rescission of the Stroke Receiving Center designation.

## XI. REFERENCE

| Number | Name |
|---|---|
| 8050 | Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 8100 | Ambulance Patient Offload Delay (APOD) |

# TACTICAL MEDICINE FOR SPECIAL OPERATIONS

## I. PURPOSE

To provide medical oversight and continuous quality improvement and establish policies and procedures for Tactical Medicine for Special Operations first responders who respond as an integral part of Special Weapons and Tactics (SWAT) operations.

## II. POLICY

- Tactical Medicine for Special Operations shall be developed and utilized in accordance with the "California POST/EMSA Tactical Medicine Operational Programs and Standardized Training Recommendations" document that can be located on the EMSA website at emsa.ca.gov.

- Tactical Medicine for Special Operations and Tactical Medics/Tactical TEMS Specialists (Emergency Medical Technicians (EMTs), Advanced EMTs (AEMTs), Paramedics (EMT-Ps), and Registered Nurses (RNs)) shall be integrated into the local EMS system, in coordination with ICEMA, the local Emergency Medical Services (EMS) Agency (POST, 2010).

- Tactical Medicine for Special Operations shall be reviewed and approved by ICEMA.

- Administration of this policy applies to EMTs, AEMTs, EMT-Ps, and RNs providing medical services within an established EMS Agency and as part of a recognized Tactical Medicine Program.

  - The medical scope of practice for EMTs, AEMTs and EMT-Ps is consistent with California Code of Regulations, Title 22, Division 9 and all ICEMA protocols.

- Tactical Medicine for Special Operations should designate a Tactical Medicine Program Director as defined within POST and EMSA guidelines.

- Tactical Medicine for Special Operations should designate a physician as a Tactical Medicine Medial Director "to provide medical direction, continuous quality improvement, medical oversight, and act as a resource for medical contingency planning" (POST, 2010).

- Tactical Medicine for Special Operations should have components pertaining to planning, medical oversight, quality improvement and training as defined in *Tactical Medicine Operational Programs and Standardized Training Recommendations* (POST, 2010; Section 2.2.1-7) and *California Tactical Casualty Care Training Guidelines* (EMSA #370, June 2017).

- Tactical Medicine for Special Operations should include tactical medical personnel in mission planning and risk assessment to ensure appropriate assets are available for the identified mission as defined in *Tactical Medicine Operational Programs and Standardized Training Recommendations* (POST, 2010; Section 2.2.2).

## III. PROCEDURE

- All agencies that intend to provide Tactical Medicine for Special Operations that include EMTs, AEMTs, EMT-Ps and RNs, will:

  - Submit an original application indicating the type of program. The Specialty and Optional Scope Program Application is available on the ICEMA website at ICEMA.sbcounty.gov.

  - Submit a copy of the proposed program to include all information as listed on the application.

  - Provide a list of all EMTs, AEMTs, EMT-Ps and RNs assigned to Tactical Medicine for Special Operations.

  - Tactical medicine personnel must be:

    - EMTs and AEMTs must be California certified.
    - EMT-Ps must be California licensed and accredited by ICEMA.
    - RNs must be licensed as a Registered Nurse in California and an authorized Flight Nurse or MICN within the ICEMA region.

  - Participate in ICEMA approved Continuous Quality Improvement process.

## IV. TRAINING

Designated Tactical Emergency Medical Support (TEMS) personnel shall successfully complete all initial and ongoing recommended training provided by an approved tactical medicine training program as listed in the California POST/EMSA *Tactical Medicine Operational Programs and Standardized Training Recommendations* (March 2010) or *California Tactical Casualty Care Training Guidelines* (EMSA #370, June 2017).

## V. DRUG AND EQUIPMENT LISTS

Equipment and supplies carried and utilized by Tactical Emergency Medical Support (TEMS) personnel shall be consistent with the items listed in the California POST/EMSA *Tactical Medicine Operational Programs and Standardized Training Recommendations* document. Equipment and supplies shall be based on the appropriate level of personnel utilized for the particular Tactical Medicine for Special Operations (TEMS BLS or TEMS ALS).

The Tactical Medicine for Special Operations standard list of drugs and equipment carried by TEMS BLS or TEMS ALS medical personnel must be reviewed and approved by ICEMA prior to issue or use by EMT or EMT-P personnel.

### TACTICAL MEDICINE OPERATIONAL EQUIPMENT RECOMMENDATIONS

| Medications | BLS | ALS |
|---|---|---|
| Albuterol 2.5 mg with Atrovent 0.5 mg MDI | | 1 |
| Aspirin 81 mg | | 1 bottle |
| Atropine Sulfate 1 mg preload | | 1 |
| Dextrose 50% 25 gm preload | | 1 |
| Diphenhydramine 50 mg | | 2 |
| Epinephrine (1:1000) 1 mg | | 2 |
| Epinephrine (1:10,000)1 mg preload | | 2 |
| Glucagon 1 mg | | 1 |

| | | |
|---|---|---|
| Naloxone 2 mg preload | | 2 |
| Nerve Agent Antidote (DuoDote) | | 1 |
| Nitroglycerine 0.4 metered dose or tablets (tablets to be discarded 90 days after opening) | | 1 |
| Normal Saline 500 ml | | 2 |
| Ondansetron 4 mg IV/IM/oral tabs | | 4 |
| Tranexamic Acid (TXA) 1 gm | | 1 |

**CONTROLLED SUBSTANCE MEDICATIONS**

| **Controlled Substance Medications MUST BE DOUBLED LOCKED** | **BLS** | **ALS** |
|---|---|---|
| Midazolam | | 20 mgs |
| Fentanyl | | 200 - 400 mcg |
| Ketamine | | 120 - 1000 mg |

**AIRWAY EQUIPMENT**

| **Airway Equipment** | **BLS** | **ALS** |
|---|---|---|
| Chest seal and Flutter Valve | | 1 |
| End Tidal CO2 (device may be integrated into bag) | | 1 |
| Endotracheal Tubes - 6.0 and/or 6.5, 7.0 and/or 7.5, and 8.0 and/or 8.5 with stylet | | 1 each |
| ET Tube holder | | 1 |
| Laryngoscope Kit | | 1 |
| Nasopharyngeal Airways Adult | 1 set | 1 set |
| Needle Cricothyrotomy Device | | 1 |
| Needle Thoracostomy Kit | | 1 |
| Suction (handheld) | 1 | 1 |
| Ventilation Bag collapsible (BVM) | 1 | 1 |

**IV/MONITORING EQUIPMENT**

| **IV/Needle/Syringes** | **BLS** | **ALS** |
|---|---|---|
| AED (with waveform monitoring preferred) | 1 | 1 |
| AED Pads | 1 | 1 |
| Blood Pressure Cuff | 1 | 1 |
| IO Device and Needles | | 1 |
| IV Needles 14-20 Gauge | | 1 of each |
| IV Start Kit | | 1 |
| IV Tubing | | 1 |
| Pulse Oximeter (optional) | | 1 |
| Saline Flush | | 2 |
| Saline Lock | | 2 |
| Stethoscope | 1 | 1 |
| Syringes 3 cc, 5 cc, 10 cc | | 1 each |

## DRESSING AND SPLINTING

| Dressing/Splints | BLS | ALS |
|---|---|---|
| CoTCCC - Recommended tourniquet system | 1 | 1 |
| Elastic compression dressing | 1 | 1 |
| Latex free gloves | 1 | 1 |
| N95 Mask | 1 | 1 |
| Occlusive dressing | 1 | 1 |
| Roller bandage | 1 | 1 |
| Splint - semi-ridged moldable | 1 | 1 |
| Sterile gauze pads | 1 | 1 |
| Tape | 1 | 1 |
| Trauma dressing | 1 | 1 |
| Trauma shears | 1 | 1 |
| Triangle bandage | 1 | 1 |
| Hemostatic impregnated gauze non-exothermic, i.e., Combat Gauze (optional) | 2 | 2 |

## MISCELLANEOUS EQUIPMENT

| Miscellaneous Equipment | BLS | ALS |
|---|---|---|
| Litter | 1 | 1 |
| Patient care record | 1 | 1 |
| Personal protection equipment (PPE) | 1 | 1 |
| Triage tags | 10 | 10 |
| Tactical light | 1 | 1 |
| Eyeware | 1 | 1 |
| Rescue blanket | 1 | 1 |
| Self-heating blanket | 1 | 1 |

# EMERGENCY MEDICAL DISPATCH CENTER REQUIREMENTS *(San Bernardino County Only)*

## I. PURPOSE

To establish ICEMA authorized Emergency Medical Dispatch (EMD) Centers to dispatch emergency medical services (EMS) resources and establish the minimum response levels of those resources.

Currently, Medical Priority Dispatch System (MPDS) is the only ICEMA recognized EMD program.

## II. DISPATCH OPERATIONS

- EMD Dispatch Centers shall:
  - Provide dispatch services necessary to receive and respond to requests for emergency and advanced life support (ALS) ambulance services and monitor system status.
  - Be approved by the State of California as a public safety answering point (PSAP).
  - Receive and process calls for emergency medical assistance from primary and secondary 9-1-1 PSAPs.
  - Provide required data and reports to ICEMA.
- Emergency Medical Dispatchers shall:
  - Determine the nature and severity of medical incidents consistent with MPDS protocols.
  - Dispatch appropriate EMS resources.
  - Provide post-dispatch and pre-arrival instructions to callers.
  - Notify responding personnel and agencies of pertinent information.
  - Monitor and track responding resources of their agency.
  - Coordinate with law enforcement, first responders and other EMS providers as needed and provide education to enhance cooperation between agencies.
  - Participate in the ICEMA Continuous Quality Improvement (CQI) process.

## III. STAFFING

- The EMD Dispatch Center shall be staffed with sufficient NAEMD trained dispatchers to accomplish all dispatch and EMD functions as indicated by the CQI process.
- All dispatchers interrogating calls must be certified by the NAEMD.
- All emergency medical dispatchers shall receive the required amount of continuing dispatch education to meet NAEMD training standard.

## IV. PROCEDURE

- Each dispatch center shall submit a completed EMD Center Application to ICEMA, which is on the ICEMA website at ICEMA.sbcounty.gov. This will include a response plan for each agency it services. Compliance with this policy will be reviewed by ICEMA every two (2) years. Any changes in service shall be reported to ICEMA immediately.

- All EMD Dispatch Centers that dispatch 9-1-1 medical response shall follow medical priority dispatch procedures that are compliant with NAEMD guidelines.

- All EMS providers using tiered response as detailed by NAEMD, shall provide the EMD Dispatch Center with a detailed response plan using the appropriate response codes that are compliant with NAEMD guidelines and ICEMA Reference #4100 - Medical Priority Dispatch Minimum Response Assignments for Emergency Medical Dispatch (EMD) Categories. The EMD Dispatch Center will then forward the response plan to ICEMA for review by the ICEMA Medical Director. Any changes must be authorized by ICEMA Medical Director.

- ICEMA local medical control approved cards are as follows:

| MPDS Card # | Card Name | Approved Yes/No | Description | Special Instructions |
|---|---|---|---|---|
| Card 9 | Cardiac Arrest/ Death | Yes | Authorized based on current protocols. | Follow ICEMA Reference #14250 and 14260. |
| Card 10 | Aspirin Diagnostic and Instruction | Yes | Use of Aspirin prior to EMS arrival. | Approved for use throughout the ICEMA region. |
| Card 24 | Pregnancy/ Childbirth | Yes | Authorized based on current protocols. | Follow ICEMA Reference #14210. |
| Card 28 | Stroke | Yes | Authorized based on current protocols. | Follow ICEMA Reference #14080. |
| Card 33 | Transfer | No | | |

## V. CQI PLAN

- EMD Dispatch Centers shall submit a CQI plan to ICEMA following the model of the NAEMD. Data will be submitted at a frequency as determined by the CQI Committee to ICEMA as outlined in the CQI plan. Specific additional indicators may be determined by ICEMA as needed.

- EMD Dispatch Centers shall participate on the ICEMA EMD CQI Committee. Meetings will be held as needed to review the QI data and will include dispatch supervisors, data entry personnel, dispatch representatives and ICEMA representatives.

- Updates to the NAEMD authorized dispatch system must be implemented in a timely manner as soon as the education and hardware are completed and compatible and documentation of the re-training must be sent to ICEMA once completed.

- A quarterly QI report will be submitted to ICEMA as per the CQI plan. Indicators and education that were reviewed and completed will be documented in this report.

## VI. REFERENCES

| Number | Name |
|---|---|
| 4100 | Medical Priority Dispatch Minimum Response Assignments for Emergency Medical Dispatch (EMD) Categories |

MEDICAL PRIORITY DISPATCH MINIMUM RESPONSE ASSIGNMENTS FOR EMERGENCY MEDICAL DISPATCH (EMD) CATEGORIES

## I. PURPOSE

The purpose of this policy is to establish approved Medical Priority Dispatch System (MPDS) response and mode assignments for use by authorized Emergency Medical Dispatch (EMD) Centers.

## II. POLICY

- EMD Centers shall dispatch EMS resources to medical emergencies and manage their response in accordance with the response level established by this policy.
- First responder and ambulance resources shall comply with instructions from an authorized EMD Center to upgrade, cancel, or reduce their response mode.
- ICEMA approved MPDS response and mode assignments for use by authorized EMD Centers are as follows:

| MPDS Card # | Card Name | Level # | Determinant Descriptors | ALS/1st | BLS/1st |
|---|---|---|---|---|---|
| **Card 1** | **Abdominal Pain** | D-1 | Not alert | X | |
| | | C-1 | Suspected aortic aneurysm | X | |
| | | C-2 | Known aortic aneurysm | X | |
| | | C-3 | Fainting or near fainting | X | |
| | | C-4 | Females w/ fainting or near fainting | X | |
| | | C-5 | Males w/ pain above navel | X | |
| | | C-6 | Females w/ pain above navel | X | |
| | | A-1 | Abdominal pain | | X |
| **Card 2** | **Allergies/Stings/ Bites** | E-1 | Ineffective breathing | X | |
| | | D-1 | Not alert | X | |
| | | D-2 | Difficulty speaking between breaths | X | |
| | | D-3 | Swarming attack (bees, wasps) | X | |
| | | D-4 | Snake bite | X | |
| | | C-1 | Difficulty breathing or swallowing | X | |
| | | C-2 | History of severe allergic reaction | X | |
| | | B-1 | Unknown status | X | |
| | | A-1 | No difficulty breathing or swallowing (rash, hives, or itching may be present) | | X |
| | | A-2 | Spider bite | | X |

| | | | | | |
|---|---|---|---|---|---|
| **Card 3** | **Animal Bites/Attacks** | D-1 | Unconscious or arrests | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Chest or neck injury (w/ difficulty breathing) | X | |
| | | D-4 | Dangerous body area | X | |
| | | D-5 | Large animal | X | |
| | | D-6 | Exotic animal | X | |
| | | D-7 | Attack or multiple animals | X | |
| | | B-1 | Possibly dangerous body area | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | B-3 | Unknown status/other code not applicable | X | |
| | | A-1 | Not dangerous body area | | X |
| | | A-2 | Non-recent | | X |
| | | A-3 | Superficial bites | | X |
| **Card 4** | **Assault/ Sexual Assault** | D-1 | Unconscious or arrest | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Chest or neck injury (w/ difficulty breathing) | X | |
| | | D-4 | Multiple victims | X | |
| | | B-1 | Possibly dangerous body area | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | B-3 | Unknown status/ other code not applicable | X | |
| | | A-1 | Not dangerous body area | | X |
| | | A-2 | Non-recent | | X |
| **Card 5** | **Back Pain (Non-trauma)** | D-1 | Not alert | X | |
| | | C-1 | Suspected aortic aneurysm | X | |
| | | C-2 | Known aortic aneurysm | X | |
| | | C-3 | Fainting or near fainting | X | |
| | | A-1 | Non-traumatic back pain | | X |
| | | A-2 | Non-recent | | X |
| **Card 6** | **Breathing Problems** | E-1 | Ineffective breathing | X | |
| | | D-1 | Not alert | X | |
| | | D-2 | Difficulty speaking between breaths | X | |
| | | D-3 | Changing color | X | |
| | | D-4 | Clammy | X | |
| | | C-1 | Abnormal breathing | X | |

| | | | | | |
|---|---|---|---|---|---|
| **Card 7** | **Burns (Scald/Explosion)** | D-1 | Multiple victims | X | |
| | | D-2 | Unconscious or arrest | X | |
| | | D-3 | Not alert | X | |
| | | D-4 | Difficulty speaking between breaths | X | |
| | | C-1 | Building fire | X | |
| | | C-2 | Difficulty breathing | X | |
| | | C-3 | Burns > 18% body area | X | |
| | | C-4 | Significant facial burns | X | |
| | | B-1 | Blast injuries (w/o priority symptoms) | X | |
| | | B-2 | Unknown status | X | |
| | | A-1 | Burns < 18% | X | |
| | **FIRE ONLY** | A-2 | Fire alarm (unknown situation) | | |
| | | A-3 | Sunburn or minor burn | | X |
| **Card 8** | **CO/Inhalation/ HazMat** | D-1 | Unconscious or arrest | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Difficulty speaking between breaths | X | |
| | | D-4 | Multiple victims | X | |
| | | D-5 | Unknown status | X | |
| | | C-1 | Alert w/ difficulty breathing | X | |
| | | B-1 | Alert w/o difficulty breathing | X | |
| | **FIRE ONLY** | OMEGA-1 | CO detector w/o symptoms | | |
| **Card 9** | **Cardiac or Respiratory Arrest Death** | E-1 | Not breathing at all | X | |
| | | E-2 | Breathing uncertain (agonal) | X | |
| | | E-3 | Hanging | X | |
| | | E-4 | Strangulation | X | |
| | | E-5 | Suffocation | X | |
| | | E-6 | Underwater | X | |
| | | D-1 | Ineffective breathing | X | |
| | | D-2 | Obvious or expected death | X | |
| | | B-1 | Obvious death | X | |
| | | OMEGA-1 | Expected death (DNR, terminal) | X | |

| | | | | | |
|---|---|---|---|---|---|
| **Card 10** | **Chest Pain (Non-traumatic)** | D-1 | Not alert | X | |
| | | D-2 | Difficulty speaking between breaths | X | |
| | | D-3 | Changing color | X | |
| | | D-4 | Clammy | X | |
| | | C-1 | Abnormal breathing | X | |
| | | C-2 | Heart attack or angina history | X | |
| | | C-3 | Cocaine | X | |
| | | C-4 | Breathing normally ≥ 35 | X | |
| | | A-1 | Breathing normally < 35 | X | |
| **Card 11** | **Choking** | E-1 | Complete obstruction | X | |
| | | D-1 | Abnormal breathing | X | |
| | | | (Partial obstruction) | X | |
| | | D-2 | Not alert | X | |
| | | A-1 | Not choking now | | X |
| **Card 12** | **Convulsion/Seizures** | D-1 | Not breathing at all | X | |
| | | D-2 | Continuous or multiple seizures | X | |
| | | D-3 | Agonal/ineffective breathing | X | |
| | | D-4 | Effective breathing not verified ≥ 35 | X | |
| | | C-1 | Focal seizures not alert | X | |
| | | C-2 | Pregnancy | X | |
| | | C-3 | Diabetic | X | |
| | | B-1 | Effective breathing not verified < 35 | X | |
| | | A-1 | Not seizing now and breathing | X | |
| | | A-2 | Focal seizures alert | X | |
| | | A-3 | Impending seizure | X | |
| **Card 13** | **Diabetic Problems** | D-1 | Unconscious | X | |
| | | C-1 | Not alert | X | |
| | | C-2 | Abnormal behavior | X | |
| | | C-3 | Abnormal breathing | X | |
| | | A-1 | Alert and behaving normally | | X |
| **Card 14** | **Drowning (Near)/ Diving Accident** | D-1 | Unconscious | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Diving or suspected neck injury | X | |
| | | D-4 | Scuba accident | X | |
| | | C-1 | Alert w/ abnormal breathing | X | |
| | | B-1 | Alert and breathing normally | X | |
| | | B-2 | Unknown status | X | |
| | | A-1 | Alert and breathing normally | X | |

| | | | | | |
|---|---|---|---|---|---|
| **Card 15** | **Electrocution/ Lightning** | E-1 | Not breathing/ineffective breathing | X | |
| | | D-1 | Unconscious | X | |
| | | D-2 | Not disconnected from power | X | |
| | | D-3 | Power not off or hazard present | X | |
| | | D-4 | Extreme fall ≥ 30 feet) | X | |
| | | D-5 | Long fall | X | |
| | | D-6 | Not alert | X | |
| | | D-7 | Abnormal breathing | X | |
| | | D-8 | Unknown status | X | |
| | | C-1 | Alert and breathing normally | X | |
| **Card 16** | **Eye Problems/ Injuries** | D-1 | Not alert | X | |
| | | B-1 | Severe eye injuries | X | |
| | | A-1 | Moderate eye injuries | X | |
| | | A-2 | Minor eye injuries | | X |
| | | A-3 | Medical eye problems | | X |
| **Card 17** | **Falls** | D-1 | Extreme fall ≥ 30 feet) | X | |
| | | D-2 | Unconscious or arrest | X | |
| | | D-3 | Not alert | X | |
| | | D-4 | Chest or neck injury w/ difficulty breathing | X | |
| | | D-5 | Long fall | X | |
| | | B-1 | Possibly dangerous body area | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | B-3 | Unknown status | X | |
| | | A-1 | Not dangerous body area | | X |
| | | A-2 | Non-recent | | X |
| | **FIRE ONLY** | A-3 | Public assist | | |
| **Card 18** | **Headache** | C-1 | Not alert | X | |
| | | C-2 | Abnormal breathing | X | |
| | | C-3 | Speech problems | X | |
| | | C-4 | Sudden onset of severe pain | X | |
| | | C-5 | Numbness | X | |
| | | C-6 | Paralysis | X | |
| | | C-7 | Change in behavior (< 3 hours) | X | |
| | | B-1 | Unknown status | X | |
| | | A-1 | Breathing normally | | X |

| | | | | | |
|---|---|---|---|---|---|
| **Card 19** | **Heart Problems/ A.I.C.D** | D-1 | Not alert | X | |
| | | D-2 | Difficulty speaking between breaths | X | |
| | | D-3 | Changing color | X | |
| | | D-4 | Clammy | X | |
| | | D-5 | Resuscitated and/or defibrillation | X | |
| | | C-1 | Firing of A.I.C.D. | X | |
| | | C-2 | Abnormal breathing | X | |
| | | C-3 | Chest pain ≥ 35 minutes | X | |
| | | C-4 | Cardiac history | X | |
| | | C-5 | Cocaine | X | |
| | | C-6 | Heart rate < 50 bpm or > 130 bpm (w/o symptoms) | X | |
| | | C-7 | Unknown status | X | |
| | | A-1 | Heart rate > 50 bpm and < 130 bpm w/o symptoms) | X | |
| | | A-2 | Chest pain ≤ 35 w/o symptoms | X | |
| **Card 20** | **Heat/Cold Exposures** | D-1 | Not alert | X | |
| | | D-2 | Multiple victims | X | |
| | | C-1 | Heart attack or angina history | X | |
| | | B-1 | Change in skin color | X | |
| | | B-2 | Unknown status | X | |
| | | A-1 | Alert | | X |
| **Card 21** | **Hemorrhage/ Lacerations** | D-1 | Unconscious or alert | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Dangerous hemorrhage | X | |
| | | D-4 | Abnormal breathing | X | |
| | | C-1 | Hemorrhage through tubes | X | |
| | | C-2 | Hemorrhage of dialysis fistula | X | |
| | | B-1 | Possibly dangerous hemorrhage | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | B-3 | Bleeding disorder | X | |
| | | B-4 | Blood thinner | X | |
| | | A-1 | Not dangerous hemorrhage | | X |
| | | A-2 | Minor hemorrhage | | X |

| | | | | | |
|---|---|---|---|---|---|
| **Card 22** | **Inaccessible Incident/ Other Entrapments** | D-1 | Mechanical/machinery entrapment | X | |
| | | D-2 | Trench collapse | X | |
| | | D-3 | Structure collapse | X | |
| | | D-4 | Confined space entrapment | X | |
| | | D-5 | Inaccessible terrain situation | X | |
| | | D-6 | Mudslide/avalanche | X | |
| | | B-1 | No longer trapped unknown injuries | X | |
| | | B-2 | Peripheral entrapment only | X | |
| | | B-3 | Unknown status | X | |
| | **FIRE ONLY** | A-1 | No longer trapped no injuries | | |
| **Card 23** | **Overdose/Poisoning (Ingestion)** | D-1 | Unconscious | X | |
| | | D-2 | Changing color | X | |
| | | C-1 | Not alert | X | |
| | | C-2 | Abnormal breathing | X | |
| | | C-3 | Antidepressants (tricyclic) | X | |
| | | C-4 | Cocaine, methamphetamine | X | |
| | | C-5 | Narcotics (heroin) | X | |
| | | C-6 | Acid or alkali (lye) | X | |
| | | C-7 | Unknown status | X | |
| | | C-8 | Poison control | X | |
| | | B-1 | Overdose w/o symptoms | | X |
| | **POISON CONTROL CONTACT** | OMEGA-1 | Poisoning w/o symptoms | | |
| **Card 24** | **Pregnancy/ Childbirth/ Miscarriage** | D-1 | Breech or cord | X | |
| | | D-2 | Head visible/out | X | |
| | | D-3 | Imminent delivery > 20 weeks) | X | |
| | | D-4 | 3rd trimester hemorrhage | X | |
| | | D-5 | High risk complications | X | |
| | | D-6 | Baby born (complications w/ baby) | X | |
| | | D-7 | Baby born (complications w/ mother) | X | |
| | | C-1 | 2nd trimester hemorrhage or miscarriage | X | |
| | | C-2 | 1st trimester serious hemorrhage | X | |
| | | C-3 | Baby born no complications | X | |
| | | B-1 | Labor delivery not imminent greater 5 months/20 weeks | X | |

| | | | | | |
|---|---|---|---|---|---|
| | | B-2 | Unknown status | X | |
| | | A-1 | 1st trimester hemorrhage or miscarriage | | X |
| | | OMEGA-1 | Waters broken (no contractions) | | X |
| **Card 25** | **Psychiatric/ Abnormal Behavior/ Suicide Attempt** | D-1 | Not alert | X | |
| | | D-2 | Dangerous hemorrhage | X | |
| | | B-1 | Serious hemorrhage | X | |
| | | B-2 | Non-serious or minor hemorrhage | X | |
| | | B-3 | Threatening suicide | X | |
| | | B-4 | Jumper (threatening) | X | |
| | | B-5 | Near hanging, strangulations, or suffocation | X | |
| | | B-6 | Unknown status | X | |
| | **POLICE ONLY** | A-1 | Non-suicidal and alert | | |
| | **POLICE ONLY** | A-2 | Suicidal (not threatening) and alert | | |
| **Card 26** | **Sick Person (Specific Diagnosis)** | D-1 | Not alert | X | |
| | | C-1 | Altered level of consciousness | X | |
| | | C-2 | Abnormal breathing | X | |
| | | C-3 | Sickle cell crisis | X | |
| | | B-1 | Unknown status | X | |
| | | A-1 | No priority symptoms | | X |
| | | A-2 | Non-priority complaints | | X |
| | | OMEGA-1 | This code is not in use | | X |
| | | OMEGA-2-28 (EXC 9) | Non-priority complaints | | X |
| | **FIRE ONLY** | Omega 9 | Cut off ring request | | |
| **Card 27** | **Stab/ Gunshot/ Penetrating Trauma** | D-1 | Unconscious or arrest | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Central wounds | X | |
| | | D-4 | Multiple wounds | X | |
| | | D-5 | Multiple victims | X | |
| | | B-1 | Non-recent (> 6 hours) | X | |
| | | B-2 | Known single peripheral wound | X | |
| | | B-3 | Serious hemorrhage | X | |
| | | B-4 | Unknown status | X | |
| | | B-5 | Obvious death | X | |
| | | A-1 | Non-recent (> 6 hours) wounds (w/o priority symptoms) | | X |

| | | | | | |
|---|---|---|---|---|---|
| **Card 28** | **Stroke (CVA)** | C-1 | Not alert | X | |
| | | C-2 | Abnormal breathing | X | |
| | | C-3 | Speech problems | X | |
| | | C-4 | Numbness, paralysis, or movement | X | |
| | | C-5 | Vision problems | X | |
| | | C-6 | Sudden onset of severe headache | X | |
| | | C-7 | Stroke history | X | |
| | | C-8 | Breathing normally ≥ 35 | X | |
| | | B-1 | Unknown status | X | |
| | | A-1 | Breathing normally < 35 | X | |
| **Card 29** | **Traffic/ Transportation Incidents** | D-1 | Major incident | X | |
| | | D-2 | High mechanism | X | |
| | | D-3 | Hazmat | X | |
| | | D-4 | Pinned (trapped) victim | X | |
| | | D-5 | Not alert | X | |
| | | B-1 | Injuries | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | B-3 | Other hazards | X | |
| | | B-4 | Unknown status | X | |
| | | A-1 | 1st party caller w/ injury to not dangerous body part | | X |
| | **POLICE ONLY** | OMEGA 1 | No injuries | | |
| **Card 30** | **Traumatic Injuries (Specific)** | D-1 | Unconscious or arrest | X | |
| | | D-2 | Not alert | X | |
| | | D-3 | Chest or neck injury (w/ difficulty breathing) | X | |
| | | B-1 | Possibly dangerous body part | X | |
| | | B-2 | Serious hemorrhage | X | |
| | | A-1 | Not dangerous body area | | X |
| | | A-2 | Non-recent (> 6 hours) | | X |

| | | | | | |
|---|---|---|---|---|---|
| **Card 31** | **Unconscious/ Fainting (Near)** | E-1 | Ineffective breathing | X | |
| | | D-1 | Unconscious - agonal/ ineffective breathing | X | |
| | | D-2 | Unconscious - effective breathing | X | |
| | | D-3 | Not alert | X | |
| | | D-4 | Changing color | X | |
| | | C-1 | Alert w/ abnormal breathing | X | |
| | | C-2 | Fainting episode and alert ≥ 35 (w/ cardiac history) | X | |
| | | C-3 | Females 12-50 w/ abdominal pain | X | |
| | | A-1 | Fainting episode and alert ≥ 35 (w/o cardiac history) | X | |
| | | A-2 | Fainting episode and alert < 35 (w/ cardiac history) | X | |
| | | A-3 | Fainting episode and alert < 35 (w/o cardiac history) | | X |
| **Card 32** | **Unknown Problem (Man Down)** | D-1 | Life status questionable | X | |
| | | B-1 | Standing, sitting, moving or talking | X | |
| | | B-2 | Medical alarm (no patient information) | X | |
| | | B-3 | Unknown status | X | |
| | | B-4 | Caller's language not understood | X | |
| **Card 33** | **Transfer/ Interfaculty/ Palliative Care** | D-1 | Suspected cardiac or respiratory arrest | X | |
| | | D-2 | Just resuscitated or defibrillated | X | |
| | | C-1 | Not alert | X | |
| | | C-2 | Abnormal breathing (acute onset) | X | |
| | | C-3 | Significant hemorrhage or shock | X | |
| | | C-4 | Possible acute heart problems or MI | X | |
| | | C-5 | Acute severe pain | X | |
| | | C-6 | Emergency response requested | X | |
| | | A-1 | Acuity I (no priority symptoms) | X | |
| | | A-2 | Acuity II (no priority symptoms) | X | |
| | | A-3 | Acuity III (no priority symptoms | X | |

| | | | | | |
|---|---|---|---|---|---|
| **Card 34** | **Automatic Crash Notification (ACN)** | D-1 | High mechanism | | |
| | | D-2 | Unconscious or not alert | | |
| | | D-3 | Not breathing/ineffective breathing | | |
| | | D-4 | Life status questionable | | |
| | | B-1 | Injuries involved | | |
| | | B-2 | Multiple victims (one unit) | | |
| | | B-3 | Multiple victims (additional units) | | |
| | | B-4 | Airbag/other automatic sensor | | |
| | | B-5 | Unknown situation/other codes (not applicable) | | |
| | | A-1 | Not dangerous injuries (1st party and single occupant) | | |
| | | OMEGA 1 | No injuries (refer to police) | | |

**TRAUMA CRITICAL CARE SYSTEM DESIGNATION**

## I. PURPOSE

To establish standards for the designation of an acute care hospital as a Trauma Receiving Center. These standards were developed to ensure patients who access the 9-1-1 system, and meet the defined Trauma triage criteria, are transported to a Trauma Receiving Center.

## II. POLICY/PROCEDURE

Hospital requirements for Inland Counties Emergency Medical Agency (ICEMA) Trauma Receiving Center designation:

- Must be a full service general acute care hospital approved by ICEMA as a receiving hospital.
- Must have basic or comprehensive emergency services with special permits.
- Must be verified by the American College of Surgeons (ACS) as a Level I - III Trauma Receiving Center. Level IV Trauma Receiving Centers must remain in compliance with the current ACS standards.
- Must be in compliance with all requirements listed in California Code of Regulations, Title 22, Division 9, Chapter 7 - Trauma Critical Care System Regulations.
    - ICEMA may issue a provisional trauma designation to facilities with a confirmed ACS verification date within 24 months of application submission, subject to Title 22 compliance and an ICEMA site survey.

## III. STAFFING REQUIREMENTS

The hospital will have the following positions filled prior to becoming a Trauma Receiving Center:

- Trauma Medical Directors

  A qualified board-certified physician by the American Board of Medical Specialties (ABMS) as defined by the local EMS agency (LEMSA) and designated by the hospital that is responsible for the Trauma Receiving Center program, performance improvement, and patient safety programs related to a trauma critical care system.

- Emergency Department Trauma Representative

  A qualified board-certified emergency medicine physician with active privileges to practice in the emergency department that will participate in the Trauma Receiving Center program.

- Trauma Program Manager

  The hospital shall designate a Trauma Program Manager who is responsible for monitoring and evaluating trauma patients. This includes participation in performance improvement and patient safety programs related to a trauma critical care system. The Trauma Program Manager must be trained or certified in critical care nursing and have

continuing education in trauma physiology or at least has two (2) years dedicated trauma patient management experience.

- Trauma Team

  A multidisciplinary team responsible for the initial resuscitation and management of the trauma patient.

- On-Call Physician Consultants and Staff

  On-call physicians, consultants, and staff must be promptly available when notified. A daily roster must include the following: on-call physician, consultants, and staff:

  - Trauma Service: Must be promptly available, maximum trauma response time 15 minutes. Trauma surgeons must have privileges in general surgery and must be dedicated to a single Trauma Receiving Center while on duty (Level I and II).
  - Neurosurgery Service: Must be promptly available for all traumatic brain injury (TBI) and spinal cord injury patients and must be present and respond within 30 minutes (Level I and II).
  - Orthopedic Service: Must be promptly available for consultation within 30 minutes when requested by the trauma team leader (Level I and II).
  - Anesthesiology Services: Must be available within 30 minutes for emergency operations.
  - Radiology Services: Qualified radiologists must be available within 30 minutes in person or by tele radiology for the interpretation of radiographs.
  - An operating room must be adequately staffed and available within 15 minutes (Level I and II).

- Registrar

  A registrar dedicated to the registry must be available to process the data capturing the ICEMA data sets and in compliance with the ACS registrar standards listed in the "Resources for Optimal Care of the Injured Patient" current manual (Level I and II).

## IV. INTERNAL HOSPITAL POLICIES

- The hospital must have capabilities to provide trauma patient care 24 hours per day, seven (7) days per week, 365 days per year.
- A single call alert/communication system for notification of incoming trauma patients, available 24 hours per day, seven (7) days per week (i.e., in-house paging system).
- The internal hospital policy/process/guidelines shall include:
  - A process for the treatment and triage of simultaneously arriving trauma patients.
  - A process for activation of trauma patients.
  - Prompt acceptance of trauma patients from referral hospitals per ICEMA Reference #9010 - Continuation of Care Policy.

- Acknowledgement that trauma patients may **only** be diverted during the times of Internal Disaster in accordance to ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).

- A written notification describing the event must be submitted to ICEMA within 24 hours.

- A Level IV Trauma Receiving Center must have a written transfer agreement with a Level I or II Trauma Receiving Center, Level I or II Pediatric Trauma Receiving Center, or other specialty care centers, for immediate transfer of those patients for whom the most appropriate medical care requires additional resources.

## V. DATA COLLECTION

All required data elements shall be collected and entered in an ICEMA approved Trauma registry on a quarterly basis and submitted to ICEMA for review. Trauma registry data must be collected in compliance with the National Trauma Data Standards and submitted to the National Trauma Data Bank (NTDB).

## VI. CONTINUOUS QUALITY IMPROVEMENT (CQI) PROGRAM

- Trauma Receiving Centers shall develop an on-going CQI program which monitors all aspect of treatment and management of trauma patients and identify areas needing improvement. The program must, at a minimum, monitor the following parameters:

  - Mortality with opportunity for improvement.

  - Mortality without opportunity for improvement.

  - Unanticipated mortality with opportunity for improvement.

  - Rates of under-triage and over-triage.

- Active participation in quarterly regional Trauma Audit Committee and the regional Trauma peer review process. This will include a review of selected medical records as determined by CQI indicators and a presentation of details to peer review committee for adjudication.

- Provide continuing education (CE) opportunities twice per year for emergency medical services (EMS) field personnel in assessment and management of trauma patients.

- Programs in place to promote public education efforts specific to trauma care.

## VII. PERFORMANCE STANDARD

Compliance with all California State Regulations and the ACS verification services performance standards.

## VIII. AMBULANCE PATIENT OFFLOAD DELAY

- All designated facilities shall maintain compliance with ICEMA APOD Policy 8100.

## IX. DESIGNATION

- The Trauma Receiving Center applicant shall submit a Letter of Intent to ICEMA, outlining the purpose of the application, proposed timeline, and intended goals.

- ICEMA designation as a Level I - IV Trauma Receiving Center will be based on an evaluation of need and volume in the community. Designation will not be determined by current compliance with Title 22 and compliance/verification of ACS alone; however, the Level I, II, and III Trauma Receiving Centers must be verified at least at an equivalent designation level that is being requested.

- The Trauma Receiving Center applicant shall be designated after satisfactory review of written documentation, a potential site survey by ICEMA, and completion of a board approved contractual agreement between the hospital and ICEMA.

- Documentation of current hospital accreditation by the ACS verification services as a Level I - III Trauma Receiving Center.

  - Level IV Trauma Receiving Centers must comply with all ACS Level IV standards.

- Initial designation as a Trauma Receiving Center shall be in accordance with terms outlined in the contract agreement.

- Failure to comply with the ICEMA policy, approved contract agreement, or the criteria and performance standards outlined in this policy, may result in probation, suspension fines or rescission of Trauma Receiving Center designation.

## X. REFERENCES

| Number | Name |
|---|---|
| 8050 | Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 9010 | Continuation of Care (San Bernardino County Only) |
| 8100 | Ambulance Patient Offload Delay (APOD) |

ICEMA ABBREVIATION LIST

## I. PURPOSE

To provide uniform documentation and universal understanding of approved abbreviations.

## II. REQUIREMENTS

All EMS providers will only use ICEMA approved abbreviations provided on this list to prevent confusion on documentation.

| DEFINITION | ABBREVIATION |
|---|---|
| Abdomen, abdominal | Abd |
| Abdominal aortic aneurysm | AAA |
| Abduction | Abd; abd |
| Above knee | AK |
| Above knee amputation | AKA |
| Acquired immune deficiency syndrome | AIDS |
| Active range of motion | AROM |
| Activities of daily living | ADL |
| Acute myocardial infarction | AMI |
| Acute renal failure | ARF |
| Admission, admitted | Adm |
| Adult respiratory distress syndrome | ARDS |
| Advanced Cardiac Life Support | ACLS |
| Advanced life support | ALS |
| After surgery | Post op |
| Against medical advice | AMA |
| Airway, breathing, circulation | ABC |
| Alcohol Intoxication | ETOH |
| Alert & oriented to (person, place, time & event) | A & O x 4 |
| Alert, verbal, pain, unresponsive | AVPU |
| Altered level of consciousness | ALOC |
| Ambulance patient offload delay | APOD |
| Ambulance patient offload time | APOT |
| Ambulate, ambulating, ambulated, etc. | Amb |
| Amount | Amt |
| Ampule | Amp |
| And | & |
| Antecubital | AC |
| Anterior | Ant |
| Apparent Life-Threatening Event | ALTE |
| Appearance, pulse, grimace, activity, respiration | APGAR |
| Appointment | Appt |
| Approximate | approx |
| Arterial blood gas | ABG |
| As soon as possible | ASAP; asap |
| Aspirin | ASA |
| At | @ |
| Atherosclerotic heart disease | ASHD |
| Atrial fibrillation | A-fib; afib |
| Atrial flutter | A-flutter |

| DEFINITION | ABBREVIATION |
|---|---|
| Atrial tachycardia | A-Tach |
| Attention Deficit Hyperactivity Disorder | ADHD |
| Auscultation | Ausc |
| Automated External Defibrillator | AED |
| Automatic Implanted Cardiac Defibrillator | AICD |
| Bag of waters | BOW |
| Bag valve mask | BVM |
| Base Station Order | BSO |
| Base Station | Base |
| Basic Life Support | BLS |
| Beats per minute | Bpm |
| Below knee amputation | BKA |
| Bicarbonate, NaCO3 | bicarb |
| Bilateral | Bilat |
| Blood alcohol content | BAC |
| Blood pressure | BP |
| Body Surface Area | BSA |
| Bowel movement | BM |
| Breath/bowel sounds | BS; b.s. |
| Bundle branch block | BBB |
| By mouth | PO; p.o. |
| Calcium | Ca |
| Calcium Chloride | CACL |
| Cancer, carcinoma | CA |
| Carbon dioxide | CO2 |
| Cardiopulmonary resuscitation | CPR |
| Centimeter | Cm |
| Central Nervous System | CNS |
| Cerebral spinal fluid | CSF |
| Cerebrovascular accident | CVA |
| Cervical collar | C-collar |
| Cervical immobilization device | CID |
| Cervical spine | C-spine |
| Chest pain | CP |
| Chief complaint | CC; C/C |
| Chronic obstructive pulmonary disease | COPD |
| Circulation, motor and sensation | CMS |
| Clear bilateral | CBL |
| Complains of | C/O; c/o |
| Complete blood count | CBC |
| Computerized axial tomography | CAT |
| Congestive heart failure | CHF |
| Conscious, alert & oriented to person, place, time & event | CAOx4 |
| Continue, continuous | cont. |
| Continuous positive airway pressure | CPAP |
| Coronary artery bypass graft | CABG |
| Coronary artery disease | CAD |
| Date of birth | DOB |
| Days old | d/o |
| Dead on arrival | DOA |
| Deep vein thrombosis | DVT |
| Defibrillation | Defib |

| DEFINITION | ABBREVIATION |
|---|---|
| Delirium tremor | DT |
| Department | dept. |
| Dextrose 25% (diluted D50) | D25 |
| Dextrose in water | D5W 5% |
| Dextrose solution | D50 50% |
| Diabetes mellitus | DM |
| Diagnosis | Dx |
| Did not obtain/Did not order | DNO |
| Difficulty breathing | Diff Breath |
| Dilation and curettage | D&C |
| Discontinue or discharged | DC; D/C; dc |
| Do not resuscitate | DNR |
| Drops | gtts |
| Dyspnea on exertion | DOE |
| Electrocardiogram | ECG; EKG |
| Electroencephalogram | EEG |
| Emergency department | ED; E.D. |
| Emergency Medical Services | EMS |
| Emergency medical technician | EMT |
| Emergency medical technician-paramedic | EMT-P |
| Emergency room | E.R. |
| Endotracheal tube | ET |
| Epinephrine | EPI |
| Equal | = |
| Esophageal Tracheal Airway Device | ETAD |
| Estimated blood loss | EBL |
| Estimated Time of Arrival | ETA; eta |
| Et cetera | Etc |
| Ethanol (alcohol) | ETOH |
| Evaluation | eval. |
| Evening | Pm |
| Every | Q |
| Extension | ext. |
| Eyes, ears, nose, throat | EENT |
| Female | F |
| Fire department | FD |
| Flexion | Flex |
| Foot, feet (not anatomy) | ft. |
| Foreign body | Fb |
| Fracture | Fx; fx |
| Full range of motion | From |
| Gallbladder | GB |
| Gastrointestinal | GI |
| Gravida 1, 2, 3 etc. | G |
| Glasgow Coma Scale | GCS |
| Grain | Gr |
| Gram | Gm |
| Gunshot wound | GSW |
| Gynecology | GYN |
| Head, eyes, ears, nose, throat | HEENT |
| Headache | HA; H/A |
| Heart rate | HR |

| DEFINITION | ABBREVIATION |
|---|---|
| Height | ht. |
| Hematocrit | Hct |
| Hemoglobin | Hb; hgb |
| History | Hx |
| History & physical | H&P |
| History of | h/o |
| Hour | h; hr |
| Human immunodeficiency virus | HIV |
| Hydrochlorothiazide | HCTZ |
| Hypertension | Htn; HTN |
| Immediately | Stat |
| Inch | in. |
| Incident Commander | IC |
| Infant respiratory distress syndrome | IRDS |
| Inferior | Inf |
| Intake (input) & output | I&O |
| Intensive care unit | ICU |
| Intracranial pressure | ICP |
| Intramuscular | IM |
| Intranasal | IN |
| Intraosseous | IO |
| Intrauterine Device | IUD |
| Intravenous | IV |
| Intravenous piggyback | IVPB |
| Intravenous push | IVP |
| Intravenously | IV |
| Irregular | irreg |
| Joules | J |
| Jugular venous distension | JVD |
| Kilograms | Kg |
| Kilometer | Km |
| Labor and delivery | L&D |
| Laboratory | Lab |
| Laceration | LAC |
| Landing Zone | LZ |
| Last menstrual period | LMP |
| Lateral | Lat |
| Left | L; Lt |
| Left bundle branch block | LBBB |
| Left lower extremity | LLE |
| Left lower lobe | LLL |
| Left lower quadrant | LLQ |
| Left lower quadrant of abd | LLQ |
| Left upper extremity | LUE |
| Left upper lobe of lung | LUL |
| Left upper quadrant of abd | LUQ |
| Level or loss of consciousness | LOC; loc; KO |
| Licensed practical nurse | LPN |
| Lidocaine | Lido |
| Liter | L |
| Liter per minute | Lpm; l/m |
| Long back board | LBB |

| DEFINITION | ABBREVIATION |
|---|---|
| Loss/level of consciousness (as noted by context) | LOC |
| Lumbar puncture | LP |
| Lung sounds | L/S |
| Magnesium Sulfate | Mag |
| Maximum | Max |
| Mechanism of injury | MOI |
| Medical Doctor | MD; M.D. |
| Medications | Meds |
| Mercury | Hg |
| Microgram(s) | Mcg |
| Miles per hour | Mph |
| Military anti-shock trousers | MAST |
| Millidrops, microdrops | Mgtt |
| Milliequivalents | mEq |
| Milligram(s) | mg |
| Milliliter | ml |
| Millimeter | mm |
| Millivolt | mV |
| Minimal | Min |
| Minute(s) | min. |
| Mobile intensive care nurse | MICN |
| Mobile intensive care unit | MICU |
| Moderate | Mod |
| Month, months old | mo; m/o |
| Morning | a.m. |
| Motor Vehicle Accident (Multi-Victim Accident) | MVA |
| Multiple Casualty Incident | MCI |
| Multiple sclerosis, morphine sulfate | MS |
| Myocardial infarction | MI |
| Narcotic | NARC |
| Nasal cannula | Nc |
| Nasogastric | NG; ng |
| Nasogastric (tube) | NG |
| Nausea/vomiting | n/v |
| Nausea/vomiting/diarrhea | n/v/d |
| Negative | neg. |
| Nitroglycerin | Nitro; NTG |
| No Acute Distress | NAD |
| No known allergies | NKA |
| No known drug allergies | NKDA |
| Nonrebreather mask | NRB |
| Non-Steroidal Anti-inflammatory Drugs | NSAIDS |
| Normal saline | NS |
| Normal sinus rhythm | NSR |
| Not applicable | N/A |
| Nothing by mouth | NPO |
| Obstetrics | OB |
| Occupational therapist/therapy | OT |
| Onset, provocation, quality, radiation, severity, time | OPQRST |
| Operating room | OR |
| Orally dissolving tablet; Under the tongue | ODT |
| Orogastric (tube) | OG |

| DEFINITION | ABBREVIATION |
|---|---|
| Ounce | oz. |
| Out of hospital cardiac arrest | OHCA |
| Overdose | OD |
| Oxygen | O2 |
| Oxygen Saturation | O2 sat |
| Palpable | Palp |
| Para, number of pregnancies | P |
| Paramedic | Medic |
| Paroxysmal Nocturnal Dyspnea | PAT |
| Paroxysmal supraventricular tachycardia | PSVT |
| Passenger space intrusion | PSI |
| Past history | P.H.; PHx |
| Past medical history | PMH |
| Patient | Pt; pt |
| Pediatric | Ped |
| Pediatric Advanced Life Support | PALS |
| Pelvic inflammatory disease | PID |
| Percutaneously Inserted Central Catheter | PICC |
| Phencyclidine | PCP |
| Physical exam, pulmonary embolism, pedal Edema (as noted by context) | PE |
| Physician's Assistant | P.A.; PA |
| Police department | PD |
| Positive | pos. |
| Possible | Poss |
| Post, after | P |
| Posterior | Post |
| Potassium | K |
| Potassium Chloride | KCL |
| Pound | lb; # |
| Pregnancy Induced Hypertension | PIH |
| Premature atrial contraction | PAC |
| Premature junctional contraction | PJC |
| Premature ventricular contraction | PVC |
| Prescription; intervention plan; therapy | Rx |
| Prior to (our) arrival | PTOA; PTA |
| Privately owned vehicle | POV |
| Psychiatric | Psych |
| Pulse, motor, sensation | PMS |
| Pulse, motor, sensory, cap refill | PMSC |
| Pulseless electrical activity | PEA |
| Pupils equal reactive to light | PERL; PEARL; PERRLA |
| Quart | qt. |
| Range of motion | ROM |
| Red blood cell (count) | RBC |
| Regarding | re: |
| Registered nurse | RN |
| Rehabilitation | Rehab |
| Respiration, respiratory | Resp |
| Respiratory rate | RR |
| Respiratory Therapist | RT |
| Response | RESPS |

| DEFINITION | ABBREVIATION |
|---|---|
| Return of spontaneous circulation | ROSC |
| Rheumatoid arthritis | RA |
| Right | R |
| Right bundle branch block | RBBB |
| Right lower extremity | RLE |
| Right lower quadrant of abd | RLQ |
| Right upper lobe of lung | RUL |
| Right upper quadrant of abd | RUQ |
| Right ventricular infarct | RVI |
| Ringer's Lactate | RL |
| Rule out | R/O; r/o |
| Saline Lock | SL |
| Second(s) | sec. |
| Sexually transmitted disease | STD |
| Short(ness) of breath | SOB |
| Signs and symptoms | S/S; s/s |
| Signs, symptoms, allergies medications, past history, last intake, events | SAMPLE |
| Sinus Bradycardia | SB; S-Brady |
| Sinus Tachycardia | ST; S-Tach |
| Sodium | Na |
| Sodium bicarbonate | NaCO3 |
| Sodium chloride | NaCl |
| Streptococcus | Strep |
| Strong and regular | S&R |
| Subcutaneous | sc; subQ |
| Sublingual | SL |
| Sudden Acute Respiratory Syndrome | SARS |
| Sudden infant death syndrome | SIDS |
| Supraventricular tachycardia | SVT |
| Systolic blood pressure | SBP |
| Tablespoon | Tbsp |
| Tablet | Tab |
| Teaspoon | Tsp |
| Temperature | Temp |
| Temperature, pulse, respirations | TPR |
| Three times a day | Tid |
| Tidal Volume | TV |
| Times | X |
| To keep open | TKO |
| Total body surface area | TBSA |
| Tracheostomy | Trach |
| Traffic collision | TC |
| Tranexamic Acid | TXA |
| Transient ischemic attack | TIA |
| Transport | Trans |
| Traumatic brain injury | TBI |
| Treatment | Tx |
| Tuberculosis | TB |
| Twice a day | BID; b.i.d. |
| Tylenol | APAP |
| Ultraviolet | UV |

| DEFINITION | ABBREVIATION |
|---|---|
| Unable to locate | UTL |
| Under the tongue; orally dissolving tablet | ODT |
| Unknown | Unk |
| Upper respiratory infection | URI |
| Urinary tract infection | UTI |
| Venereal disease | VD |
| Ventricular fibrillation | V-Fib; VF |
| Ventricular tachycardia | V-Tach; VT |
| Versus | Vs |
| Vital signs | v.s. |
| Volume | Vol |
| Warm, dry and pink | w/d/p |
| Water | H2O |
| Watts per second | W/S |
| Weight | Wt |
| Wheelchair | w/c |
| Whenever necessary, as needed | Prn |
| White (Caucasian) | Wht |
| White blood cell (count) | WBC |
| With | $\bar{c}$ |
| Within normal limits | WNL; wnl |
| Without | $\bar{s}$ |
| Wolf-Parkinson-White | WPW |
| Year | Yr |
| Years old | Y/O; y.o. |

# MINIMUM DOCUMENTATION REQUIREMENTS FOR TRANSFER OF PATIENT CARE

## I. PURPOSE

To define the minimum amount of fields on a patient care record that must be completed prior to the transfer of care between EMS providers if available, applicable or known.

## II. PROCEDURE

First responders must complete the following mandatory fields prior to transferring care of a patient to a transporting agency whether using paper or electronic documentation.

- Patient identifier.
  - Name
  - Sex
  - Birth date
- Chief complaint.
- Mechanism of injury.
- Time of onset/ last seen normal.
- Pertinent medical history.
  - Medications
  - Allergies
- Vital signs.
  - Blood pressure
  - Pulse rate and quality
  - Respiration rate and quality
  - Skin signs
- Glasgow Coma Scale.
- PQRST for pain.
- All 12-lead ECG with patient name will accompany the patient.
- All medications and procedures, including attempts with times done prior to transfer.
- If base hospital contact made, document which base hospital contacted.
- First responder unit identifier.
- Transport unit identifier.
- Any other pertinent information not seen by the transport provider that might affect patient care.

The narrative should be written if there is time or shall be given verbally to the next provider. Other fields should be completed if possible or if the fields pertain to the chief complaint.

In the event of a multiple casualty incident (MCI), the minimum mandatory documentation required is the triage tags. All patients in an MCI, regardless of the degree of injury or lack of injury, must have a triage tag.

REQUIREMENTS FOR PATIENT CARE REPORTS

## I. PURPOSE

To establish requirements for the initiation, transfer, completion, review and retention of patient care reports by BLS and ALS EMS providers that is necessary to maintain medical control and continuity of patient care.

## II. RESPONSIBILITIES FOR INITIATION, TRANSFER, COMPLETION AND REVIEW OF PATIENT CARE REPORTS

**Initiation of Patient Care Report**

- An electronic patient care report (ePCR) must be created for each patient response.
  - EMS providers using their own electronic health record (EHR) system must comply with ICEMA Reference #5040 - Requirements for Collection and Submission of EMS Data.
  - The initiation and completion of the ePCR is the responsibility of the EMS field personnel who participate in the EMS response and/or patient care.
  - If two (2) or more units from the same EMS provider are dispatched, at least one (1) EMS field personnel is required to initiate and complete an ePCR.
  - When two (2) or more units from different EMS providers are dispatched, at least one (1) EMS field personnel from each EMS provider is required to initiate and complete an ePCR.
- EMS field personnel shall obtain, and document all required ICEMA data elements, including all assessments, procedures and medications administered and provided by the EMS field personnel and members of their crews participating in the patient care.
- EMS field personnel shall only document assessment, procedures and medications administered and provided by EMS field personnel within their own organization.
  - If procedures or medications are administered by laypersons or public safety, providers will document those procedures and/ or medications in the applicable ePCR fields.
  - EMS providers must add student and/or intern names and certifications to their user lists, so all EMS field personnel rendering care are appropriately identified on the ePCR.
  - Students must not participate in completing the ePCR.

**Completion of Patient Care Reports**

- The EMS field personnel responsible for patient care shall accurately complete the patient care report and ensure that the ePCR:

- Contains all data elements required by ICEMA including all assessments, procedures and medications administered and provided by the EMS field personnel and members of their crews participating in patient care.
- Includes any additional information required by NEMSIS/CEMSIS.
- It is signed by the EMS field personnel (EMS primary care provider/EMS crew member) who is responsible for patient care (EMS provider may require more than one signature).
- It is completed, locked and posted according to this policy.

**Transfer of Patient Care Information and Distribution of Patient Care Reports**

- The ICEMA Data System is the preferred method of transferring all patient care information between EMS field personnel, EMS providers, hospitals and ICEMA.
- EMS field personnel transferring patient care must initiate an electronic transfer of all required information to the accepting EMS field personnel concurrently with the verbal transfer of care.
- ePCRs from both the transport agency and the first response agency (if applicable) must be completed and posted to the server within four (4) hours of completion of the response.
  - ePCR upload requirements may be delayed due to an emergency response; however, submission must be completed as soon as possible but no later than the end of shift when the patient response occurred.
  - In situations where the transfer of information is not possible due to connectivity issues, the transfer must be made at the earliest opportunity when connectivity is restored.

**Review and Evaluation of Patient Care Reports**

- ICEMA may view or request a copy of any completed ePCR for quality assurance and/or quality improvement.
- The EMS provider is responsible for the monitoring, review, evaluation, and improvement of patient care data per the EMS provider's Quality Improvement Plan.
- The EMS provider is responsible to include all ICEMA and State required EMS system quality indicators in its quality improvement program.
- ICEMA may produce system-wide statistical and quality improvement summary reports based on individual or aggregate data.
- The EMS provider is responsible for the evaluation of individual statistical or quality assurance summary reports.

## III. RESPONSIBILITIES FOR RECORD/REPORT RETENTION

- All records pertaining to patient care shall be maintained by the EMS provider, hospital, and/or ICEMA as required by State and/or federal regulation. Types of records to be retained, include:
  - Records related to either suspected or pending litigation.
  - Electronic Patient Care Reports (ePCR).
  - Electrocardiograms (EKG/ECG).
  - Capnography waveforms.
  - EMS provider refusal of care documentation.

## IV. PRIVACY

All EMS providers are responsible to enact policies which ensure patient privacy by restricting access and implementing electronic protections in compliance with State and federal statues, policies, rules and regulations, including the Health Insurance Portability and Accountability Act of 1996 (HIPAA).

## V. REFERENCES

| Number | Name |
|---|---|
| 5020 | Minimum Documentation Requirements for Transfer of Patient Care |
| 5040 | Requirements for Collection and Submission of EMS Data |

REQUIREMENTS FOR COLLECTION AND SUBMISSION OF EMS DATA

## I. PURPOSE

To establish requirements for the collection and submission of data to the ICEMA Data System by EMS providers using their own electronic health record (EHR) system as required by State regulations and ICEMA policy.

## II. POLICY

All EMS providers shall utilize an EHR system that is compliant with CEMSIS and NEMSIS and contain any additional data elements required by ICEMA. EMS providers must submit data to the ICEMA Data System to maintain compliance with medical control to ensure the continuity of patient care within the ICEMA region.

## III. RESPONSIBILITIES OF EMS PROVIDERS

- EMS providers using their own EHR system, and their vendor(s) must maintain a system that:
  - Contain provisions for the electronic transfer of the patient care between EMS providers and hospitals at the time of transfer of care that:
  - Ensures all required data is submitted to the ICEMA Data System with transfer of patient care to a subsequent EMS provider or hospital.
  - Ensures all required data is submitted to the ICEMA Data System when the record is completed and/or locked.
  - Resubmits all records, if opened and changed for any reason, at the time of the next scheduled submission of data.
- EMS providers using their own EHR system must:
  - Initiate and complete an ePCR as outlined in ICEMA Reference # 5030-Requirements for Patient Care Reports.
  - Notify ICEMA of any system outages for more than 60 minutes by e-mailing the ICEMA Duty Officer.
  - Use the same version of CEMSIS and NEMSIS used by ICEMA.
    - Ensure that data element numbers match those in the ICEMA Data System.
  - Coordinate any updates to the current versions of CEMSIS and NEMSIS when implemented by ICEMA to coincide with the upgrade implementation date.
  - Include validation rules that ensure that all required data elements are captured in the ePCR.
  - Allow the California Hospital Hub to access their EHR system.

- EMS providers using their own EHR system must provide ICEMA with a detailed list of all:
  - Data elements and field values currently active in the EMS provider's EHR system.
    - Documentation must show relationship between data elements and field values in the EMS provider's EHR system with those on the ICEMA Data System.
  - Validation rules implemented on the EMS provider's EHR system.
- EMS providers using their own EHR system must submit and demonstrate a process for the electronic transfer of patient care between sending and receiving EMS field personnel at the time of transfer of patient care to ICEMA for approval 90 days prior to implementation that includes:
  - A process that creates a unified record between the sending and receiving EMS providers.
  - The ability to upload an ePCR for transfer to the other responding EMS providers that:
    - Is available for use by EMS Providers using the ICEMA Data System at the time of transfer of patient care, and
    - Allows EMS field personnel utilizing the ICEMA Data System to use the standard user interface (Transfer-Upload/Download functions).
  - Demonstrates the accuracy and validity of all submitted data.
  - Ensures that all ICEMA required data elements and field values are included in the EMS provider's input/output form.
- EMS providers using their own EHR system must make any ICEMA requested changes or additions to their data sets and input forms and maintain the ability to integrate data with the ICEMA Data System within the time periods specified below:
  - Make any changes or additions in priority data elements and/or values within 24 hours of notification (weekdays only). Priority items are defined as those that are necessary to comply with State regulations or medical control.
  - Make any changes or additions of non-priority data elements and/or values within five (5) days of notification.
  - Ensure that all changes in either priority and non-priority data sets are implemented in the EMS provider's input/output forms at the time of the change and provide a copy of the EMS provider's revised input/output forms to ICEMA.
  - EMS providers whose data is not accepted by the State or national data repositories will be excluded from further data submissions until the EMS provider can demonstrate that it is compliant with CEMSIS and/or NEMSIS standards or as required by State and/or federal regulations.

## IV. RESPONSIBILITIES OF DISPATCH CENTERS USING COMPUTER AIDED DISPATCH (CAD)

- When CAD data is used to populate the ePCR, all dispatch centers that dispatch EMS providers using their own EHR system must submit CAD data to ICEMA in an electronic format that will:

  - Include all data elements as described in the current *NEMSIS CAD Data Standard* and submitted in a format that is compatible with the ICEMA Data System.

  - Be submitted concurrently with the medical aid request or the initiation of the response.

  - Include required data for all emergency and non-emergency medical aid requests.

## V. REFERENCES

| NUMBER | NAME |
|---|---|
| 5030 | Requirements for Patient Care Reports |

# PHYSICIAN ON SCENE

## I. PURPOSE

To establish criteria for an advanced emergency medical technician (AEMT) and paramedic (EMT-P) during situations in which a physician is physically present at the scene of a 9-1-1 response.

## II. POLICY

Medical responsibility for patient care is the responsibility of the base hospital physician. Within the ICEMA region, an AEMT or EMT-P may only follow medical orders given by the base hospital physician or MICN.

## III. PROCEDURE

In the event that an AEMT or EMT-P arrives at the scene of a medical or a trauma emergency and a physician on scene wishes to direct the care of the patient and assume medical responsibility for the patient, the following conditions apply:

- The physician must be informed that base hospital contact must be made, and the final decision regarding the assumption of medical responsibility for patient care will be made by the base hospital physician.
- The physician must show proper identification and a current California physician's license.
- The physician must agree to sign the patient care report agreeing to take full responsibility for the care and treatment of the patient(s) involved in the incident and accompanies the patient(s) in the ambulance to the most appropriate receiving facility. This statement is available on the ICEMA electronic patient care report (ePCR) EMS providers using software not totally integrated with ICEMA software must provide a form stating the above and obtaining physician signature.
- Care of the patient must be transferred to a physician at the receiving facility.

## IV. AEMT and EMT-P RESPONSIBILITIES

The AEMT or EMT-P has the following responsibilities in the event that the physician on scene assumes responsibility for patient care:

- Notify base hospital that a physician has requested to take over patient.
- Maintain control of drugs and equipment from the LALS or ALS unit. Inform the physician of drugs and equipment available.
- Offer assistance to the physician on scene. The AEMT or EMT-P may only perform procedures that are within the ICEMA scope of practice.
- Document on patient care report all necessary information and obtain physician signature.

RESPONSIBILITY FOR PATIENT MANAGEMENT

## I. PURPOSE

To define the responsibility for patient care management in the prehospital setting. Within the ICEMA region, in the event both public and private emergency medical services (EMS) field personnel arrive on the scene with the same qualifications, patient care management responsibility will rest with the first to arrive.

## II. PROCEDURE

- An advanced emergency medical technician (AEMT) or paramedic (EMT-P) may transfer patient management responsibility to an emergency medical technician (EMT) for transportation, only under the following conditions:
  - ➢ The patient is stable for transport, and no ALS measures have been initiated.
  - ➢ When operating under ICEMA Reference #8030 - Transport of Patients (BLS).
  - ➢ When operating under ICEMA Reference #8080 - Medical Response to a Multiple Casualty Incident.
  - ➢ When operating under ICEMA Reference #6050 - Local Medical Emergency.
- The base hospital should be contacted if at any time transfer of patient management responsibility is in question or for any patient not meeting the above criteria.

## III. REFERENCES

| Number | Name |
|---|---|
| 6050 | Local Medical Emergency |
| 8030 | Transport of Patients (BLS) |
| 8080 | Medical Response to a Multiple Casualty Incident |

# REPORTING INCIDENTS OF SUSPECTED ABUSE

## I. PURPOSE

EMS field personnel are required to report incidents of suspected neglect or abusive behavior towards children, dependent adults or elders. These reporting duties are individual, and no supervisor or administrator may impede or inhibit such reporting duties, and no person making such report shall be subject to any sanction for making such report.

When (2) two or more persons who are required to report are present at scene, and jointly have knowledge of a suspected abuse, and when there is agreement among them, the telephone report may be made by a member of the team selected by mutual agreement and a single written report may be made and signed by the selected member of the reporting team. Any member who has knowledge that the member designated to report has failed to do so, shall thereafter make the report.

Information given to hospital staff does not fulfill the required reporting mandated from the State. The prehospital caregivers must make their own report.

## II. POLICY

**Child Abuse/Neglect**

Suspicion of child abuse/neglect is to be reported by EMS field personnel by telephone to the Child Abuse Hotline immediately or as soon as possible. Be prepared to give the following information:

- Name of person making report.
- Name of child.
- Present location of child.
- Nature and extent of the abuse/neglect.
- Location where incident occurred, if known.
- Other information as requested.

San Bernardino County: 1-800-827-8724 24-hour number or 1-909-384-9233

Inyo County: 1-760-872-1727 M-F 8 am - 5pm or 911 after hours

Mono County: 1-800-340-5411 M-F 8 am - 5pm or 1-760-932-7755 after hours

The phone report must be followed within 36 hours by a written report on the “Suspected Child Abuse Report” form. Mail this to:

San Bernardino County: CPS
412 West Hospitality Lane
San Bernardino, CA 92408

Inyo County: CPS
162 Grove Street, Suite J
Bishop, CA 93514

Mono County: Department of Social Services
PO Box 576
Bridgeport, CA 93517

The identity of any person who files a report shall be confidential and disclosed only between child protective agencies, or to counsel representing a child protection agency, or to the district attorney in a criminal prose.

## III. DEPENDENT ADULT AND ELDER ABUSE/NEGLECT

Suspicion of dependent adult and elder abuse/neglect should be reported as soon as possible by telephone. Be prepared to give the following information:

- Name of person making report.
- Name, address and age of the dependent adult or elder.
- Nature and extent of person's condition.
- Other information, including information that led the reporter to suspect either abuse or neglect.

San Bernardino County: 1-877-565-2020 24-hour number

Inyo County: 1-760-872-1727 M-F 8 am - 5pm or 911 after hours

Mono County: 1-800-340-5411 M-F 8 am - 5pm or 1-760-932-7755 after hours

The phone report must be followed by a written report within 48 hours of the telephone report on the "Report of Suspected Dependent Adult/Elder Abuse" form. Mail this report to:

San Bernardino County: Department of Aging/Adult Services
784 E. Hospitality Lane
San Bernardino, CA 92415
Fax number 1-909-388-6718

Inyo County: Social Services
162 Grove Street, Suite J
Bishop, CA 93514

Mono County: Department of Social Services
PO Box 576
Bridgeport, CA 93517

The identity of all persons who report shall be confidential and disclosed only by court order or between elder protective agencies.

**San Bernardino County Department of Aging and Adult Services Long-Term Care Ombudsman Program**

Ombudsmen are independent, trained and certified advocates for residents living in long-term care facilities. Certified Ombudsmen are authorized by Federal and State law to receive, investigate and resolve complaints made by or on behalf of residents living in skilled nursing or assisted living facilities for the elderly. Ombudsmen work with licensing and other regulatory agencies to support Resident Rights and achieve the best possible quality of life for all long-term care residents. Ombudsman services are confidential and free of charge.

| | |
|---|---|
| Administrative Office Receives All Reports of Abuse:<br>San Bernardino County Department of Aging and Adult Services<br>686 East Mill Street<br>San Bernardino, CA 92415-0640<br>909-891-3928 Office<br>1-866-229-0284 Reporting<br>Fax 909-891-3957 | The State CRISIS line number:<br><br>1-800-231-4024<br>This CRISIS line is available to take calls and refer complaints 24 hours a day, 7 days a week. |

# ORGAN DONOR INFORMATION

## I. PURPOSE

To comply with State legislation requiring emergency medical services (EMS) field personnel to search for organ donor information on adult patients for whom death appears imminent.

## II. POLICY

Existing law provides that any individual who is at least 18 years of age may make an anatomical gift and sets forth procedures for making that anatomical gift, including the presence of a pink dot on their driver's license indicating enrollment in the California Organ and Tissue Donor Registry.

- When EMS field personnel encounter an unconscious adult patient for whom it appears death is imminent, a reasonable search of the patient's belonging should be made to determine if the individual carries information indicating status as an organ donor. This search shall not interfere with patient care or transport. Any inventory of victim's personal effects should be on the patient care record and signed by the person who receives the patient.

- All EMS field personnel shall notify the receiving hospital if organ donor information is discovered.

- Any organ donor document discovered should be transported to the receiving hospital with the patient unless the investigating law enforcement officer requests the document. In the event that no transport is made, any document should remain with the patient.

- EMS field personnel should briefly note the results of the search, notification of hospital and witness name(s) on the patient care report.

- No search is to be made by EMS field personnel after the patient has expired.

LOCAL MEDICAL EMERGENCY

## I. PURPOSE

To provide guidelines to emergency medical services (EMS) field personnel regarding the treatment and transportation of patients during a declared Local Medical Emergency.

## II. POLICY

EMS field personnel shall follow the procedures and guidelines outlined below regarding the treatment and transportation of patients during a declared Local Medical Emergency.

## III. PROCEDURES

The following procedures shall apply during a Local Medical Emergency:

- A public safety agency of the affected jurisdiction shall notify the San Bernardino County Communications Center (Comm Center) of the proclamation of a local emergency and shall provide information specifying the geographical area that the proclamation affects.
- The Comm Center shall notify:
  - The County Health Officer/Designee.
  - ICEMA Duty Officer.
  - The County Sheriff's Department.
  - Area EMS providers.
  - Area hospitals.
- This policy shall remain in effect for the duration of the declared Local Medical Emergency or until rescinded by the Medical and Health Operational Area Coordinator (MHOAC) which can be the County Health Officer and/or the ICEMA EMS Administrator or his/her designee.

## IV. MEDICAL CONTROL

- EMS field personnel (BLS, LALS and ALS) may function within their Scope of Practice as established in the ICEMA Policy, Procedure, and Protocol Manual without base hospital contact.
- No care will be given unless the scene is secured and safe for EMS field personnel.
- Transporting EMS providers may utilize BLS units for patient transport as dictated by transport resource availability. In cases where no ambulance units are available, EMS field personnel will utilize the most appropriate method of transportation at their disposal.
- Patients too unstable to be transported outside the affected area should be transferred to the closest secured appropriate facility.
- Comm Center should be contacted on the 700/800 MHz system for patient destination by

the transporting unit.

- Base hospital contact criteria outlined in ICEMA Reference #3040 - Radio Communication, may be suspended by the ICEMA Medical Director. EMS providers will be notified. Receiving hospitals should be contacted with following information once en route:
  - Estimated time of arrival (ETA).
  - Number of patients.
  - Patient status: Immediate, delayed or minor.
  - Brief description of injury.
  - Treatment initiated.

## V. DOCUMENTATION

EMS field personnel (first responder and transport) may utilize Cal Chiefs' approved triage tags as the minimum documentation requirement. The following conditions will apply:

- One section is to be kept by the jurisdictional public safety agency. A patient transport log will also be kept indicating time, incident number, patient number (triage tag), and receiving hospital.
- One section to be retained by the transporting EMS provider. A patient log will also be maintained indicating time, incident number, patient number (triage tag) and receiving hospital.
- Remaining portion of triage tag to accompany patient to receiving hospital which is to be entered into the patient's medical record.
- All Radio Communication Failure reports may be suspended for duration of the Local Medical Emergency.

All refusals of treatment and/or transport will be documented as scene safety allows.

## VI. SAN BERNARDINO COUNTY COMMUNICATIONS CENTER

Comm Center will initiate a Multiple Casualty Incident (MCI) according to ICEMA Reference #8090 - Medical Response to a Multiple Casualty Incident. This information will be coordinated with appropriate fire/rescue zone dispatch centers and medical unit leaders in the field as needed.

## VII. RESPONSIBILITIES OF THE RECEIVING HOSPITALS

- Receiving hospitals upon notification by the Comm Center of a declared Local Medical Emergency will provide hospital bed availability and Emergency Department capabilities for immediate and delayed patients.
- Receiving hospitals will utilize ReddiNet to provide the Comm Center and ICEMA with hospital bed capacity status minimally every four (4) hours, upon request, or when capacities are reached.
- It is strongly recommended that receiving hospitals establish a triage area in order to

evaluate incoming emergency patients.

- In the event that incoming patients overload the service delivery capacity of the receiving hospital, it is recommended that the hospital consider implementing their disaster surge plan.

- Saturated hospitals may request evacuation of stable inpatients. Movement of these patients should be coordinated by County Emergency Operations Center (EOC) and in accordance with local disaster response plans and if necessary, National Disaster Medical System categories.

## VIII. REFERENCES

| Number | Name |
|---|---|
| 3040 | Radio Communication |
| 8080 | Medical Response to a Multiple Casualty Incident |

# PATIENT RESTRAINTS

## I. PURPOSE

To provide guidelines on the use of restraints in the field or during transport for patients who are violent or potentially violent, or who may harm themselves or others.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

- The safety of the patient, community and responding personnel is of paramount concern when following this policy.
- Restraints are to be used only when necessary in situations where the patient is potentially violent and is exhibiting behavior that is dangerous to self or others.
- EMS field personnel must consider that aggressive or violent behavior may be a symptom of medical conditions such as head trauma, alcohol, drug-related problems, metabolic disorders, stress and psychiatric disorders.
- The method of restraint used shall allow for adequate monitoring of vital signs and shall not restrict the ability to protect the patient's airway, breathing, or compromise neurological or vascular status.
- Restraints should be applied by law enforcement whenever possible. If applied, an officer is required to remain available at the scene or during transport to remove or adjust the restraints for patient safety.
- This policy is not intended to negate the need for law enforcement personnel to use appropriate restraint equipment that is approved by its respective agency to establish scene-management control.

## III. PROCEDURE

The following procedures should guide EMS field personnel in the application of restraints and the monitoring of the restrained patient:

- Restraint equipment must be either padded leather restraints or soft restraints (e.g., posey, Velcro or seat-belt type). Both methods must allow for quick release.
- EMS field personnel shall **not** apply following forms of restraint:
  - Hard plastic ties, any restraint device requiring a key to remove, hand cuffs or hobble restraints.
  - Backboard, scoop stretcher or flat as a "sandwich" restraint.
  - Restraining a patient's hands and feet behind the patient (e.g., hog-tying).
  - Methods or other materials applied in a manner that could cause vascular or neurological compromise.

- Restraint equipment applied by law enforcement (handcuffs, plastic ties or "hobble" restraints) must provide sufficient slack in the restraint device to allow the patient to straighten the abdomen and chest, and to take full tidal volume breaths.

- Restraint devices applied by law enforcement require the officer's continued presence to ensure patient and scene-management safety. The officer shall accompany the patient in the ambulance or follow by driving in tandem with the ambulance on a predetermined route. A method to alert the officer of any problems that may develop during transport should be discussed prior to leaving the scene.

- Transport patients in low to high fowler's position. Never transport a patient in a prone position while restrained. Transportation of a patient supine, while restrained, can affect respiratory function and constant monitoring of respiratory status is required. EMS field personnel must ensure that the patient's position does not compromise respiratory/circulatory systems or does not preclude any necessary medical intervention to protect the patient's airway should vomiting occur.

- Restrained patients shall be transported to the most appropriate receiving facility within the guidelines per ICEMA Reference #9030 - Responsibility for Patient Management. The only allowable exception is a 5150 order presented when direct admission to a psychiatric facility has been arranged.

## IV. DOCUMENTATION

Documentation on the Electronic Patient Care Report (ePCR) shall include:

- The reasons restraints were needed.

- Which agency applied the restraints (e.g., EMS, law enforcement).

- Restrained extremities should be evaluated for pulse quality, capillary refill, color, nerve and motor function every 15 minutes. It is recognized that the evaluation of nerve and motor status requires patient cooperation and may be difficult to monitor. Documentation on ePCR is essential.

- Respiratory status should be evaluated for rate and quality every 15 minutes or more often as clinically indicated while restrained.

## V. REFERENCE

| **Number** | **Name** |
|---|---|
| 6020 | Responsibility for Patient Management |

# CARE OF MINORS IN THE FIELD

## I. PURPOSE

To provide guidelines for EMS field personnel for treatment and/or transport of minors in the field.

## II. PROCEDURE

**Treatment and/or Transport of Minors**

- In the absence of a parent or legal representative, minors with an emergency condition shall be treated and transported to the medical facility most appropriate to the needs of the patient.
- In the absence of a parent or legal representative, minors with a non-emergency condition require EMS field personnel to make reasonable effort to contact a parent or legal representative before initiating treatment and/or transport. If a parent or legal representative cannot be reached and minor is transported, EMS field personnel shall make every effort to inform the parent or legal representative of where the minor has been transported, and request that law enforcement accompany the minor patient to the hospital.

**Minors Not Requiring Immediate Treatment and/or Transport**

- A minor evaluated by EMS field personnel and determined not to be injured, to have sustained only minor injuries, or to have an illness or injury not requiring immediate treatment and/or transportation, may be released to:
  - Parent or legal representative.
  - Designated care giver over 18 years of age.
  - Law enforcement.
  - EMS field personnel shall document on the patient care report to whom the minor was released.

**Minor Attempting to Refuse Indicated Care**

- Attempt to contact parent or legal representative for permission to treat and/or transport.
- If parent or legal representative cannot be contacted, contact law enforcement and request minor to be taken into temporary custody for treatment and/or transport.

**Base Hospital Contact**

- Base hospital contact is required, prior to EMS field personnel leaving the scene, for the following situations:
  - Minors under the age of nine (9) whose parents or guardians are refusing care.
  - Minors who, in the opinion of EMS field personnel, do not require treatment or transport.

- See ICEMA Reference #9030 - Destination.

## III. REFERENCE

| Number | Name |
|---|---|
| 9030 | Destination |

# PATIENT REFUSAL OF CARE - ADULT

## I. PURPOSE

To provide direction for EMS field personnel when an individual refuses their advice that treatment and/or transport is indicated.

## II. PRINCIPLE

If a competent, conscious patient or legal guardian refuses care offered, or requests to be transported to a hospital other than the nearest, medically appropriate facility, the patient's request should be honored, when possible.

All Against Medical Advice (AMA) shall be fully documented to acknowledge that the individual may benefit from assessment, treatment and/or transport refused the advice of EMS field personnel. Documentation shall acknowledge that the advice is to protect the individual and the EMS services and that the decision was that of the individual.

Base Hospital contact shall be made on all AMA patients receiving ALS interventions and on all patients accepting treatment but refusing transport.

EMS field personnel may refuse a request to transport a patient to a more distant facility that is outside of their service area provided they offer transportation to an appropriate medical facility. In the event the patient or legal guardian insists upon transport and the transporting ambulance agrees to transport to a more distant facility, the signature of the patient or legal guardian must be obtained on the patient care report and base hospital contact made.

## III. CONSENT

- Immediately required treatment should not be delayed to obtain consent.
- An individual has the responsibility to consent to or refuse treatment. If he/she is unable to do so, consent is then considered implied.
- In non-emergency cases, consent should be obtained from the individual.
- For treatment of minors or a definition of emancipated minors refer to ICEMA Reference #6070 - Care of Minors in the Field.

## IV. MEDICAL DECISION-MAKING CAPACITY

- An individual has medical decision-making capacity if he or she:
  - Is capable of understanding the nature and consequences of the proposed treatment and refusal of such treatment.
  - Has sufficient emotional control, judgment and discretion to manage his or her own affairs
- An individual having an understanding of what may happen if treated or not treated, and is oriented to person, place, time and purpose.
- An individual with an altered level of consciousness will be unlikely to fulfill these criteria.

- If the individual is not deemed mentally competent, the person should be treated and transported. Attempt to obtain law enforcement concurrence in these circumstances.

## V. REFUSAL OF CARE DOCUMENTATION

The following information should be carefully documented on the patient care report:

- The individual's chief complaint, mechanism of injury, level of orientation/level of consciousness.
- Base hospital contact per ICEMA Reference #3040 - Radio Communication.
- Any medical treatment or evaluation needed and refused.
- The need for emergency transportation; also, if transport by means other than an ambulance could be hazardous due to the individual's injury or illness.
- Individual advised that potential harm could result without emergency medical treatment and/or transport.
- Individual provided with a refusal advice sheet, and if he or she would accept the refusal advice sheet.
- A copy of the patient care report with the individual's signature of refusal will be kept by the EMS provider per ICEMA Reference #5030 - Requirements for Patient Care Reports.

## VI. REFERENCE

| Number | Name |
|---|---|
| 3040 | Radio Communication |
| 5030 | Requirements for Patient Care Reports |
| 6070 | Care of Minors in the Field |

# TREATMENT AND TRANSPORTATION RECOMMENDATIONS OF PATIENTS WITH EMERGING INFECTIOUS DISEASES

## I. PURPOSE

To establish a policy for treatment and transportation recommendations of patients with emerging infectious diseases within the ICEMA region.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

**Signs and Symptoms May or May Not Include**

- Fever
- Runny nose, cough, sore throat (or any combination)
- Gastrointestinal symptoms
- Suspicion or reported suspicion of an infectious disease

## III. PROCEDURE

**Patient Care**

- Treatment for a symptomatic individual who is a confirmed case or a suspected case of infectious disease is supportive based upon assessment findings.
- IV fluids and appropriate medications are to be initiated per established protocols.
- Exacerbation of underlying medical conditions in patients should be considered, thoroughly assessed and treated per established protocols.

**Infection Control of Ill Persons During Treatment and Transport**

- EMS field personnel should incorporate rapid assessment of potential infectious environment into their scene survey/safety and maintain an index of suspicion for infectious disease when a patient with signs/symptoms consistent with the case definition(s) is encountered.
- Personal Protective Equipment (PPE) must be immediately accessible and employed by all EMS providers who come into close contact with ill and/or infectious patients as outlined in the California ATD Standard. This would include the driver in vehicles with open driving compartments particularly when the patient is receiving aerosolized treatment.
- Limit contact with suspected infectious patients to the number of EMS providers and/or EMS field personnel necessary to provide patient care.
- All required care should be provided to the patient(s) as indicated by protocol(s).
- Patients with suspected or confirmed case-status should be transported as warranted by assessment findings. All patients in acute respiratory distress will be transported. If transport is initiated, symptomatic patients should not be transported with non-symptomatic patients. The patient should be accompanied by a single attendant during transport to limit exposure unless patient treatment needs dictate otherwise.

- After thorough assessment and attention to the patient's respiratory status, the patient should be encouraged to wear a surgical mask if it can be tolerated or oxygen mask if indicated. Close monitoring of the patient's respiratory status is required at all times during treatment and transport.

- Exercise caution with treatments that may be aerosol-generating, such as:

  - Intubation
  - Continuous Positive Airway Pressure (CPAP)
  - Nebulized medications
  - Suctioning
  - Bag Valve Mask (BVM) ventilation

- It is recommended that ventilation, if used, be equipped with a HEPA filter. The HEPA filter is to be inserted between the BVM breathing device and the patient.

**Specific EMS Personal Protective Equipment Standards and Transport Recommendations**

- All EMS field personnel who have contact with the patient should wear the recommended PPE.

- For EMS field personnel treating and/or transporting a patient that meets the case definition of infectious respiratory disease, protection must include wearing a fit-tested N95 respirator (or higher), disposable gloves and eye protection (face shield or goggles).

- The ambulance ventilation system should be operated in the non-recirculating mode, and the maximum amount of outdoor air should be provided to facilitate dilution. If the vehicle has a rear exhaust fan, use this fan during transport. If the vehicle is equipped with a supplemental recirculating ventilation unit that passes air through HEPA filters before returning it to the vehicle, use this unit to increase the number of Air Changes per Hour (ACH). Air should flow from the cab (front of vehicle), over the patient, and out the rear exhaust fan. If an ambulance is not used, the ventilation system for the vehicle should bring in as much outdoor air as possible, and the system should be set to nonrecirculating. If possible, physically isolate the cab from the rest of the vehicle, and place the patient in the rear seat. [1]

  - Drivers with isolated driver's compartment should remove their PPE and perform hand hygiene prior to initiating the transport. Drivers with no isolated compartments should continue to wear their respirator during transport.

- Clean hands thoroughly with soap and water or an alcohol-based hand gel before and after all patient contacts.

- All equipment and surface areas should be thoroughly decontaminated with an anti-bacterial cleaner following each patient contact.

# EMS FELLOW FIELD RESPONSE

## I. PURPOSE

To establish criteria for approved EMS Fellows and EMS Fellowship Leadership to serve as direct medical control when present in the field.

An EMS Fellow is a licensed physician who is participating in an accredited postgraduate EMS Fellowship training program following successful completion of a residency program in emergency medicine.

Once the EMS Fellow completes the required field training, this policy will allow an EMS Fellow to assist and/or direct paramedics (EMT-Ps) personnel in advanced life support (ALS) procedures according to ICEMA policies and protocols.

This policy applies specifically to physicians performing in the role as an EMS Fellow or Fellowship Leadership on scene, and does not pertain either to physicians who present as bystander citizens on scene or to physicians who are part of an established EMS response element (i.e., tactical physician, aeromedical flight team, search and rescue team).

## II. POLICY/PROCEDURE

- ICEMA, the participating provider, along with EMS Fellow and Fellowship Leadership will determine field schedule.
- EMS field personnel will be notified of the EMS Fellow's field schedule prior to arrival.
- EMT field personnel shall obtain proper identification from the EMS Fellow and Fellowship Leadership.
- The EMS Fellow and Fellowship Leadership have the authority to provide on-scene medical direction.
- EMS field personnel may receive orders from the EMS Fellow and/or Fellowship Leadership within the Paramedic Scope of Practice and in compliance with ICEMA policy.
- The base hospital does not need to be contacted for orders.
- All EMS Fellow and Fellowship Leadership orders must be consistent with ICEMA policies and protocols.
- The EMS Fellow and Fellowship Leadership may perform medical care and procedures at the scene of an emergency.

## III. PATIENT DESTINATION

- EMS field personnel are required to notify the receiving hospital that they are inbound.
- Patient will be transported to the most appropriate hospital in accordance with ICEMA Reference #9030 - Destination.

## IV. LIABILITY

- Liability insurance is the responsibility of the EMS Fellowship program.

## V. REFERENCES

| Number | Name |
|---|---|
| 9030 | Destination |

# TRANSPORT OF CRITICAL 911 PATIENTS WHEN NO AMBULANCE IS AVAILABLE

## I. PURPOSE

To establish standards for the transportation of critical 911 patients in the rare event that traditional modes of transportation are unavailable. In an emergency situation, when failure to take other action would likely result in harm or negative patient outcome, field personnel may utilize the most appropriate method of transportation available.

## II. POLICY

- In the event that there are no available ambulances to meet the response needs within the Inland Counties operational areas.
- EMS field personnel may utilize the most medically appropriate method of transportation at their disposal, if:
  - The on-scene crew has a critical patient where no ALS ambulance, assistance by hire ALS ambulance, or BLS ambulance is available, has no ETA, or an extended ETA.
- All patients transported in these circumstances must have 100% CQI.
- Providers transporting patients utilizing alternative transportation modes and methods must notify the ICEMA Duty Officer within 24 hours of the incident.

STANDARD DRUG AND EQUIPMENT LIST - BLS/LALS/ALS

Each ambulance and first responder unit shall be equipped with the following functional equipment and supplies. **This list represents mandatory items with minimum quantities** excluding narcotics, which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

All ALS (transport and non-transport) and BLS transport vehicles shall be inspected annually.

**MEDICATIONS/SOLUTIONS**

| Exchanged Medications/Solutions | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| Acetaminophen (Tylenol) 1 gm IV | | | 1 | 1 |
| Adenosine (Adenocard) 6 mg | | | 1 | 1 |
| Adenosine (Adenocard) 12 mg | | | 2 | 2 |
| Albuterol Aerosolized Solution (Proventil) - unit dose 2.5 mg | | 4 doses | 4 doses | 4 doses |
| Aspirin, chewable - 81 mg tablet | | 2 | 1 bottle | 1 bottle |
| Atropine 1 mg preload | | | 2 | 2 |
| Calcium Chloride 1 gm preload | | | 1 | 1 |
| Dextrose 10% in 250 ml Water (D10W) | | 2 | 2 | 2 |
| Diphenhydramine (Benadryl) 50 mg | | 2 | 1 | 1 |
| Epinephrine 1 mg/ml 1 mg | | 2 | 5 | 5 |
| Epinephrine 0.1 mg/ml 1 mg preload | | | 4 | 4 |
| Glucagon 1 mg | | 1 | 1 | 1 |
| Glucose paste | 1 tube | 1 tube | 1 tube | 1 tube |
| Ipratropium Bromide Inhalation Solution (Atrovent) unit dose 0.5 mg | | | 4 | 4 |
| Irrigating Saline and/or Sterile Water (1000 cc) | 2 | 1 | 1 | 2 |
| Lidocaine 2% 100 mg | | | 3 | 3 |
| Magnesium Sulfate 10 gm | | | 1 | 1 |
| Naloxone (Narcan) 2 mg preload | 2 | 2 | 2 | 2 |
| Nitroglycerine (NTG) - Spray 0.4 mg metered dose and/or tablets (tablets to be discarded 90 days after opening) | | 2 | 1 | 2 |
| Nitroglycerine Paste 2% - 1 gm packets, **or**<br>Nitroglycerine Paste 2% - 30 gm tube, **or**<br>Nitroglycerine Paste 2% - 60 gm tube | | | | 2<br>1<br>1 |
| Normal Saline for Injection (10 cc) | | 2 | 2 | 2 |
| Normal Saline 100 cc | | | 1 | 2 |
| Normal Saline 250 cc | | | 1 | 1 |
| Normal Saline 500 ml and/or 1000 ml | | 2000 ml | 3000 ml | 6000 ml |
| Ondansetron (Zofran) 4 mg Oral Disintegrating Tablets (ODT) | | | 4 | 4 |
| Ondansetron (Zofran) 4 mg IM/IV | | | 4 | 4 |
| Sodium Bicarbonate 50 mEq preload | | | 2 | 2 |
| Tranexamic Acid (TXA) 1 gm | | | 4 | 4 |

| **Non-Exchange Controlled Substance Medications MUST BE DOUBLE LOCKED** | **BLS** | **LALS** | **ALS Non-Transport** | **ALS Transport** |
|---|---|---|---|---|
| Buprenorphine-Naloxone (Suboxone) SL | | | 48 mg *optional* | 48 mg optional |
| Diazepam *(optional alternative when midazolam is commercially unavailable)* | | | 40-80 mg | 40-80 mg |
| Fentanyl | | | 200-400 mcg | 200-400 mcg |
| Midazolam | | | 20-40 mg | 20-40 mg |
| Ketamine | | | 120-1000 mg | 120-1000 mg |

**AIRWAY/SUCTION EQUIPMENT**

| **Exchanged Airway/Suction Equipment** | **BLS** | **LALS** | **ALS Non-Transport** | **ALS Transport** |
|---|---|---|---|---|
| CPAP circuits - all manufacture's available sizes | | | 1 each | 2 each |
| End-tidal CO2 device - Pediatric and Adult (may be integrated into bag) | | | 1 each | 1 each |
| Endotracheal Tubes cuffed - 6.0 and/or 6.5, 7.0 and/or 7.5 and 8.0 and/or 8.5 with stylet | | | 2 each | 2 each |
| ET Tube holders - adult | | 1 each | 1 each | 2 each |
| i-gel - Size 1,1.5,2,2.5, 3, 4, and 5 | | | 1 each | 2 each |
| Mask - Adult & Pediatric non-rebreather oxygen mask | 2 each | 2 each | 2 each | 2 each |
| Mask - Infant oxygen Mask | 1 | 1 | 1 | 1 |
| Nasal cannulas - pediatric and adult | 2 each | 2 each | 2 each | 2 each |
| Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr | | | 1 each | 1 each |
| Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr | | | 1 each | 1 each |
| Nasopharyngeal Airways - (infant, child, and adult) | 1 each | 1 each | 1 each | 1 each |
| Needle Cricothyrotomy Device - Pediatric and adult<br>or<br>Needles for procedure 10, 12, 14 and/or 16 gauge | | | 1 each<br><br><br>2 each | 1 each<br><br><br>2 each |
| 14 gauge 3.25 inch and<br>18 gauge 1.75-2 inch needles for Needle Thoracostomy | | | 2 each | 1 |
| Oropharyngeal Airways - (infant, child, and adult) | 1 each | 1 each | 1 each | 1 each |
| Rigid tonsil tip suction | 1 | | 1 | 1 |
| Small volume nebulizer with universal cuff adaptor | | 2 | 2 | 2 |
| Suction Canister | 1 | | 1 | 1 |
| Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr | 1 each | | 1 each | 1 each |
| Ventilation Bags -<br>Infant 250 ml<br>Pediatric 500 ml (or equivalent)<br>Adult | <br>1<br>1<br>1 | <br>1<br>1<br>1 | <br>1<br>1<br>1 | <br>1<br>1<br>1 |
| Water soluble lubricating jelly | | 1 | 1 | 1 |

| Non-Exchange Airway/Suction Equipment | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| Ambulance oxygen source -10 L / min for 20 minutes | 1 | | | 1 |
| CPAP - (must be capable of titrating pressure between 2 and 15 cm $H_2O$) | | | 1 | 1 |
| Flashlight/penlight | 1 | 1 | 1 | 1 |
| Laryngoscope blades - #0, #1, #2, #3, #4 curved and/or straight | | | 1 each | 1 each |
| Laryngoscope handle with batteries - or 2 disposable handles | | | 1 | 1 |
| Magill Forceps - Pediatric and Adult | | | 1 each | 1 each |
| Manual powered suction device | | 1 | | |
| Portable oxygen with regulator - 10 L /min for 20 minutes | 1 | 1 | 1 | 1 |
| Portable suction device (battery operated) | 1 | | 1 | 1 |
| Pulse Oximetry device | (SEE OPTIONAL EQUIPMENT SECTION, PG. 5) | 1 | 1 | 1 |
| Stethoscope | 1 | 1 | 1 | 1 |
| Wall mount suction device | 1 (BLS TRANSPORT ONLY) | | | 1 |

**IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT**

| Exchanged IV/Needles/Syringes/Monitor Equipment | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| Conductive medium or Pacer/Defibrillation pads | | | 2 each | 2 each |
| Disposable Tourniquets | | 2 | 2 | 2 |
| ECG electrodes | | | 20 | 20 |
| Mechanical (i.e. SAM) or Powered (i.e.EZ) IO Driver.<br>**Manual insertion of IO needle is only permitted when mechanical or powered driver fails and no other option is available* | | | 1 each | 1 each |
| Mechanical/Powered IO Needles:<br>25 mm<br>45 mm | | | <br>2 each<br>1 each | <br>2 each<br>1 each |
| Glucose monitoring device with compatible strips and OSHA approved single use lancets | 1 | 1 | 1 | 1 |
| 3-way stopcock with extension tubing | | | 2 | 2 |
| IV Catheters - sizes 14, 16, 18, 20, 22, 24 | | 2 each | 2 each | 2 each |
| Macrodrip Administration Set<br>Microdrip Administration Set (60 drops / cc) | | 3<br>1 | 3<br>1 | 3<br>2 |
| Mucosal Atomizer Device (MAD) for nasal administration of medication | 2 | 2 | 2 | 4 |
| Pressure Infusion Bag (disposable) | | 1 | 1 | 1 |
| Razors | | 1 | 2 | 2 |
| Safety Needles - 20 or 21gauge and 23 or | | 2 each | 2 each | 2 each |

| Exchanged IV/Needles/Syringes/Monitor Equipment | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| 25 gauge | | | | |
| Saline Lock Large Bore Tubing Needleless | | 2 | 2 | 2 |
| Sterile IV dressing | | 2 | 2 | 2 |
| Syringes w/wo safety needles - 1 cc, 3 cc, 10 cc catheter tip | | 2 each | | |
| Syringes w/wo safety needles - 1 cc, 3 cc, 10 cc, 20 cc, 60 cc catheter tip | | | 2 each | 2 each |

| Non-Exchange IV/Needles/Syringes/ Monitor Equipment | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| 12-lead ECG Monitor and Defibrillator with TCP and printout | | | 1 | 1 |
| Blood pressure cuff - large adult or thigh cuff, adult, child and infant (one of each size) | 1 | 1 | 1 | 1 |
| Capnography monitor and supplies, may be integrated in the cardiac monitor | | | 1 | 1 |
| Needle disposal system (OSHA approved) | 1 | 1 | 1 | 1 |
| Thermometer - Mercury Free with covers | 1 | 1 | 1 | 1 |

**OPTIONAL EQUIPMENT/MEDICATIONS**

| Non-Exchange Optional Equipment/ Medications | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| AED/defib pads - Adult (1), Pediatric (1) | 1 each | 1 each | | |
| Albuterol MDI with spacer | | 4 doses | 4 doses | 4 doses |
| Automatic CPR device (FDA approved) | 1 | 1 | 1 | 1 |
| Automatic transport ventilator (Specialty Program Only - ICEMA approved device) | | | 1 | 1 |
| Backboard padding | 1 | 1 | 1 | 1 |
| Buretrol | | | 1 | 1 |
| Chemistry profile tubes | | | 3 | 3 |
| Epinephrine 0.15 mg Auto-Injector Jr. | 2 | 2 | | |
| Epinephrine 0.3 mg Auto-Injector | 2 | 2 | | |
| Nerve Agent Antidote Kit (NAAK) - DuoDote or Mark I | 3 | 3 | 3 | 3 |
| EMS Tourniquet | 1 | | 1 | 1 |
| Gum Elastic intubation stylet | | | 2 | 2 |
| Hemostatic Dressings * | 1 | 1 | 1 | 1 |
| IO Needles - Manual, Adult and Pediatric, Optional | | Pediatric sizes only IO needles and drivers | 1 each | 1 each |
| IV infusion pump | | | 1 | 1 |
| IV warming device | | 1 | 1 | 1 |
| Manual IV Flow Rate Control Device | | | 1 | 1 |
| Manual powered suction device | 1 | 1 | 1 | 1 |
| Multi-lumen peripheral catheter | | | 2 | 2 |
| Needle Thoracostomy Kit (prepackaged) | | | 2 | 2 |
| Naloxone (Narcan) Nasal Spray 4 mg | 2 | 2 | 2 | 2 |
| Pulse Oximetry device | 1 | | | |
| Sodium Bicarbonate 50 mEq / 50cc Vial | | | 2 | 2 |
| Translaryngeal Jet Ventilation Device | | | 1 | 1 |

| Non-Exchange Optional Equipment/ Medications | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| Vacutainer | | | 1 | 1 |
| Video Laryngoscope Device | | | 1 | 1 |

* Hemostatic Dressings

- Quick Clot, Z-Medica
  Quick Clot, Combat Gauze LE
  Quick Clot, EMS Rolled Gauze, 4x4 Dressing, TraumaPad
- Celox
  Celox Gauze, Z-Fold Hemostatic Gauze
  Celox Rapid, Hemostatic Z-Fold Gauze
- HemCon ChitoFlex Pro Dressing

**NOTE**:

- The above products are "packaged" in various forms (i.e., Z-fold, rolled gauze, trauma pads, 4"x4"pads) and are authorized provided they are comprised of the approved product.
- Hemostatic Celox Granules, or granules delivered in an applicator, are not authorized.

**DRESSING MATERIALS/OTHER EQUIPMENT/SUPPLIES**

| Exchanged Dressing Materials/Other Equipment/ Supplies | BLS | LALS | ALS Non-Transport | ALS Transport |
|---|---|---|---|---|
| Adhesive tape - 1 inch | 2 | 2 | 2 | 2 |
| Air occlusive dressing | 1 | 1 | 1 | 1 |
| Ankle and wrist restraints, soft ties acceptable | 1 | | 1 | 1 |
| Antiseptic swabs/wipes | 10 | 10 | 10 | 10 |
| Bedpan or fracture pan<br>Urinal | 1 (BLS TRANSPORT UNITS ONLY)<br>1 (BLS TRANSPORT UNITS ONLY) | | | 1<br>1 |
| Cervical Collars - Rigid Pediatric and Adult all sizes or<br>Cervical Collars - Adjustable Adult and Pediatric | 2 each<br>2 each | 2 each<br>2 each | 2 each<br>2 each | 2 each<br>2 each |
| Cold Packs | 2 | 2 | 2 | 2 |
| Emesis basin or disposable bags and covered waste container | 1 | 1 | 1 | 1 |
| Head immobilization device | 2 | 2 | 2 | 2 |
| OB Kit | 1 | 1 | 1 | 1 |
| Pneumatic or rigid splints capable of splinting all extremities | 4 | 2 | 2 | 4 |
| Povidone/Iodine swabs/wipes or antiseptic equivalent | | 4 | 10 | 10 |
| Roller bandages - 4 inch | 6 | 3 | 3 | 6 |
| Sterile bandage compress or equivalent | 6 | 2 | 2 | 6 |
| Sterile gauze pads - 4x4 inch | 4 | 4 | 4 | 4 |
| Sterile sheet for Burns | 2 | 2 | 2 | 2 |
| Universal dressing 10x30 inches | 2 | 2 | 2 | 2 |

| **Non-Exchange Dressing Materials/Other Equipment/ Supplies** | **BLS** | **LALS** | **ALS Non-Transport** | **ALS Transport** |
|---|---|---|---|---|
| 800 MHz Radio | | 1 | 1 | 1 |
| Ambulance gurney | 1 (BLS TRANSPORT UNITS ONLY | | | 1 |
| Bandage shears | 1 | 1 | 1 | 1 |
| Blood Borne Pathogen Protective Equipment - (non-porous gloves, goggles face masks and gowns meeting OSHA Standards) | 2 | 1 | 2 | 2 |
| Pediatric Emergency Measuring Tape (Broselow, etc.) | | 1 | 1 | 1 |
| Drinkable water in secured plastic container or equivalent | 1 gallon | | | 1 gallon |
| Long board with restraint straps | 1 | 1 | 1 | 1 |
| Pediatric immobilization board | 1 | 1 | 1 | 1 |
| Pillow, pillowcase, sheets and blanket | 1 set (BLS TRANSPORT UNITS ONLY | | | 1 set |
| Short extrication device | 1 | 1 | 1 | 1 |
| Straps to secure patient to gurney | 1 set (BLS TRANSPORT UNITS ONLY | | | 1 set |
| Traction splint | 1 | 1 | 1 | 1 |
| Triage Tags - ICEMA approved | 20 | 20 | 20 | 20 |

STANDARD DRUG AND EQUIPMENT LIST - EMS AIRCRAFT

Each Aircraft shall be equipped with the following functional equipment and supplies. This list represents mandatory items with minimum quantities, to exclude narcotics, which must be kept within the range indicated. All expiration dates must be current. All packaging of drugs or equipment must be intact. No open products or torn packaging may be used.

| MEDICATIONS/SOLUTIONS | AMOUNT |
|---|---|
| Acetaminophen (Tylenol) 1 gm IV | 1 |
| Adenosine (Adenocard) 12 mg | 2 |
| Albuterol Aerosolized Solution (Proventil) - unit dose 2.5 mg | 3 doses |
| Aspirin, chewable - 81 mg tablet | 1 bottle |
| Atropine 1 mg preload | 2 |
| Calcium Chloride 1 gm preload | 1 |
| Dextrose 10% in 250 ml Water (D10W) * | 1 |
| Diphenhydramine (Benadryl) 50 mg | 1 |
| Epinephrine 30 mg/30 ml | 1 |
| Dextrose 50% 25 gm | 1 |
| Ipratropium Bromide Inhalation Solution (Atrovent) unit dose 0.5 mg | 2 |
| Lidocaine 2% prefilled 100 mg syringe | 2 |
| Magnesium Sulfate 10 gms | 1 |
| Naloxone (Narcan) 2 mg preload | 2 |
| Nitroglycerin (NTG) - Spray 0.4 mg metered dose and/or tablets (tablets to be discarded 90 days after opening.) | 1 |
| Normal Saline for Injection (10 cc) | 2 |
| Normal Saline 100ml | 3 |
| Normal Saline 500 ml | 1 |
| Normal Saline 1000 ml | 3 |
| Ondansetron (Zofran) 4 mg Oral Disintegrating Tablets (ODT) | 2 |
| Ondansetron (Zofran) 4 mg IM/ IV | 2 |
| Sodium Bicarbonate 50 mEq preload | 1 |
| Tranexamic Acid (TXA) 1 gm | 4 |

| CONTROLLED SUBSTANCE MEDICATIONS-MUST BE DOUBLE LOCKED | AMOUNT |
|---|---|
| Fentanyl | 200-400 mcg |
| Midazolam | 20-40 mg |
| Ketamine | 120-1000 mg |

| AIRWAY/SUCTION EQUIPMENT | AMOUNT |
|---|---|
| Aircraft Oxygen source -10 L /min for 20 minutes | 1 |
| C-PAP circuits - all manufacture's available sizes | 1 each |
| End-tidal CO2 device - pediatric and adult (may be integrated into bag) | 1 each |
| Endotracheal Tubes cuffed - 6.0 and/or 6.5, 7.0 and/or 7.5 2 each and 8.0 (1) each | 2 each |
| ET Tube holders - adult | 1 each |
| Flashlight/penlight | 1 |
| Laryngoscope handle with batteries - or 2 disposable handles | 1 |
| Laryngoscope blades - #0, #1, #2, #3, #4 curved and/or straight | 1 each |
| Magill Forceps - Pediatric and Adult | 1 each |
| RAM cannulas- Multiple Sizes | 2 each |
| Naso/Orogastric tubes - 10fr or 12fr, 14fr, 16fr or 18fr | 1 each |
| Naso/Orogastric feeding tubes - 5fr or 6fr, and 8fr | 1 each |
| Nasopharyngeal Airways - child and adult | 1 each |

| AIRWAY/SUCTION EQUIPMENT | AMOUNT |
|---|---|
| Needle Cricothyrotomy Device (Approved) - Pediatric and adult<br>*or*<br>Needles for procedure 10, 12, 14 and/or16 gauge | 1 each<br><br>2 each |
| Non-Rebreather $O_2$ Mask - Pediatric and Adult, Infant Simple Mask | 1 each |
| 14 gauge 3.25 inch and<br>18 gauge 1.75-2 inch needles for Needle Thoracostomy | <br>2 each |
| Oropharyngeal Airways - infant, child, and adult | 1 each |
| Portable Oxygen with regulator - 10 L /min for 20 minutes | 1 |
| Portable suction device (battery operated) *and/or* Wall mount suction device | 1 each |
| Pulse Oximetry device | 1 |
| Small volume nebulizer with universal cuff adaptor | 1 |
| Stethoscope | 1 |
| Suction catheters - 6fr, 8fr or 10fr, 12fr or 14fr | 1 each |
| Ventilation Bags - Infant 250 ml, Pediatric 500 ml and Adult 1 L | 1 each |
| Water soluble lubricating jelly | 1 |
| Ridged tonsil tip suction | 1 |

| IV/NEEDLES/SYRINGES/MONITORING EQUIPMENT | AMOUNT |
|---|---|
| 12-Lead ECG Monitor and Defibrillator with TCP and printout | 1 |
| 800 MHz Radio | 1 |
| Blood pressure cuff - large adult or thigh cuff, adult, child and infant | 1 set |
| Capnography monitor and supplies, may be integrated in the cardiac monitor | 1 |
| Conductive medium *or* Adult and Pediatric Pacer/Defibrillation pads | 2 each |
| ECG - Pediatric and Adult | 20 patches |
| Mechanical (SAM) or Power IO (EZ) Needles and Driver 25 mm<br>*and*<br>45 mm<br>**Manual insertion of IO needle is only permitted when mechanical or powered driver fails, and no other option is available* | 2 each<br><br><br>1 each |
| 3-way stopcock with extension tubing | 2 |
| IO Needles - Manual, Adult and Pediatric, Optional | 1 each |
| IV Catheters - sizes 14, 16, 18, 20, 22, 24 | 2 each |
| Glucose monitoring device | 1 |
| Macrodrip Administration Set or equivalent<br>Microdrip Administration Set (60 drops/ml) or equivalent | 1<br>1 |
| Mucosal Atomizer Device (MAD) for nasal administration of medication | 2 |
| Needle disposal system (OSHA approved) | 1 |
| Pressure infusion bag | 1 |
| Safety Needles - 20 or 21 gauge and 23 or 25 gauge | 2 each |
| Saline Lock | 2 |
| Syringes w/wo safety needles - 1 ml, 3 ml, 10 ml, 20 ml | 2 each |
| Syringe - 60 ml catheter tip | 1 |
| Thermometer - Mercury free with covers | 1 |

| DRESSING MATERIALS/OTHER EQUIPMENT SUPPLIES | AMOUNT |
|---|---|
| Adhesive tape - 1 inch | 2 |
| Air occlusive dressing | 1 |
| Aircraft stretcher or litter system with approved FAA straps that allows for Axial Spinal Immobilization | 1 |
| Ankle and wrist restraints, soft ties acceptable | 1 |
| Antiseptic swabs/wipes | |
| Bandage shears | 1 |
| Blanket or sheet | 2 |

| DRESSING MATERIALS/OTHER EQUIPMENT SUPPLIES | AMOUNT |
|---|---|
| Blood Borne Pathogen Protective Equipment - (non-porous gloves, goggles face masks and gowns meeting OSHA Standards) | 2 |
| Cervical Collars - Rigid Pediatric & Adult all sizes<br>*or*<br>Cervical Collars - Adjustable Adult and Pediatric | 1 each<br><br>1 each |
| Emesis basin or disposable bags and covered waste container | 1 |
| OB Kit | 1 |
| Pediatric Emergency Measuring Tape (Broselow, etc.) | 1 |
| Povidone/Iodine swabs/wipes or antiseptic equivalent | |
| Roller bandages - 4 inch | 2 |
| bandage compress or equivalent | 2 |
| gauze pads - 4x4 inch | |
| Sterile Sheet for Burns | 1 |

| OPTIONAL EQUIPMENT/MEDICATIONS | Amount |
|---|---|
| Automatic ventilator (Approved) | 1 |
| Backboard padding | 1 |
| BLS AED/defib pads | 1 |
| Chemistry profile tubes | 3 |
| Nerve Agent Antidote Kit (NAAK) - DuoDote or Mark I | 3 |
| D5W in bag | 1 |
| Hemostatic Dressing * | 1 |
| IV infusion pump | 1 |
| IV warming device | 1 |
| Manual powered suction device | 1 |
| Medical Tourniquet | 1 |
| Naloxone (Narcan) Nasal Spray 4 mg | 2 |
| Needle Thoracostomy Kit (prepackaged) | 2 |
| Pediatric immobilization board | 1 |
| Translaryngeal Jet Ventilation Device | 1 |
| Vacutainer | 1 |

* Hemostatic Dressings

- Quick Clot, Z-Medica
  - Quick Clot, Combat Gauze LE
  - Quick Clot, EMS Rolled Gauze, 4x4 Dressing, TraumaPad
- Celox
  - Celox Gauze, Z-Fold Hemostatic Gauze
  - Celox Rapid, Hemostatic Z-Fold Gauze

**NOTE**:

- The above products are “packaged” in various forms (i.e., Z-fold, rolled gauze, trauma pads, and 4”x4” pads) and are authorized provided they are comprised of the approved product.
- Hemostatic Celox Granules, or granules delivered in an applicator, are not authorized.

# INTERFACILITY TRANSFER GUIDELINES

## I. PURPOSE

To identify patient care responsibilities for emergency medical technicians (EMTs), advanced EMTs (AEMTs) and paramedics (EMT-Ps) during interfacility transports.

## II. BLS INTERVENTIONS

During an interfacility transport, an EMT may monitor the following if the patient is non-critical and deemed stable by the transferring physician and the physician has approved transport via BLS ambulance:

Appropriate transfer paperwork and medical records must accompany the patient to their destination.

- Monitor a saline lock or peripheral lines delivering fluids in any combination/concentration of Normal Saline, Lactated Ringers or Dextrose and Water provided the following conditions are met:
  - No medications have been added to the IV fluid.
  - Maintain the IV at a pre-set rate.
  - Check tubing for kinks and reposition arm if necessary.
  - Turn off IV fluid if signs/symptoms of infiltration occur.
  - Control any bleeding at insertion site.
- Transport a patient with a urinary catheter provided the following:
  - The catheter is able to drain freely.
  - No action is taken to impede flow or contents of drainage collection bag.
- Transport a patient with a nasogastric or gastrostomy tube provided the tube is clamped.
- If the patient's condition deteriorates, the patient should be transported to the closest receiving hospital.

## III. LIMITED ALS (LALS) INTERVENTIONS

During an interfacility transport, if the patient is non-critical and deemed stable by the transferring physician and the physician has approved transport via LALS ambulance, an AEMT may monitor or perform the following:

- Peripheral lines delivering fluids in any combination/concentration of normal saline, lactated ringers or dextrose and water.
- Saline locks.
- Tracheo-bronchial suction of an intubated patient.

- Initiate prior to contact protocols if the patient's condition deteriorates, then must contact the base hospital per ICEMA Reference #3040 - Radio Communication.

Appropriate transfer paperwork and medical records must accompany the patient to their destination.

AEMTs may not transport a patient with IV drips that are not in the AEMT scope of practice.

AEMTs may not transport patients with blood or blood products.

## IV. ALS INTERVENTIONS

***Appropriate transfer paperwork and medical records must accompany the patient to their destination.***

If the transfer is a STEMI patient, refer to ICEMA Reference #8020 - Specialty Care Transport.

EMT-Ps may not transport a patient with IV drips that are not in the EMT-P scope of practice.

EMT-Ps may not transport patients with blood or blood products.

During an interfacility transport, an ICEMA accredited EMT-P may:

- Monitor peripheral lines delivering fluids in any combination/concentration of normal saline, lactated ringers or dextrose and water.
- Transport intravenous solutions with added medication(s) as follows:
  - Lidocaine
  - Dopamine
  - Magnesium Sulfate
- Monitor and administer medications through a pre-existing vascular access.
- Monitor or saline lock.
- Monitor IV solutions containing potassium $\leq$40mEq/L.
- Monitor thoracostomy tubes to water or dry sealed drainage.
- Monitor nasogastric tubes.

EMT-Ps may initiate prior to contact protocols if the patient's condition deteriorates, then must contact the base hospital per ICEMA Reference #5040- Radio Communication Policy.

- If EMT-P personnel are requested for the transfer, the transferring physician shall submit written orders designating treatment during transport that are within ICEMA protocols.
- Any change in the patient's status that may require a deviation from the transferring physician's orders or jeopardize the continued safe transport of the patient to the receiving facility, the EMT-P shall contact the transferring physician (primarily) or base station hospital (secondarily), transferring physician may then be consulted by base hospital personnel to facilitate care by transport personnel.

## V. NURSE ASSISTED ALS TRANSPORT

In the event of a critical patient that needs transport with medication or IV drips that are outside of the EMT-P scope of practice and CCT transport is not possible, a Registered Nurse (RN) from the transferring hospital may accompany the patient. The RN will be responsible for orders from the transferring physician. In the event the patient condition deteriorates, the EMT-P will contact the base hospital for orders and destination change. The RN will continue to provide care consistent with the transferring physician's orders. The base hospital physician may consider discontinuing or continuing the prior orders based on patient condition. The RN will document the base hospital physician orders on the transferring facility's patient care record. The EMT-P will document on the ePCR or O1A.

## VI. REFERENCES

| Number | Name |
|---|---|
| 3040 | Radio Communication |
| 8020 | Specialty Care Transport |

SPECIALTY CARE TRANSPORT

## I. PURPOSE

To establish the criteria for the approval of Specialty Care Transport (SCT) providers and personnel operating within San Bernardino, Inyo or Mono Counties.

## II. PROGRAM APPROVAL

- Requests for approval must be made in writing 60 days prior to the anticipated starting date of service. The request must include:
  - Proposed identification, location of the SCT unit, and geographic coverage area.
  - Proposed SCT staffing, including Registered Nurse (RN) or Respiratory Care Practitioner (RCP) and a Paramedic (EMT-P) or Emergency Medical Technician (EMT).
  - A description of the procedures to be followed for changes in destination due to unforeseen changes in the patient's condition or other unexpected circumstances.
  - A copy of all policies, protocols and procedures that are approved by the SCT provider's Medical Director.
  - A description of the orientation program and process utilized to verify skill competency for SCT personnel.
  - Documentation identifying and listing the qualifications for the SCT provider's Medical Director, including current license, certifications and resume/curriculum vitae.
  - Documentation identifying and listing the qualifications for the SCT Nurse Coordinator, including current license, certifications, and resume/curriculum vitae.
  - A quality improvement (QI) plan, or an amendment to the EMS provider's QI Plan, that describes the QI process for interfacility SCT. The plan must comply with all provisions of the ICEMA QI Plan and include 100% review of all patient care reports in which SCT is utilized.
  - Agreement to comply with all ICEMA policies and protocols for transport of critically injured or ill patients and quality improvement.
- ICEMA will notify the applicant in a timely manner if any further documentation is needed.
- The applicant will be notified in writing of approval or denial of the program within 60 days.

## III. POLICY

- A private ambulance company must be ICEMA approved to operate in San Bernardino, Inyo, or Mono Counties as a Basic Life Support (BLS) or Advanced Life Support (ALS) provider.

- A private ambulance provider must be ICEMA approved to employ RNs and/or RCPs to staff and provide SCT.

- All EMS providers interested in providing SCT utilizing any combination of RNs and/or RCPs and EMT-Ps or EMTs shall provide the information required for program approval for review to determine eligibility.

- This policy does not apply when RNs or RCPs, employed by a healthcare facility, are occasionally utilized by an EMS transport provider to provide interfacility patient transport as part of emergent situations.

## IV. DOCUMENTATION FOR SCT

- An ICEMA approved electronic patient care report (ePCR) is required for all transported patients.

- If a paper downtime form is utilized, EMS providers are required to submit an ICEMA approved ePCR by the end of shift or within 24 hours of the transport (whichever is less).

- The EMS provider shall conduct a 100% review of all patient care reports as part of their QI program.

## V. EQUIPMENT

- The EMS provider shall provide the following equipment:

  - BLS equipment per ICEMA Reference #7010 - Standard Drug and Equipment List - BLS/LALS/ALS.

  - ALS equipment per ICEMA Reference #7010 - Standard Drug and Equipment List - BLS/LALS/ALS when utilizing a RN or EMT-P.

  - Additional equipment as needed to provide required specialized treatment and care.

## VI. SCT MEDICAL DIRECTOR

- A full or part-time physician licensed in the State of California and qualified by training and experience with practice, within the last five (5) years, in emergency or acute critical care medicine. The ICEMA Medical Director must approve the candidate for medical director.

- The duties of the SCT medical director shall include but not be limited to:

  - Sign and approve, in advance, all medical protocols to be followed by the RN and/or RCP.

  - Ensure the ongoing training of SCT personnel in SCT provider's policies and treatment protocols relative to their level of care and scope of practice.

  - Be familiar with the Emergency Medical Treatment and Active Labor Act (EMTALA) and the Health Insurance Portability and Accountability Act (HIPAA) of 1996 requirements.

  - Ensure the ongoing training of staff in EMTALA and HIPAA requirements.

- Participate in the development, implementation, and ongoing evaluation of the QI program to ensure the quality of patient care and safe transport of patients.

## VII. SCT NURSE COORDINATOR

- A full or part-time RN, licensed in the State of California that is qualified by training and/or experience in emergency or acute critical care medicine, within the last five (5) years, in emergency or acute critical care nursing. The duties of the SCT Nurse Coordinator shall include but not be limited to:
  - Maintain documentation indicating that all SCT personnel have been properly oriented to the SCT program.
  - Maintain documentation for all applicable licensure, certification and/or accreditation requirements of all SCT personnel.
  - Provide ongoing training to all SCT personnel.
  - Be familiar with EMTALA and HIPAA requirements.
  - Provide ongoing training of staff in EMTALA and HIPAA requirements.
  - Ensure the development, implementation and ongoing evaluation of the SCT provider's QI program in collaboration with the SCT Medical Director.

## VIII. SCT PERSONNEL

- SCT personnel shall:
  - Be utilized to perform duties within their respective scope of practice but must be accompanied by other medical personnel, when required, based on patient acuity and/or anticipated patient care requirements.
  - Be currently licensed or certified for unrestricted practice in California.
  - Currently possess a valid American Heart Association BLS Healthcare Provider, American Red Cross Professional Rescuer CPR card or equivalent.
  - Currently possess a valid American Heart Association Advanced Cardiac Life Support (ACLS) card (except EMTs). ACLS cards that are obtained online must have hands on skills evaluation with an approved American Heart Association instructor.
- SCT personnel shall be credentialed per the following ICEMA policies:
  - RNs shall be authorized as a Mobile Intensive Care Nurse (MICN) per ICEMA Reference #1040 - MICN Authorization - Base Hospital, Administrative, Flight Nurse and Critical Care Transport.
  - RCPs shall be authorized by ICEMA per ICEMA Reference #1050 - RCP Authorization.
  - EMT-Ps utilized as part of a SCT shall be accredited per ICEMA Reference #1030 - EMT-P Accreditation.

- EMTs utilized as part of a SCT shall be certified per ICEMA Reference #1020 - EMT Certification.

## IX. PROCEDURES

- Each SCT provider shall develop and maintain procedures for the hiring and training of SCT personnel.
- Each SCTs provider must develop a manual to include the following:
  - Malpractice insurance coverage.
  - Identity and accessibility of the SCT Medical Director and SCT Nurse Coordinator.
  - Vehicle inventory lists including minimum equipment listed in equipment above.
  - Copies of all related interfacility transfer paperwork and instruction for completing the ePCR.
  - Guidelines for change in patient destination due to patient condition and procedures for base hospital contact when necessary.
  - Any protocols (standing orders) to be followed by the RN and/or RCP based on ACLS, PALS and/or NALS guidelines and approved by the SCT Medical Director.
  - Any medical protocols to be followed by the RN and/or RCP and approved by the SCT Medical Director
- All policies and protocols are subject to review by ICEMA.

## X. REFERENCES

| Number | Name |
|---|---|
| 1020 | EMT Certification |
| 1030 | EMT-P Accreditation |
| 1040 | MICN Authorization - Base Hospital, Administrative, Flight Nurse and Critical Care Transport |
| 1050 | RCP Authorization |
| 7010 | Standard Drug and Equipment List - BLS/LALS/ALS |

# TRANSPORT OF PATIENTS (BLS)

## I. PURPOSE

In the prehospital setting or during interfacility transport, a certified Emergency Medical Technician (EMT) working in the ICEMA region or supervised EMT student may monitor peripheral lines delivering intravenous fluids, Foley catheters, saline locks, nasogastric tubes, gastrostomy tubes, perform finger stick blood glucose testing, and administer naloxone for suspected narcotic overdose, under the California Code of Regulations, Title 22, Section 100063(b).

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

- An EMT may monitor, maintain and adjust as necessary in order to maintain a preset rate of flow and turn off peripheral lines delivering glucose solutions or isotonic solutions including Ringers Lactate for volume replacement provided the following restrictions are met:
  - Interfacility transfers: The patient is not critical and deemed stable by the transferring physician and that physician authorizes transport.
  - Scene transport: The patient is not critical, and the base hospital physician approves transport by an EMT.
  - No additional medications have been added to the intravenous fluids.
  - In the prehospital setting, no other advanced life support procedures have been initiated.
- The EMT shall:
  - Monitor and maintain the IV at a preset rate.
  - Check the tubing for kinks and reposition the arm if necessary when loss of flow occurs.
  - Control the bleeding at the IV site.
  - Turn off the flow of intravenous fluid if infiltration or alteration of flow occurs. Vital signs should then be monitored frequently.
- An EMT may transport a patient with a saline lock provided:
  - The patient is not critical and deemed stable by the transferring physician or base hospital physician and the transferring physician approves transport by an EMT.
  - The EMT shall:
    - Monitor the saline lock only as placed at time of transfer.
    - Control any bleeding at insertion site.

- An EMT may transport a patient with a Foley catheter provided:
  - The patient is noncritical and deemed stable by the transferring physician or base hospital physician and the transferring physician approves transport by an EMT.
  - The catheter is able to drain freely to gravity.
  - No action is taken to impede flow or disrupt contents of drainage collection bag.
- An EMT may transport a patient with a nasogastric tube or gastrostomy tube provided:
  - The patient is not critical and deemed stable by the transferring physician or base hospital physician and the physician approves transport by an EMT.
  - Nasogastric and gastrostomy tubes are clamped.
  - All patients who have received fluids prior to transport must be transported in semi-fowlers position to prevent aspiration, unless contraindicated.
- An EMT may perform finger stick blood glucose testing if patient meets field assessment/treatment indicators, as outlined in ICEMA Reference #14060 - Altered Level of Consciousness/Seizures - Adult, ICEMA Reference #14150 - Cardiac Arrest - Pediatric, ICEMA Reference #14160 - Altered Level of Consciousness/Seizures - Pediatric and ICEMA Reference #14170 - Seizure - Pediatric.
- An EMT may administer Naloxone by intranasal and/or intramuscular routes for suspected narcotic overdose, as outlined in ICEMA Reference #14060 - Altered Level of Consciousness/Seizures - Adult, ICEMA Reference #14150 - Cardiac Arrest - Pediatric and ICEMA Reference #14160 - Altered Level of Consciousness/Seizures - Pediatric.
- If at any time the patient's condition deteriorates, the patient should be transported to the closest receiving hospital.

## III. REFERENCES

| Name | Number |
|---|---|
| 14060 | Altered Level of Consciousness/Seizures - Adult |
| 14150 | Cardiac Arrest - Pediatric |
| 14160 | Altered Level of Consciousness/Seizures - Pediatric |
| 14170 | Seizure - Pediatric |

# REQUESTS FOR HOSPITAL DIVERSION AND AMBULANCE REDIRECTION

## I. PURPOSE

To define policy and procedures for hospitals to request diversion of Advanced Life Support (ALS) ambulances and to define procedures for the redirection of ALS ambulances by the transport providers.

## II. POLICY

- Hospital diversion is driven by the hospital and may only be used if the hospital meets the criteria that is listed in this policy.
- Ambulance redirection is driven by the EMS providers and may only be used if the criteria listed in this policy are met.

## III. DIVERSION

- Ambulance diversion based on hospital capacity, census or staffing is not permitted in the ICEMA region. Limited diversion for hospital internal disaster and trauma Centers is permitted as outlined in this policy.
- This policy applies to the 9-1-1 emergency system as a temporary measure and is not intended for utilization to determine destination for interfacility transports, including higher level of care transports.
- If a hospital meets internal disaster criteria, Trauma Center Diversion or any other specialty care centers with unique circumstances, immediate telephone notification must be made to the ICEMA Duty Officer by an administrative staff member who has the authority to determine that criteria has been met for diversion.
- Hospitals must notify EMS dispatch centers immediately via ReddiNet or available communication modalities.
- Hospitals must maintain a hospital diversion policy that conforms with this policy. The hospital policy shall include plans to educate all appropriate staff on proper utilization of diversion.
- Within 72 hours of an incident, the hospital must provide ICEMA with a written after-action report indicating the reasons for internal disaster, plans activated, adverse patient consequences and the corrective actions taken. The report must be signed by the CEO or designated responsible individual.
- ICEMA staff may contact the hospital to determine the reasons for ambulance diversion, under this policy.
- ICEMA may remove any hospital from diversion status using ReddiNet if it is determined that the request is not consistent with this policy.

## IV. REDIRECT

- Receiving hospitals cannot redirect an incoming ambulance and limited diversion is only permitted for internal disaster or trauma centers as outlined in this policy.

- ICEMA may randomly audit records to ensure redirected ambulance patients are transported to the appropriate destination.

- ICEMA may perform unannounced site visits to hospitals on temporary redirection status to ensure compliance.

## V. PROCEDURE FOR DIVERSION

A request for diversion of ALS ambulances may be made by contacting the ICEMA Duty Officer, for the following approved categories:

- CT Diversion (for Non-Specialty Care Centers).
  - When Non-Specialty Care Centers experience CT scanner failure, the hospital can go on ambulance diversion using the ReddiNet system for EMS patients who may require CT imaging.

- Trauma Center Diversion (for use by designated Trauma Centers only)
  - The on-duty trauma surgeon must be involved in the decisions regarding any request for trauma diversion.
  - The trauma team and trauma surgeon (both first and second call) are fully committed to the care of trauma patients in the operating room and are NOT immediately available for any additional incoming patients meeting approved trauma triage criteria.
  - All operating rooms are occupied with critically injured patients that meet trauma triage criteria.
  - All CT Scanners are inoperable due to scanner failure at a designated Trauma Center.
  - Internal disaster.

  **NOTE**: Diversion is canceled when all designated Trauma Centers are on Trauma Center Diversion.

- **Internal Disaster Diversion**
  - Requests for Internal Disaster Diversion shall apply only to physical plant breakdown affecting the Emergency Department or significant patient services.

    **NOTE**: Examples of Internal Disaster Diversion include bomb threats, explosions, power outage and a nonfunctional generator, fire, earthquake damage, hazardous materials exposure, incidents involving the safety and/or security of a facility.
  - Internal Disaster Diversion shall not be used for hospital capacity or staffing issues.
  - Internal Disaster Diversion will stop all 9-1-1 transports into the facility.

- The hospital CEO or AOD shall be notified and notification documented in ReddiNet.
- If the hospital is a designated base hospital, the hospital should consider immediate transfer of responsibility for on-line direction to another base hospital. Notification must be made to the EMS provider.
- The affected hospital shall enter Internal Disaster Diversion status into ReddiNet and notify the ICEMA Duty Officer immediately.

  **NOTE**: Some hospitals have an internal policy called internal disaster to facilitate staff movement or other surge measures. This is not the same as internal disaster referred to in this policy and should not be put out on ReddiNet.

- **Exceptions to CT and Trauma Diversion Only**:
  - Basic life support (BLS) ambulances shall not be diverted.
  - Ambulances on hospital property shall not be diverted.
  - With the exception of Internal Disaster Diversion involving significant plant failure, patients exhibiting unmanageable problems (i.e., difficult to manage airway, uncontrolled hemorrhage, cardiopulmonary arrest) in the field, shall be transported to the closest emergency department.

## VI. PROCEDURE FOR AMBULANCE REDIRECTION (ACTIVE REDIRECT)

- Active Redirect will only be initiated at the recommendation of an ambulance supervisor, fire department Battalion Chief or above, or the ICEMA Duty Officer.
- Active Redirect can be initiated when three (3) or more ambulances are held on bed delay for more than 25 minutes.
- Supervisory personnel should be on scene whenever possible to work with the hospital to offload patients.
- Every effort should be made to clear ambulances on bed delay.
- Once the determination has been made to place the hospital on Active Redirect, the supervisor will ensure that notification is made via ReddiNet.
- Hospitals on Active Redirect will remain in that status for a maximum of two (2) hours. If conditions resolve prior to the two (2) hour time limit, the hospital shall be taken off Active Redirect.
- The paramedic has the ability to override the redirect status based on patient request and for continuity of care. (i.e. cancer patients, heart patients, transplant patients or hospital insurance).
- Any patient needing Specialty Care Services will be transported to the closest, most appropriate hospital regardless of redirect status.

- Any Critical patient will be transported to the closest most appropriate hospital regardless of redirect status.

# HOSPITAL EMERGENCY RESPONSE TEAM (HERT)

## I. PURPOSE

To establish a formal mechanism for providing rapid advanced surgical care at the scene, in which a higher level of on scene surgical expertise, physician field response, is requested by the on scene emergency medical services (EMS) provider.

## II. PRINCIPLES

- In general, a HERT is utilized in a situation where a life-saving procedure, such as an amputation, is required due to the inability to extricate a patient. Life before limb concept is utilized as a life-saving measure, not as a time saving measure.

- HERT should be assembled and ready to respond within 20 minutes of a request with standard life-saving equipment in accordance with the HERT provider's internal policy on file with ICEMA.

- The standard life-saving equipment referenced above shall be predetermined, preassembled, readily available, clearly labeled, and stored in a predetermined location. Based upon the magnitude and nature of the incident, the standard life-saving equipment may require augmentation.

## III. POLICY

- Composition of a HERT

  - The composition of the HERT, and the identification of a Physician Team Leader, shall be in accordance with the approved HERT provider's internal policy on file with ICEMA.

  - The Physician Team Leader:

    - Is responsible for organizing, supervising, and accompanying members of the team to a scene where a physician field response has been requested.
    - Shall be familiar with base hospital operations and ICEMA's policies, procedures, and protocols.
    - Is responsible for retrieving the life-saving equipment and determining if augmentation is required based upon the magnitude and nature of the incident.
    - Will determine the ultimate size and composition of the team based upon the magnitude and nature of the incident.
    - Will report to, and be under the authority of, the IC or their designee. Other members of the team will be directed by the Physician Team Leader.

- Activation of a HERT

  - The anticipated duration of the incident should be considered in determining the need for a HERT. Before requesting a HERT, the IC should take into account that it may be a minimum of 30 minutes before a team can be on scene.

- The IC shall contact the appropriate communications center and request the HERT.

- San Bernardino County Communication Center shall contact the approved HERT provider regarding the request. The Physician Team Leader will organize the team and equipment in accordance with the HERT provider's internal policy, and the magnitude and nature of the incident.

- The IC will provide pertinent information regarding the incident through their communications center.

- The Physician Team Leader shall inform the San Bernardino County Communication Center once the team has been assembled and indicate the number of team members.

- San Bernardino County Communication Center will notify the IC of the estimated time of arrival and mode of transportation of the HERT.

- Consider secondary air ambulance for patient transportation.

- <u>Transportation of a HERT</u>

  - When either ground or air transportation is indicated, the San Bernardino County Communication Center will arrange emergency response vehicle transportation for the HERT.

  - Consider use of larger ground (CCT or bariatic) or air units for transport of patient and the HERT to a receiving hospital.

  - Upon the conclusion of the incident, the HERT will work with the IC to contact the San Bernardino County Communication Center to arrange transportation of the team back to the originating facility, if needed.

- <u>Responsibilities of a HERT On Scene</u>

  - Upon arrival of the HERT, the Physician Team Leader will report directly to the IC. Access to the emergency medical scene will be at the discretion of the IC. The HERT members will have the recommended safety gear:

    - Safety goggles
    - Leather gloves
    - ANSI approved rescue helmet with HERT labeled on both sides (blue)
    - Nomex jumpsuit with HERT indicated on the back (blue)
    - DOT safety vests
    - ANSI/NFPA approved safety boot with steel toe and steel shank

  - Only personnel that meet the minimum safety gear requirements may be allowed into the area. All other responding personnel will be kept at a safe distance.

  - Documentation of care rendered will be completed on hospital approved trauma flow sheets (nursing notes) and physician progress notes.

- Approval Process of a HERT

  Trauma Centers interested in providing a HERT must develop internal policies to comply with all requirements and submit evidence of the ability to meet all requirements of this policy to ICEMA for review and approval as a HERT provider.

MEDICAL RESPONSE TO HAZARDOUS MATERIALS/TERRORISM INCIDENT

## I. PURPOSE

To supplement the Operational Area Plan Hazardous Material Response Policy. To provide a more detailed medical perspective and serve as a guide to dispatch centers, EMS providers (both public and private) and general acute care hospitals, and to outline a plan of coordinated medical response to victims of hazardous materials incidents and suspected or actual acts of terrorism for decontamination, protective measures and treatment.

## II. PROCEDURE

**Operational Principles for First Responders**

- There is a direct relationship between the type and amount of material and the resultant illness. Exposure may lead to injury and death. Risk to personnel is directly related to the type of contaminant and length of exposure.
- A single small release, with any degree of personal carelessness, could disable an entire emergency medical services (EMS) system.
- On scene personnel safety takes priority over any immediate rescue/resuscitation concerns.
- EMS providers will be unable to respond to other emergencies until decontamination of involved equipment and EMS field personnel is accomplished.

**Response and Activation**

- Immediate notification to the County Interagency Hazardous Materials Emergency Response Team through appropriate dispatch center. Suspected terrorist activity should also be reported to the appropriate public safety agency having primary investigative authority.
- Information (if known) to be provided to responding agencies:
  - Name of substance (this could include basic information such as container information, placards, color/size/odor descriptions and should be obtained from a safe distance); do not make an effort to smell any chemical. If you smell the chemical, you have been exposed.
  - Physical state of material (liquid, gas, solid, powder, etc.).
  - What is the product doing, i.e., melting, bubbling, off-gassing, still leaking.
  - Extent of contamination.
  - Lay of the land.
  - Wind direction, other weather conditions.
  - Staging area (up-wind, upstream, uphill).

- Alternate travel route.
- Consider activation of multi-casualty incident (MCI) if appropriate.

**Hospital Notification**

- Hospitals should immediately be made aware of any hazardous materials/terrorism incident through the ReddiNet System or by phone. This early alert will allow the hospital(s) to prepare for the eventuality of receiving patients from the incident.
- This notification should be made even if it appears no victims have received exposure or contamination. In some cases, individuals may arrive at local hospitals without going through decontamination. These victims have the potential for exposure risk and contamination of personnel and facilities and would result in the lengthy shutdown of a facility while specialized decontamination teams render the facility safe.
- Consider requesting additional hazmat and/or decon equipment from local Fire jurisdiction to assist with larger numbers of walk-ins.

**First Responding EMS Ambulance**

- If an ambulance is the first responder, upon suspicion of a hazardous material release, the EMS crew should:
  - Advise the appropriate dispatch center of the situation. This information will minimize unnecessary and inadvertent exposure to other public safety personnel and equipment.
  - The EMS crew shall await arrival of appropriate resources prior to rendering any treatment.
- Medical responders will always work in the Support Zone. They should never enter the Exclusion or Contamination Reduction Zones.
- The Incident Commander (IC) will determine the level of personal protective equipment (PPE) needed in each zone.
- Only personnel who are wearing proper PPE shall make contact with victims in the Exclusion or Contamination Reduction Zones.
- The IC or designee will make all decisions regarding the mode of transportation for injured persons.

**On Site Treatment**

- Within the Exclusion and Contamination Reduction Zones:

  Self-contamination potential and restrictions caused by PPE make definitive treatment within these zones difficult. Only those public safety responders trained in providing medical care in a hazardous environment, and limited to basic life support (BLS) procedures, should provide medical treatment within these zones. This treatment should be followed by rapid transportation to the Containment Reduction Zone/Decon. Any ambulatory victims need to be directed to an Ambulatory Decon Area/Line for decontamination. It is possible some of these people can decontaminate themselves.

- The Safe Zone:

  Paramedic medical interventions should begin only after the decontamination process. Treatment should be in accordance with prevailing medical standards of care and by consultation with the base hospital, if indicated. One hospital should act as the coordinating hospital using resources such as Regional Poison Control Center and/or Toxic Information Center.

**Medical Transportation**

- Ground Ambulance Preparation:
  - If a victim is contaminated, there will be no ambulance transport until gross decontamination is performed.
  - If transport is deemed necessary by the IC or designee, then:
    - A plastic sheet should be placed on the ambulance floor prior to transport.
    - Adequate ventilation should be provided to avoid accumulation of toxic chemical levels in the ambulance.
- Helicopter Consideration:
  - A decision to utilize helicopter services should be decided by the collaboration of the IC, or designee, and the flight crew.
  - Guidelines outlined in Ground Ambulance Preparation above should be applied to preparing a helicopter prior to transporting patients.
  - Air transport of patients should be considered as a last resort.

**Determination of Destination Hospital and Related Preparation**

- Destination Hospital:

  The destination hospital should be determined by the standard of the closest and most appropriate. When information indicates the hazardous material possesses a significant threat to hospital personnel, consideration should be given in consultation with the base hospital physician to triage the patients to a single hospital. This decision should be made based on the potential danger to attending staff, threatened facility closure and the ability of the hospital to handle such cases.

- Preparation by Receiving Hospital(s):
  - Internal preparation according to hospital policies and procedures.
  - Anticipate walk-in contaminated patients.
  - Anticipate the need for fine detail decontamination (e.g., fingernail beds and ear canals of persons who were field decontaminated). Check for contact lenses.

- In the event contaminated victims arrive at the hospital, the hospital should be prepared to decontaminate victims in a pre-designated area outside of the Emergency Department. Some accessories may include:

  - Temperature controlled water hose (low pressure).
  - Acceptable catch basin.
  - Expendable or easily decontaminated gurney.
  - Towels and sheets for patient.
  - Movable screens for privacy.
  - Plastic lined garbage receptacles for contaminated clothes and equipment. Personal effects of victims involved in a terrorist event should be bagged and labeled as possible evidence for collection by law enforcement.
  - Consider requesting assistance from local hazmat teams for additional assistance.
  - A current contract with a State licensed hazardous materials contractor to dispose of contaminated materials and properly perform area decontamination should already be in place.

**Base Hospital Medical Direction Roles and Responsibilities**

- Assignment of a Mobile Intensive Care Nurse (MICN)/Emergency Department physician or designee to the ReddiNet System, if available, throughout the duration of the incident.

- Collaboration of base hospital physician and the IC/Technical Reference Team Leader as to the best method of decontamination.

- Provide to EMS field personnel, online information regarding prodromal symptoms that may be expected as a result of exposure to hazardous materials or weapons of mass destruction (WMD) agents.

- Anticipate walk-in contaminated patients and initiate appropriate action.

- Assist in consultation and determination of destination.

**Decontamination of EMS Equipment and EMS Field Personnel**

Proper protection of equipment and supplies should minimize EMS equipment and EMS field personnel out of service due to any contamination that may occur during transport. If the vehicle and equipment are contaminated during transport, they should not return to service until adequately decontaminated by qualified personnel. In addition, the following procedure should be followed:

- Personal protective garments should be discarded in designated receptacles at hospital facilities as soon as practical.

- Decontamination should take place under the direction of designated hazardous materials personnel.

- Decontamination should take place in an area where wastewater can be contained.

- No medical vehicle, associated hardware, or supplies shall be released for service until clearance is received from designated hazardous materials personnel.

# MEDICAL RESPONSE TO A MULTIPLE CASUALTY INCIDENT

## I. PURPOSE

To outline and coordinate the responses by EMS field personnel to a Multiple Casualty Incident (MCI) and to standardize definitions, as outlined in the Firescope Field Operations Guide (FOG) and the responsibilities of each participating entity.

## II. PRINCIPLES

- Field responses to an MCI will follow the procedures/guidelines consistent with the Incident Command System (ICS) as outlined in Firescope.
- Hospitals shall receive as much advanced notice as possible to prepare for arriving patients.

## III. SCOPE

An MCI is any incident where personnel on scene have requested additional responses to care for all victims.

- Incident requires five (5) or more ambulances; and/or
- Incident involves ten (10) or more patients; and/or
- Requires utilization of triage tags; and/or
- May require patient distribution to more than one (1) hospital.

## IV. PROCEDURE

**General Operational Procedures**:

- First arriving resource with the appropriate communications capability shall declare an MCI; establish command, name the incident and request hospital bed availability through the Coordinated Communication Center (CCC). This resource shall remain in command until relieved by the public safety agency having jurisdictional authority.
- All operation functions and procedures on scene will be in accordance with Firescope.
- The Incident Commander (IC) will assign the first available resource to triage. Adults shall be triaged according to START as outlined in Firescope. Pediatric patients shall be triaged according to JumpSTART (see definitions) developed by California Emergency Medical Services for Children.
- The IC or designee shall establish communications with the CCC on the Med Comm Talk Group for situation update and to obtain hospital bed availability.
- The Medical Communications Coordinator (Med Comm), when initially communicating with the CCC, will provide the name of incident, type, location and agency in charge.

- Patients should generally be transported to the appropriate hospitals as provided to the Med Comm by the CCC.

- The Med Comm shall notify the CCC with the following information for all patients departing the scene:

  - Transport method (air, ground, bus)
  - Transport agency and unit
  - Number of patients (adult and pediatric)
  - Classification of patients (Immediate, Delayed, Minor)
  - Destination (in accordance with CCC destination availability)

- Transporting units shall make attempts to contact the receiving hospital en route to provide patient(s) report using the incident name to identify the patient and provide the following information:

  - Incident name
  - Transporting agency and unit number
  - Age/sex
  - Mechanism of injury
  - Chief complaint and related injuries that may need specialty services, e.g., respiratory, neuro, vascular or decontamination
  - Glasgow Coma Scale
  - ETA

- If the destination is changed en route from that provided by the Med Comm, the transporting unit shall notify the CCC through its dispatch and shall make contact to revised receiving hospital. The CCC will notify the original destination that the transporting unit has been diverted by the base hospital physician or that the patient condition has deteriorated.

**Special Operational Procedures - Use of Non-Emergency Vehicles**:

The Patient Transportation Unit Leader (PTUL), in coordination with the IC, may utilize non-emergency vehicles to transport patients triaged as “minor.” The Med Comm will work with the receiving facilities to coordinate the destinations. In such cases, the following conditions shall apply:

- Non-emergency vehicles may be requested through the CCC or by special arrangement made on scene by the PTUL; however, in the event arrangements are made on scene, the PTUL shall notify the CCC.

- If resources allow at least one ALS team (minimum of one paramedic and one EMT) with appropriate equipment will accompany each non-emergency transport vehicle.

- Generally, the ratio of patients to ALS team should not exceed 15:1.
- In the event of deterioration of a patient en route, the non-emergency unit shall immediately call for an ALS emergency ambulance and transfer care for transport to the closest emergency department.

**Responsibilities of the County Communications Center (CCC)**:

- Upon field notification of an MCI, the CCC shall immediately poll hospitals via ReddiNet for bed availability.
- The CCC shall advise other 9-1-1 dispatch centers of the MCI, including the name and location.
- The CCC shall dispatch all air resources for the MCI.
- The CCC shall notify the EMS Agency when five or more ambulances are requested.
- The CCC will confirm patient departure from scene with Med Comm by providing the departure time.
- The CCC will advise receiving hospitals of the number/categories of patients en route via ReddiNet or other approved methods.
- The CCC will notify all involved hospitals when the MCI is concluded.

**Responsibilities of the Receiving Hospital**:

- All hospitals shall respond immediately to the ReddiNet poll.
- A receiving facility may not change the destination of a patient.
- A designated Trauma base hospital physician may change a patient destination only if a patient condition deteriorates.
- Hospitals shall enter all required information into the ReddiNet, including, but not limited to, names, age sex and triage tag number of patients transported from the MCI.
- Each hospital that received patients from the MCI shall participate in after action reviews as necessary.

**Medical Direction**:

- EMS personnel shall operate within ICEMA “prior to contact” protocols for both medical and trauma patient(s).
- If base hospital consultation is necessary, medical direction refers to a specific patient(s) and not to the incident as a whole (operational aspects).

**Field Documentation**:

- The Med Comm maintains responsibility to ensure the following:
  - Utilization of the Med Com log. This form will include:
    - Name and location of the incident.
    - Triage tag number for each patient and the hospital destination.
    - Brief description of the incident.
  - Completion of as much information as available will be documented on the triage tag.
  - A completed individual patient care report for all patients with a chief complaint who "refuse treatment" and desire to sign a release of liability or AMA.
- Each transporting unit is responsible for generating a patient care report for each patient transported excluding patients transported by non-emergency vehicles. Those transported in non-emergency vehicles will be identified by triage tags. This should include patient tracking tag/number and will indicate the incident name and location.

## IV. ADDENDUM

**Firescope Operations Procedures of a Multiple Casualty Incident**

**Operational System Description:** The multi-casualty organizational module is designed to provide for the necessary supervision and control of essential functions required during an MCI. The primary functions will be directed by the Medical Group Supervisor, if activated (or Operations), who reports to the Multi-Casualty Branch Director, if activated, or in most cases, the Commander. Resources having direct involvement with patients are supervised or coordinated by one of the functional leaders or coordinators.

The Medical Branch structure in the ICS system is designed to provide the IC with a basic, expandable modular system for managing the incident. The system is designed to be set up consistently in all incidents involving mass casualties and has the ability to expand the incident organization as needed.

**Initial Response Organization:** Initial response resources are managed by the IC, who will handle all Command and General Staff responsibilities. The resources will respond based on the **operational procedures** (as outlined in this protocol).

**Reinforced Response Organization:** In addition to the initial response, the IC establishes a Triage Unit Leader, a Treatment Unit Leader, Patient Transportation Unit Leader and Ambulance Coordinator. Also, patient treatment areas are established.

**Multi-Group Response:** All positions within the Medical Group are now filled. The Air Operations Branch may be designated to provide coordination between the Ambulance Coordinator and the Air Operations Branch. The Extrication Group is established to free entrapped victims.

**Multi-Branch Incident Organization:** The complete incident organization shows the Multi-Casualty Branch and other Branches. The Multi-Casualty Branch now has multiple Medical Groups (geographically separate) but only one Patient Transportation Group. This is because all patient transportation must be coordinated through one point to avoid overloading hospitals.

**Operational Principles**:

- First arriving resource with the appropriate communications capability shall declare a MCI, establish command, name the incident, and request bed availability. This resource will remain in command until relieved by the public safety agency having jurisdictional authority.

- The IC will assign the first available resource to triage. Victims shall be triaged according to START/JumpSTART criteria, and ICS shall be implemented according to Firescope.
- The IC will assign the resource with the appropriate communications capability to establish communications with CCC situation update and to obtain bed availability.

- Treatment areas are set up based upon needs and available resources according to classification of patients (immediate, delayed and minor.) The Treatment Unit Leader will notify Patient Transportation Unit Leader when a patient is ready for transportation and of any special needs (e.g. Burns, Pediatrics, etc.)

- Patients are transported to the appropriate facilities based upon patient condition, bed availability, and transport resources. The Patient Transportation Unit Leader and the Medical Communications Coordinator will work together to transport the patients using the appropriate methods to the most appropriate destinations.

- The Patient Transportation Unit Leader/Medical Communications Coordinator will determine all patient destinations.

- The IC will designate a staging area(s). Transportation personnel should stay with their vehicle to facilitate rapid transport, unless reassigned by the IC or his designee.

- The Patient Transportation Unit Leader will then call for an ambulance or other designated transportation vehicle to respond to the loading area.

- The Patient Transportation Unit Leader, in coordination with the IC, may put in a request through the Communications Center for buses to transport minor or uninjured patients.

- The Patient Transportation Unit Leader will copy the information from the triage tag onto a Patient Transportation Log and confirm destination with the ambulance crew.

- The Patient Transportation Unit Leader will notify Medical Communications Coordinator of patient departure.

- The transporting unit should contact the receiving facility en route with a patient report, using the incident name to identify the patient.

# MEDICAL RESPONSE TO A MULTIPLE CASUALTY INCIDENT (Inyo and Mono Counties)

## I. PURPOSE

- To outline and coordinate the responses by EMS system participants to multiple casualty incidents (MCI) in Inyo and Mono Counties.
- To standardize definitions, as outlined in the Firescope Field Operations Guide (FOG) and the responsibilities of each participating entity.

## II. PRINCIPLES

- Field responses to an MCI will follow the procedures/guidelines consistent with the Incident Command System (ICS) as outlined in Firescope.
- Hospitals shall receive as much advanced notice as possible to prepare for arriving patients.

## III. SCOPE

An MCI is any incident where personnel (law, fire, or medical) on scene have requested additional resources to care for all victims. This may include one or more of the following criteria:

- An incident requiring three (3) or more ambulances and/or involving five (5) or more patients.
- The utilization of triage (e.g., START) tags.
- Patient distribution beyond one (1) hospital.

## IV. PROCEDURE

**General Operational Procedures**

- First arriving resource with the appropriate communications capability shall declare an MCI, establish command, and name the incident. This resource shall remain in command until relieved by the public safety agency having jurisdictional authority.
- Sheriff's Office (SO) Dispatch shall alert/notify all other 9-1-1 dispatch centers (CHP and adjacent jurisdictions) OES Mutual Aid Coordinators (fire, law, Medical/Health Operational Area Coordinator (MHOAC)) of the declaration of an MCI.
- The first medical personnel (e.g. ambulance crew) on scene shall:
  - Become the Medical Group Supervisor, and
  - Initiate triage. Adults shall be triaged according to START as outlined in Firescope. Pediatric patients shall be triaged according to JumpSTART, developed by California Emergency Medical Services for Children. Triage and patient tracking and coordination with receiving hospitals shall be accomplished utilizing standard triage tags.

- Assume responsibility for requesting additional resources (e.g. ambulances, personnel, equipment) in coordination with the base station, SO and/or CHP Dispatch, and the OES Operational Area Coordinators (fire, law, and/or MHOAC), as requested and available and relevant (dependent on geographical location and availability and communications capability), and

- Assume responsibility for patient tracking and matching patient types/needs with appropriate and available transportation resources and staff and receiving hospitals, in coordination with the base station, SO and/or CHP Dispatch, and the OES Operational Area Coordinators (fire, law, and/or MHOAC), and

- Contact base station and/or receiving hospitals and/or EMS aircraft providers for patient destination and coordination once the MCI has been declared.

- All operation functions and procedures on scene will be in accordance with Firescope and National Incident Management System (NIMS).

- The Medical Group Supervisor shall establish communications with the base station and/or receiving hospitals through available methods for situation update (i.e. Medical Sit Rep) and to obtain hospital bed availability/coordination, with the assistance and support of SO and/or CHP Dispatch, EMS aircraft providers, and the OES Operational Area Coordinators (fire, law, and/or MHOAC), as requested and relevant (dependent on geographical location and availability and communications capability).

- The Medical Group Supervisor will identify and request the necessary resources through the IC or designee. The IC or Medical Group Supervisor will contact the base station and/or receiving hospitals and/or OES Mutual Aid Coordinators (fire, law, MHOAC), with the assistance and support of SO and/or CHP Dispatch, as available and appropriate, to fulfill medical resource requests.

- During incidents with multiple destination hospitals, the Medical Group Supervisor may assign a Medical Communications Coordinator (Med Comm). The Med Comm will provide the following information when initially communicating with Dispatch (SO or CHP), the base station and/or receiving hospitals, or OES Mutual Aid Coordinators (fire, law, MHOAC):

  - Name of incident, type, location, initial patient estimate, and agency in charge.

  - Patients should be transported to the appropriate hospitals as provided to the Med Comm by the Medical Group Supervisor.

- The Medical Group Supervisor, shall notify the base station and the receiving hospital(s) (or Med Comm shall notify Dispatch, if available and assigned, to relay to the hospitals) (or EMS aircraft providers shall communicate with receiving hospitals) of the following information for all patients departing the scene:

  - Transport method (e.g. air, ground, bus).

  - Transport agency and unit.

  - Number of patients (adult and pediatric).

  - Identification (triage tag number) and classification of patients (i.e. Immediate, Delayed, Minor).

- Destination (only when Med Comm is coordinating multiple hospital destinations based on base station, EMS aircraft providers, and/or Medical Group Supervisor evaluation of hospital availability).

- Transporting units shall make attempts by available means to contact the receiving hospital en route to provide patient(s) report using the incident name to identify the patient and provide the following information:

  - Incident name.
  - Transporting name and unit number.
  - Age/sex.
  - Illness or mechanism of injury.
  - Triage classification (immediate (red), delayed (yellow), green (minor), and any significant deterioration in condition/status during transport.
  - Chief complaint and related illness/injury that may need specialty services, (e.g. respiratory, neuro, vascular, decontamination, burns).
  - Glasgow Coma Scale (GCS), if relevant.
  - Estimated Time of Arrival (ETA).
  - Tracking of patients and destinations is the primary joint responsibility of the base station and field medical personnel, with assistance as requested and available from Dispatch.

  If the destination is changed en route, the transporting unit shall notify the initial receiving hospital, if possible, and shall make attempts to contact the new receiving hospital en route. If the base station is coordinating patient destinations in conjunction with the Med Comm, the transporting unit will notify the base station, who will notify the original destination that the patient has been diverted by the base station physician or that the patient condition has deteriorated.

**Special Operational Procedures - Use of Non-Emergency Vehicles**

The Medical Group Supervisor, in coordination with the IC, may utilize non-emergency vehicles to transport patients triaged as Minor (green). The Medical Group Supervisor (or Med Comm, if assigned) will coordinate the destinations with the base station and/or receiving hospitals, if there are multiple receiving facilities. In such cases, the following conditions shall apply:

- Non-emergency vehicles may be requested through the IC, through Dispatch or by special arrangement made on scene by the Medical Group Supervisor.

- If resources allow, at least one (1) ALS team (minimum of one (1) paramedic and one (1) EMT) with appropriate equipment will accompany each non-emergency transport vehicle. Generally, the ratio of patients to ALS team should not exceed 15:1.

- When resources do not permit an ALS team to accompany a non-emergency transport vehicle, a BLS team consisting of at least two (2) EMT's and/or First Responders will accompany the vehicle. Generally, the ratio of patients to BLS team should not exceed 9:1.

- In the event of deterioration of a patient en route, the non-emergency unit shall immediately call for an ALS emergency ambulance, if available, and transfer care for transport to the closest emergency department.

**Responsibilities of Dispatch**

- SO Dispatch shall alert/notify all other 911 dispatch centers (CHP and adjacent jurisdictions), and County OES Mutual Aid Coordinators (fire, law, Medical/Health Operational Area Coordinator (MHOAC)) of the declaration of an MCI.

- SO Dispatch shall assist, collaborate, and help to coordinate the filling of resource requests from the base station, IC, the Medical Group Supervisor, and/or the OES Mutual Aid Coordinators (fire, law, MHOAC), as available. This may include mutual aid resources from outside the operational area, including ground and/or air transportation resources and personnel.

**Responsibilities of the Base Station**

- Upon field notification of an MCI, the base station shall immediately notify area hospitals. If there is the potential for multiple patient destinations, the base station will poll area hospitals for bed availability.

- The base station shall assist, collaborate, and help to coordinate the filling of all resource requests from the IC, the Medical Group Supervisor, and/or the OES Mutual Aid Coordinators (fire, law, MHOAC), as requested. This may include mutual aid medical resources from outside the operational area.

- The base station shall coordinate with Dispatch, the IC, the Medical Group Supervisor or designee, and the OES Mutual Aid Coordinators, the deployment of all air resources for the MCI, as requested.

- The base station shall notify ICEMA and the MHOAC when three (3) or more ambulances are requested for an incident.

- If the base station is coordinating patient destinations, it will confirm patient departure from scene with Med Comm, if assigned, by providing the departure time and estimated time of arrival (ETA) to the receiving hospital.

- The base station will advise receiving hospitals of the number/categories of patients en route via approved method (e.g. radio, telephone).

- If the base hospital needs additional resources, it shall contact the MHOAC.

**Responsibilities of the Receiving Hospital**

- All hospitals shall respond immediately to any request from the Medical Group Supervisor or designee for bed availability.

- A receiving facility may not change the destination of a patient.
- If the receiving facility needs additional resources, it shall contact the MHOAC.
- Each hospital that received patients from the MCI shall participate in after action reports and improvement plans as necessary.

**Responsibilities of the OES Mutual Aid Coordinators (Fire, Law, MHOAC)**

- The Medical Health Operational Area Coordinator (MHOAC) Program is comprised of the personnel, facilities, and supporting entities that fulfill the functions of the MHOAC role as directed by the MHOAC. The MHOAC is a functional designation within the Operational Area, filled by the Health Officer and the local emergency medical services agency administrator (or designee/s), that shall assist the other Operational Area Coordinators (fire, law) in the coordination of situational information and medical and health mutual aid during emergencies.
- The MHOAC Program is the principal point-of-contact within the Operational Area for information related to the public health and medical impact of an emergency. Within two (2) hours of incident recognition, it is expected that the MHOAC Program will prepare and submit the electronic Health and Medical Situation Report to the activated local emergency management agency (Duty Officer, IC/UC, EOC), to the RDMHC/S Program (REOC), to CDPH, and to EMSA (Duty Officers or EOC if activated).
- The Mutual Aid Coordinators (fire, law, MHOAC) are responsible for coordinating the process of requesting, obtaining, staging, tracking, using, and demobilizing mutual aid resources. If Unified Command has been established for an incident, health and medical entities request resources through the Operations and Logistics Section of field-level Unified Command, which coordinates the resource fulfillment within the Operational Area, or from neighboring Operational Areas where there are cooperative assistance agreements or day-to-day relationships in existence.
- If the resource cannot be obtained locally, the MHOAC Program will request health and medical resources from outside of the Operational Area by working with the RDMHC/S Program in preparing and submitting a Health and Medical Resource Request Form to the activated local emergency management agency (Duty Officer, IC/UC, and EOC) and to the RDMHC/S Program (REOC). Examples include, but are not limited to, additional transportation resources (ambulance strike teams, EMS aircraft), accepting specialty facility beds/physicians (multi-trauma, burns, pediatrics), and ventilators.

**Medical Direction**

- EMS personnel shall operate within ICEMA “prior to contact” protocols for both medical and trauma patients.
- When base station consultation occurs, medical direction refers to a specific patient and not to the incident as a whole (operational aspects).
- When multiple hospital destinations exist, medical direction has the option of referring the resource establishing radio contact to the base station for bed availability.

**Field Documentation**

- The Medical Group Supervisor (or Med Comm, if established) maintains responsibility to ensure the following:
  - Utilization of the approved ICEMA/MCI patient care report. This form will include:
    - Name and location of the incident.
    - Triage tag number for each patient and the hospital destination.
    - Brief description of the incident.
  - Completion of an individual patient care report for each deceased individual at the incident.
  - Completion of an individual patient care record for all patients with a chief complaint and who "refuse treatment". As feasible, ask patients to sign a release of liability (e.g. Against Medical Advice (AMA) liability form).
- Each transporting unit is responsible for generating a patient care record for each patient transported excluding patients transported by non-emergency vehicles. Those transported in non-emergency vehicles will be identified by triage tags. This should include patient tracking tag/number and will indicate the incident name and location.

## V. ADDENDUM

**Firescope Operations Procedures of a Multi-Casualty Incident**

**Operational System Description**: The Multi-Casualty Organizational Module within the Firescope Field Operations Guide (ICS 420-1) is designed to provide for the necessary supervision and control of essential functions required during an MCI. The primary functions will be directed by the Medical Group Supervisor who reports in most cases to the IC, or the Multi-Casualty Branch Director, if activated. Resources having direct involvement with patients are supervised or coordinated by one of the functional leaders or coordinators.

The Medical Branch structure in the ICS system is designed to provide the IC with a basic, expandable modular system for managing the incident. The system is designed to be set up consistently in all incidents involving mass casualties and has the ability to expand the incident organization as needed.

**Initial Response Organization**: Initial response resources are managed by the IC, who will handle all Command and General Staff responsibilities. The resources will respond based on the **operational procedures** (as outlined in this protocol).

**Reinforced Response Organization**: In addition to the initial response, the Medical Group Supervisor may establish a Triage Unit Leader, Treatment Unit Leader, Patient Transportation Unit Leader, Medical Communications Coordinator (Med Comm), and Ambulance Coordinator. Also, patient treatment areas are established, if needed.

**Multi-Group Response**: All positions within the Medical Group are now filled. The Air Operations Branch may be designated to provide coordination between the Ambulance Coordinator and the Air Operations Branch. The Extrication Group is established to free entrapped victims.

**Multi-Branch Incident Organization**: The complete incident organization shows the Multi-Casualty Branch and other Branches. The Multi-Casualty Branch now has multiple Medical Groups (geographically separate) but only one Patient Transportation Group. This is because all

patient transportation must be coordinated through one (1) point to avoid overloading hospitals. If necessary for span of control, the IC may appoint a Medical Branch Director to oversee the Medical Group and other relevant groups.

**Operational Principles**

- First arriving resource with the appropriate communications capability shall declare an MCI, establish command, and name the incident. This resource will remain in command until relieved by the public safety agency having jurisdictional authority.

- The IC will assign the first available resource to triage. Victims shall be triaged according to START/JumpSTART criteria, and ICS shall be implemented according to Firescope and NIMS.

- The IC will assign the resource with the appropriate communications capability to establish communications with the base station for resource requests, as needed.

- Treatment areas are set up based upon needs and available resources according to classification of patients (Immediate, Delayed and Minor.) The Treatment Unit Leader will notify Patient Transportation Unit Leader when a patient is ready for transportation and of any special needs (e.g. burns, pediatrics, decontamination). If these positions are not assigned, the Medical Group Supervisor will retain this responsibility.

- Patients are transported to the appropriate facility based upon patient condition, bed availability, and transport resources. The Medical Group Supervisor is responsible for patient transportation and destination and may assign/delegate this responsibility to a Patient Transportation Unit Leader and a Medical Communications Coordinator who would work together to transport the patients using the appropriate methods to the most appropriate destinations.

- The Patient Transportation Unit Leader and Med Comm, if assigned, will determine all patient destinations in coordination with the base station.

- The IC will designate a staging area(s). Transportation personnel should stay with their vehicles to facilitate rapid transport, unless reassigned by the IC or designee.

- The Patient Transportation Unit Leader will then call for an ambulance or other designated transportation vehicle to respond to the loading area.

- The Patient Transportation Unit Leader, in coordination with the IC, may put in a request through Dispatch for buses to transport minor or uninjured patients.

- The Patient Transportation Unit Leader will copy the information from the triage tag onto a Patient Transportation Log, and confirm destination with the ambulance crew, bus, or other driver.

- The Patient Transportation Unit Leader will notify the Med Comm, if assigned, of patient departure.

- The transporting unit should contact the receiving facility en route with a patient report, using the incident name to identify the patient.

# AMBULANCE PATIENT OFFLOAD DELAY (APOD)

## I. PURPOSE

To establish policy for the safe and rapid transfer of patient care responsibilities between Emergency Medical Services (EMS) personnel and emergency department (ED) medical personnel.

## II. CONSIDERATIONS

Delays in the transfer of patient care and offloading of patients adversely affect patient care,

## III. DIRECTION OF EMS FIELD PERSONNEL

EMS field personnel must continue to provide and document patient care in accordance with ICEMA treatment policies and protocols prior to the transfer of patient care to the designated receiving hospital.

## IV. PATIENT CARE RESPONSIBILITY

The responsibility for patient care belongs to the designated receiving hospital once the patient arrives on hospital grounds.

## V. TRANSFER OF PATIENT CARE

Patients Under Care of EMS Field Personnel

Signatures shall be collected when physical transfer of the patient occurs and the report is given to hospital staff and shall note ambulance arrival time at the hospital. If the transfer of care and patient offloading from the ambulance gurney exceeds 25 minutes, it will be documented and tracked as APOD.

EMS field personnel are responsible for immediately returning to response ready status once patient care has been transferred to ED medical personnel and the patient has been offloaded from the ambulance gurney.

## VI. APOD MITIGATION PROCEDURES

ED medical personnel should consider the following to prevent APOD:

- Immediately acknowledge the arrival of each patient transported by EMS.
- Receive a verbal patient report from EMS field personnel; and
- Transfer patient to the hospital gurney, bed, chair, wheelchair or waiting room as appropriate for patient condition within 25 minutes of arrival at the hospital ED.

If APOD does occur, the hospital should make every attempt to:

- Provide a safe area in the ED for the EMS personnel to temporarily wait while the hospital's patient remains on the ambulance gurney.
- Inform the attending paramedic or EMT of the anticipated time for the offload of the patient.

- Provide information to the supervisor of the EMS field personnel regarding the steps that are being taken by the hospital to resolve APOD.

Hospitals will provide written details to ICEMA and EMS providers of policies and procedures that have been implemented to mitigate APOD including:

- Processes for internal escalation of APOD:
  - ED/Attending Physician
  - ED Nurse Manager/Director or Designee (i.e., Charge Nurse)
  - House Supervisor
  - Administrator on call
- Processes to alert via ReddiNet
  - Local receiving hospitals/base hospitals
  - Fire department and ambulance dispatch centers
- Processes for EMS field providers to alert the ED medical personnel of a decline in the patient's condition.
- EMS field personnel are directed to do the following to prevent APOD:
- Work cooperatively with the receiving hospital staff to transition patient care within the timeframes established in this policy.

## VII. CLINICAL PRACTICES FOR EMS FIELD PERSONNEL TO REDUCE APOD

The EMS field personnel shall utilize sound clinical judgment and follow the appropriate ICEMA policies and treatment protocols including:

- Initiate care as clinically indicated with the appropriate basic life support (BLS) and advanced life support (ALS) interventions.
- Initiate vascular access only as clinically indicated.
- Discontinue ECG monitoring before removing the patient from the ambulance if there are no clinical indications for cardiac monitoring.

## VIII. APOD UNUSUAL EVENTS

In response to a major emergency that requires immediate availability of ambulances the San Bernardino County Medical Health Operational Area Coordinator may give direction to EMS field providers to immediately transfer patient care to the ED medical personnel and return to service to support the EMS system resource needs.

- If offload delay exceeds 25 minutes, EMS field personnel will transfer care of the patient to ED medical personnel and transition patient to a gurney, cot, bed, chair, wheelchair, or waiting room that is appropriate for patients' condition.

- Transfer of care will include BLS and ALS patients that are determined to be stable and safe to transfer, based on EMS field personnel evaluation.

EMS field personnel are required to give a verbal patient report containing any pertinent information necessary for the ongoing care of the patient. EMS field personnel will complete and post the written ePCR in accordance with existing policy.

## IX. Exceedance of APOD Standards

If an emergency department (ED) reports an APOD that exceeds ICEMA's adopted standard for the preceding month, EMSA shall comply with all of the following:

- Report the ambulance patient offload time exceedance to ICEMA and the commission via electronic means.
- Direct ICEMA to alert all EMS providers within their jurisdiction
- Direct the ED to immediately implement its APOD reduction protocol developed pursuant to Section 1797.120.6.
- Host, at minimum, bi-weekly calls with the relevant hospital administration, including emergency department leadership, EMS providers, ICEMA, and hospital employees to update and discuss implementation of the protocol and the outcomes.

# EMS AIRCRAFT UTILIZATION (SAN BERNARDINO COUNTY ONLY)

## I. PURPOSE

To establish 9-1-1 EMS aircraft utilization and medical transportation criteria for San Bernardino County.

## II. POLICY

- All EMS aircraft requests from the field in San Bernardino County will be coordinated by ICEMA's designated EMS Aircraft Dispatch Center (ADC).
- EMS aircraft may be requested by EMS providers when a patient's condition is of a time sensitive nature and where extended transport times may result in a poor patient outcome. EMS providers must contact ADC to request aircraft.
- At the time of dispatch, the ADC shall utilize the closest available EMS aircraft proximate to the scene of the incident using Automatic Flight Following (AFF) as the determining factor.
- If two (2) or more EMS aircraft are co-located and/or within close distance (less than a mile), the ADC shall institute a rotation system for all EMS aircraft.
- The ADC shall determine the closest EMS aircraft and inform the EMS provider which EMS aircraft will be utilized, this will include an accurate Estimated Time of Arrival (ETA). ETA will be determined by time of dispatch until EMS aircraft is over scene and includes the total amount of time for crew preparation, flight planning, aircraft pre-flight, take-off, aircraft reconfiguration, and flight time to over scene.
- The destination decision will be made in accordance with established ICEMA policies and protocols and may be changed by the flight crew in conjunction with the pilot in command based on patient or flight safety concerns including weather conditions.
- All air transports will undergo a Quality Improvement (QI) review following dispatch and transport.

## III. EMS AIRCRAFT TRANSPORT INDICATIONS

- The determination to utilize a 9-1-1 dispatched EMS aircraft must be made with the use of a thorough and appropriate physical assessment by qualified EMS field personnel on scene, and must be made with careful consideration of the following elements:
  - The injury/illness is of a time-sensitive, critical nature requiring Specialty Care Center services.
  - The benefit of EMS aircraft transport is clearly greater than ground transportation. An acceptable standard is a 15 minute time differential in favor of air transportation.
  - The needs of the patient and scene management supersede all other considerations.

## IV. EMS AIRCRAFT CANCELLATION INDICATIONS

- A dispatched EMS aircraft that responds to a scene, prior to ground transport contact with the patient, will be cancelled if the Incident Commander in consultation with the most medically qualified first responder determines it is not needed.
    - If ground transport is the first to arrive on scene, and it is determined that air transport is not needed, ground transport may cancel a dispatched EMS aircraft.

## V. SPECIAL CONSIDERATIONS

- Transport stable snakebite patients from the field by ground to the closest hospital.
- Mechanism of injury alone is not criteria for transport by air.
- Patients with unmanageable airways shall be transported to the closest hospital for airway stabilization and, on its own, does not constitute an indication for EMS aircraft utilization.
- If a request to transport is denied by the initial dispatched aircraft, the second aircraft shall be notified of the denial, and the reason for the denial.
- If the patient is combative due to suspected traumatic injury, communication with flight personnel is essential.
- Patients with exposure to hazardous materials must be decontaminated on scene before utilizing EMS aircraft.
- Medical transport by EMS aircraft may not be suitable in the following situations:
    - Cardiac arrest when the patient is not responding to prehospital therapy.
    - Patients who are violent or have behavioral emergencies.

# ASSESS AND REFER RESPONSE PLAN (San Bernardino County Only)

## I. PURPOSE

To establish standards for the identification of patients whose condition does not require transport by 9-1-1 emergency ambulance. All 9-1-1 calls for EMS will receive an appropriate response, timely assessment, and appropriate patient care. If it is determined that the patient is stable and does not require emergency department services, EMS field personnel will assess patient and provide an appropriate alternative recommendation.

## II. POLICY

- If the patient's condition is stable and meets assess and refer criteria EMS field personnel will provide the patient the following recommendation:
  - "It appears that you do not require immediate care in the emergency department. You should seek care with your regular healthcare provider, urgent care or clinic. If symptoms worsen seek medical help or re-contact 9-1-1."

## III. GENERAL CONSIDERATIONS

- Transport all patients requiring immediate medical attention to the closest, most appropriate hospital.
- EMS should not require patients that are being released from the scene to sign AMA on the Patient Care Record.
- Provide instructions that if symptoms worsen, patient should go to the emergency department, contact their healthcare provider, or re-contact 9-1-1.
- If the patient or guardian refuses the referral, the patient will be transported to the closest most appropriate hospital.

## IV. PARAMEDIC ASSESS AND REFER DECISION MAKING PRINCIPLES

- Does the patient, parent, or guardian have Decision Making Capacity?
- Are EMS field personnel concerned with the patient's current medical condition?
- How likely is the patient to successfully navigate the provided referral?

## V. ASSESS AND REFER CRITERIA

- The patient must meet all of the following criteria:
  - Parent or guardian is on scene if the patient is under 18 years of age (unless legally emancipated).
  - Has a Glasgow Coma Scale (GSC) of 15 or GCS is at patient's baseline.
  - Exhibits no clinical evidence of:
    - Altered level of consciousness

- Alcohol or drug ingestion that impairs decision making capacity
- Abnormal or labored breathing or shortness of breath
- Chest pain/discomfort of any kind
- Hypoxia as indicated by low oxygen saturation
- Significant tachycardia
- Serious hemorrhage

- Exhibits evidence of Decision-Making Capacity sufficient to understand the nature of the medical condition as well as the risks and potential consequences of not seeking additional medical care from the provided recommendation.
- The patient would benefit from the provided recommendation.
- The patient is likely to successfully navigate the provided recommendation.

- If there is clinical evidence of a viral illness, the patient must meet all the following criteria:
  - Be stable.
  - Not under two (2) years of age, or over 65 years of age.
  - Does not have an underlying medical history.
- For the COVID positive patient or PUI, assess for a referral to stay home, self-isolate, and seek follow-up treatment with a physician.

## VI. DOCUMENTATION REQUIREMENTS

- Physical exam.
- Treatment provided.
- Patient, parent, or guardian is alert, oriented, and acting appropriately for their age.
- Indications that there were no signs of significant impairment due to drugs, alcohol, organic causes, or mental illness.
- Any other observations that indicate that the patient, parent, or guardian has impaired Decision-Making Capacity.
- Recommendation/referrals shall be documented utilizing the following four (4) step process:
  - That a recommendation/referral was offered.
  - What the recommendation/referral was that EMS field personnel provided.
  - The patient's understanding of the recommendation/referral.
  - The patient's plan based on the recommendation/referral of the EMS field personnel.
- The person(s), if any, who remained to look after the patient (the patient's "support system").

- The name of the interpreter utilized, if applicable.
- EMS field personnel will leave a referral card containing relevant community referral information with the patient.

CONTINUATION OF CARE

## I. PURPOSE

To develop a system that ensures the rapid transport of patients upon arrival at a receiving hospital that requires urgent transfer to a higher level of care.

This policy shall only be used for:

- Rapid transport of STEMI, stroke and trauma patients from referral hospitals to the appropriate Specialty Care Center.
- Specialty Care Center to Specialty Care Center when higher level of care is required.
- EMS providers that are transporting unstable patients to a STEMI, Stroke or Trauma Center but need to stop at the closest receiving hospital for stabilization before continuing to a Specialty Care Center.

It is not to be used for interfacility transfer of patients.

## II. INCLUSION CRITERIA

- Patients meeting ICEMA Reference #9040 - Trauma Triage Criteria, who arrive at a non-trauma hospital.
- Upon recognition of any critically injured patient that requires urgent transfer from one trauma receiving center to a higher level of care trauma receiving center.
- Patients requiring subspecialty services that are not a requirement for trauma center designation (i.e., reimplantation, hand surgery, burn, etc.) are not covered by this policy and must be managed through the normal interfacility transfer process compliant with all applicable regulations.
- Any patient with a positive STEMI requiring EMS transport to a STEMI Receiving Center (refer to ICEMA Reference #4040 - ST Elevation Myocardial Infarction Critical Care System Designation).
- Any patient with a positive mLAPSS requiring EMS transport to a Stroke Receiving Center, (refer to ICEMA Reference #4070 - Stroke Critical Care System Designation).
- Any stroke patient identified with a Large Vessel Occlusion (LVO) requiring rapid EMS transport to higher level of care for Endovascular Stroke Treatment.

## III. INITIAL TREATMENT GOALS AT REFERRAL HOSPITAL

- Initiate resuscitative measures within the capabilities of the facility.
- Ensure patient stabilization is adequate for subsequent transport.

- Do not delay transport by initiating any diagnostic procedures that do not have direct impact on immediate resuscitative measures.

  - GOAL FOR USE OF CONTINUATION OF CARE POLICY

    Less than 30 minutes at referral hospital (door-in/door-out).
    Less than 30 minutes to complete ALS continuation of care transport.
    Less than 30 minutes door-to-intervention at Specialty Care Center.
    Less than 60 minutes for rapid identification of a LVO at a primary stroke center.

- Referral hospital shall contact the appropriate Specialty Care Center ED physician directly without calling for an inpatient bed assignment.

- Specialty Care Centers should route requests directly to the ED physician and bypass their transfer center triage process.

- EMS providers shall make contact with Specialty Care Centers to notify of the estimated time of arrival.

- Specialty Care Centers shall accept all referred STEMI, stroke and trauma patients meeting criteria in this policy unless they are on Internal Disaster as defined in ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).

- The ED physician is the accepting physician at the Specialty Care Center and will activate the STEMI, Stroke or Trauma Team according to internal policies or protocols.

- The referral hospital ED physician will determine the appropriate mode of transportation for the patient.

- Simultaneously call 9-1-1 and utilize the following script to dispatch:

  **"This is a continuation of care from ____ hospital to ____ STEMI, Stroke or Trauma Center"**

  **Fire departments will not be dispatched for 9-1-1 continuation of care calls; the dispatchers will only dispatch transporting ALS ambulances.**

- Referral hospital ED physician will provide a verbal report to the ED physician at the Specialty Care Center.

- Referral hospital will send all medical records, test results, radiologic evaluations to the Specialty Care Center. DO NOT DELAY TRANSPORT - these documents may be electronically submitted or faxed to the Specialty Care Center.

## IV. SPECIAL CONSIDERATIONS FOR REFERRAL HOSPITALS

- If a patient arrives at a referral hospital via EMS field personnel, a physician may request that the transporting team remain and immediately transport the patient once minimal stabilization is completed.

- If a suspected stroke patient presenting to a non-designated stroke center is outside of the tPA administration window (greater than 4.5 hours from "last seen normal"), consider contacting nearest thrombectomy capable or comprehensive stroke center to determine the best destination. Then follow the 9-1-1 script.

- Unless medically necessary, avoid using medications or IV drips that are outside of the EMT-P scope of practice to avoid delays in transferring of patients.

- The referral hospital may consider sending one of its nurses or physician with the transporting ALS ambulance if deemed necessary due to the patient's condition or scope of practice limitations per ICEMA Reference #8010 - Interfacility Transfer Guidelines.

- Do not call 9-1-1 dispatch if the patient requires Critical Care Transport (CCT) or Specialty Care Transport (SCT). The referral hospital must make direct contact with the EMS Providers Dispatch Center.

- Diversion is not permitted except for Internal Disaster. However, to avoid prolonged door-to-intervention times when STEMI, Stroke and Trauma Centers are over capacity, base hospitals may facilitate alternative STEMI, Stroke or Trauma Centers as the best destination for the patient. Base hospitals must ensure physician to physician contact when facilitating the use of an alternate destination.

## V. REFERENCES

| Number | Name |
|---|---|
| 4040 | ST Elevation Myocardial Infarction Critical Care System Designation (San Bernardino County Only) |
| 4070 | Stroke Critical Care System Designation (San Bernardino County Only) |
| 8010 | Interfacility Transfer Guidelines |
| 8050 | Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 9040 | Trauma Triage Criteria |

CONTINUATION OF TRAUMA CARE (FORT IRWIN)

**THIS POLICY IS FOR FORT IRWIN FIRE DEPARTMENT (FIFD), FORT IRWIN DEPARTMENT OF EMERGENCY SERVICES (DES), FORT IRWIN ARMY AIR AMBULANCE AND WEED ARMY COMMUNITY HOSPITAL (WACH) FOR TRANSPORTATION AND TRANSFER OF STEMI, STROKE OR TRAUMA PATIENTS TO A TRAUMA CENTER OR SPECIALTY CARE CENTER ONLY AND SHALL NOT BE USED FOR ANY OTHER TRANSFERS OR REQUESTS FOR TRANSFER FROM OTHER FACILITIES.**

## I. PURPOSE

To provide a mechanism of rapid transport of STEMI, stroke, or trauma patients from within the boundaries of Fort Irwin and the National Training Center to an appropriate STEMI, stroke, or trauma center for higher level of care with minimal delay. The terrain and nature of the National Training Center at Fort Irwin presents particular obstacles for the transport of STEMI, stroke, or trauma patients. Most STEMI, stroke, or trauma patients must be airlifted to an appropriate Specialty Care Center.

## II. POLICY

- Weed Army Community Hospital (WACH) to a STEMI Receiving Center (SRC), Neurovascular Stroke Center (NRSC) or Trauma Center (TC).

  - PATIENT INCLUSION CRITERIA

    - Any patient meeting ICEMA Trauma Triage Criteria, (refer to ICEMA Reference #9030 - Trauma Triage Criteria and #9030 - Destination) arriving at a non-trauma hospital by EMS or non-EMS transport.
    - Any patient with a positive STEMI requiring EMS transport to a SRC (refer to ICEMA Reference #4040 - ST Elevation Myocardial Infarction Critical Care System Designation).
    - Any patient with a positive mLAPSS or stroke scale requiring EMS transport to a NSRC (refer to ICEMA Reference #4070 - Stroke Critical Care System Designation).
    - These procedures are not to be used for any other form of interfacility transfer of patients.

  - INITIAL TREATMENT GOAL AT WACH

    - Initiate resuscitative measures within the capabilities of the hospital.
    - Ensure patient stabilization is adequate for subsequent transport.
    - <u>DO NOT DELAY TRANSPORT</u> by initiating any diagnostic procedures that do not have direct impact on immediate resuscitative measures.
    - WACH ED physician will determine the appropriate mode of transportation for the patient. WACH will contact Fort Irwin Army MEDEVAC for air ambulance transport utilizing established procedures for Fort Irwin.

- GUIDELINES:

  Less than 30 minutes at WACH (door-in/door-out).
  Less than 45 minutes to complete continuation of care transport.
  Less than 30 minutes door-to-intervention at Specialty Care Center.

- WACH shall contact the appropriate Specialty Care Center ED physician directly without calling for an inpatient bed assignment. WACH will contact the assigned Specialty Care Center in accordance with ICEMA Reference #9010 - Continuation of Care (San Bernardino County Only).

  SRC: Desert Valley Hospital, St. Mary Medical Center
  NSRC: Loma Linda University Medical Center, Arrowhead Regional Medical Center
  TC: Loma Linda University Medical Center, Arrowhead Regional Medical Center

- WACH ED physician will provide a verbal report to the ED physician at the Specialty Care Center.

- Fort Irwin Army MEDEVAC will make Specialty Care Center base hospital contact.

- Specialty Care Centers shall accept all referred STEMI, stroke, or trauma patients unless they are on Internal Disaster as defined in ICEMA Reference #8050 - Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).

- The Specialty Care Center ED physician is the accepting physician at the Specialty Care Center and will activate the internal STEMI, Stroke, or Trauma Team according to internal SRC, NSRC or TC policies or protocols.

  WACH must send all medical records, test results and radiologic evaluations to the Specialty Care Center. DO NOT DELAY TRANSPORT - these documents may be FAXED to the Specialty Care Center.

➢ SPECIAL CONSIDERATIONS

- If a suspected stroke patient is outside of the tPA administration window (greater than 4.5 hours from “last seen normal”), contact nearest NSRC to determine the best destination.

- ICEMA EMT-Ps may only transport patients on Dopamine and Lidocaine drips. Heparin and Integrillin drips are not within the ICEMA EMT-P scope of practice.

- WACH should consider sending one of its nurses, or a physician, with the Fort Irwin Army MEDEVAC if deemed necessary due to the patient’s condition or scope of practice. This practice is highly encouraged. US Army Flight Medics and Critical Care Flight Paramedics may request additional providers from WACH upon its assessment of the patient’s condition and en route care needs.

- Specialty Care Center diversion is not permitted except for Internal Disaster. However, Specialty Care Center base hospitals are allowed to facilitate redirecting of EMS patients to nearby SRCs, NSRCs or TCs when the closest Specialty Care Center is over capacity to minimize door-to-intervention times. Specialty Care Center base hospitals shall ensure physician to physician contact when redirecting patients.

- AIR AMBULANCE

  - Fort Irwin maintains internal 24-hour US Army Air Ambulance with MEDEVAC capabilities conducted by C Company (Air Ambulance), 2916th Aviation Battalion. Fort Irwin Army Air Ambulance is the primary method of air transport for medical and trauma patients originating within the boundaries of the National Training Center and Fort Irwin. Requests for use of this asset by Fort Irwin Range Control, DES, FIFD and WACH will be in accordance with the procedures established within Fort Irwin. To expedite appropriate treatment of STEMI, stroke, or trauma patients, Fort Irwin Army Air Ambulance will proceed directly to the most appropriate SRC, NSRC or TC, for patients that meet the criteria of ICEMA Reference #9010 - Continuation of Care, #9040 - Trauma Triage Criteria, and #9030 - Destination policy when immediate lifesaving intervention or stabilization is <u>not</u> required. These patients will bypass WACH and proceed directly to an SRC, NSRC or TC for treatment.

  - Fort Irwin Army Air Ambulance will contact the County Communication Center (CCC) for TC destination. TC destination will be rotated by the CCC. If unable to contact the CCC, Fort Irwin Army MEDEVAC will follow the destination policy established in ICEMA Reference #9030 - Destination.

  - The assigned base hospital for medical direction will be Loma Linda University Medical Center (LLUMC). ICEMA EMT-Ps will follow ICEMA's policies, procedures and protocols. US Army Flight Medics and Critical Care Flight Paramedics will follow the Standard Medical Operating Guidelines (SMOG) established by the US Army Surgeon General and the assigned US Army Flight Surgeon. When conflicts in procedure or protocol of patient care exist between ICEMA and the US Army SMOG, each EMS provider will work in accordance with its individual protocols and confer jointly to assure the best possible care is provided and achieves the best outcome for the patient. US Army Flight Medics and Critical Care Flight Paramedics are authorized to perform all treatments and procedures that are provided as en route medical orders from the receiving hospital or the medical direction of LLUMC.

  - The onboard attending FIFD ICEMA EMT-P will make contact with the destination SRC, NSRC or TC prior to arrival in order to alert the STEMI, Stroke, or Trauma Teams. In the absence of the FIFD ICEMA EMT-P, the US Army Flight Medic or US Army Critical Care Flight Paramedic will ensure contact is made in accordance with Fort Irwin's procedures.

  - In the event of special considerations, such as weather, time, distance and patient location, the Fort Irwin Army Air Ambulance Pilot-in-Command may choose to divert to University Medical Center (UMC) Las Vegas in accordance with the Memorandum of Agreement established between Fort Irwin Army Air Ambulance and UMC Las Vegas.

- In times of inclement weather or due to aircraft emergencies where landing at the destination hospital is not feasible, Fort Irwin MEDEVAC will contact the CCC for assistance in order to arrange for ground ambulance transportation at an appropriate airfield or the precautionary landing zone so that transportation of the patient can continue to the designated hospital.

- Should Fort Irwin Army Air Ambulance be unavailable for patient transportation, requests for civilian air ambulance support shall be made through the CCC by FIFD or WACH.

- GROUND AMBULANCE

  - Ground ambulances on Fort Irwin are provided and staffed by WACH and are dispatched by Fort Irwin DES with support from FIFD.

  - Patients that are determined to meet ICEMA's Trauma Triage Criteria (refer to ICEMA Reference #9030 - Trauma Triage Criteria) or are in immediate need of a Specialty Care Center as determined by a FIFD ICEMA EMT-P may be transported directly to the Fort Irwin Main Post Helipad or designated ambulance exchange point for immediate transfer by air ambulance when immediate lifesaving intervention or stabilization is not required. These patients will bypass WACH and proceed directly to an SRC, NSRC or TC for treatment. Coordination for this exchange will be conducted by FIFD utilizing established procedures to contact Fort Irwin Army MEDEVAC.

  - Patients that do not meet ICEMA's Trauma Triage Criteria or require immediate lifesaving interventions or stabilization will be transported directly to WACH.

## III. REFERENCES

| Number | Name |
|---|---|
| 4040 | ST Elevation Myocardial Infarction Critical Care System Designation (San Bernardino County Only) |
| 4070 | Stroke Critical Care System Designation (San Bernardino County Only) |
| 8050 | Requests for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 9010 | Continuation of Care (San Bernardino County Only) |
| 9030 | Destination |
| 9040 | Trauma Triage Criteria |

DESTINATION

## I. PURPOSE

To establish standards for the transportation of 9-1-1 patients to the most appropriate receiving facility that has the staff and resources to deliver definitive care to the patient. Destination may be determined by patient's need for specialty care services, for example STEMI, Stroke and Trauma centers.

## II. POLICY

If the patient's condition is stable, the most appropriate destination may be the facility associated with their healthcare plan and primary care physician.

If a patient requires specialty care services at an ICEMA designated STEMI, Stroke, or Trauma Receiving Center, the EMS provider may bypass closer facilities.

Destination decisions should be based on patient condition or patient, guardian, family or law enforcement request. Patients who are unable to request a destination or who do not have a preference shall be taken to the closest hospital unless their condition requires specialty services described below.

## III. GENERAL CONSIDERATIONS

- Closest Hospital
  - All patients requiring immediate medical attention for difficult to manage airways or life-threatening conditions.
  - Patients that do not have a destination preference.
- Patient Request
  - Honor patient requests if possible and when appropriate.
  - If patient is medically stable and the destination is not significantly beyond the primary response area of the EMS transportation provider.
  - EMS field personnel must obtain an AMA and notify the base hospital if a patient is in need of STEMI, stroke, or trauma services and refuses transport to a Specialty Care Center, or chooses to bypass the recommended Specialty Care Center.
- Higher Level of Care
  - Is dictated by patient condition.
  - ALS providers may bypass a closer facility and transport to a facility that has the capability to provide appropriate specialty care based on the patient's condition.

- Base Hospital
  - Paramedics are encouraged to contact base hospitals for consult on destination for patients with special considerations.

## IV. PSYCHIATRIC HOLDS

- All patients with a medical complaint on a behavioral health hold (5150) require medical evaluation, treatment and shall be transported to the closest acute care hospital for medical clearance.
- Any acute care hospital is capable of medically clearing behavioral health patients.
- Patients on a 5150 hold with no medical complaints or conditions, may be released to law enforcement for transport directly to a behavioral health facility.

## V. SPECIALTY CARE CENTERS

- STEMI Receiving Centers: (Refer to ICEMA Reference #14240 - Suspected Acute Myocardial Infraction (AMI).
  - STEMI Receiving Centers are the appropriate destination for identified STEMI patients.
  - Once a patient with a STEMI has been identified, make early STEMI notification to the STEMI Receiving Center and prepare patient for expeditious transport.
  - ROSC patients of unknown or suspected cardiac etiology, regardless of 12-lead ECG reading, should be transported to the closest STEMI Receiving Center. If the closest STEMI Receiving Center is greater than 30 minutes, transportation to the closest receiving hospital may be appropriate.
  - STEMI patients with difficult to manage airways shall be transported to the closest receiving hospital.
- Stroke Receiving Centers: (Refer to ICEMA Reference #14080 - Stroke Treatment - Adult.)
  - Stroke Receiving Centers are the appropriate destination for suspected stroke patients identified by using the mLAPSS triage criteria and LAMS Score.
  - Prepare the patient for expeditious transport once a positive mLAPSS is identified and LAMS scale has been completed.
  - Notify the Stroke Receiving Center of the patient's pending arrival as soon as possible to allow timely notification of the stroke team.
  - Identified acute stroke patients with "last seen normal" time plus transport time less than 24 hours, or a "wake-up" stroke, transport to closest Stroke Receiving Center.
  - Transport to closest receiving hospital for patients with "last seen normal" time equaling greater than 24 hours. Base hospital may be contacted to assist with the destination decision.

- Patients with difficult to manage airways shall be transported to the closest receiving hospital.

- Trauma: (Refer to ICEMA Reference #9040 - Trauma Triage Criteria.)
  - Adult patients meeting trauma triage criteria shall be transported to the closest Trauma Center.
  - Pediatric patients meeting trauma triage criteria shall be transported to a pediatric Trauma Center when there is less than a 20 minute difference in transport time between the pediatric Trauma Center and the closest Trauma Center.
  - For patients who meet mechanism of injury criteria per ICEMA Reference #9040 - Trauma Triage Criteria, but have no associated physiologic or anatomic criteria, paramedics are encouraged to contact a trauma base hospital for consultation to determine patient destination. In some cases, trauma base hospital may direct patient to a non-trauma receiving hospital.
  - Make trauma base hospital contact to determine if a Trauma Center should be the destination for patients not meeting the trauma triage criteria but meeting age and/or co-morbid factors.
  - Patients with difficult to manage airways shall be transported to the closest receiving hospital.

    Traumatic cardiac arrest patients that do not meet determination of death on scene criteria shall be transported to the closest trauma center when the distance **between** the closest hospital and the closest trauma center is less than 20 minutes.
- Burn: (Refer to ICEMA Reference #9040 - Trauma Triage Criteria.)
  - Transport any burn patients who meet trauma triage criteria to the closest Trauma Center.
  - Transport pediatric burn patients that meet trauma triage criteria to a pediatric Trauma Center if transport time is less than 20 minutes.
  - Transport minor and moderate burns to the closest receiving hospital.
  - Transport major burns to the closest burn center if transport time is less than 20 minutes.
  - Transport burn patients with respiratory compromise or at high risk for developing respiratory distress to the closest receiving hospital.

**VI. INTERFACILITY TRANSFER** (Refer to ICEMA Reference #8010 - Interfacility Transfer Guidelines.)

- Patients will be transported to the designated receiving facility. If the patient's condition deteriorates significantly while en route to the designated facility the patient may be diverted to the closest receiving hospital for stabilization.
- EMTs and EMT-Ps may initiate protocols prior to contacting the base hospital for change of destination.

## VII. EMS AIRCRAFT ROTATION AND DESTINATION (San Bernardino County Only)

- All EMS Aircraft requests from the field in San Bernardino County will be dispatched by the ICEMA designated Aircraft Dispatch Center (ADC).

- The destination will be determined by the EMS providers based on patient requirements for specialty centers.

## VIII. REFERENCES

| Number | Name |
|---|---|
| 8010 | Interfacility Transfer Guidelines |
| 9040 | Trauma Triage Criteria |
| 14080 | Stroke Treatment - Adult |
| 14240 | Suspected Acute Myocardial Infraction (AMI) |

# TRAUMA TRIAGE CRITERIA

## I. PURPOSE

To establish Trauma Triage Criteria that is consistent with the American College of Surgeons standards that will help identify trauma patients in the field, and based upon their injuries, direct their transport to an appropriate Trauma Center.

## II. POLICY

### A. Trauma Triage Criteria

Measure vitals and Level of Consciousness (LOC).

A patient shall be transported to the closest Trauma Center if any one (1) physiologic criteria is present following a traumatic event. Trauma base hospital contact shall be made.

#### 1. Physiologic Indicators:

- **Glasgow Coma Scale (GCS)/**
  - Adult and Pediatric
    - GCS less than or equal to 13
- **Respiratory**
  - Adult and Pediatric
    - RR less than 10 or more than 29
    - (RR less than 20 for infant less than 1 year old) or need for ventilatory support
- **Hypotension**
  - Adult
    - BP less than 90 mm Hg
    - tachycardia
  - Pediatric
    - exhibits inadequate tissue perfusion
    - abnormal vital signs (according to age)

#### 2. Anatomic Indicators:

- **Penetrating injuries to head, neck, torso and extremities proximal to the knee or elbow**
- **Blunt chest trauma resulting in chest wall instability or deformity (e.g., flail chest or ecchymosis)**
- **Two (2) or more proximal long bone fractures (femur, humerus)**

- **Crushed, degloved, mangled or pulseless extremity**
- **Amputation proximal to the wrist or ankle**
- **Pelvic fractures**
- **Open or depressed skull fracture**
- **Paralysis**

A patient shall be transported to the closest Trauma Center if any one (1) anatomic criteria is present following a traumatic event. Trauma base hospital contact shall be made.

If physiologic or anatomic criteria is not met, assess mechanism of injury and evidence of high-energy impact.

**3. Mechanism of Injury**:

- **Falls**
  - Adults: more than 20 feet (one story is equal to 10 feet)
  - Pediatric: more than 10 feet or two (2) to three (3) times the child's height
- **High-risk auto crash**
  - Intrusion, including roof: more than 12 inches occupant site
  - Ejection (partial or complete) from automobile
  - Death in the same passenger compartment
  - Vehicle telemetry data consistent with a high-risk injury
  - Child (0-9) unrestrained or in unsecured child safety seat
- **Auto versus pedestrian/bicyclist thrown, run over, or with significant (more than 20 mph) impact**
- **Motorcycle crash more than 20 mph**

If a patient has one or more of the following mechanisms of injury **with** any of the above physiologic or anatomic criteria transport to the closest TC.

If there are no associated physiologic or anatomic criteria that meets one or more of the following mechanisms of injury, contact a Trauma base hospital for physician consultation to determine the patient destination. In some cases, a Trauma base hospital may direct a patient to a non-trauma receiving hospital.

**4. Age and Co-Morbid Factors**:

Assess special patient or system considerations.

If the patient does not meet any of the above criteria, make Level I or Level II Trauma base hospital contact to determine the appropriate destination: for the following patients:

- **Older adults more than 65 years of age**
  - Risk of Injury/death increases after age 65.
  - Patient on anticoagulants and or bleeding disorders.
  - SBP less than 110 might represent shock after age 65.
  - Low impact mechanism (e.g., ground level falls might result in severe injury.
- **Children**
  - Pediatric patients (14 years and younger).
  - Suspicion of child abuse.
  - Triage children preferentially to pediatric capable Trauma Centers.
  - Pediatric patients will be transported to a Pediatric Trauma Center when there is less than a 20 minute difference in transport time to the Pediatric Trauma Center versus the closest Trauma Center.
- **Burns**
  - Without other trauma mechanism triage to closest receiving hospital or burn center.
  - With trauma mechanism, triage to Trauma Center. Make Trauma base hospital contact.
- **Pregnancy more than 20 weeks**
- **EMS Provider Judgement**

**B.** **<u>Radio Contact</u>**

- If not contacted at scene, the receiving Trauma base hospital must be notified as soon as possible in order to activate the trauma team.
- If the closest receiving Trauma Center is located outside the ICEMA region, and no orders or consult is needed, contact the Trauma Center that will be receiving the patient directly.
- Contact Trauma base hospital if a patient meets Trauma Triage Criteria but is refusing transport to a Trauma Center.
- In Inyo and Mono Counties, the assigned base hospital should be contacted for consultation and destination.

**C. Hospital Trauma Diversion Status**

Refer to ICEMA Reference #8050 - Request for Ambulance Redirection and Hospital Diversion (San Bernardino County Only).

**D. Multiple Casualty Incident (MCI)**

Refer to ICEMA Reference #8080 - Medical Response to a Multiple Casualty Incident.

## III. REFERENCES

| Number | Name |
|---|---|
| 8050 | Request for Ambulance Redirection and Hospital Diversion (San Bernardino County Only) |
| 8080 | Medical Response to a Multiple Casualty Incident |
| 9010 | Continuation of Care (San Bernardino County Only) |
| 14250 | Determination of Death on Scene |

# EMERGENCY MEDICAL TRANSPORT OF POLICE DOGS - PILOT PROJECT (*San Bernardino County Only*)

## I. PURPOSE

To provide guidance for the emergency transportation of police dogs injured in the line of duty.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

Police dog means a dog being part of the law enforcement team, with specific training used by a peace officer in the discharge or attempted discharge of his or her duties that may include, but not be limited to, a search and rescue dog and a passive alert dog.

Police dogs injured in the line of duty may require immediate transport to a facility capable of caring for its injuries.

The EMS provider's administration must determine if they will create a policy to permit the ambulance transportation of an injured police dog.

## III. PROCEDURE

An EMS provider is authorized to transport a police dog injured in the line of duty to a veterinary facility capable of treating the police dog if all the following conditions apply:

- A request for transport of an injured police dog is made by the dog handler.
- The EMS transport provider is present at the scene of the injury at the time the request for transport is made.
- No person at the scene of incident is requiring medical attention or medical transportation at the time the request for transport is made.
- The EMS provider has a policy that permits the transportation of an injured police dog.
- The police dog handler accompanies the injured police dog and remains in full control of the dog during transport.
- The police dog handler provides the location to the nearest facility that is capable of providing veterinary medical services to the injured police dog.
- The police dog handler remains responsible for any first aid rendered to the injured police dog during transport.

## IV. DATA COLLECTION

- EMS field personnel must immediately notify its EMS Coordinator upon return to service.
- A completed Police Dog Transport form must be submitted to the ICEMA Duty Officer via e-mail at icemadutyofficer@cao.sbcounty.gov, within 24 hours (form available on the ICEMA website at ICEMA.sbcounty.gov).
- ICEMA shall collect data on the number of police dogs transported, the name of the facility to which the police dog was transported to, and the outcome of those transports.

- ICEMA shall submit a report to the Legislature that includes the data described above by January 1, 2022.

# TRIAL STUDY PARTICIPATION

## I. PURPOSE

To define the requirements for Emergency Medical Services (EMS) providers or hospitals to participate in California EMS Authority (EMSA) approved trial studies in the ICEMA region.

## II. ELIGIBILITY

Participating EMS providers and hospitals must:

- Designate an EMS Coordinator or Continuous Quality Improvement (CQI) Coordinator respectively.
- EMS providers must be current participants on the ICEMA Data System and complete all the required fields on the electronic patient care report (ePCR) for the duration of the study.
- EMS or CQI Coordinators must review all enrolled cases within 24 hours and report any adverse effects to ICEMA immediately.
- All EMS field personnel and hospital staff participating in the trial study must successfully complete all educational offerings or competencies for the duration of the study.
- Hospitals must compile and submit all relevant data elements as requested by ICEMA.
- Due to the nature of these trial studies and safety concerns, the EMS or CQI Coordinators must participate in all Trial Study CQI Review meetings and incident reviews of enrolled trial study cases. Additionally, all personnel directly involved in these trial studies may be required to attend and participate in Trial Study CQI Review meetings.
- EMS providers and hospitals must commit to purchasing and maintaining, at their cost, an adequate supply of the medication and/or equipment used in the trial study.

## III. PROCEDURE

- EMS or CQI Coordinator must notify ICEMA, in writing, expressing their interest in participating in the trial study.
- EMS or CQI Coordinator must provide rosters of all personnel documenting completion of educational offerings and/or competencies within 10 days of completion.
- EMS providers and hospitals must sign the Condition of Participation form acknowledging the terms of the trial study.

# LEAVE BEHIND NALOXONE DISTRIBUTION - PILOT PROGRAM

## I. PURPOSE

To establish a policy and the authorization for the distribution of "Leave Behind Naloxone" kits by EMS field personnel to individuals who are at risk for experiencing an opioid overdose. "Leave Behind Naloxone" kits may also be distributed to individuals who may come in contact with individuals who are at risk for experiencing an opioid overdose.

## II. BACKGROUND

The Naloxone Distribution Project (NDP) is a federally funded "Leave Behind Naloxone" initiative administered by the Department of Health Care Services (DHCS) in California. The project was designed to combat opioid overdose-related deaths through the free distribution of naloxone to qualifying entities, for the purpose of distribution to persons at risk for opioid overdose and those in a position to assist those persons at risk. Local EMS agencies in California are qualified entities to participate in this program.

## III. POLICY/PROCEDURE

- This policy applies only to "Leave Behind Naloxone" kits intended for laypersons' use.
- All patients treated for an opioid overdose shall be assessed and managed by the responding EMS field personnel per ICEMA Reference #14060 - Altered Level of Consciousness/Seizures - Adult, and ICEMA Reference #14160 - Altered Level of Consciousness - Pediatric.
- All patients treated for an opioid overdose who refuse transport shall be managed per ICEMA Reference #6080 - Patient Refusal of Care - Adult.
- This policy does not pertain to the Naloxone (Narcan) administration listed in ICEMA Reference #7010 - Standard Drug and Equipment List - BLS/LALS/ALS.
- EMS field personnel shall document distribution of "Leave Behind Naloxone" kits per ICEMA Reference #5030 - Requirements for Patients Care Reports.
- EMS providers participating in the NDP and their EMS field personnel must follow all applicable guidelines for the procurement, reporting, training and distribution of "Leave Behind Naloxone" kits.

## IV. REFERENCES

| Number | Name |
|---|---|
| 5030 | Requirements for Patient Care Reports |
| 6080 | Patient Refusal of Care - Adult |
| 7010 | Standard Drug and Equipment List – BLS/LALS/ALS |
| 14060 | Altered Level of Consciousness/Seizures - Adult |
| 14160 | Altered Level of Consciousness - Pediatric |

Point of Care Ultrasound Local Optional Scope of practice (Approved Providers Only)

## I. PURPOSE

To establish authority and parameters for the prehospital use of Prehospital Point of Care Ultrasound (POCUS) as part of a trial study.

## II. INCLUSION CRITERIA

Paramedic (EMT-P) application of POCUS should be considered to help guide treatment during any of the following conditions:

- Suspected Tension Pneumothorax as a result of blunt or penetrating traumatic injury.
  - Absent or decreased breath sounds, and
  - Signs of hemodynamic compromise (shock).
- Right upper abdominal quadrant for detection of intra-abdominal bleeding as a result of blunt or penetrating trauma to the chest and/or abdomen
- Persistent cardiac arrest with fine ventricular fibrillation, asystole, or PEA.

## III. CONTRAINDICATIONS

Any circumstance where application of POCUS, or interpretation of the findings may delay patient care or transportation to the emergency department.

## IV. PROCEDURE

EMT-Ps must evaluate each patient to determine whether they meet criteria and indications for performing POCUS. This assessment is not intended to replace clinical judgement or currently employed techniques for treatment. It is intended to augment the paramedic's diagnostic tools and verify or eliminate differential diagnoses considered.

Only EMT-Ps meeting the following criteria may utilize the POCUS:

- May only use the Butterfly IQ handheld ultrasound device approved for use.
- Be authorized by an EMS provider who has purchased the equipment and supplies.
- Has received training in use of the Butterfly IQ handheld ultrasound device and meets all requirements for use.

## V. DOCUMENTATION REQUIREMENTS

- ICEMA requirements for documentation and collection and submission of EMS data must be followed.
- Utilization of prehospital ultrasound will be documented in the procedures section of the patient care record.

- EMS crews shall document the patient complaint, exam type and findings for QI review.
- All images captured by POCUS must be archived in the “ICEMA Butterfly Network cloud” for review.

## VI. QUALITY ASSURANCE

- EMS Coordinators for participating agencies will need to develop a workflow that allows the following things to occur in order:
  - Field crew uploads image/s to the cloud.
  - Physician review of the images is completed with their comments and feedback added to the cloud image.
  - EMS Coordinator reviews the physician comments / feedback.
  - EMS Coordinator completes the CQI Review for the call in Image Trend.
- EMS Coordinators shall review 100% of calls and participate with quarterly scheduled case review sessions.
- Participating agencies will maintain internal records for individual performing paramedics along with the type of exam, exam findings of concern and whether or not these were validated on physician review.

# OPIOID WITHDRAWAL

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Patient exhibiting signs/symptoms of possible opioid withdrawal characterized by tachycardia, gastrointestinal distress, hot and cold flashes, poor concentration, diaphoresis, rhinorrhea, restlessness, piloerection, and/or yawning.

## II. EXCLUSION CRITERIA

- Under 16 years of age
- Any methadone use within the last 10 days
- Altered mental status and unable to give consent
- Severe medical illness (sepsis, respiratory distress, etc.)
- Recent benzodiazepine, alcohol, or intoxicants suspected within 24 hours
- Unable to comprehend potential risks and benefits for any reason
- Not a candidate for buprenorphine maintenance treatment for any reason

## III. BLS INTERVENTIONS

- Oxygen therapy as clinically indicated.
- If patient exhibiting signs/symptoms of possible altered level of consciousness refer to ICEMA Reference #14060-Altered Level of Consciousness/Seizure-Adult
- Assess and document response to therapy.

## IV. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS interventions.
- Obtain vascular access.

## V. ALS INTERVENTIONS

**Note:** Administration of Buprenorphine-Naloxone (Suboxone) is authorized for transport providers and approved non-transport providers.

- Perform activities identified in the BLS and LALS interventions.
- Place on cardiac monitor and obtain a 12-lead ECG as clinical indicated.
- Use Clinical Opioid Withdrawal Scale (COWS ≥8) assessment tool to determine if patient meets criteria for treatment.
- Provide counseling and assess patient interest in buprenorphine-naloxone (Suboxone®).

- Administer buprenorphine-naloxone (Suboxone®) per ICEMA Reference #11010 – Medication – Standard Orders. (16 mg/ 4mg buprenorphine-naloxone SL).
- Reassess patient after 10 minutes.
- If symptoms worsen or persist, administer second dose buprenorphine-naloxone (Suboxone®) per ICEMA Reference #11010 – Medication – Standard Orders (8mg/2mg buprenorphine-naloxone (Suboxone®) SL to max dose 24 mg/ 6mg).
- Transport to a California Bridge Hospital and inform patient that the hospital navigator will initiate contact within 72 hours to offer additional treatment.
- If patient declines transport, provide MAT information, coaching, and brochure.
- Provide Leave Behind Naloxone kit and education if available.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Order |
| 14060 | Altered Level of Consciousness/Seizures-Adult |

MEDICATION - STANDARD ORDERS

**Medications listed in this protocol may be used only for the purposes referenced by the associated ICEMA Treatment Protocol.**

**For Nerve Agent Antidote Kit (NAAK) or medications deployed with the ChemPack see Appendix I (Page 12).**

**Acetaminophen (Tylenol) - Adult (ALS)**

*For mild to moderate pain scales of 1-5 or in moderate to severe pain where other medications are contraindicated or deferred.*

Tylenol, 1 gm IV/IO infusion over fifteen (15) minutes. Single dose only

**Acetaminophen (Tylenol) – Pediatric (ALS)**

*For mild to moderate pain scales of 1-5 or in moderate to severe pain where other medications are contraindicated or deferred.*

2 years to 14 years:

Tylenol, 15mg/kg to max of 1000mg or 1 gm IV/IO infusion over fifteen (15) minutes. Single dose only

*Reference #s 7010, 7020, 14100*

**Adenosine (Adenocard) - Adult (ALS)**

*Stable narrow-complex SVT or Wide complex tachycardia:*

Adenosine, 6 mg rapid IVP followed immediately by 20 cc NS bolus, and Adenosine, 12 mg rapid IVP followed immediately by 20 cc NS bolus if patient does not convert. May repeat one (1) time.

*Reference #s 7010, 7020, 14040*

**Albuterol (Proventil) Aerosolized Solution - Adult (LALS, ALS)**

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

*Reference #s 4060, 7010, 7020, 14010, 14070*

**Albuterol (Proventil) Aerosolized Solution - Adult (ALS)**

*For suspected hyperkalemia due to crush injury (Prolonged entrapment and/or abnormal EKG findings)*

Albuterol, 2.5 mg nebulized, may repeat two (2) times **or** continuous 7.5mg nebulized

*Reference # 14090*

**Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Adult (BLS, LALS, ALS)**

Albuterol MDI, four (4) puffs every 10 minutes for continued shortness of breath and wheezing.

*Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190*

**Albuterol (Proventil) - Pediatric (LALS, ALS)**

Albuterol, 2.5 mg nebulized, may repeat two (2) times.

*Reference #s 7010, 7020, 14120, 14140, 14190*

**Albuterol (Proventil) Metered-Dose Inhaler (MDI) - Pediatric (BLS, LALS, ALS)**

Albuterol MDI, four (4) puffs every 10 minutes for continued shortness of breath and wheezing.

*Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190*

**Aspirin, chewable -Adult (LALS, ALS)**

Aspirin, 325 mg PO chewed (one (1) adult non-enteric coated aspirin) or four (4) chewable 81 mg aspirin.

*Reference #s 4060, 4080, 5010, 7010, 7020*

**Atropine (ALS) - Adult**

Atropine, 1 mg IV/IO. May repeat every five (5) minutes up to a maximum of 3 mg or 0.04 mg/kg.

*Organophosphate poisoning:*
Atropine, 2 mg IV/IO, repeat at 2 mg increments every five (5) minutes if patient remains symptomatic.

*Reference #s 4060, 4080, 7010, 7020, 13010, 14030, 14260*

**Atropine - Pediatric (ALS)**

*Organophosphate poisoning - Pediatrics less than 14 years of age:*
Atropine, 0.05 mg/kg IV/IO not to exceed adult dose of 2 mg, repeat at 0.1 mg/kg increments every five (5) minutes if patient remains symptomatic.

*Reference #s 4060, 4080, 7010, 7020, 13010*

**Blood Products- Adult (ALS)** **[LOSOP for Approved Providers Only]**

*Hemorrhagic Shock Due to Severe Traumatic Injury or severe postpartum hemorrhage*

LTO+WB 1 Unit warmed and infused or

pRBCs 2 Units warmed and infused

If blood administration criteria persist, administer an additional unit of LTO+WB or pRBCs

Reference # 14090, 14210

**Buprenorphine-Naloxone (Suboxone ®)-Adult (ALS)**:

*Opioid Withdrawal- Clinical Opioid Withdrawal Scale ≥ 8:*
Buprenorphine-Naloxone, 16 mg/4mg sublingual, may repeat at 8 mg/2mg sublingual after ten (10) minutes if patient remains symptomatic, to a maximum total dose of 24 mg/6mg.

*Reference #s 7010, 10050*

**Calcium Chloride - Adult (ALS)***:*

*Calcium Channel Blocker Poisonings (base hospital order only)*
Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO.

*Reference #s 5010, 7010, 7020, 13010*

*For cardiac arrest with suspected hypocalcemia, hyperkalemia, hypermagnesemia or calcium channel blocker poisoning (base hospital order only)*

Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO.

*Reference #s 7010, 7020, 14050*

*For End Stage Renal Disease (ESRD) patients on dialysis with suspected hyperkalemia and hemodynamic instability with documented sinus bradycardia,3rd degree AV Block, 2nd degree Type II AV Block, slow junctional and ventricular escape rhythms, or slow atrial fibrillation. (Base hospital order only**).***

Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO

*Reference #s 5010, 7010, 7020, 14030*

*For suspected hyperkalemia due to crush injury (Prolonged entrapment and/or abnormal EKG findings)*

Calcium Chloride, 1 gm (10 ml of a 10% solution) IV/IO

*Reference # 14090*

**Calcium Chloride - Pediatric (ALS) *(base hospital order only)****:*

*Calcium Channel Blocker Poisonings*
Calcium Chloride, 20 mg/kg IV/IO over five (5) minutes.

*Reference #s 7010, 7020, 13010*

**Dextrose - Adult (LALS, ALS)**

*Hypoglycemia - Adult with blood glucose less than 80 mg/dL:*
Dextrose 10% /250 ml (D10W 25 gm) IV/IO Bolus

*Reference #s 4060, 4080, 5010, 7010, 7020, 8010, 13020, 13030, 14040, 14060*

**Dextrose - Pediatric (LALS, ALS)**

*Hypoglycemia - Neonates (0 - 4 weeks) with blood glucose less than 35 mg/dL or pediatric patients (more than 4 weeks) with glucose less than 60 mg/dL:*
Dextrose 10%/250 ml (D10W 25 gm) 0.5 gm/kg (5 ml/kg) IV/IO

*Reference #s 5010, 7010, 7020, 13020, 13030, 14150, 14160, 14170*

**Diazepam – Adult (ALS)** ***only when midazolam is not commercially available.***

***Seizures:***
*Diazepam, 5 mg IV/IO, single dose only*
*Diazepam, 10mg IM, single dose only*

**Diazepam- Pediatric** ***(ALS) only when midazolam is not commercially available*****.**

***Seizures:***

***Diazepam 0.1mg/kg IV/IO, single dose only,*** not to exceed adult dose of ***5mg***
***Diazepam 0.2mg/kg IM, single dose only,*** not to exceed adult dose of ***10mg***

*Reference #s 7010, 7020, 14170*

**Diphenhydramine - Adult (ALS)**

Diphenhydramine, 25 mg IV/IO

Diphenhydramine, 50 mg IM

*Reference #s 4060, 4080, 7010, 7020, 13010, 14010*

**Diphenhydramine - Pediatric (ALS)**

*Allergic reaction:*

| | |
|---|---|
| 2 years to 14 years | Diphenhydramine, 1 mg/kg slow IV/IO, not to exceed adult dose of 25 mg, **or** |
| | Diphenhydramine, 2 mg/kg IM not to exceed adult dose of 50 mg IM. |

*Reference #s 7010, 7020, 14140*

**Epinephrine (1 mg/ml) - Adult (LALS, ALS)**

*Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Severe Allergic Reactions:*
Epinephrine, 0.3 mg IM. May repeat after 15 minutes one (1) time if symptoms do not improve.

*Reference # 14010*

**Epinephrine (0.1 mg/ml) - Adult (ALS)**

*For persistent severe anaphylactic reaction:*
Epinephrine (0.1 mg/ml), 0.1 mg slow IVP/IO. May repeat every five (5) minutes as needed to total dosage of 0.5 mg.

*Reference # 14010*

*Cardiac Arrest, Asystole, PEA:*
Epinephrine (0.1 mg/ml), 1 mg IV/IO.

*Reference #s 4060, 4080, 5010, 7010, 7020, 14010, 14050, 14260*

**Epinephrine (0.3 Auto injector) - Adult (BLS, LALS, ALS)**

*For severe asthma and/or anaphylaxis only*

Epinephrine 0.3 mg auto-injector, may repeat once after 15 minutes

**Epinephrine (0.15 Auto injector Jr.) - Pediatric (BLS, LALS, ALS)**

*For anaphylaxis only*

Epinephrine 0.15 mg auto-injector

**Epinephrine (0.01 mg/ml) - Adult (ALS)**

*Post resuscitation, persistent profound nontraumatic shock and hypotension, and for persistent shock due to trauma where cardiac arrest is imminent:(Push Dose Epinephrine).*

Prepare Epinephrine 0.01 mg/ml solution by mixing 9 ml of normal saline with 1 ml of Epinephrine 0.1 mg/ml in a 10 ml syringe. Administer 1 ml every one (1) to five (5) minutes titrated to maintain SBP more than 90 mm Hg.

*Reference #s 4060, 4080, 5010, 7010, 7020, 11010, 14050, 14090,14230*

**Epinephrine (1 mg/ml) - Pediatric (LALS, ALS)**

*Severe Bronchospasm, Asthma Attack, Pending Respiratory Failure, Severe Allergic Reactions:*
Epinephrine, 0.01 mg/kg IM not to exceed adult dosage of 0.3 mg. May repeat after 15 minutes one (1) time if symptoms do not improve.

*Reference #s 4060, 5010, 7010, 7020, 14120, 14140*

**Epinephrine (0.1 mg/ml) - Pediatric (ALS)**

*Anaphylactic reaction (no palpable radial pulse and depressed level of consciousness):*
Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO, no more than 0.1 mg per dose. May repeat to a maximum of 0.5 mg.

*Cardiac Arrest:*

| | |
|---|---|
| 1 day to 8 years | Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO (do not exceed adult dosage) |
| 9 to 14 years | Epinephrine (0.1 mg/ml), 1.0 mg IV/IO |

*Newborn Care:*
Epinephrine (0.1 mg/ml), 0.01 mg/kg IV/IO if heart rate is less than 60 after one (1) minute after evaluating airway for hypoxia and assessing body temperature for hypothermia.

Epinephrine (0.1 mg/ml), 0.005 mg/kg IV/IO every 10 minutes for persistent hypotension as a base hospital order or in radio communication failure.

*Reference # 14200*

**Epinephrine (0.01 mg/ml) - Pediatric (ALS)**

*Post resuscitation, profound shock and hypotension, for persistent shock due to trauma where cardiac arrest is imminent (Push Dose Epinephrine):*

Prepare Epinephrine 0.01 mg/ml solution by mixing 9 ml of normal saline with 1 ml of Epinephrine 0.1 mg/ml in a 10 ml syringe. Administer 0.1 ml/kg (do not exceed adult dosage), every one (1) to five (5) minutes. Titrate to maintain a SBP more than 70 mm Hg.

*Reference #s 5010, 7010, 7020, 11010, 14150, 14180, 14230*

**Epinephrine (1mg/ml) Nebulized – Pediatric (ALS)**

*Nebulized epinephrine is strictly for the treatment of **croup** associated with **stridor at rest**.*

Administration of nebulized epinephrine to pediatric patients greater than 8 years of age is not permitted.

Nebulized Epinephrine 0.5 mg/kg (1 mg/ml) 1:1000, mixed with NS for minimum volume 3 ml, not to exceed a max single dose of 5mg.

**Fentanyl - Adult (ALS)**

*Chest Pain (Presumed Ischemic Origin):*

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

*Acute traumatic injuries, acute abdominal/flank pain, burn injuries, Cancer pain, Sickle Cell Crisis:*

Fentanyl, 50 mcg slow IV/IO push over one (1) minute. May repeat every five (5) minutes titrated to pain, not to exceed 200 mcg IV/IO, **or**

Fentanyl, 100 mcg IM/IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

*Pacing, synchronized cardioversion:*

Fentanyl, 50 mcg slow IV/IO over one (1) minute. May repeat in five (5) minutes titrated to pain, not to exceed 200 mcg.

Fentanyl, 100 mcg IN. May repeat 50 mcg every 10 minutes titrated to pain, not to exceed 200 mcg.

Any combination of IV/IO/IM/IN may be administered, not to exceed 200 mcg. Contact base hospital for additional orders and to discuss further treatment options.

*Reference #s 3050, 4060, 4080, 5010, 7010, 7020, 11020, 13030, 14070, 14090, 14100, 14240*

**Fentanyl - Pediatric (ALS)**

Fentanyl, 0.5 mcg/kg slow IV/IO over one (1) minute. May repeat in five (5) minutes titrated to pain, not to exceed 50 mcg for a single dose.

Fentanyl, 1 mcg/kg IM/IN, may repeat every 10 minutes titrated to pain not to exceed 100 mcg for a single dose.

Any combination of IV/IO/IM/IN may be administered, not to exceed four (4) doses or cumulative maximum of 200 mcg. Contact base hospital for additional orders and to discuss further treatment options.

*Reference #s 3050, 4080, 5010, 7010, 7020, 13030, 14180, 14190, 14240*

**Glucose - Oral - Adult (BLS, LALS, ALS)**

*Adult with blood glucose less than 80 mg/dL:*
Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

*Reference #s 7010, 7020, 13020, 14060, 14080, 14230*

**Glucose - Oral - Pediatric (BLS, LALS, ALS)**

*Hypoglycemia - Neonates (0 - 4 weeks) with blood glucose less than 35 mg/dL or pediatric patients (more than 4 weeks) with glucose less than 60 mg/dL:*
Glucose - Oral, one (1) tube for patients with an intact gag reflex and hypoglycemia.

*Reference #s 7010, 7020, 14170, 14160*

**Glucagon - Adult (LALS, ALS)**

Glucagon, 1 mg IM/SC/IN, if unable to establish IV. May administer one (1) time only.

*Beta blocker Poisoning* (***base hospital order only***)*:*
Glucagon, 1 mg IV/IO

*Reference #s 4060, 4080, 7010, 7020, 13010, 13030, 14060*

**Glucagon - Pediatric (LALS, ALS)**

*Hypoglycemia, if unable to establish IV:*
Glucagon, 0.03 mg/kg IM/IN, if unable to start an IV. May be repeated one (1) time after 20 minutes for a combined maximum dose of 1 mg.

*Reference #s 7010, 7020, 13030, 14160, 14170*

*Beta blocker poisoning **(base hospital order only)**:*
Glucagon, 0.03 mg/kg IV/IO

*Reference #'s 4060, 4080, 7010, 7020, 13010*

**Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol Adult (ALS)**

Atrovent, 0.5 mg nebulized. Administer one (1) dose only.

*Reference #s 7010, 7020, 14010, 14070*

**Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol Adult (ALS)**

When used in combination with Albuterol MDI use Albuterol MDI dosing.

*Reference #s 4060, 4080, 7010, 7020, 14010, 14070*

**Ipratropium Bromide (Atrovent) Inhalation Solution use with Albuterol - Pediatric (ALS)**

| | |
|---|---|
| 1 day to 12 months | Atrovent, 0.25 mg nebulized. Administer one (1) dose only. |
| 1 year to 14 years | Atrovent, 0.5 mg nebulized. Administer one (1) dose only. |

*Reference #s 7010, 7020, 14120, 14140, 14190*

**Ipratropium Bromide (Atrovent) Metered-Dose Inhaler (MDI) use with Albuterol - Pediatric (ALS)**

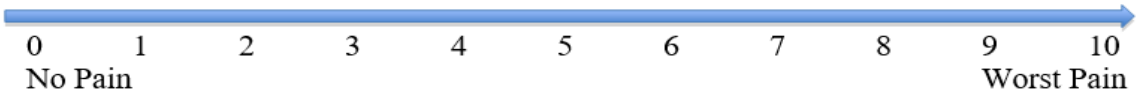
When used in combination with Albuterol MDI use Albuterol MDI dosing.

*Reference #s 4060, 4080, 7010, 7020, 14120, 14140, 14190*

**Ketamine - Adult (ALS)**

*Acute traumatic injury, acute abdominal/flank pain, burn injuries, cancer related pain and sickle cell crisis:*
Ketamine, 0.3 mg/kg to a max of 30 mg in a 50 - 100 ml of NS via IV over five (5) minutes. May repeat one (1) time, after 15 minutes, if pain score remains at five (5) or higher. Do not administer IVP, IO, IM, or IN.

This is the official pain scale to be used in patient assessment and documented on the PCR.




*Reference #s 7010, 7020, 14100*

**Lidocaine - Adult (ALS)**

*VT (pulseless)/VF:*
Initial Dose: Lidocaine, 1.5 mg/kg IV/IO

For refractory *VT (pulseless)/VF*, may administer an additional 0.75 mg/kg IV/IO, repeat one (1) time in five (5) to 10 minutes; maximum total dose of 3 mg/kg.

*V-Tach, Wide Complex Tachycardia - with Pulses:*
Lidocaine, 1.5 mg/kg slow IV/IO

May administer an additional 0.75 mg/kg slow IV/IO: maximum total dose of 3 mg/kg.

*Reference #s 4060, 5010, 7010, 7020, 8010, 11020, 14040, 14050, 14090*

**Lidocaine - Pediatric (ALS)**

*Cardiac Arrest:*

| | |
|---|---|
| 1 day to 8 years | Lidocaine, 1.0 mg/kg IV/IO |
| 9 to 14 years | Lidocaine, 1.0 mg/kg IV/IO |

May repeat Lidocaine at 0.5 mg/kg after five (5) minutes; maximum total dose of 3 mg/kg.

*Reference #s 5010, 7010, 7020, 14150*

**Lidocaine 2% (Intravenous Solution) - Pediatric and Adult (ALS)**

*Pain associated with IO infusion:*
Lidocaine, 0.5 mg/kg slow IO push over two (2) minutes, not to exceed 40 mg total.

*Reference #s 5010, 7010, 7020, 11020*

**Magnesium Sulfate-Adult (ALS)**

*Polymorphic Ventricular Tachycardia:*
Magnesium Sulfate, 2 gm IV/IO bolus over five (5) minutes for polymorphic VT if prolonged QT is observed during sinus rhythm post-cardioversion.

*Eclampsia (Seizure/Tonic/Clonic Activity):*
Magnesium Sulfate, 4 gm IV/IO slow IV push over three (3) to four (4) minutes.

Magnesium Sulfate, 10 mg/min IV/IO drip to prevent continued seizures.

*Reference #s 5010, 7010, 7020, 8010, 14210*

*Severe Asthma/Respiratory Distress (ALS) **(base hospital order only)**:*
Magnesium Sulfate, 2 gm slow IV drip over 20 minutes. Do not repeat.
*Reference# 14010*

**Magnesium Sulfate - Pediatric (ALS)**

*Severe Asthma/Respiratory Distress **(base hospital order only)**:*
Magnesium Sulfate, 50 mg/kg slow IV drip over 20 minutes. Do not exceed the adult dosage of 2 gm total. Do not repeat.

*Reference # 14120*

**Midazolam (Versed) - Adult (ALS)**

*Behavioral Emergencies, if patient meets criteria for potentially fatal and dangerous agitation:*
Midazolam, 2.5 mg IV/IO. May repeat in five (5) minutes, **or**

Midazolam, 5 mg IM/IN. May repeat in 10 minutes.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered. Contact base hospital for additional orders and to discuss further treatment options.

*Reference # 14110*

*Post Intubation Agitation **(base hospital order only)**: Agitation following Intubation that hinders patient's care, i.e. biting or attempting to remove ET tube/lines,* **Not to be used for sedation during intubation of any patients**.
Midazolam, 2.5 mg IV/IO **or**

Midazolam 5 mg IM/IN

Patient must have advanced airway (endotracheal tube or i-gel.)

*Repeat dose requires base hospital contact.*

*Reference # 14050*

*Seizure:*

Midazolam, 2.5 mg IV/IO. May repeat in five (5) minutes for continued seizure activity, **or**

Midazolam, 5 mg IM/IN. May repeat in 10 minutes for continued seizure activity.

Assess patient for medication-related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

*Pacing, synchronized cardioversion:*

Midazolam, 2.5 mg slow IV/IO. May repeat in five (5) minutes.

Midazolam, 5 mg IM/IN. May repeat in ten (10) minutes.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered. Contact base hospital for additional orders and to discuss further treatment options.

*CPAP:*

Midazolam, 1 mg IV/IO/IM/IN may be administered one (1) time for anxiety related to application of CPAP. Contact base hospital for additional orders.

*Reference #s 4060, 4080, 7010, 7020, 11020, 13020, 14060, 14210*

**Midazolam (Versed) - Pediatric (ALS)**

*Seizures:*

Midazolam, 0.1 mg/kg IV/IO with maximum dose 2.5 mg. May repeat Midazolam in five (5) minutes, **or**

Midazolam, 0.2 mg/kg IM/IN with maximum dose of 5 mg. May repeat Midazolam in 10 minutes for continued seizure.

Assess patient for medication-related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered for continued seizure activity. Contact base hospital for additional orders and to discuss further treatment options.

*Behavioral Emergencies, if patient meets criteria for potentially fatal and dangerous agitation* ***(base hospital order):***

Midazolam, 0.1 mg/kg IV/IO. May repeat in five (5) minutes, **or**

Midazolam, 0.2 mg/kg IM/IN. May repeat in 10 minutes.

Assess patient for medication-related reduced respiratory rate or hypotension.

Maximum of three (3) doses using any combination of IV/IO/IM/IN may be administered. Not to exceed adult dose. Contact base hospital for additional orders and to discuss further treatment options.

*Reference #s 7010, 7020, 14170, 14110*

**Naloxone (Narcan) - Adult (BLS)**

*For resolution of respiratory depression related to suspected opiate overdose:*

Naloxone, 0.5 mg IM/IN, may repeat Naloxone 0.5 mg IM/IN every two (2) to three (3) minutes if needed to improve respiratory effort.

*For suspected Fentanyl overdose with respiratory depression:*

Consider a loading dose of 4 mg IN Naloxone. If no signs of respiratory improvement, consider Naloxone 0.5 mg IM/IN every two (2) to three (3) minutes if needed.

Do not exceed 10 mg of Naloxone total regardless of route administered.

*Reference #s 7010, 7020, 8030, 14060*

**Naloxone (Narcan) - Adult (LALS, ALS)**

*For resolution of respiratory depression related to suspected opiate overdose:*

Naloxone, 0.5 mg IV/IO/IM/IN, may repeat Naloxone 0.5 mg IV/IO/IM/IN every two (2) to three (3) minutes if needed to improve respiratory effort.

*For suspected Fentanyl overdose with respiratory depression:*

Consider a loading dose of 4 mg IN Naloxone, may repeat one (1) time. If no signs of respiratory improvement, consider Naloxone 0.5 mg IV/IO/IM/IN every two (2) to three (3) minutes if needed.

Do not exceed 10 mg of Naloxone total regardless of route administered.

*Reference #s 4080, 7010, 7020, 14060*

**Naloxone (Narcan) - Pediatric (BLS)**

*For resolution of respiratory depression related to suspected opiate overdose:*

| | |
|---|---|
| 1 day to 8 years | Naloxone, 0.1 mg/kg IM/IN (do not exceed the adult dose of 0.5 mg per administration) |
| 9 to 14 years | Naloxone, 0.5 mg IM/IN |

May repeat every two (2) to three (3) minutes if needed. Do not exceed the adult dosage of 10 mg total IM/IN.

*Reference #s 7010, 7020, 8030, 14150, 14160*

**Naloxone (Narcan) - Pediatric (LALS, ALS)**

*For resolution of respiratory depression related to suspected opiate overdose:*

| | |
|---|---|
| 1 day to 8 years | Naloxone, 0.1 mg/kg IV/IO/IM/IN (do not exceed the adult dose of 0.5 mg per administration) |
| 9 to 14 years | Naloxone, 0.5 mg IV/IO/IM/IN |

May repeat every two (2) to three (3) minutes if needed. Do not exceed the adult dosage of 10 mg total IV/IO/IM/IN.

*Reference #s 7010, 7020, 14150, 14160*

**Nitroglycerin (NTG) -Adult (LALS, ALS)**

Nitroglycerin, 0.4 mg sublingual/transmucosal.

One (1) every three (3) minutes as needed. May be repeated as long as patient continues to have signs of adequate tissue perfusion. **If a Right Ventricular Infarction is suspected, the use of nitrates requires base hospital contact.**

Nitroglycerin Paste, 1 inch (1 gm) transdermal, may not repeat.

Nitroglycerin sublingual is the preferred route of administration for ACS. Nitro Paste is a one (1) time dose and intended for when sublingual cannot be easily administered (i.e., CPAP).

Nitroglycerin is contraindicated if there are signs of inadequate tissue perfusion or if sexual enhancement medications have been utilized within the past 48 hours.

*Reference #s 4060, 4080, 7010, 7020, 14010, 14240*

**Ondansetron (Zofran) - Patients four (4) years old to Adult (ALS)**

*Nausea/Vomiting:*

Ondansetron, 4 mg slow IV/IO/ODT

All patients four (4) to eight (8) years old: May administer a total of 4 mgs of Ondansetron prior to base hospital contact.

All patients nine (9) and older: May administer Ondansetron 4 mg; may repeat two (2) times, at 10 minute intervals, for a total of 12 mgs prior to base hospital contact.

May be used as prophylactic treatment of nausea and vomiting associated with narcotic administration.

*Reference #s 4080, 7010, 7020, 14090, 14180, 14220*

**Oxygen - Pediatric and Adult (BLS, LALS. ALS) (non-intubated patient per appropriate delivery device)**

*General Administration (Hypoxia):*

Titrate Oxygen at lowest rate required to maintain $SPO_2$ at 94%. Do not administer supplemental oxygen for $SPO_2$ more than 95%.

*Chronic Obstructive Pulmonary Disease (COPD):*

Titrate Oxygen at lowest rate required to maintain $SPO_2$ at 90%. Do not administer supplemental oxygen for $SPO_2$ more than 91%.

*Reference #s 12010, 13010, 13020, 13030, 13050, 14010, 14020, 14030, 14040, 14060, 14070, 14090, 14120, 14130, 14140, 14160, 14170, 14180, 14190, 14200, 14210, 14220, 14230, 14240*

**Sodium Bicarbonate - Adult (ALS)**

*Tricyclic Poisoning **(base hospital order only)**:*

Sodium Bicarbonate, 1 mEq/kg IV/IO

*Reference #s 5010, 7010, 7020, 13010*

*For cardiac arrest with suspected metabolic acidosis, hyperkalemia or tricyclic poisoning* ***(base hospital order only)****:*

Sodium Bicarbonate, 50 mEq IV/IO/ 50cc preload or 50cc single-dose vial

*Reference #'s 7010, 7020, 14050*

*For suspected hyperkalemia due to crush injury: (Prolonged entrapment and/or abnormal EKG findings)*

Sodium Bicarbonate, 50 mEq IV/IO/ 50cc preload or 50cc single-dose vial

*Reference # 14090*

**Sodium Bicarbonate - Pediatric (ALS)**

*Tricyclic Poisoning* ***(base hospital order only)****:*

Sodium Bicarbonate, 1 mEq/kg IV/IO

*Reference #'s 7010, 7020, 13010*

**Tranexamic Acid (TXA) - Patients 15 years of age and older (ALS)**

*Signs of hemorrhagic shock meeting inclusion criteria:*

Tranexamic Acid, 2 gm slow IV/IO over 1 minute or

Tranexamic Acid, 1 gm as 2 x 5ml IM injections

*Signs of postpartum hemorrhagic shock (base hospital order only)*

Tranexamic Acid, 2 gm slow IV/IO over 1 minute or

Tranexamic Acid, 1 gm as 2 x 5ml IM injections

*Reference #s 7010, 7020, 14090, 14210, 14230,*

**APPENDIX I**

**Medications for self-administration or with deployment of the ChemPack.**

**Medications listed below may be used only for the purposes referenced by the associated ICEMA Treatment Protocol. Any other use, route or dose other than those listed, must be ordered in consultation with the Base Hospital physician.**

**Atropine - Pediatric (BLS, AEMT-Auto-injector only with training, ALS)**

*Known nerve agent/organophosphate poisoning with deployment of the ChemPack using:*

Two (2) or more mild symptoms: Administer the weight-based dose listed below as soon as an exposure is known or strongly suspected. If severe symptoms develop after the first dose, two (2) additional doses should be repeated in rapid succession 10 minutes after the first dose; do not administer more than three (3) doses. If profound anticholinergic effects occur in the absence of excessive bronchial secretions, further doses of atropine should be withheld.

One (1) or more severe symptoms: Immediately administer (3) three weight-based doses listed below in rapid succession.

*Weight-based dosing:*

| | |
|---|---|
| Less than 6.8 kg (less than 15 lbs): | 0.25 mg, IM using multi-dose vial |
| 6.8 to 18 kg (15 to 40 lbs): | 0.5 mg, IM using AtroPen auto-injector |
| 18 to 41 kg (40 to 90 lbs): | 1 mg, IM using AtroPen auto-injector |
| More than 41 kg (more than 90 lbs): | 2 mg, IM using multi-dose vial |

*Symptoms of insecticide or nerve agent poisoning, as provided by manufacturer in the AtroPen product labeling, to guide therapy:*

Mild symptoms: Blurred vision, bradycardia, breathing difficulties, chest tightness, coughing, drooling, miosis, muscular twitching, nausea, runny nose, salivation increased, stomach cramps, tachycardia, teary eyes, tremors, vomiting, or wheezing.

Severe symptoms: Breathing difficulties (severe), confused/strange behavior, defecation (involuntary), muscular twitching/generalized weakness (severe), respiratory secretions (severe), seizure, unconsciousness, urination (involuntary).

**NOTE**: Infants may become drowsy or unconscious with muscle floppiness as opposed to muscle twitching.

*Reference #s 11010, 13010, 13040*

**Diazepam (Valium) - Adult (ALS)**

*For seizures associated with nerve agent/organophosphate exposure ONLY with the deployment of the ChemPack:*

Diazepam 10 mg (5 mg/ml) auto-injector IM (if IV is unavailable), **or**
Diazepam 2.5 mg IV

*Reference # 13040*

**Diazepam (Valium) - Pediatric (ALS)**

*For seizures associated with nerve agent/organophosphate exposure ONLY with the deployment of the ChemPack:*

Diazepam 0.05 mg/kg IV

*Reference # 13040*

**Nerve Agent Antidote Kit (NAAK)/Mark I or DuoDote (containing Atropine/Pralidoxime Chloride for self-administration or with deployment of the ChemPack) - Adult**

*Nerve agent exposure with associated symptoms:*

One (1) NAAK auto-injector IM into outer thigh. May repeat up to two (2) times every 10 to 15 minutes if symptoms persist.

*Reference #s 7010, 7020, 13010, 13040*

**12-lead Electrocardiography (EMT-P)**

- ECG should be performed prior to medication administration.
- ECG should be performed on any patient whose medical history and/or presenting symptoms are consistent with acute coronary syndrome including typical or atypical chest pain, syncopal episode, prior AMI, heart disease, or other associated risk factors.

**Capnography (EMT-P)**

- Utilize capnography in patients with respiratory distress, respiratory failure, cardiac arrest, and critically ill patients
- Capnography is required for continuous monitoring of patients given medications that may cause respiratory depression.
- Perform capnography after administration of Midazolam for behavioral emergencies.
- Monitor waveform, numerical value and document in ePCR.

**Continuous Positive Airway Pressure Device (CPAP) - Adult (EMT-P)**

- Start at lowest setting and increase slowly until patient experiences relief or until a maximum of 15 cm $H_2O$ is reached.

**External Jugular Vein Access (AEMT and EMT-P)**

- Not indicated for patients eight (8) years of age and younger.
- Patient condition requires IV access and other peripheral venous access attempts are unsuccessful.

**Blood Glucose Check (EMT, AEMT, and EMT-P)**

- Should be assessed if the patient meets key indicators consistent with high or low blood sugar.

**Intraosseous Insertion (AEMT pediatric patients only and EMT-P)**

- EMT-Ps may administer Lidocaine slowly per ICEMA Reference #11010 - Medication - Standard Orders, to control infusion pain.
- 
- Approved insertion sites:
  - Eight (8) years of age or younger (LALS and ALS):
    - Proximal Tibia - Anterior medial surface of tibia, 2 cm below tibial tuberosity.

- Nine (9) years of age and older (ALS only):
  - Proximal Tibia - Anterior medial surface of tibia, 2 cm below tibial tuberosity.
  - Distal Tibia - Lower end of tibia, 2 cm above the medial malleolus.
  - Humeral Head.
  - Anterior distal femur, 2 cm above the patella - Base hospital contact only.

- Leave site visible and monitor for extravasation.

**Nasogastric/Orogastric Tube (EMT-P)**

- Use a water-soluble lubricating jelly.

**Needle Cricothyrotomy (EMT-P)**

- Absolute contraindication: Transection of the distal trachea.
- Monitor end-tidal $CO_2$ and wave form capnography.
- Monitor pulse oximetry.
- Contact base hospital if unable to ventilate adequately and transport immediately to the closest hospital for airway management.

**Needle Thoracostomy (EMT-P)**

- As a temporary method for chest decompression in the management of suspected tension pneumothorax.
  - **Clinical Indications:**
    - Patients with hypotension (SBP less than 90), clinical signs of shock, and at least one of the following signs:
      - Jugular vein distention.
      - Tracheal deviation away from the side of the injury (often a late sign).
      - Absent or decreased breath sounds on the affected side.
      - Increased resistance when ventilating a patient.
- The midaxillary line at the 5$^{th}$ intercostal space is the preferred site.
- Consider bilateral needle thoracostomy if no improvement or in traumatic cardiac arrest.

**Oral Endotracheal Intubation - Adult (EMT-P)**

- Oral endotracheal intubation is permitted only in patients who are taller than the maximum length of a pediatric emergency measuring tape (Broselow, etc.) or equivalent measuring from the top of the head to the heal of the foot.
- Monitor end-tidal $CO_2$ and wave form capnography.
- Monitor pulse oximetry.

- If unable to place ET after a maximum of three (3) intubation attempts (defined as placement of the laryngoscope in the mouth). If unsuccessful, continue with BVM airway management and transport to the nearest receiving hospital. If BVM is ineffective then attempt placement of supraglottic airway.

- Document verification of tube placement (auscultation, visualization, capnography).

**Supraglottic Airway –Pediatric and Adult (EMT-P)**

- Supraglottic airway is permitted only as a **Backup** airway in patients who have failed attempts with BLS airway and oral endotracheal intubation.

- Monitor end-tidal $CO_2$ and wave form capnography.

- Monitor pulse oximetry.

- If unable to place after three (3) attempts (defined as placement of the soft gel into the mouth), continue with BLS airway and proceed to nearest receiving hospital

- Document verification of SGA (auscultation, continuous capnography).

**Spinal Motion Restriction (EMT, AEMT and EMT-P)**

- Should be placed if patient meets the indicators, per ICEMA Reference #14090 - Trauma - Adult (Neuro Deficits present, Spinal Tenderness present, Altered Mental status, Intoxication, or Distracting Injury).

- An AEMT and/or EMT-P may remove if placed by BLS crew and it does not meet indicators.

**Synchronized Cardioversion (EMT-P)**

- For anxiety prior to cardioversion, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.

- For pain, consider Fentanyl per ICEMA Reference #11010 - Medication - Standard Orders.

- If rhythm deteriorates to v-fib, turn off the sync button and defibrillate.

- Select initial energy level setting at 100 joules or a clinically equivalent biphasic energy level per manufacture guidelines. Procedure may be repeated at 200, 300 and 360 joules or a clinically equivalent biphasic energy level per manufacture guidelines.

- With base hospital order, repeated cardioversion attempts at 360 joules or clinically equivalent biphasic energy level per manufacturer’s guidelines may be attempted.

**Transcutaneous Cardiac Pacing (EMT-P)**

- Start at a rate of 60 and adjust output to the lowest setting to maintain capture. Assess peripheral pulses and confirm correlation with paced rhythm.
- Reassess peripheral pulses. Adjust output to compensate for loss of capture.
- Increase rate **(not to exceed 100)** to maintain adequate tissue perfusion.
- For anxiety, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.
- For pain, consider Fentanyl per ICEMA Reference #11010 - Medication - Standard Orders.
- Contact the base hospital if rhythm persists or for continued signs of inadequate tissue perfusion.

**Vagal Maneuvers (EMT-P)**

- Relative contraindications for patients with hypertension, suspected STEMI, or suspected head/brain injury.
- Reassess cardiac and hemodynamic status. Document rhythm before, during and after procedure.
- If rhythm does not convert within ten (10) seconds, follow ICEMA Reference #14040 - Tachycardias - Adult.

PATIENT CARE GUIDELINES

## I. PURPOSE

To establish guidelines for the minimum standard of care and transport of patients.

## II. BLS INTERVENTIONS

- Obtain a thorough assessment of the following:
  - Airway, breathing and circulatory status.
  - Subjective assessment of the patient's physical condition and environment.
  - Objective assessment of the patient's physical condition and environment.
  - Vital signs (blood pressure, pulse, respiration, GCS, skin signs, etc.).
  - Prior medical history and current medications.
  - Any known medication allergies or adverse reactions to medications, food or environmental agents.
- Initiate care using the following tools as clinically indicated or available:
  - Spinal motion restriction.
  - Airway control with appropriate BLS airway adjunct.
  - Oxygen as clinically indicated.
  - Assist the patient into a physical position that achieves the best medical benefit and maximum comfort.
  - Automated External Defibrillator (AED).
  - Administer Naloxone by intranasal and/or intramuscular routes.
  - Blood glucose monitoring.
  - Consider the benefits of early transport and/or intercept with ALS personnel if clinically indicated.
- Assemble necessary equipment for ALS procedures or treatment under direction of EMT-P.
  - Cardiac monitoring.
  - IV/IO.
  - Endotracheal intubation.
- Under EMT-P supervision, assemble pre-load medications as directed (excluding controlled substances).

## III. LIMITED ALS (LALS) INTERVENTIONS

- Evaluation and continuation of all initiated BLS care.
- Augment BLS assessment with an advanced assessment including, but not limited to the following:
  - Qualitative lung assessment.
  - Blood glucose monitoring.
- Augment BLS treatment measures with LALS treatments as indicated by LALS protocols.
- Initiate airway control as needed with the appropriate LALS adjunct.
- Initiate vascular access as clinically indicated.

## IV. ALS INTERVENTIONS

- Evaluation and continuation of all initiated BLS and/or LALS care when indicated by patient's condition.
- Augment BLS and/or LALS assessment with clinically indicated advanced assessments including but not limited to the following:
  - Cardiac monitor and/or 12-lead ECG.
  - Capnography.
  - Blood glucose monitoring.
- Augment BLS and/or LALS treatment with advanced treatments as clinically indicated.
  - Initiate airway control when clinically indicated using an appropriate airway adjunct to achieve adequate oxygenation and ventilation.
  - Initiate fluid resuscitation when clinically indicated.
- Review and evaluate treatments initiated by BLS, LALS, or ALS personnel.
  - Consider discontinuing treatments not warranted by patient's clinical condition. Intermittent monitoring may be used instead of continuous monitoring when clinically indicated.

# GLASGOW COMA SCALE

## I. EYE OPENING

- **Spontaneous**: Eye opening is spontaneous if the patient's eyes are already open at the time of the assessment with no stimulation other than that of the existing ambient environment. The patient can close his eyes to command. This eye opening response implies an intact reticular activating mechanism and a functioning arousal mechanism.
- **To Voice**: If the patient's eyes are not open at the time of the assessment, a response to voice is present if the eyes open when the patient's name is spoken or shouted.
- **To Pain**: If verbal stimulation is unsuccessful in eliciting eye opening, a response to pain is present if the eyes open when a standard pain stimulus is applied.
- **None**: No eye response is present if the above attempts at stimulation are unsuccessful.

## II. BEST VERBAL RESPONSE

- **Oriented**: After being aroused, the patient is asked name, place and date. The patient is oriented if the answers given are correct.
- **Confused**: The patient is confused if the individual cannot answer the questions regarding name, place and date accurately, but is still capable of producing phrases, sentences or conversation exchanges.
- **Inappropriate**: In this state, the patient cannot produce phrases, sentences or conversational exchanges, but can produce an intact word or two. These words may be electable only in response to physical stimulation and may frequently be obscenities or relative's names.
- **Incomprehensible**: In this state, the patient can produce groans, moans or unintelligible mumblings, but cannot produce an intact word in response to stimulation.
- **None**: In this state, the patient does not respond with any phonation to any stimulation no matter how prolonged or repeated.

## III. BEST MOTOR RESPONSE

- **Obedient**: In response to instructions, whether verbal or written, or through gestures, patient shows ability to comprehend the instruction and to physically execute it. A common example is the command to hold up two fingers.
- **Purposeful**: When a standard painful stimulus is applied, the patient may move limb or body away from stimulus in a purposeful manner or attempt to push stimulus away.
- **Withdrawal**: If the patient does not obey commands, the standard pain stimulus is applied. Withdrawal is present if 1) the elbow flexes, 2) the movement is rapid, 3) there is no muscle stiffness and 4) the arm is drawn away from the trunk.
- **Flexion**: Flexion is present if 1) the elbow flexes, 2) the movement is slow, 3) muscle stiffness is present, 4) the forearm and hand are held against the body and 5) the limbs hold a hemiplegic position.

- **Extension**: Extension is present if 1) the legs and arms extend, 2) muscle stiffness is present and 3) external rotation of the shoulder and forearm occurs.

- **None**: Maximum standard pain stimulation produces no motor response.

**NOTE: Spinal cord injury may invalidate motor assessment in this form.**

## IV. MODIFIED GLASGOW COMA SCALE FOR INFANTS AND CHILDREN

| | Child | Infant | Score |
|---|---|---|---|
| Eye opening | Spontaneous<br>To speech<br>To pain only<br>No response | Spontaneous<br>To speech<br>To pain only<br>No response | 4<br>3<br>2<br>1 |
| Best verbal response | Oriented, appropriate<br>Confused<br>Inappropriate words<br>Incomprehensible sounds<br>No response | Coos and babbles<br>Irritable cries<br>Cries to pain<br>Moans to pain<br>No response | 5<br>4<br>3<br>2<br>1 |
| Best motor response* | Obeys commands<br>Localizes painful stimulus<br>Withdraws in response to pain<br>Flexion in response to pain<br>Extension in response to pain<br>No response | Moves spontaneously and purposefully<br>Withdraws to touch<br>Withdraws to response in pain<br>Abnormal flexion posture to pain<br>Abnormal extension posture to pain<br>No response | 6<br>5<br>4<br>3<br>2<br>1 |

* If patient is intubated, unconscious, or preverbal, the most important part of this scale is motor response. Motor response should be carefully evaluated.

# POISONINGS

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Altered level of consciousness.
- Signs and symptoms of substance ingestion, inhalation, injection or surface absorption.
- History of substance poisoning.
- For nerve agent, organophosphate or carbamate exposure in which the ChemPack has been deployed, refer to ICEMA Reference #13040 - Nerve Agent Antidote Kit (Training, Storage and Administration).

## II. PRIORITIES

- Assure the safety of EMS field personnel, initiate decontamination and isolation procedures as indicated.
- Assure and maintain ABCs.
- Determine degree of physiological distress.
- Obtain vital signs, history and complete physical assessment including the substance ingested, the amount, the time substance was ingested and the route.
- If appropriate and can be safely transported, bring ingested substance to the hospital with patient.
- Expeditious transport.

## III. BLS INTERVENTIONS

- Assure and maintain ABCs.
- Obtain oxygen saturation on room air, unless detrimental to patient condition. Administer oxygen per ICEMA Reference #11010 - Medication - Standard Orders.
- Contact poison control (1-800-222-1222).
- Obtain accurate history of incident:
  - Name of product or substance.
  - Quantity ingested, and/or duration of exposure.
  - Time elapsed since exposure.
  - Pertinent medical history, chronic illness, and/or medical problems within the last twenty-four (24) hours.
  - Patient medication history.

- Obtain and monitor vital signs.
- Expeditious transport.

## IV. LIMITED ALS (LALS) INTERVENTIONS PRIOR TO BASE HOSPITAL CONTACT

- Perform activities identified in the BLS Interventions.
- Obtain vascular access at a TKO rate or if signs of inadequate tissue perfusion, administer 500 cc fluid challenge and repeat until perfusion improves.
- For pediatric patients with signs of inadequate tissue perfusion, administer 20 ml/kg IV and repeat until perfusion improves.

## V. ALS INTERVENTIONS PRIOR TO BASE HOSPITAL CONTACT

- Perform activities identified in the BLS and LALS Interventions.
- Monitor cardiac status.
- For phenothiazine “poisoning” with ataxia and/or muscle spasms, administer Diphenhydramine per ICEMA Reference #11010 - Medication - Standard Orders.
- For known organophosphate poisoning, administer Atropine per ICEMA Reference #11010 - Medication - Standard Orders.
- For seizures associated with nerve agent or organophosphate poisoning, administer Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.
- For seizures associated with nerve agent or organophosphate poisoning, with deployment of the ChemPack, administer Diazepam per ICEMA Reference #11010 - Medication - Standard Orders.

## VI. BASE HOSPITAL MAY ORDER THE FOLLOWING

- For tricyclic poisonings, administer Sodium Bicarbonate per ICEMA Reference #11010 - Medication - Standard Orders.
- For calcium channel blocker poisonings with persistent hypotension or bradycardic arrhythmias, administer Calcium Chloride per ICEMA Reference #11010 - Medication - Standard Orders.
- For beta blocker poisonings, administer Glucagon per ICEMA Reference #11010 - Medication - Standard Orders.

## VII. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 13040 | Nerve Agent Antidote Kit (Training, Storage and Administration) |

# HEAT RELATED EMERGENCIES

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

**MINOR HEAT ILLNESS SYNDROMES**

- Environmental conditions.
- Increased skin temperature.
- Increased body temperature.
- General weakness.
- Muscle cramps.

**HEAT EXHAUSTION (Compensated)**

- All or some of the symptoms above.
- Elevated temperature.
- Vomiting.
- Hypotension.
- Diaphoresis.
- Tachycardia.
- Tachypnea.

**HEAT STROKE (Uncompensated)**

- All or some of the symptoms above.
- Hyperthermia.
- ALOC or other signs of central nervous system dysfunction.
- Absence or decreased sweating.
- Tachycardia.
- Hypotension.

**HEAT EXHAUSTION/ HEAT STROKE**

- Dehydration.
- Elevated temperature, vomiting, hypotension, diaphoresis, tachycardia and tachypnea.

- No change in LOC.

II. **BLS INTERVENTIONS**

- Remove patient from heat source, position with legs elevated and begin cooling measures.
- Oxygen as clinically indicated.
- Rehydrate with small amounts of appropriate liquids as tolerated. Do not give liquids if altered level of consciousness.
- If patient has signs of Heat Stroke, begin rapid cooling measures including cold packs placed adjacent to large superficial vessels.
- Evaporative cooling measures.

**III. LIMITED ALS INTERVENTIONS**

- Obtain vascular access.
  - ADULT
    - Fluid bolus with 500 ml NS. Reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion.
  - PEDIATRIC
    - Patients less than nine (9) years of age: Initial 20 ml/kg IV bolus; reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion.
- If clinically indicated, obtain blood glucose. If hypoglycemic administer:
  - ADULT/PEDIATRIC
    - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
    - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders.
- Seizure precautions, refer to ICEMA Reference #14060 - Altered Level of Consciousness/Seizures - Adult.
- Contact base hospital for destination and further treatment orders.

**IV. ALS INTERVENTIONS**

- Obtain vascular access.
  - ADULT
    - Fluid bolus with 500 ml NS. May repeat fluid bolus if continued signs of inadequate tissue perfusion.

- PEDIATRIC
  - Patients less than nine (9) years of age: Initial 20 ml/kg IV/IO bolus; reassess and repeat fluid bolus if continued signs of inadequate tissue perfusion.

- If clinically indicated, obtain blood glucose. If hypoglycemic administer:
  - ADULT/PEDIATRIC
    - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
    - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders.

- Base hospital may order additional medication dosages and additional fluid boluses.

- Obtain rhythm strip for documentation with copy to receiving hospital.

- For tonic/clonic type seizure activity administer:
  - ADULT/PEDIATRIC
    - Midazolam per ICEMA Reference #11010 -Medication - Standard Orders.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 14060 | Altered Level of Consciousness/Seizures - Adult |

# COLD RELATED EMERGENCIES

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

### MILD HYPOTHERMIA

- Decreased core temperature.
- Cold, pale extremities.
- Shivering, reduction in fine motor skills.
- Loss of judgment and/or altered level of consciousness or simple problem solving skills.

### SEVERE HYPOTHERMIA

- Severe cold exposure or any prolonged exposure to ambient temperatures below 36 degrees with the following indications:
  - Altered LOC with associated behavior changes.
  - Unconscious.
  - Lethargic.
- Shivering is generally absent.
- Blood pressure and heart sounds may be unobtainable.

### SUSPECTED FROSTBITE

- Areas of skin that are cold, white, and hard to touch.
- Capillary refill greater than two (2) seconds.
- Pain and/or numbness to affected extremity.

## II. BLS INTERVENTIONS

- Remove from cold/wet environment; remove wet clothing and dry patient.
- Begin passive warming.
- Insulate and apply wrapped heat packs, if available, to groin, axilla and neck. This process should be continuous.
- Maintain appropriate airway with oxygen as clinically indicated (warm, humidified if possible).
- Assess carotid pulse for a minimum of one (1) to two (2) minutes. If no pulse palpable, place patient on AED. If no shock advised, begin CPR.
- Insulate to prevent further heat loss.

- Elevate extremity if frostbite is suspected.
- Do not massage affected extremity.
- Wrap affected body part in dry sterile gauze to prevent further exposure and handle with extreme care.

**III. LIMITED ALS INTERVENTIONS**

- Advanced airway as clinically indicated.
- Obtain vascular access.
- Obtain blood glucose level, if indicated administer:
  - ADULT/PEDIATRIC
    - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
    - May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
    - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders if unable to establish IV.
- Obtain vascular access and administer fluid bolus.
  - Nine (9) years and older: 500 ml warmed NS, may repeat.
  - Birth to eight (8) years: 20 ml/kg warmed NS, may repeat.
- Contact base hospital.

**IV. ALS INTERVENTIONS**

- Obtain vascular access.
- Cardiac monitor.
- If clinically indicated, obtain blood glucose. If hypoglycemic administer:
  - ADULT/PEDIATRIC
    - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
    - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders, if unable to establish IV.
- For complaints of pain in affected body part:
  - ADULT/PEDIATRIC
    - Fentanyl per ICEMA Reference #11010 - Medication - Standard Orders.
- Advanced airway as clinically indicated.

- Obtain vascular access and administer fluid bolus.
  - Nine (9) years and older: 500 ml warmed NS, may repeat.
  - Birth to eight (8) years: 20 ml/kg warmed NS, may repeat.
- Obtain rhythm strip for documentation.
- For documented VF, Pulseless V-Tach:
  - Defibrillate one (1) time at manufacturer recommended dose. Do not defibrillate again until patient has begun to warm.
- For documented asystole:
  - Begin CPR.
  - May give additional fluid bolus.
- Contact base hospital.

## V. REFERENCE

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |

# NERVE AGENT ANTIDOTE KIT (TRAINING, STORAGE AND ADMINISTRATION)

## I. PURPOSE

To provide a standard for the training, storage and use of Nerve Agent Antidote Kits (NAAKs) by EMS field personnel.

## II. POLICY

- The NAAK (DuoDote or Mark I) is an optional personal protective equipment (PPE) for self-administration.
- The NAAK is authorized for self-administration by public safety personnel, emergency medical technicians (EMTs), advanced emergency medical technicians (AEMTs) or paramedics (EMT-Ps) following exposure to nerve agents, organophosphates, or carbamates.
- EMS providers equipping and employing EMTs or AEMTs with NAAKs for self-administration must provide NAAK training as described below. EMT-Ps do not require any additional training.
- Public safety agencies equipping public safety personnel with NAAKs for self-administration must provide training per ICEMA Reference #15050 - Optional Skills and Medications (Authorized Public Safety Personnel).
- When the ChemPack is deployed, EMTs, AEMTs or EMT-Ps may administer the NAAK and/or AtroPen to patients per ICEMA Reference #11010 - Medication - Standard Orders.
- When the ChemPack is deployed, EMT-Ps are authorized by the ICEMA Medical Director to administer Diazepam (Valium) per ICEMA Reference #11010 - Medication - Standard Orders.
- Public safety personnel are **not** permitted to administer the NAAK to patients without prior authorization (refer to ICEMA Reference #15050 - Optional Skills and Medications (Authorized Public Safety Personnel). Public safety personnel may **not** administer AtroPen (Atropine).

## III. TRAINING REQUIREMENTS

- Training will consist of no less than two (2) hours of ICEMA approved didactic and skills laboratory training that includes:
  - Indications
  - Contraindications
  - Side/adverse effects
  - Routes of administration
  - Dose
  - Mechanisms of drug action

- Disposal of contaminated items and sharps
- Medication administration and proper use of NAAK

- At the completion of the training, the student will complete a competency based written and skills examination for the administration of Atropine and Pralidoxime Chloride (2-Pam) that includes:
  - Assessment of when to administer the medication.
  - Managing a patient before, during, and after administering the medication.
  - Using universal precautions and body substance isolation procedures during medication administration.
  - Demonstration of aseptic technique during medication administration.
  - Demonstrate the preparation of the medication.
  - Demonstrate site selection and administration of medication by the intramuscular route.
  - Proper disposal of contaminated items and sharps.
  - Completion of the notification of usage form.
- All EMS field personnel and public safety personnel will complete the competency based skills examination every two (2) years.
- EMS providers providing NAAK training must retain training records for a minimum of four (4) years and make all records available for review at the request of ICEMA or the California EMS Authority.

## IV. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 15050 | Optional Skills and Medications (Authorized Public Safety Personnel) |

# SMOKE INHALATION/CO EXPOSURE/SUSPECTED CYANIDE TOXICITY

## I. PURPOSE

To identify and treat smoke inhalation and suspected cyanide toxicity.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

- Indicators
  - Exposure to fire and smoke, particularly in an enclosed-space structure fire.
  - Hydrogen cyanide concentration measured in the air does not accurately correlate to patient's level of exposure and toxicity. Consider possibility of Carbon Monoxide (CO) and cyanide exposure/toxicity in any patient (or unprotected EMS field personnel) with smoke inhalation.
- Cyanide Toxicity
  - Initial signs and symptoms are non-specific and may include headache, dizziness, nausea, vomiting, confusion, and syncope.
  - Worsening signs and symptoms may include altered level of consciousness (ALOC), hypotension, shortness of breath, seizures, cardiac dysrhythmias, and cardiac arrest.
  - The "bitter almond" smell on the breath of a cyanide-poisoned patient is neither sensitive nor specific and should not be considered in making the assessment.
- CO Poisoning
  - Initial signs and symptoms are non-specific and may include flu like symptoms, dizziness, severe headache, nausea, sleepiness, weakness and disorientation.
  - Worsening signs and symptoms may include blurred vision, shortness of breath, and altered level of consciousness.

## III. BLS INTERVENTIONS

- Remove patient from exposure area.
- Administer 100% oxygen via nonrebreather mask.

## IV. ALS INTERVENTIONS

- Monitor pulse oximetry ($SpO_2$) though values may be unreliable in patients suffering from smoke inhalation.
- Place on cardiac monitor and obtain a 12-lead ECG.
- IV access, consider fluid bolus of 300 cc NS.
- Use BVM with airway adjuncts as needed. Consider advanced airway if indicated.

- For treatment of bronchospasm as indicated by wheezing, refer to ICEMA Reference #14010 - Respiratory Emergencies - Adult.

- Ensure rapid transport to closest receiving emergency department.

## V. REFERENCE

| Number | Name |
|---|---|
| 14010 | Respiratory Emergencies - Adult |

# DROWNING/SUBMERSION INJURIES

**Cardiac arrest in drowning is caused by hypoxia, airway and ventilation are equally important to high-quality CPR.**

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Submersion in water regardless of depth.
- ALOC with submersion
- Respiratory distress with foaming, vomiting, coughing, wheezing, abnormal lung sounds and or apnea.
- Decreased or absent vital signs.

## II. PRIORITIES

- Assure the safety of EMS field personnel.
- Assure and maintain ABCs with an emphasis on reversing hypoxia.
- Ventilate through the foam, do not waste time attempting to suction.
- Consider trauma or pre-existing medical problem (hypoglycemia, seizure, dysrhythmia).
- Assess for hypothermia.
- Encourage transport even if symptoms are mild.

## III. BLS INTERVENTIONS

- Assure and maintain ABCs.
- Administer oxygen per ICEMA Reference #11010 - Medication - Standard Orders.
- Maintain spinal motion restriction if indicated.
- Remove wet clothing/ warm patient.
- Obtain and monitor vital signs.
- Provide high quality CPR if indicated with an emphasis on airway.

## IV. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access at a TKO rate or if signs of inadequate tissue perfusion, administer 500 cc fluid challenge and repeat until perfusion improves.

- For pediatric patients with signs of inadequate tissue perfusion, administer 20 ml/kg IV and repeat until perfusion improves.

- Administer Albuterol per ICEMA Reference #11010-Medication-Standing Orders

## V. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.

- Monitor cardiac status.

- Monitor end tidal CO2, pulse oximetry

- Obtain glucose level. If indicated administer:

  - Dextrose per ICEMA Reference #11010-Medication-Standing Orders.

  - May repeat blood glucose level. Repeat Dextrose Per ICEMA Reference # 11010-Medication- Standing Orders.

- Administer Albuterol/Atrovent per ICEMA Reference #11010 - Medication - Standard Orders.

- Consider an advanced airway, refer to ICEMA Reference # 11020 – Procedure - Standard Orders.

## VI. REFERENCES

| **Number** | **Name** |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure- Standing Orders |
| 14050 | Cardiac Arrest-Adult |
| 14150 | Cardiac Arrest-Pediatric |

RESPIRATORY EMERGENCIES - ADULT

## CHRONIC OBSTRUCTIVE PULMONARY DISEASE

### I. FIELD ASSESSMENT/TREATMENT INDICATORS

Symptoms of chronic pulmonary disease, wheezing, cough, pursed lip breathing, decreased breath sounds, accessory muscle use, anxiety, ALOC or cyanosis.

### II. BLS INTERVENTIONS

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, obtain oxygen saturation on room air, or on home oxygen if possible.

### III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain oxygen saturation on room air or on home oxygen if possible.
- Administer Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.

### IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol with Atrovent per ICEMA Reference #11010 - Medication - Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

  If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.
- Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

### V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders. |

## ACUTE ASTHMA/BRONCHOSPASM/ALLERGIC REACTION/ANAPHYLAXIS

### I. FIELD ASSESSMENT/TREATMENT INDICATORS

History of prior attacks, possible toxic inhalation or allergic reaction, associated with wheezing, diminished breath sounds or cough.

**II. BLS INTERVENTIONS** (For severe asthma and/or anaphylaxis **only**)

- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated, humidified oxygen preferred.
- For anaphylaxis only, administer Epinephrine (0.3 mg auto-injector) per ICEMA Reference #11010 - Medication - Standard Orders.
- May repeat Epinephrine (0.3 mg auto-injector) per ICEMA Reference #11010 - Medication - Standard Orders, after 15 minutes one (1) time.

**III. LIMITED ALS (LALS) INTERVENTIONS**

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Administer Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
- For signs of inadequate tissue perfusion, initiate IV bolus of 300 ml NS. If signs of inadequate tissue perfusion persist may repeat fluid bolus one (1) time.
- If no response to Albuterol, administer Epinephrine (1 mg/ml) per ICEMA Reference #11010 - Medication - Standard Orders.
- May repeat Epinephrine (1 mg/ml), per ICEMA Reference #11010 - Medication - Standard Orders, after 15 minutes one (1) time.

**IV. ALS INTERVENTIONS**

- Perform activities identified in the BLS and LALS Interventions.
- Administer Albuterol, with Atrovent per ICEMA Reference #11010 - Medication - Standard Orders.
- For suspected allergic reaction, consider Diphenhydramine per ICEMA Reference #11010 - Medication - Standard Orders.
- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

  If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.
- If no response to Albuterol, administer Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.
- May repeat Epinephrine (1 mg/ml) per ICEMA Reference #11010 - Medication - Standard Orders after 15 minutes one (1) time.

- For persistent severe anaphylactic reaction, administer Epinephrine (0.1 mg/ml) per ICEMA Reference #11010 - Medication - Standard Orders.

- Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

**V. BASE HOSPITAL MAY ORDER THE FOLLOWING**

- For severe asthma/respiratory distress that has failed to respond to the other previous treatments, administer Magnesium Sulfate per ICEMA Reference #11010 - Medication - Standard Orders.

**VI. REFERENCES**

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

**ACUTE PULMONARY EDEMA/CHF**

**I. FIELD ASSESSMENT/TREATMENT INDICATORS**

History of cardiac disease, including CHF, and may present with rales, occasional wheezes, jugular venous distention and/or peripheral edema.

**II. BLS INTERVENTIONS**

- Reduce anxiety, allow patient to assume position of comfort.

- Administer oxygen as clinically indicated. For pulmonary edema with high altitude as a suspected etiology, descend to a lower altitude and administer high flow oxygen with a non re-breather mask.

- Be prepared to support ventilations as clinically indicated.

**III. LIMITED ALS (LALS) INTERVENTIONS**

- Perform activities identified in the BLS Interventions.

- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.

- Administer Nitroglycerine (NTG) per ICEMA Reference #11010 - Medication - Standard Orders. In the presence of hypotension (SBP less than 100), the use of NTG is contraindicated.

- If symptoms do not improve after NTG administration, consider Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.

**IV. ALS INTERVENTIONS**

- Perform activities identified in the BLS and LALS Interventions.

- Place patient on Continuous Positive Airway Pressure (CPAP), refer to ICEMA Reference #11020 - Procedure - Standard Orders.

  If systolic BP remains greater than 90 mm Hg, consider Midazolam per ICEMA Reference #11010 - Medication - Standard Orders for relief of anxiety related to CPAP mask.

- Consider advanced airway, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# AIRWAY OBSTRUCTION - ADULT

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Universal sign of distress.
- Alteration in respiratory effort and/or signs of obstruction.
- Altered level of consciousness.

## II. BLS INTERVENTION

**RESPONSIVE**

- Assess for ability to speak or cough (e.g., “Are you choking?”).
- If unable to speak, administer abdominal thrusts (if the rescuer is unable to encircle the victim’s abdomen or the patient is in the late stages of pregnancy, utilize chest thrusts) until the obstruction is relieved or patient becomes unconscious.
- After obstruction is relieved, reassess and maintain ABCs.
- Administer oxygen therapy; obtain oxygen saturation.
- If responsive, place in position of comfort. If uninjured but unresponsive with adequate respirations and pulse, place on side in recovery position.

**UNRESPONSIVE**

- Position patient supine (for suspected trauma, maintain in-line spinal motion restriction).
- Begin immediate CPR at a 30:2 ratio for two (2) minutes.
- Each time the airway is opened to ventilate, look for an object in the victim’s mouth and if found, remove it.
- If apneic and able to ventilate, provide one (1) breath every five (5) to six (6) seconds.
- Place AED on patient.

## III. LIMITED ALS (LALS) INTERVENTION

**UNRESPONSIVE**

- If apneic and able to ventilate, establish advanced airway.
- Establish vascular access as indicated.

## IV. ALS INTERVENTION

**UNRESPONSIVE**

- If apneic and able to ventilate, establish advanced airway.
- If obstruction persists, visualize with laryngoscope and remove visible foreign body with Magill forceps and attempt to ventilate.
- If obstruction persists and unable to ventilate, consider Needle Cricothyrotomy, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

## V. REFERENCE

| Number | Name |
|---|---|
| 11020 | Procedure - Standard Orders |

# ALLERGIC REACTIONS - ADULT

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Signs and symptoms of an acute allergic reaction.
- History of exposure to possible allergens.

## II. BLS INTERVENTION

- Recognize signs/symptoms of respiratory distress.
- Reduce anxiety, assist patient to assume POC.
- Oxygen administration as clinically indicated (humidified oxygen preferred).
- Assist patient with self-administration of prescribed Epinephrine device if available.
- For anaphylaxis only, administer epinephrine auto-injector per ICEMA Reference #11010 – Medication – Standard Orders.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Establish IV/IO access if indicated.
- For symptomatic hypotension with poor perfusion, consider fluid bolus of 300 ml NS, and repeat as indicated.
- Albuterol per ICEMA Reference #11010 – Medication – Standard Orders.
- If no response to Albuterol, consider Epinephrine per ICEMA Reference #11010 – Medication – Standard Orders.
- For anaphylactic shock (e.g., no palpable radial pulse and a depressed level of consciousness), administer Epinephrine per ICEMA Reference #11010 – Medication – Standard Orders.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS interventions.
- Albuterol with Atrovent per ICEMA Reference #11010 – Medication – Standard Orders.
- If no response to Albuterol and Atrovent, consider Epinephrine per ICEMA Reference #11010 – Medication – Standard Orders.

- Administer Diphenhydramine per ICEMA Reference #11010 – Medication – Standard Orders.

- If apneic and unable to ventilate, consider oral endotracheal intubation per ICEMA Reference #11020 – Procedure – Standard Orders.

- Base Hospital may order additional medication dosages and additional fluid boluses.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

BRADYCARDIAS - ADULT

## STABLE BRADYCARDIA

### I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Heart rate less than 60 bpm.
- Signs of adequate tissue perfusion.

### II. BLS INTERVENTIONS

- Recognition of heart rate less than 60 bpm.
- Reduce anxiety, allow patient to assume position of comfort.
- Administer oxygen as clinically indicated.

### III. LIMITED ALS (LALS) INTERVENTIONS

- Establish vascular access if indicated. If lungs sound clear, consider bolus of 300 cc NS, may repeat.
- Monitor and observe for changes in patient condition.

### IV. ALS INTERVENTIONS

- Establish vascular access if indicated. If lungs sound clear, consider bolus of 300 ml NS, may repeat.
- Place on cardiac monitor, obtain rhythm strip for documentation and upload to ePCR with a copy to receiving hospital. If possible, obtain a 12-lead ECG to better define the rhythm.
- Monitor and observe for changes in patient condition.

### V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

## UNSTABLE BRADYCARDIA

### I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Signs of inadequate tissue perfusion/shock, ALOC, or ischemic chest discomfort.

### II. BLS INTERVENTIONS

- Recognition of heart rate less than 60 bpm.
- Reduce anxiety, allow patient to assume position of comfort.

- Administer oxygen as clinically indicated.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Establish vascular access if indicated by inadequate tissue perfusion.
  - Administer IV bolus of 300 ml NS, may repeat one (1) time.
  - Maintain IV rate at TKO after bolus.
- Monitor and observe for changes in patient condition.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Place on cardiac monitor, obtain rhythm strip for documentation and upload to ePCR with a copy to receiving hospital. If possible, obtain a 12-lead ECG to better define the rhythm.
- Administer Atropine per ICEMA Reference #11010 - Medication -Standard Orders.
- If Atropine is ineffective, or for documented MI, 3rd degree AV Block with wide complex and 2nd degree Type II AV Block, utilize Transcutaneous Cardiac Pacing, per ICEMA Reference #11020 Procedure - Standard Orders.
  - **BASE HOSPITAL MAY ORDER THE FOLLOWING**:

    For End Stage Renal Disease (ESRD) patients on dialysis with suspected hyperkalemia And hemodynamic instability, with documented sinus bradycardia, 3rd degree AV block and 2nd degree Type II AV Block, slow junctional and ventricular escape rhythms, or slow atrial fibrillation, administer Calcium Chloride per ICEMA Reference # 11010- Medication-Standard Orders
- Contact base hospital if interventions are unsuccessful.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# TACHYCARDIAS - ADULT

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Signs and symptoms of poor perfusion.
- Heart rate greater than 150 beats per minute (bpm).

## II. BLS INTERVENTIONS

- Recognition of heart rate greater than 150 bpm.
- Reduce anxiety; allow patient to assume position of comfort.
- Administer oxygen as clinically indicated.
- Consider transport to closest hospital or ALS intercept.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Recognition of heart rate greater than 150 bpm.
- Place AED pads on patient as a precaution in the event patient has sudden cardiac arrest.
- Initiate an IV with normal saline and administer 300 ml bolus to patient exhibiting inadequate tissue perfusion.
- Obtain blood glucose. If indicated administer:
  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders, **or**
  - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders.
  - May repeat blood glucose. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders if indicated.

## IV. ALS INTERVENTIONS

Determine cardiac rhythm, obtain a 12-lead ECG to better define rhythm if patient condition allows, establish vascular access and proceed to appropriate intervention(s).

**Narrow Complex Supraventricular Tachycardia (SVT)**

- Initiate NS bolus of 300 ml IV.
- Valsalva/vagal maneuvers.
- Adenosine per ICEMA Reference #11010 - Medication - Standard Orders.
- Synchronized cardioversion, refer to ICEMA Reference #11020 - Procedure - Standard Orders.

- Contact base hospital.

**V-Tach or Wide Complex Tachycardias (Intermittent or Sustained)**

- Consider Adenosine, per ICEMA Reference #11010 - Medication - Standard Orders, if the rate is regular and the QRS is monomorphic. Adenosine is contraindicated for unstable rhythms or if the rhythm is an irregular or polymorphic wide complex tachycardia.
- If Adenosine fails to convert the rhythm or is contraindicated, consider Lidocaine per ICEMA Reference #11010 - Medication - Standard Orders.
- Polymorphic VT should receive immediate unsynchronized cardioversion (defibrillation). Consider infusing Magnesium per ICEMA Reference #11010 -Medication - Standard Orders.
- Precordial thump for witnessed spontaneous VT, if defibrillator is not immediately available for use.
- Synchronized cardioversion, refer to ICEMA Reference #11020 - Procedure - Standard Orders.
- Contact base hospital.

**Atrial Fib/Flutter**

- Transport to appropriate facility.
- For patients who are hemodynamically unstable, proceed to synchronized cardioversion, refer to ICEMA Reference #11020 - Procedure - Standard Orders.
- Contact base hospital.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# CARDIAC ARREST - ADULT

High performance (HP) CPR is an organized approach to significantly improve the chance of survival for patients who suffer an out-of-hospital cardiac arrest (OHCA). Return of spontaneous circulation (ROSC) is resumption of sustained perfusing cardiac activity associated with significant respiratory effort after cardiac arrest. Signs of ROSC include breathing, coughing, patient movement and a palpable pulse, or measurable blood pressure without the use of an automatic compression device.

The principles for HP CPR include:

- Minimize interruptions of chest compressions.
- Ensure proper depth of chest compressions of 2" - 2.5" allowing full chest recoil (no leaning on chest).
- Proper chest compression rate at 100 - 120 per minute.
- Avoid compressor fatigue by rotating compressors every two (2) minutes. Ventilations shall be sufficient to cause minimal chest rise, avoiding hyperventilation as it can decrease survival.
- For cardiac arrest related to drowning, refer to ICEMA Reference # 13060- Drowning/Submersion Injuries.

Advanced airways can be safely delayed in OHCA patients until ROSC is achieved if the airway is effectively managed by BLS Interventions. BVM offers excellent oxygenation and ventilation without disrupting high quality compressions.

Base hospital contact is <u>not required</u> to terminate resuscitative measures, if the patient meets criteria set forth below in the Termination of Efforts in the Prehospital Setting.

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Cardiac arrest in a non-traumatic setting.

## II. BLS INTERVENTIONS

- Assess patient, begin HP CPR and maintain appropriate BLS airway measures.
- Place patient on AED, if available. To minimize the "hands off" interval before a rhythm analysis/shock, complete chest compression cycle without an added pause for ventilations or pulse check just before rhythm analysis.
- If shock is advised, perform HP CPR compressions while AED is charging. Remove hands from patient and deliver shock then immediately resume uninterrupted HP CPR for two (2) minutes.
- Do not delay HP CPR for post-shock pulse check or a rhythm analysis.
- After two (2) minutes of HP CPR, analyze rhythm using AED while checking for pulse.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS interventions.

- Establish peripheral intravenous access and administer a 500 ml bolus of normal saline (NS).

- BLS airway with BVM is the airway of choice during active HP CPR.

## IV. ALS INTERVENTIONS

- Initiate HP CPR and continue appropriate BLS Interventions while applying the cardiac monitor without interruption to chest compressions.

  - **Note:** Automatic compression devise may only be used for non-traumatic cardiac arrest.

- Determine cardiac rhythm and defibrillate if indicated. After defibrillation, immediately began HP CPR. Begin a two (2) minute cycle of HP CPR.

- Obtain IV/IO access.

- BLS airways should be maintained during active CPR. Endotracheal intubation is the advanced airway of choice if BLS airway does not provide adequate ventilation. Establish advanced airway per ICEMA Reference #11020 - Procedure - Standard Orders without interruption to chest compressions.

- Utilize continuous quantitative waveform capnography, for the monitoring of patient's airway, the effectiveness of chest compressions and for possible early identification of ROSC. Document the waveform and the capnography number in mm HG in the ePCR.

  **NOTE**: Capnography **shall** be used for all cardiac arrest patients.

- Insert NG/OG tube to relieve gastric distension per ICEMA Reference #11020 - Procedure - Standard Orders.

**Ventricular Fibrillation/Pulseless Ventricular Tachycardia**

- Defibrillate at 360 joules for monophasic or biphasic equivalent per manufacturer. If biphasic equivalent is unknown use maximum available.

- Perform HP CPR immediately after each defibrillation for two (2) minutes, without assessing the post-defibrillation rhythm.

- Administer Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders every five (5) minutes, without interruption of HP CPR unless capnography indicates possible ROSC.

- Reassess rhythm for no more than ten (10) seconds after each two (2) minute cycle of HP CPR. If VF/VT persists, defibrillate as above.

- After two (2) cycles of HP CPR, consider administering:
  Lidocaine per ICEMA Reference #11010 - Medication - Standard Orders, may repeat.

- If patient remains in pulseless VF/VT after 20 minutes of CPR, consult base hospital.

**Pulseless Electrical Activity (PEA) or Asystole**

- Assess for reversible causes and initiate treatment.
- Continue HP CPR with evaluation of rhythm (no more than 10 seconds) every two (2) minutes.
- Administer fluid bolus of 300 ml NS IV, may repeat.
- Administer Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders every 5 (five) minutes without interruption of HP CPR.
- Base hospital may order the following:
  - Sodium Bicarbonate per ICEMA Reference #11010 - Medication Standard Orders.
  - Calcium Chloride per ICEMA Reference #11010 - Medication Standard Orders.

**Stable ROSC**

- Obtain a 12-lead ECG, regardless of 12-lead ECG reading, transport to the closest STEMI Receiving Center, per ICEMA Reference #9030 - Destination.
- Monitor ventilation to a capnography value between 35 mm Hg and 45 mm Hg.
- Utilize continuous waveform capnography to identify loss of circulation.
- For persistent profound shock and hypotension, administer Push Dose Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.
- Base hospital may order the following:
  - For post ROSC agitation, administer Midazolam per ICEMA Reference # 11010-Medication Standard Orders

**Termination of Efforts in the Prehospital Setting**

- The decision to terminate efforts in the field should take into consideration, first, the safety of personnel on scene, and then family and cultural considerations.
- Consider terminating resuscitative efforts in the field if no ROSC is achieved and capnography waveform reading remains less than 15 mm Hg after 20 minutes of HP CPR with ALS Interventions, and any of the following criteria are met:
  - No shocks were delivered.
  - Arrest not witnessed by EMS field personnel.
  - Persistent asystole, agonal rhythm or pulseless electrical activity (PEA) at a rate of less than 40 bpm.
- If patient has any signs of pending ROSC (i.e., capnography waveform trending upwards, PEA greater than 40 bpm), then consider transportation to a STEMI Receiving Center.
- Contact local law enforcement to advise of prehospital determination of death.
- Provide comfort and care for survivors.

## V. REFERENCES

| Number | Name |
|---|---|
| 9030 | Destination |
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |
| 13060 | Drowning/Submersion Injuries |

# ALTERED LEVEL OF CONSCIOUSNESS/SEIZURES - ADULT

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Patient exhibiting signs/symptoms of a possible altered level of consciousness characterized by a Glasgow Coma Score of less than 15 or less than patient's normal baseline.
- Suspected narcotic dependence, opiate overdose, hypoglycemia, traumatic injury, shock, toxicologic, alcoholism and assess possible cardiac causes.
- Tonic/clonic movements followed by a brief period of unconsciousness (post-ictal).
- Suspect status epilepticus for frequent or extended seizures.
- Consider carbon monoxide (CO) poisoning with any patient exposed to products of combustion.

## II. BLS INTERVENTIONS

- Oxygen therapy as clinically indicated. If CO poisoning suspected, administer 100% oxygen via non-rebreather mask per ICEMA Reference #13050 - Smoke Inhalation/CO Exposure/Suspected Cyanide Toxicity.
- Position patient as tolerated. If altered gag reflex with absence of traumatic injury, place in left lateral position.
- Place patient in spinal motion restriction per ICEMA Reference #14090 - Trauma - Adult (15 years of age and older).

  Obtain and assess blood glucose level. If indicated, administer Glucose - Oral per ICEMA Reference #11010 Medication - Standard Orders.
- If suspected opiate overdose with severely decreased respiratory drive, administer Naloxone per ICEMA Reference #11010 - Medication - Standard Orders.
- Assess patient for medication related reduced respiratory rate or hypotension.
- Assess and document response to therapy.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access.
- Obtain and assess blood glucose level. If indicated administer:
  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders, **or**
  - If unable to establish IV, Glucagon may be given one (1) time per ICEMA Reference #11010 - Medication - Standard Orders.

- If indicated, may repeat blood glucose level. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Place on cardiac monitor and obtain a 12-lead ECG.
- For tonic/clonic type seizure activity, administer:
  - Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.
  - Assess patient for medication related reduced respiratory rate or hypotension.
- For suspected opiate overdose with severely decreased respiratory drive, administer Naloxone per ICEMA Reference #11010 - Medication - Standard Orders.
- Assess and document response to therapy.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 13050 | Smoke Inhalation/CO exposure/Suspected Cyanide Toxicity |
| 14090 | Trauma - Adult (15 years of age and older) |

# BURNS - ADULT (15 years of age and older)

Burn patient requires effective communication and rapid transportation to the closest receiving hospital.

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Refer to ICEMA Reference #9030 - Destination policy.

## II. BLS INTERVENTIONS

- Break contact with causative agent (stop the burning process).
- Remove clothing and jewelry quickly, if indicated.
- Keep patient warm.
- Estimate % TBSA burned and depth using the “Rule of Nines”.
  - An individual’s palm represents 1% of TBSA and can be used to estimate scattered, irregular burns.
- Transport to ALS intercept or to the closest receiving hospital.

### A. Manage Special Considerations

- **Thermal Burns**: Stop the burning process. Do not break blisters. Cover the affected body surface with dry, sterile dressing or sheet.
- **Chemical Burns**: Brush off dry powder, if present. Remove any contaminated or wet clothing. Irrigate with copious amounts of saline or water.
- **Tar Burns**: Cool with water, do not remove tar.
- **Electrical Burns**: Remove from electrical source (without endangering self) with a nonconductive material. Cover the affected body surface with dry, sterile dressing or sheet.
- **Eye Involvement**: Continuous flushing with NS during transport. Allow patient to remove contact lenses if possible.
- **Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death On Scene.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Advanced airway as indicated.
- Airway Stabilization:

  Burn patients with respiratory compromise or potential for such, will be transported to the closest most appropriate receiving hospital for airway stabilization.
- IV access (warm IV fluids when available).

- *Unstable:* BP less than 90 mm HG and/or signs of inadequate tissue perfusion, start 2nd IV access.

  *IV NS* 500 ml boluses, may repeat to a maximum of 1000 ml.

- *Stable*: BP more than 90 mm HG and/or signs of adequate tissue perfusion.

  *IV NS* 500 ml per hour.

- Transport to appropriate facility.

  - *Minor Burn Classification*: Transport to the closest most appropriate receiving hospital.

  - *Moderate Burn Classification*: Transport to the closest most appropriate receiving hospital.

  - *Major Burn Classification*: Transport to the closest most appropriate Burn Center (San Bernardino County contact ARMC).

  - *Critical Trauma Patient (CTP) with Associated Burns:* Transport to the most appropriate Trauma Center.

- Burn patients with associated trauma, should be transported to the closest Trauma Center. Trauma base hospital contacted shall be made.

**A. <u>Manage Special Considerations</u>**

- **Electrical Burns**: Place AED on patient.

  - Electrical injuries that result in cardiac arrest shall be treated as medical arrests.

- **Respiratory Distress**: Use BVM as needed and transport to the nearest facility for airway control. Contact receiving hospital ASAP. Albuterol with Atrovent per ICEMA Reference #11010 -Medication - Standard Orders.

- **Deteriorating Vital Signs:** Transport to the closest most appropriate receiving hospital. Contact base hospital.

- **Pulseless and Apneic**: Transport to the closest most appropriate receiving hospital and treat according to ICEMA policies. Contact base hospital.

- **Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

- **Precautions and Comments**:

  - High flow oxygen is essential with known or potential respiratory injury. Beware of possible smoke inhalation.

  - Contact with appropriate advisory agency may be necessary for hazardous materials, before decontamination or patient contact.

- Do not apply ice or ice water directly to skin surfaces, as additional injury will result.

## IV. ALS INTERVENTIONS

- Advanced airway (as indicated).
- Airway Stabilization:

  Burn patients with respiratory compromise or potential for such, will be transported to the closest most appropriate receiving hospital for airway stabilization.
- Monitor ECG.
- IV/IO Access (Warm IV fluids when available).
  - *Unstable:* BP less than 90 mm HG and/or signs of inadequate tissue perfusion, start 2nd IV access.

    *IV/IO NS* 500 ml boluses, may repeat to a maximum of 1000 ml.
  - *Stable*: BP more than 90 mm HG and/or signs of adequate tissue perfusion.

    *IV/IO NS* 500 ml per hour.
- Treat pain as indicated.

  **Pain Relief**: Administer an appropriate analgesic per ICEMA Reference #14100 - Pain Management - Adult. Document vital signs and pain scale every five (5) minutes until arrival at destination.
- Transport to appropriate facility:
  - *CTP with associated burns,* transport to the closest Trauma Center.
  - Burn patients with associated trauma, should be transported to the closest Trauma Center. Trauma base hospital contacted shall be made.
- Insert nasogastric/orogastric tube as indicated.
- Refer to Section V - Burn Classifications below.

### A. <u>Manage Special Considerations</u>

- **Electrical Burns**: Monitor for dysrhythmias, treat according to ICEMA protocols.
  - Electrical injuries that result in cardiac arrest shall be treated as medical arrests.
- **Respiratory Distress**: Intubate patient if facial/oral swelling are present or if respiratory depression or distress develops due to inhalation injury.
  - Albuterol with Atrovent per ICEMA Reference #11010 - Medication - Standard Orders.

- Administer humidified oxygen, if available.
- Apply capnography.
- Awake and breathing patients with potential for facial/inhalation burns are not candidates for nasal tracheal intubation. CPAP may be considered, if indicated, after consultation with base hospital.

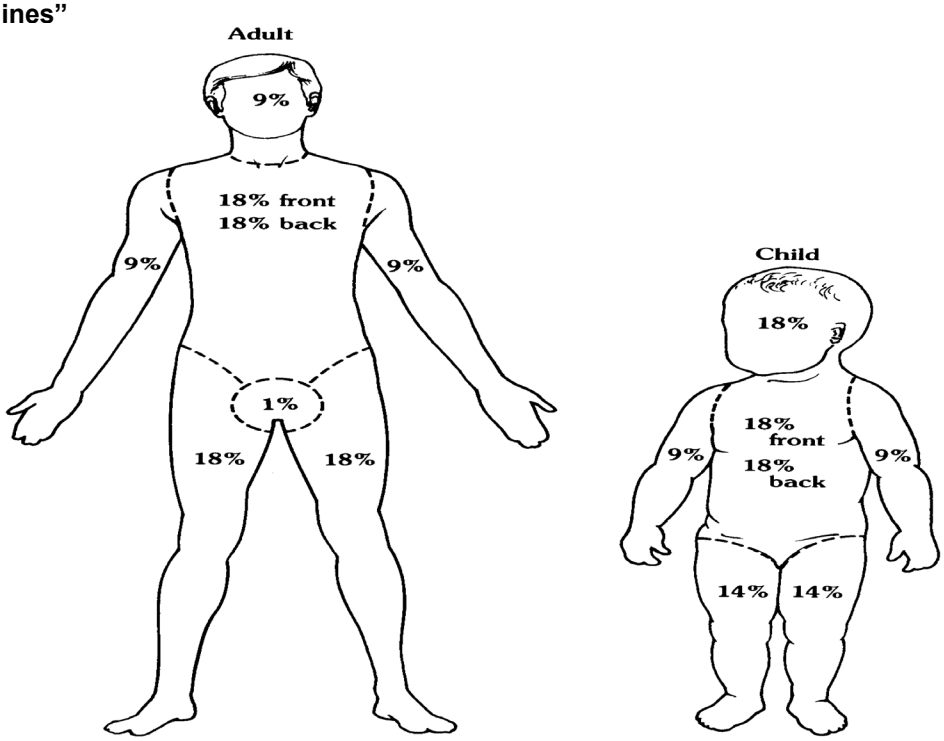
- **Deteriorating Vital Signs**: Transport to the closest receiving hospital. Contact base hospital.
- **Pulseless and Apneic**: Transport to the closest receiving hospital and treat according to ICEMA policies. Contact base hospital.
- **Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.
- **Precautions and Comments**:
  - Contact with appropriate advisory agency may be necessary for hazardous materials, before decontamination or patient contact.
  - Do not apply ice or ice water directly to skin surfaces, as additional injury will result.
- **Base Hospital Orders**: May order additional medications, fluid boluses and CPAP.

## V. BURN CLASSIFICATIONS

| **ADULT BURN CLASSIFICATION CHART** | **DESTINATION** | |
|---|---|---|
| **MINOR - ADULT**<br>• Less than 10% TBSA<br>• Less than 2% Full Thickness | **CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL** | |
| **MODERATE - ADULT**<br>• 10 - 20% TBSA<br>• 2 - 5% Full Thickness<br>• High Voltage Burn<br>• Suspected Inhalation Injury<br>• Circumferential Burn<br>• Medical problem predisposing to infection (e.g., diabetes mellitus, sickle cell disease) | **CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL** | |

| **MAJOR - ADULT** | **CLOSEST MOST APPROPRIATE BURN CENTER** | |
|---|---|---|
| • More than 20% TBSA burn in adults<br>• More than 5% Full Thickness<br>• Known Inhalation Injury<br>• Any significant burn to face, eyes, ears, genitalia, or joints | In San Bernardino County, contact: Arrowhead Regional Medical Center (ARMC) | |

**"Rule of Nines"**




## VI. REFERENCES

| Number | Name |
|---|---|
| 9030 | Destination |
| 11010 | Medication - Standard Orders |
| 14100 | Pain Management - Adult |
| 14250 | Determination of Death on Scene |

# STROKE TREATMENT - ADULT

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Patient exhibiting signs/symptoms of a possible stroke. These signs may include speech disturbances, altered level of consciousness, parasthesias, new onset seizures, dizziness, unilateral weakness and visual disturbances.

## II. BLS INTERVENTIONS

- Obtain patient oxygen saturation on room air. Titrate oxygen if clinically indicated, to maintain an oxygen saturation of 94% per ICEMA Reference #11010 - Medication - Standard Orders.
- Obtain blood glucose.

## III. LIMITED ALS (LALS)/ALS INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access.
- **Modified Los Angeles County Prehospital Stroke Screen (mLAPSS)**: A screening tool used by EMS field personnel to assist in identifying patients who may be having a stroke.

  **mLAPSS Criteria**: The patient is **mLAPSS positive**, if "yes" on Criteria #1 - 5 and exhibits unilateral weakness on Criteria #6.

| **mLAPSS Criteria** | **Yes** | **No** | |
|---|---|---|---|
| 1. Age over 17 years? | | | |
| 2. No prior history of seizure disorder? | | | |
| 3. New onset of neurologic symptoms in last 24 hours? | | | |
| 4. Patient was ambulatory at baseline prior to event? | | | |
| 5. Blood glucose between 60 and 400? | | | |
| 6. Exam (*look for obvious asymmetry):* | <u>Normal-Bilaterally</u> | <u>Right</u> | <u>Left</u> |
| • Facial Smile/Grimace | ☐ | ☐ Droop<br>☐ Normal | ☐ Droop<br>☐ Normal |
| • Grip | ☐ | ☐ Weak Grip<br>☐ Normal | ☐ Weak Grip<br>☐ Normal |
| | ☐ | ☐ No Grip<br>☐ Normal | ☐ No Grip<br>☐ Normal |
| • Arm Weakness | ☐ | ☐ Drifts Down<br>☐ Normal | ☐ Drifts Down<br>☐ Normal |
| | | ☐ Falls Down Rapidly<br>☐ Normal | ☐ Falls Down Rapidly<br>☐ Normal |

- If patient is mLAPSS positive, use LAMS to determine the stroke severity.
- Patients less than 17 years of age presenting as a suspected stroke, consider transporting to the closest stroke center.
- **Los Angeles Motor Score (LAMS)**: A scoring tool used by EMS providers to determine the severity of stroke on patients who are mLAPSS positive. If the total LAMS score is four (4) or greater, consider Large Vessel Occlusion (LVO).

| **LAMS Score Criteria** | | |
|---|---|---|
| FACE | 0 | Both sides move normally |
| | 1 | One side is weak or flaccid |
| ARM | 0 | Both sides move normally |
| | 1 | One side is weak |
| | 2 | One side is flaccid/does not move |
| GRIP | 0 | Both sides move normally |
| | 1 | One side is weak |
| | 2 | One side is flaccid/does not move |
| TOTAL SCORE | | |

- Ask when “last seen normal” or without stroke symptoms.
- If “last seen normal” plus transport time is less than 24 hours, or a “wake-up stroke”, transport to closest Stroke Receiving Center.
- If “last seen normal” plus transport time is greater than 24 hours, transport to the closest receiving hospital.
- If mLAPSS negative and stroke is still suspected, consult base hospital for destination.
- To ensure that there is no delay in treatment obtain and document on scene family phone number.
  - If family member is not present, it is recommended that the EMS field personnel bring the patients cell phone.
- Consider 12-lead ECG (ALS only).
- **Thrombolytic Assessment**: If time is available, and the patient or family can provide the information, assess the patient using the criteria listed below and report to ED personnel:

| **Thrombolytic Assessment Criteria** | **Yes** | **No** |
|---|---|---|
| Onset greater than 4.5 hours? | | |
| History of recent bleeding? | | |
| Use of anticoagulant? | | |
| Major surgery or serious trauma in the previous 14 days? | | |
| Sustained systolic blood pressure above 185 mm Hg? | | |
| Recent stroke or intracranial hemorrhage? | | |

## IV. REFERENCE

| **Number** | **Name** |
|---|---|
| 11010 | Medication - Standard Orders |

TRAUMA - ADULT (15 years of age and older)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Any trauma patient meeting Trauma Triage Criteria requiring rapid transportation to the closest Trauma Center.
- Refer to ICEMA Reference #9040 - Trauma Triage Criteria and ICEMA Reference #9030 - Destination.
- Contact the Trauma Center as soon as possible in order to activate the trauma team.
  - ➢ If the closest Trauma Center is outside ICEMA region, and no base orders or consult is needed, EMS field personnel may contact the hospital they will be transporting the patient to.
  - ➢ In Inyo and Mono Counties, the assigned base hospital shall be contacted for determination of appropriate destination.

**NOTE**: EMS field personnel are not authorized to evaluate patients with suspected concussion for purpose of return to play clearance.

## II. BLS INTERVENTIONS

- Ensure thorough initial assessment.
- Ensure patent airway, protecting cervical spine.
- Obtain oxygen saturation (if BLS equipped).
- Administer oxygen and/or ventilate as needed.
- Keep patient warm.
- For a traumatic full arrest, do not delay transport, initiate CPR, utilize the AED if indicated and transport to the closest trauma center.
- Mechanical cardiopulmonary resuscitation (mCPR) devices are contraindicated for trauma patients.
- When indicated, transport to ALS intercept or to the closest receiving hospital.

### A. <u>Manage Special Considerations</u>

- **Spinal Motion Restriction**: If the patient meets any of the following indicators using the acronym (NSAID):

  **N-**euro Deficit(s) present?
  **S-**pinal Tenderness present?
  **A-**ltered Mental Status?
  **I-**ntoxication?
  **D-**istracting Injury?

- Consider maintaining spinal alignment on the gurney, or using spinal motion restriction on an awake, alert and cooperative patient, without the use of a rigid spine board.

- Penetrating trauma without any NSAID indicators are not candidates for spinal motion restriction.

**NOTE**: The long backboard (LBB) is an extrication tool, whose purpose is to facilitate the transfer of a patient to a transport stretcher and is not intended, or appropriate for achieving spinal motion restriction. Judicious application of the LBB for purposes other than extrication necessitates that EMS field personnel ensure the benefits outweigh the risks. If a LBB is applied for any reason, patients should be removed as soon as it is safe and practical. LBB does not need to be reapplied on interfacility transfer (IFT) patients.

- **Abdominal Trauma**: Cover eviscerated organs with saline dampened gauze. Do not attempt to replace organs into the abdominal cavity.

- **Amputations**: Control bleeding. Rinse amputated part gently with sterile irrigation saline to remove loose debris/gross contamination. Place amputated part in dry, sterile gauze and in a plastic bag surrounded by ice (if available). Prevent direct contact with ice. Document in the narrative who the amputated part was given to.

  **Partial Amputation**: Splint in anatomic position and elevate the extremity.

- **Bleeding**:

  - Apply direct pressure and/or pressure dressing.

  - When direct pressure or pressure dressing fails, control life threatening bleeding of a severely injured extremity with the application of a tourniquet.

- **Chest Trauma**: If a wound is present, cover it with an occlusive dressing. If the patient's ventilations are being assisted, dress wound loosely, (do not seal). Continuously reevaluate patient for the development of tension pneumothorax.

- **Flail Chest**: Stabilize chest, observe for tension pneumothorax. Consider assisted ventilations.

- **Fractures**: **Immobilize** above and below the injury. Apply splint to injury in position found except:

  - **Femur**: Apply traction splint if indicated.

  - **Grossly angulated long bone with distal neurovascular compromise**: Apply gentle unidirectional traction to improve circulation.

  - **Check and document distal pulse before and after positioning**.

- **Genital Injuries**: Cover genitalia with saline soaked gauze. If necessary, apply direct pressure to control bleeding. Treat amputations the same as extremity amputations.

- **Head and Neck Trauma**: Place brain injured patients in reverse Trendelenburg (elevate the head of the backboard 15 - 20 degrees), if the patient exhibits no signs of shock.

  - **Eye**: Whenever possible protect an injured eye with a rigid dressing, cup or eye shield. Do not attempt to replace a partially torn globe, stabilize it in place with sterile saline soaked gauze. Cover uninjured eye.

  - **Avulsed Tooth**: Collect teeth, place in moist, sterile saline gauze and place in a plastic bag.

- **Impaled Object**: Immobilize and leave in place. Remove object if it interferes with CPR, or if the object is impaled in the face, cheek or neck and is compromising ventilations.

- **Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform identified BLS interventions and additional LALS interventions.

- Advanced airway (as indicated).

  - Unmanageable Airway: Transport to the closest most appropriate receiving hospital when the patient requires advanced airway and an adequate airway cannot be maintained with a BVM device.

- Establish IV access.

  - *Unstable*: If BP less than 90 mm Hg and/or signs of inadequate perfusion, start 2nd IV access.

  - *Stable*: Maintain IV if BP more than 90 mm Hg and/or signs of adequate tissue perfusion.

**Blunt Trauma**:

- *Unstable*: Establish IV NS administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml.

- *Stable*: Saline lock only, do not administer IV fluids.

**Penetrating Trauma**:

- Saline lock only, do not administer IV fluids.

**Isolated Closed Head Injury**:

- *Unstable:* Establish IV NS, administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml.

- *Stable*: Saline lock only, do not administer IV fluids.

**Isolated Extremity Trauma**:

- *Unstable:* Establish IV NS, administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml.

- *Stable*: Saline lock only, do not administer IV fluids.

**Crush Injuries with Suspected Hyperkalemia** *(Prolonged entrapment and/or abnormal EKG findings)***:**

- Establish IV NS, administer 500 ml bolus. May repeat one (1) time to a maximum of 1000 ml.

- Transport to appropriate hospital.

**A. <u>Manage Special Considerations</u>**

- Consider Push Dose Epi for persistent shock due to trauma where cardiac arrest is imminent, per ICEMA Reference #11010 - Medication - Standard Orders.

- **Spinal Motion Restriction**: LALS personnel should remove LBB devices from patients placed in full spinal motion restriction precautions by first responders and BLS personnel if the patient does not meet any of the following indicators using the acronym (NSAID):

  **N-**euro Deficit(s) present?
  **S-**pinal Tenderness present?
  **A-**ltered Mental Status?
  **I-**ntoxication?
  **D-**istracting Injury?

- **Impaled Object**: Remove object upon Trauma base hospital physician order, if indicated.

**B. <u>Traumatic Cardiac Arrest</u>**

- If patient does not meet determination of death on scene criteria, initiate the resuscitation and rapid transport of traumatic cardiac arrest patients to the closest trauma center if the distance is less than 20 minutes from the closest receiving center.

- All other procedures may be deferred for immediate ambulance loading of patient and performed enroute, with the exception of hemorrhage control, needle thoracostomy, and initiation of CPR.

- For traumatic pediatric arrest contact a pediatric trauma base hospital for destination.
- If organized rhythm is not restored after defibrillation x 3 or patient converts to non-shockable rhythm; refer to ICEMA Reference #12010 Determination of Death on Scene.

**C.** **<u>Determination of Death on Scene</u>**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

- Severe blunt force traumatic arrest, pulseless, without signs of life and cardiac electrical activity less than 40 bpm, if indicated, consider pronouncing on scene.
- Penetrating Traumatic arrest, in asystole in at least two (2) leads and no reported vital signs (palpable pulse, and or spontaneous respirations during the EMS encounter with the patient, contact the trauma base hospital for determination of death on scene.
- If the patient does not meet the "Obvious Death Criteria" per ICEMA Reference #14250 - Determination of Death on Scene, contact the Trauma base hospital for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient.
- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without Trauma base hospital contact.
- **Precautions and Comments**:
  - Electrical injuries that result in cardiac arrest shall be treated as medical arrests.
  - Consider cardiac etiology in older patients in cardiac arrest with low probability of mechanism of injury.
  - If the patient is not responsive to trauma-oriented resuscitation, consider medical etiology and treat accordingly.
  - Unsafe scene may warrant transport despite low potential for survival.

## IV. ALS INTERVENTIONS

- Perform identified BLS and LALS intervention and the additional ALS interventions.
- Advanced Airway (as indicated):
  - Unmanageable Airway: If an adequate airway cannot be maintained with a BVM device; **<u>and</u>** the paramedic is unable to intubate or insert SGA or perform a successful needle cricothyrotomy (if indicated), **<u>then</u>** transport to the closest receiving hospital and follow ICEMA Reference #9010 - Continuation of Care (San Bernardino County Only).
- Monitor ECG.
- Establish IV/IO access.
  - *Unstable*: If BP less than 90 mm Hg and/or signs of inadequate perfusion, start 2nd IV access.
  - *Stable*: Maintain IV/IO if BP more than 90 mm Hg and/or signs of adequate tissue perfusion.

**Blunt Trauma**:

- *Unstable*: Establish IV/IO NS administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml.
- *Stable*: Saline lock only, do not administer IV fluids.

**Penetrating Trauma**:

- Saline lock only, do not administer IV fluids.

**Isolated Closed Head Injury**:

- *Unstable:* Establish IV/IO NS, administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml.
- *Stable*: Saline lock only, do not administer IV fluids.

**Isolated Extremity Trauma**:

- *Unstable:* Establish IV/IO NS, administer 250 ml bolus. May repeat one (1) time to a maximum of 500 ml (avoid placement on injured extremity).
- *Stable*: Saline lock only, do not administer IV fluids.

**Crush Injuries with Suspected Hyperkalemia** *(Prolonged entrapment and/or abnormal EKG findings)*

- Establish IV/IO NS, administer 500 ml bolus. May repeat one (1) time to a maximum of 1000 ml.
- Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
- Calcium Chloride per ICEMA Reference #11010 - Medication - Standard Orders.
- Sodium Bicarbonate per ICEMA Reference #11010 - Medication - Standard Orders.

- Tranexamic Acid (TXA) administration for blunt or penetrating traumas:
  - Must be within three (3) hours of injury and must have either:
    - Signs and symptoms of hemorrhagic shock with SBP less than 90 mm Hg.
    - Significant hemorrhage with heart rate greater than or equal to 120.
    - Bleeding not controlled by direct pressure or tourniquet.
    - Pediatric administration is not indicated.
  - **Blunt Trauma**:
    - For signs of hemorrhagic shock meeting inclusion criteria above, administer TXA per ICEMA Reference #11010 - Medication - Standard Orders.

- **Penetrating Trauma**:
  - For signs of hemorrhagic shock meeting inclusion criteria above, administer TXA per ICEMA Reference #11010 - Medication - Standard Orders.

- Blood transfusion for hemorrhagic shock due to severe traumatic injury:
  **[LOSOP for Approved Providers Only]**
  - SBP <70 or unable to obtain **or**
  - SBP < 90 AND HR ≥ 110 (SI >1.2) **or**
  - Traumatic arrest witnessed by EMS

- **Blunt Trauma**:
  - Administer LTO+WB or pRBCs IV/IO per ICEMA Reference #11010 - Medication - Standard Orders.

- **Penetrating Trauma**:
  - Administer LTO+WB or pRBCs IV/IO per ICEMA Reference #11010 - Medication - Standard Orders.

- Transport to appropriate Trauma Center.
- Insert nasogastric/orogastric tube as indicated.

**A. <u>Manage Special Considerations</u>**

- When field blood transfusion is available prioritize blood products prior to IV fluids if criteria is met.
- As a temporary method for chest decompression, in the management of suspected tension pneumothorax, perform needle thoracostomy.
  - ***Clinical Indications:***
    - *Patients with hypotension (SBP less than 90), clinical signs of shock, and at least one of the following signs.*
    - *Jugular vein distention.*
    - *Tracheal deviation away from the side of the injury (often a late sign).*
    - *Absent or decreased breath sounds on the affected side.*
    - *Increased resistance when ventilating a patient*
- The midaxillary line at the 5th intercostal space is the preferred site.
  .
- Consider bilateral needle thoracostomy if no improvement or in traumatic cardiac arrest.

- **Pain Relief for Acute Traumatic Injuries**:
  - Administer an appropriate analgesic per ICEMA Reference #14100 - Pain Management. Document vital signs and pain scale every five (5) minutes until arrival at destination
  - Consider Ondansetron per ICEMA Reference #11010 - Medication - Standard Orders.

## V. REFERENCES

| Number | Name |
|---|---|
| 9010 | Continuation of Care |
| 9030 | Destination |
| 9040 | Trauma Triage Criteria |
| 11010 | Medication - Standard Orders |
| 14010 | Respiratory Emergencies - Adult |
| 14050 | Cardiac Arrest - Adult |
| 14100 | Pain Management |
| 14250 | Determination of Death on Scene |

PAIN MANAGEMENT

## I. PURPOSE

To define the prehospital use of analgesics for pain management to patients with mild to severe pain.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

The prehospital use of analgesics should be considered for the following:

- Acute traumatic injuries
- Acute abdominal/flank pain
- Burn injuries
- Cancer pain
- Sickle Cell Crisis
  - The inability to recall a specific traumatic incident does not necessarily preclude the administration of pain medication.

## III. BLS INTERVENTIONS

- Attempt to calm, reduce anxiety, and allow patient to assume position of comfort.
- Utilize ice, immobilize and splint the affected area as indicated.
- Assess patient's level of pain using the pain scale from 1 - 10 with 10 being the worst pain.
- Administer oxygen as clinically indicated per ICEMA Reference # 12010 - Patient Care Guidelines.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Consider early vascular access.
- Place on cardiac monitor. Obtain capnography, monitoring waveform and numerical value as clinically indicated.
- Monitor and assess patient vital signs prior to administration of any analgesic.
- For treatment of pain as needed with a blood pressure of greater than 100 systolic:
  - Fentanyl per ICEMA Reference # 11010 - Medication - Standard Orders (adult or pediatric patients), for moderate to severe pain 6-10 on pain scale **or**

- Ketamine per ICEMA Reference # 11010 - Medication - Standard Orders (Adult Only- 15 Years of Age and Older), for moderate to severe pain 6-10 on pain scale **or**

- Tylenol per ICEMA Reference # 11010 - Medication - Standard Orders (adult or pediatric patients), for mild to moderate pain 1-5 on pain scale or in moderate to severe pain where other medications are contraindicated or deferred.

- For treatment of pain as needed with a blood pressure less than 100 systolic:

  - Ketamine per ICEMA Reference # 11010 - Medication - Standard Orders, (Adult Only- 15 Years of Age and Older) for moderate to severe pain 6-10 on pain scale **or**

  - Tylenol per ICEMA Reference # 11010 - Medication - Standard Orders (adult or pediatric patients), for mild to moderate pain 1-5 on pain scale or in moderate to severe pain where other medications are contraindicated or deferred.

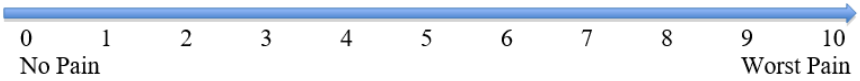
- Continuous monitoring of patients ECG and capnography is required for administration of Ketamine or fentanyl.

- Reassess and document vital signs, capnography, and pain scores every five (5) minutes.

## V. SPECIAL CONSIDERATIONS

- Shifting from one analgesic while treating a patient requires base hospital contact.

This is the official pain scale to be used in patient assessment and documented on the PCR.




## VI. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure- Standard Order |
| 14240 | Suspected Acute Myocardial Infarction (AMI) |
| 14070 | Burns- Adult |
| 14090 | Trauma- Adult |
| 14190 | Burns-Pediatric |
| 14180 | Trauma-Pediatric |
| 13030 | Cold Related Emergencies |

BEHAVIORAL EMERGENCIES

## I. PURPOSE

To provide timely and appropriate treatment for patients that are violent, potentially violent, or who may harm themselves or others, including the potential use of restraints in the field or during transport.

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

Symptoms of dangerous agitation, confusion and hallucinations, erratic behavior, profuse diaphoresis, elevated vital signs, hyperthermia, unexplained strength and endurance, and behaviors that include clothing shedding, shouting, and extreme thrashing when restrained.

This policy is not intended to negate the need for law enforcement personnel to use appropriate restraint equipment to establish scene-management control. Restraints should be applied by law enforcement whenever possible. If applied, an officer is required to remain available at the scene or during transport to remove or adjust the restraints for patient safety per ICEMA Reference #6060 - Patient Restraints.

## III. BLS INTERVENTIONS

- Approach patient in a calm and cautious manner.
- Ensure patent airway, obtain oxygen saturation and apply oxygen as needed.
- Restraint equipment must be either padded leather restraints or soft restraints (e.g., posey, velcro or seat-belt type).
- Apply four (4) point restraints as clinically indicated. Transport of a restrained patient should be in low to high Fowler's position. Never transport a patient in a prone position while restrained. Transport of a patient supine, while restrained, can affect respiratory function and constant monitoring of respiratory status is required.
- Perform cooling measures as clinically indicated.
- If suspected hypoglycemia, obtain blood glucose.

## IV. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.

## V. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- If patient meets criteria for potentially fatal and dangerous agitation, administer Midazolam per ICEMA Reference #11010 - Medication - Standard Orders. Do not delay administration of Midazolam due to lack of vascular access as IM or IN is preferred in this circumstance.
- Minors under the age of nine (9) base hospital order only.

- Place on cardiac monitor. Continuous monitoring of a patient after administration of Midazolam is required.
- Obtain capnography, monitor waveform and numerical value. Apnea can be the result of the use of Midazolam and other medications.
- Once conditions are safe, establish IV.
- Base hospital may order:
  - For potentially fatal and dangerous agitation and suspected metabolic acidosis/hyperkalemia administer Sodium Bicarbonate per ICEMA Reference #11010 - Medication - Standard Orders.

## VI. REFERENCES

| Number | Name |
|---|---|
| 6060 | Patient Restraints |
| 11010 | Medication - Standard Orders |

# RESPIRATORY EMERGENCIES - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Asthma
- Toxic Inhalation
- Difficult Breathing
- Stridor at Rest (Croup)

## II. BLS INTERVENTIONS

- Assess environment and determine possible causes.
- If safe remove patient from any suspected contaminant.
- Recognize signs and symptoms of respiratory distress for age.
- Reduce anxiety, assist patient to assume position of comfort.
- Oxygen administration as clinically indicated (humidified oxygen preferred).

## III. LIMITED ALS (LALS) INTERVENTIONS

- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
- If no response to Albuterol, consider Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.
- Obtain vascular access at a TKO rate.
- If allergic reaction suspected, refer to ICEMA Reference #14140 - Allergic Reactions - Pediatric (Less than 15 years of age).
- Base hospital physician may order additional medications or interventions as indicated by patient condition.

## IV. ALS INTERVENTIONS

- Maintain airway with appropriate adjuncts, obtain $O_2$ saturation on room air if possible.
  - ➢ Albuterol with Atrovent, per ICEMA Reference #11010 - Medication - Standard Orders.
- If no response to Albuterol and Atrovent, consider Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders. Obtain vascular access at a TKO rate.

- If allergic reaction suspected, refer to ICEMA Reference #14140 - Allergic Reactions - Pediatric (Less than 15 years of age).

- Base hospital physician may order additional medications or interventions as indicated by patient condition.

- **CROUP ASSOCIATED WITH STRIDOR AT REST (CRITICAL FINDING)**

  - Administration of nebulized epinephrine to pediatric patients greater than 8 years of age is not permitted.

  - Nebulized Epinephrine 0.5 mg/kg (1 mg/ml) 1:1000, mixed with NS for minimum volume 3 ml, not to exceed a max single dose of 5mg.

## V. BASE HOSPITAL MAY ORDER THE FOLLOWING

- For severe asthma/respiratory distress that has failed to respond to the other previous treatments, administer Magnesium Sulfate per ICEMA Reference #7040 - Medication - Standard Orders.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 14140 | Allergic Reactions - Pediatric (Less than 15 years of age) |

# AIRWAY OBSTRUCTION - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Universal sign of distress.
- Sudden alteration in respiratory effort or signs of obstruction - coughing, gagging, stridor, wheezing, or apnea.
- Altered level of consciousness (for younger children this is measured by the inability to recognize caregiver, no aversion to being cared for by EMS field personnel, limp and/or ineffective cry).

## II. BLS INTERVENTIONS

### RESPONSIVE

- Assess for ability to cry, speak or cough (e.g., “are you choking?”).
- Administer abdominal thrusts (repeated cycles of five (5) back slaps and five (5) chest thrusts for infant less than one (1) year), until the foreign body obstruction is relieved or until patient becomes unresponsive.
- After obstruction is relieved, reassess and maintain ABCs.
- Obtain oxygen saturation on room air if possible.
- Administer oxygen.
- If responsive, place in position of comfort, enlisting help of child’s caregiver if needed. If child is uninjured but unresponsive with adequate breathing and a pulse, place in recovery position.

### UNRESPONSIVE

- Position patient supine (for suspected trauma maintain in-line axial stabilization). Place under-shoulder support to achieve neutral cervical spinal position if indicated.
- Begin CPR, starting with thirty (30) compressions.
- Open airway using the head tilt-chin lift method (for suspected trauma, use jaw thrust). Remove object if visible.
- If apneic, attempt two (2) ventilations with bag-valve mask. If no chest rise or unable to ventilate, continue cycles of thirty (30) compressions to two (2) ventilations until obstruction is relieved or able to ventilate.
- If apneic and able to ventilate, provide one (1) breath every three (3) to five (5) seconds. Confirm that pulses are present and reassess every two (2) minutes.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- If obstruction persists continue with compressions until obstruction is relieved or arrival at hospital.
- Transport to closest receiving hospital for airway management.

## IV. ALS INTERVENTIONS

- If obstruction persists and unable to ventilate, attempt to visualize and remove visible foreign body with Magill forceps and attempt to ventilate.
- If obstruction persists, consider Needle Cricothyrotomy per ICEMA Reference #11020 - Procedure - Standard Orders.

## V. REFERENCE

| Number | Name |
|---|---|
| 11020 | Procedure - Standard Orders |

# ALLERGIC REACTIONS - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Signs and Symptoms of an acute allergic reaction.
- History of Exposure to possible allergen.

## II. BLS INTERVENTIONS

- Recognize signs/symptoms of respiratory distress for age.
- Reduce anxiety, assist patient to assume POC.
- Oxygen administration as clinically indicated (humidified oxygen preferred).
- Assist patient with self-administration of prescribed Epinephrine device if available.
- For anaphylaxis only, administer Epinephrine Auto-Injector per ICEMA Reference #11010 - Medication - Standard Orders.
- Assist patient with self-administration of prescribed Diphenhydramine.

## III. LIMITED ALS (LALS) INTERVENTIONS - PEDIATRIC (Less than 15 years of age)

- Perform activities identified in the BLS Interventions.
- Maintain airway with appropriate adjuncts, obtain oxygen saturation on room air if possible.
- Establish IV/IO access if indicated.
- For symptomatic hypotension with poor perfusion, consider fluid bolus of 20 ml/kg of NS not to exceed 300 ml NS, and repeat as indicated.
- Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
- If no response to Albuterol, consider Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.
- For anaphylactic shock (e.g., no palpable radial pulse and a depressed level of consciousness), administer Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Albuterol with Atrovent per ICEMA Reference #11010 - Medication - Standard Orders.
- If no response to Albuterol and Atrovent, consider Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.

- Administer Diphenhydramine per ICEMA Reference #11010 - Medication - Standard Orders for patients two (2) years of age or older.

- If apneic and unable to ventilate, consider oral endotracheal intubation per ICEMA Reference #11020 - Procedure - Standard Orders for patients who are taller than the maximum length of a pediatric emergency measuring tape (Broselow, etc.) or equivalent measuring from the top of the head to the heal of the foot.

- Base hospital may order additional medication dosages and additional fluid boluses.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# CARDIAC ARREST - PEDIATRIC (Less than 15 years of age)

High performance (HP) CPR is an organized approach to significantly improve the chance of survival for patients who suffer an out-of-hospital cardiac arrest (OHCA). Return of spontaneous circulation (ROSC) is resumption of sustained perfusing cardiac activity associated with significant respiratory effort after cardiac arrest. Signs of ROSC include breathing, coughing, patient movement and a palpable pulse, or a measurable blood pressure without the use of an automatic compression device.

The principles for HP CPR include:

- Minimize interruptions of chest compressions.
- Compression rate shall be between 100 - 120 per minute allowing full chest recoil at a depth of at least one-third (1/3) the anteroposterior diameter of the chest until the age of puberty.
- Avoid compressor fatigue by rotating compressors every two (2) minutes.
- Avoid hyperventilation as it can decrease survival.
- Ventilate at a rate of 12 - 20 per minute. Ventilation rate decreases as patient age increases. Volumes shall be the minimum necessary to cause chest rise.
- For cardiac arrest related to drowning, refer to ICEMA Reference # 13060- Drowning/Submersion Injuries.

Advanced airways can be safely delayed in OHCA patients until ROSC is achieved if the airway is effectively managed by BLS Interventions. BVM offers excellent oxygenation and ventilation without disrupting high quality compressions.

Whenever possible, provide family members with the option of being present during the resuscitation of an infant or a child. For any termination of efforts, base hospital contact is required.

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Cardiac arrest in a non-traumatic setting. Consider the potential causes of arrest for age.

## II. BLS INTERVENTIONS

- Assess patient, begin HP CPR, and maintain appropriate BLS airway measures.
- If available, utilize AED for patients one (1) year of age or older. To minimize the “hands off” interval before a rhythm analysis/shock, complete chest compressions cycle, without an added pause for ventilations or pulse check just before rhythm analysis.
- If shock is advised, perform HP CPR compressions while AED charging. Remove hands from patient and deliver shock then immediately resume uninterrupted HP CPR for two (2) minutes.
- Do not delay HP CPR for post-shock pulse check or a rhythm analysis.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Initiate HP CPR while applying the AED.
- Obtain IO/IV access (IO is preferred for under nine (9) years of age).
- For continued signs of inadequate tissue perfusion, administer fluid bolus of NS. Reassess after each bolus. May repeat two (2) times for continued signs of inadequate tissue perfusion.
  - 1 day to 8 years: 20 ml/kg NS
  - 9 to 14 years: 300 ml NS

## IV. ALS INTERVENTIONS

- Initiate HP CPR and continue appropriate BLS Interventions while applying the cardiac monitor without interruption to chest compressions.
- Determine the cardiac rhythm and defibrillate at 2 j/kg (or manufacturer's recommended equivalent) if indicated. After defibrillation, immediately resume HP CPR. Begin a two (2) minute cycle of HP CPR.
- Obtain IO/IV access (IO is preferred).
- Utilize continuous quantitative waveform capnography, for monitoring of patient's airway, the effectiveness of chest compressions and for early identification of ROSC. Document the waveform and the capnography number in mm Hg in the ePCR.
- Continue with BLS airway management ensuring adequate ventilations. BLS airways should be maintained during active CPR.
- Endotracheal intubation is the advanced airway of choice if BLS airway does not provide adequate ventilation. Endotracheal intubation may only be performed on patients who are taller than maximum length of a pediatric emergency measuring tape (Broselow, etc.) or equivalent, measuring from the top of the head to the heel of the foot per ICEMA Reference #11020 - Procedure - Standard Orders.

  **NOTE**: Capnography **shall** be used for all cardiac arrest patients.
- Insert NG/OG tube per ICEMA Reference #11020 - Procedure - Standard Orders.

**<u>Ventricular Fibrillation/Pulseless Ventricular Tachycardia</u>**

- Initial defibrillation is administered at 2 j/kg (or manufacturer's recommended equivalent). Second defibrillation is administered at 4 j/kg. Third and subsequent defibrillation attempts should be administered at 10 j/kg not to exceed the adult dose.
- Perform HP CPR immediately after each defibrillation for two (2) minutes without assessing the post-defibrillation rhythm.

- Administer Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders every five (5) minutes, without interruption of HP CPR, unless capnography indicates possible ROSC.

- Reassess rhythm for no more than 10 seconds after each two (2) cycles of HP CPR. If VF/VT persists, defibrillate as indicated above.

- After two (2) cycles of HP CPR, consider administering Lidocaine per ICEMA Reference #11010 - Medication - Standard Orders, may repeat.

- If patient remains in pulseless VF/VT after 20 minutes of HP CPR, consult base hospital.

**Pulseless Electrical Activity/Asystole**

- Assess for reversible causes and initiate treatment.

- Continue HP CPR with evaluation of rhythm (no more than 10 seconds) every two (2) minutes.

- Administer initial fluid bolus of 20 ml/kg NS for all ages, may repeat at:

  - 1 day to 8 years: 20 ml/kg NS

  - 9 to 14 years: 300 ml NS

- Administer Epinephrine, per ICEMA Reference #11010 - Medication - Standard Orders every five (5) minutes without interruption of HP CPR.

**Stable ROSC**

- Obtain a 12-lead ECG, upload and document then transport to the closest receiving hospital.

- Utilize continuous waveform capnography, to identify loss of circulation.

- Obtain blood glucose level. If indicated, administer:

  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.

  - May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders if indicated.

- For suspected opiate overdose, administer Naloxone per ICEMA Reference #11010 - Medication - Standard Orders.

- For continued signs of shock and hypotension with SBP of less than 70 mm Hg **after** successful resuscitation administer Push Dose Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders.

- Base hospital physician may order additional medications or interventions as indicated by patient condition.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |
| 13060 | Drowning/Submersion Injuries |

# ALTERED LEVEL OF CONSCIOUSNESS - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Patient exhibits inappropriate behavior for age.
- History or observation of an Apparent Life-Threatening Event (ALTE).

## II. BLS INTERVENTIONS

- Assess environment and determine possible causes for illness.
- Spinal motion restriction, if clinically indicated.
- Oxygen therapy, if clinically indicated.
- Airway management, as indicated (OPA/NPA, BVM ventilation).
- Obtain and assess blood glucose level. If indicated, administer Glucose - Oral per ICEMA Reference #11010 - Medication - Standard Orders.
- If suspected narcotic overdose with severely decreased respiratory drive, administer Naloxone per ICEMA Reference #11010 - Medication - Standard Orders.
- Obtain patient temperature. Begin cooling measures if temperature is elevated or warming measures if temperature is decreased.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access.
- For symptomatic hypotension with poor perfusion, consider fluid bolus of 20 ml/kg of NS not to exceed 300 ml NS.
- Obtain and assess blood glucose level. If indicated, administer:
  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
  - May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders if indicated.
  - If unable to establish an IV, consider Glucagon per ICEMA Reference #11010 - Medication - Standard Orders.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Establish advanced airway as indicated per ICEMA Reference #11020 - Procedure - Standard Orders.

- Place on cardiac monitor.
- Base hospital physician may order additional medication dosages and additional fluid boluses.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# SEIZURE - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Tonic/clonic movements followed by a brief period of unconsciousness (postictal).
- Suspect status epilepticus for frequent or extended seizures.
- History of prior seizures, narcotic dependence or diabetes.
- Febrile seizures (patients under four (4) years of age).
- Traumatic injury.

## II. BLS INTERVENTIONS

- Protect patient from further injury; spinal motion restriction if indicated.
- Assure and maintain airway patency after cessation of seizure, with oxygen therapy as indicated.
- Airway management as indicated (OPA/NPA, BVM ventilation).
- Obtain and assess blood glucose level. If indicated administer Glucose - Oral per ICEMA Reference #11010 Medication - Standard Orders.
- Position patient in left lateral position in absence of traumatic injury; watch for absent gag reflex.
- Remove excess clothing and begin cooling measures if patient is febrile.
- Protect patient during transport by padding appropriately.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access.
- Obtain blood glucose level, if indicated administer:
  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
  - May repeat blood glucose level. Repeat Dextrose per ICEMA Reference #11010 - Medication - Standard Orders if indicated.
  - Glucagon per ICEMA Reference #11010 - Medication - Standard Orders, if unable to start an IV.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Establish advanced airway as clinically indicated per ICEMA Reference #11020 - Procedure - Standard Orders for patients who are taller than the maximum length of a pediatric emergency measuring tape (Broselow, etc.) or equivalent measuring from the top of the head to the heel of the foot.
- Place on cardiac monitor if indicated.
- For tonic/clonic type seizure activity administer:
  - Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.
  - Assess and document response to therapy.
  - Base hospital may order additional medication dosages or a fluid bolus.

## V. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

TRAUMA - PEDIATRIC (Less than 15 years of age)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Any pediatric trauma patient less than 15 years of age meeting trauma triage criteria requiring rapid transportation to the closest pediatric trauma center.

- Refer to ICEMA Reference #9040 - Trauma Triage Criteria and ICEMA Reference #9030 - Destination.
- Contact the receiving pediatric trauma center as soon as possible in order to activate the pediatric trauma team.
  - ➢ Inyo and Mono Counties contact the assigned base hospital for determination of appropriate destination.

**NOTE**: EMS field personnel are not authorized to evaluate patients with suspected concussion for the purpose of return to play clearance.

## II. BLS INTERVENTIONS

- Ensure thorough initial assessment.
- Ensure patient airway, protecting cervical spine.
- Oxygen and/or ventilate as needed, $O_2$ saturation (if BLS equipped).
- Keep patient warm and reassure.
- For a traumatic full arrest, an AED may be utilized, if indicated.
- Transport to ALS intercept or to the closest receiving hospital.

### A. <u>Manage Special Considerations</u>

- **Spinal Motion Restriction**: Using age-appropriate assessments, if the patient meets any of the following indicators using the acronym (NSAID):

  **N-**euro Deficit(s) present?
  **S-**pinal Tenderness present?
  **A-**ltered Mental Status?
  **I-**ntoxication?
  **D-**istracting Injury?

  - ➢ Consider maintaining spinal alignment on the gurney, or using spinal motion restriction on an awake, alert and cooperative patient, without the use of a rigid spine board.
  - ➢ Penetrating trauma without any NSAID indicators are not candidates for spinal immobilization using spine board.

- **Spinal Motion Restriction with use of a Rigid Spine Board**: If the use of a rigid, spine board is indicated, and the level of the patient's head is greater than that of the torso, use approved pediatric spine board with a head drop or arrange padding on the board so that the ears line up with the shoulders and keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.

- **Abdominal Trauma**: Cover eviscerated organs with saline dampened gauze. Do not attempt to replace organs into the abdominal cavity.

- **Amputations**: Control bleeding. Rinse amputated part gently with sterile irrigation saline to remove loose debris/gross contamination. Place amputated part in dry, sterile gauze and in a plastic bag surrounded by ice (if available). Prevent direct contact with ice. Document in the narrative who the amputated part was given to.

  - **Partial amputation**: Splint in anatomic position and elevate the extremity.

- **Chest Trauma**: If a wound is present, cover it with an occlusive dressing. If the patient's ventilations are being assisted, dress wound loosely, (do not seal). Continuously re-evaluate patient for the development of tension pneumothorax.

- **Flail Chest**: Stabilize chest, observe for tension pneumothorax. Consider assisted ventilations.

- **Fractures**: Immobilize above and below the injury. Apply splint to injury in position found except:

  - **Femur**: Apply traction splint if indicated.

  - **Grossly angulated long bone with distal neurovascular compromise**: Apply gentle unidirectional traction to improve circulation.

  - **Check and document distal pulse before and after positioning**.

- **Genital Injuries**: Cover genitalia with saline soaked gauze. If necessary, apply direct pressure to control bleeding. Treat amputations the same as extremity amputations.

- **Head and Neck Trauma**: Place brain injured patients in reverse Trendelenburg (elevate the head of the backboard 15 - 20 degrees), if the patient exhibits no signs of shock.

  - **Eye**: Whenever possible protect an injured eye with a rigid dressing, cup or eye shield. Do not attempt to replace a partially torn globe - stabilize it in place with sterile saline soaked gauze. Cover uninjured eye.

  - **Avulsed Tooth**: Collect teeth, place in moist, sterile saline gauze and place in a plastic bag.

- **Impaled Object**: Immobilize and leave in place. Remove object if it interferes with CPR, or if the object is impaled in the face, cheek or neck and is compromising ventilations.

- **Traumatic Arrest**: CPR if indicated. May utilize an AED if indicated.

- **Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform identified BLS interventions and additional LALS interventions.

  - Unmanageable Airway: When an adequate airway cannot be maintained by a BVM device, transport to the closest most appropriate receiving hospital.

- IV Access (warm IV fluids when available).

  - *Unstable:* Vital signs (age appropriate) and/or signs of inadequate tissue perfusion, start 2nd IV access.

    Administer 20 ml/kg NS bolus IV.

  - *Stable*: Vital signs (age appropriate) and/or signs of adequate tissue perfusion.

    Saline lock only, do not administer IV fluids.

- Transport to appropriate hospital. Pediatric patients identified as CTP will be transported to a Pediatric Trauma Center when there is less than a 20 minute difference in transport time to the Pediatric Trauma Center versus the closes Trauma Center.

### A. <u>Manage Special Considerations</u>

- Consider Push Dose Epi for persistent shock due to trauma where cardiac arrest is imminent, per ICEMA Reference #11010 - Medication - Standard Orders

- **Spinal Motion Restriction:** LALS personnel should remove LBB devices from patients placed in full spinal motion restriction precautions by first responders and BLS personnel if the patient does not meet any of the following indicators while considering age-appropriate assessments when using the acronym (NSAID):

  **N-**euro Deficit(s) present?
  **S-**pinal Tenderness present?
  **A-**ltered Mental Status?
  **I-**ntoxication?
  **D-**istracting Injury?

- **Impaled Object**: **Remove** object upon trauma base hospital physician order, if indicated.

### B. Determination of Death on Scene: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

- *Severe Blunt Force Trauma Arrest*: If indicated, transport to the closest receiving hospital.

- *Penetrating Trauma Arrest*: If indicated, transport to the closest receiving hospital.

- If the patient does not meet the "Obvious Death Criteria" in ICEMA Reference #14250 - Determination of Death on Scene, contact the Trauma base hospital for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma, and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient.

- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without trauma base hospital contact.

- **Precautions and Comments**:

  - Electrical injuries that result in cardiac arrest shall be treated as medical arrests.

  - Confirm low blood sugar in children and treat as indicated with altered level of consciousness.

  - Suspect child maltreatment when physical findings are inconsistent with history. Remember reporting requirements for suspected child maltreatment.

  - Unsafe scene may warrant transport despite low potential for survival.

## IV. ALS INTERVENTIONS

- Perform identified BLS and LALS interventions and the additional ALS interventions.

- Establish advanced airway as indicated per ICEMA Reference #11020 -Procedure - Standard Orders.

  - Unmanageable Airway: If an adequate airway cannot be maintained with a BVM device; **and** the paramedic is unable to intubate, insert SGA or perform a successful needle cricothyrotomy (if indicated), **then** transport to the closest receiving hospital and follow ICEMA Reference #9010 - Continuation of Care.

- Establish IV/IO Access (warm IV fluids when available).

  - *Unstable:* Vital signs (age appropriate) and/or signs of inadequate tissue perfusion, start 2nd IV access.

    Administer 20 ml/kg NS bolus IV.

  - *Stable*: Vital signs (age appropriate) and/or signs of adequate tissue perfusion.

    Saline lock only, do not administer IV fluids.

- Monitor ECG.

- Insert nasogastric/orogastric tube as indicated.

**A. <u>Manage Special Considerations</u>**

- As a temporary method for chest decompression, in the management of suspected tension pneumothorax, perform needle thoracostomy.
  - ***Clinical Indications:***
  - *Patients with hypotension (SBP less than 90), clinical signs of shock, and at least one of the following signs:*
    - *Jugular vein distention.*
    - *Tracheal deviation away from the side of the injury (often a late sign).*
    - *Absent or decreased breath sounds on the affected side.*
    - *Increased resistance when ventilating a patient*
- The midaxillary line at the 5th intercostal space is the preferred site.
- Consider bilateral needle thoracostomy if no improvement or in traumatic cardiac arrest.
- **Fractures**
  - **Pain Relief**:
    - Fentanyl per ICEMA Reference #11010 - Medication - Standard Orders.
    - For patients four (4) years old and older, consider Ondansetron per ICEMA Reference #11010 - Medication - Standard Orders.
- **Pain Relief for Acute Traumatic Injuries**:
  - Administer an appropriate analgesic per ICEMA Reference #14100 - Pain Management. Document vital signs and pain scale every five (5) minutes until arrival at destination.
  - Consider Ondansetron per ICEMA Reference #11010 - Medication - Standard Orders
- **Impaled Object**: Remove object upon Trauma base hospital physician order, if indicated.

**B. Determination of Death on Scene**: Refer to ICEMA Reference #14250 - Determination of Death on Scene.

- *Severe Blunt Force Trauma Arrest*: If indicated, transport to the closest receiving hospital.
- *Penetrating Trauma Arrest*: If indicated, transport to the closest receiving hospital.
- If the patient does not meet the "Obvious Death Criteria" in ICEMA Reference #14250 - Determination of Death on Scene, contact the Trauma base hospital for determination of death on scene for those patients who suffer a traumatic cardiac arrest in the setting of penetrating trauma with documented asystole in at least

two (2) leads, and no reported vital signs (palpable pulse and/or spontaneous respirations) during the EMS encounter with the patient.

- Resuscitation efforts on a penetrating traumatic arrest victim are not to be terminated without Trauma base hospital contact.

## V. REFERENCES

| Number | Name |
|---|---|
| 9010 | Continuation of Care |
| 9030 | Destination |
| 9040 | Trauma Triage Criteria |
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |
| 14150 | Cardiac Arrest - Pediatric (Less than 15 years of age) |
| 14250 | Determination of Death on Scene |
| 14100 | Pain Management |

# BURNS - PEDIATRIC (Less than 15 years of age)

Any burn patient requires effective communication and rapid transportation to the closest receiving hospital.

In Inyo and Mono Counties, the assigned base hospital should be contacted for determination of appropriate destination.

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

Refer to ICEMA Reference #9030 - Destination policy.

## II. BLS INTERVENTIONS

- Break contact with causative agent (stop the burning process).
- Remove clothing and jewelry quickly, if indicated.
- Keep patient warm.
- Estimate percentage of total body surface area (TBSA) burned and depth using the "Rule of Nines". An individual's palm represents 1% of TBSA and can be used to estimate scattered, irregular burns.
- Transport to ALS intercept or to the closest receiving hospital.

### A. Manage Special Considerations

- **Thermal Burns**: Stop the burning process. Do not break blisters. Cover the affected body surface with dry, sterile dressing or sheet.
- **Chemical Burns**: Brush off dry powder, if present. Remove any contaminated or wet clothing. Irrigate with copious amounts of saline or water.
- **Tar Burns**: Cool with water, do not remove tar.
- **Electrical Burns**: Remove from electrical source (without endangering self) with a nonconductive material. Cover the affected body surface with dry, sterile dressing or sheet.
- **Eye Involvement**: Continuous flushing with NS during transport. Allow patient to remove contact lenses if possible.
- **Determination of Death on Scene**: Refer to ICEMA Reference #10010 - Determination of Death on Scene.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Airway Stabilization (as indicated). Burn patients with respiratory compromise, or potential for such, will be transported to the closest receiving hospital for airway stabilization.

- IV/IO Access (warm IV fluids when available).
  - *Unstable:* Vital signs (age appropriate) and/or signs of inadequate tissue perfusion consider starting a second IV or saline lock. Administer 20 ml/kg NS bolus IV/IO, may repeat one (1) time.
  - *Stable*: Vital signs (age appropriate) and/or signs of adequate tissue perfusion.
  - Less than 5 years of age: IV NS 150 ml per hour
  - More than 5 years of age - Less than 15 years of age: IV NS 250 ml per hour
- Transport to appropriate facility:
  - Critical trauma patients with associated burns or burn patients sustaining critical trauma, should be transported to the closest Trauma Center. Trauma base hospital contacted shall be made.
- Refer to Section V - Burn Classifications below.

**A. <u>Manage Special Considerations</u>**

- **Respiratory Distress**:
  - Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
  - Administer humidified oxygen, if available.
- **Deteriorating Vital Signs**: Transport to the closest receiving hospital. Contact base hospital.
- **Pulseless and Apneic**: Transport to the closest receiving hospital and treat according to ICEMA protocols. Contact base hospital.
- **Determination of Death on Scene**: Refer to ICEMA Reference #10010 - Determination of Death on Scene.
- **Precautions and Comments**:
  - Contact with appropriate advisory agency may be necessary for hazardous materials, before decontamination or patient contact.
  - Do not apply ice or ice water directly to skin surfaces as additional injury will result.
  - Do not apply cool dressings or allow environmental exposure, since hypothermia will result in a young child.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Establish advanced airway as clinically indicated per ICEMA Reference #11020 - Procedure - Standard Orders for patients who are taller than the maximum length of a

pediatric emergency measuring tape (Broselow, etc.) or equivalent measuring from the top of the head to the heel of the foot.

- ➢ Airway Stabilization: Burn patients with respiratory compromise or potential for such, will be transported to the closest receiving hospital for airway stabilization.

- Insert nasogastric/orogastric tube as indicated.
- Monitor ECG.
- Treat pain as indicated.
  - ➢ Administer an appropriate analgesic per ICEMA Reference #14100 - Pain Management. Document vital signs and pain scale every five (5) minutes until arrival at destination.
  - ➢ Document vital signs every five (5) minutes while medicating for pain and reassess the patient.
- Transport to appropriate facility.
  - ➢ Critical trauma patients with associated burns or burn patients sustaining critical trauma, should be transported to the closest Trauma Center. Trauma base hospital contacted shall be made.
- Refer to Section V - Burn Classifications below.

**A. <u>Manage Special Considerations</u>**

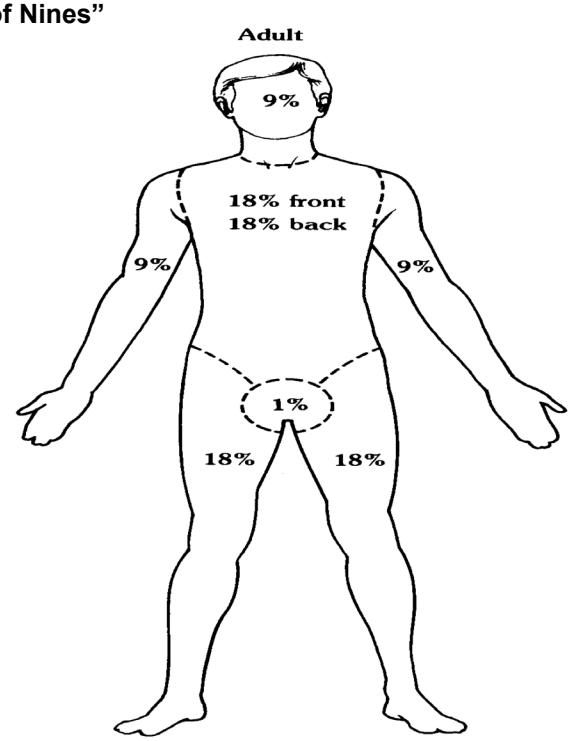
- **Respiratory Distress**: Establish advanced airway if facial/oral swelling are present or if respiratory depression or distress develops due to inhalation injury per ICEMA Reference #11020 - Procedure - Standard Orders for patients who are taller than the maximum length of a pediatric emergency measuring tape (Broselow, etc.) or equivalent measuring from the top of the head to the heal of the foot.
  - ➢ Albuterol per ICEMA Reference #11010 - Medication - Standard Orders.
  - ➢ Administer humidified oxygen, if available.
- **Deteriorating Vital Signs**: Transport to the closest receiving hospital. Contact base hospital.
- **Pulseless and Apneic**: Transport to the closest receiving hospital and treat according to ICEMA protocols. Contact base hospital.
- **Determination of Death on Scene**: Refer to ICEMA Reference #10010 - Determination of Death on Scene.
- **Precautions and Comments**:
  - ➢ Contact with appropriate advisory agency may be necessary for hazardous materials, before decontamination or patient contact.

- Do not apply ice or ice water directly to skin surfaces as additional injury will result.
- Do not apply cool dressings or allow environmental exposure, since hypothermia will result in a young child.

## V. BURN CLASSIFICATIONS

| PEDIATRIC BURN CLASSIFICATION CHART | DESTINATION |
|---|---|
| **MINOR - PEDIATRIC**<br><br>• Less than 5% TBSA<br>• Less than 2% Full Thickness | **CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL** |
| **MODERATE - PEDIATRIC**<br><br>• 5 - 10% TBSA<br>• 2 - 5% Full Thickness<br>• High Voltage Injury<br>• Suspected Inhalation Injury<br>• Circumferential Burn<br>• Medical problem predisposing to infection (e.g., diabetes mellitus, sickle cell disease) | **CLOSEST MOST APPROPRIATE RECEIVING HOSPITAL** |
| **MAJOR - PEDIATRIC**<br><br>• More than 10% TBSA<br>• More than 5% Full Thickness<br>• High Voltage Burn<br>• Known Inhalation Injury<br>• Any significant burn to face, eyes, ears, genitalia, or joints | **CLOSEST MOST APPROPRIATE BURN CENTER**<br><br>In San Bernardino County, contact:<br>Arrowhead Regional Medical Center (ARMC) |

**"Rule of Nines"**




## VI. REFERENCES

| Number | Name |
|---|---|
| 9030 | Destination |
| 14250 | Determination of Death on Scene |
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

NEWBORN CARE

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Field delivery with or without complications.

## II. BLS INTERVENTIONS

- When head is delivered, suction mouth then the nose, and check to see that cord is not around baby's neck.
- Dry infant and provide warm environment. Prevent heat loss (remove wet towel).
- Place baby in supine position at or near the level of the mother's vagina. After pulsation of cord has ceased double clamp cord at approximately seven (7) inches and ten (10) inches from baby and cut between clamps.
- Maintain airway, suction mouth and nose.
- Provide tactile stimulation to facilitate respiratory effort.
- Assess breathing, if respirations less than 20 or gasping, provide tactile stimulation and assisted ventilation if indicated.
- Circulation:
  - Heart Rate less than 100 ventilate BVM with 100% oxygen for 30 seconds and reassess. If heart rate is still less than 100 per minute but greater than 60, reevaluate BVM and reposition airway.
  - If heart rate is less than 60 bpm after above interventions, begin compressions with ventilations at a 3:1 ratio (approximately 100 compressions and 30 ventilations per minute).
- If central cyanosis is present, utilize supplemental oxygen at 10 to 15 L per minute using oxygen tubing close to infant's nose and reassess. If no improvement is noted after 30 seconds, assist ventilation with BVM.
- Obtain Apgar scoring at one (1) and five (5) minutes. Do not use Apgar to determine need to resuscitate.

**APGAR SCORE**

| SIGN | 0 | 1 | 2 |
|---|---|---|---|
| **Heart Rate** | Absent | Less than 100 per minute | More than 100 per minute |
| **Respirations** | Absent | Less than 20 or irregular | More than 20 or crying |
| **Muscle Tone** | Limp | Some Flexion | Active Motion |
| **Reflex Irritability** | No Response | Grimace | Cough or Sneeze |
| **Color** | Blue or pale | Blue Extremities | Completely Pink |

## III. LIMITED ALS (LALS) INTERVENTIONS

- Perform activities identified in the BLS Interventions.
- Obtain vascular access via IV if indicated.
- Obtain blood glucose by heel stick.
  - If blood glucose less than 35 mg/dL, administer Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.

## IV. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Obtain vascular access via IV/IO if indicated.
- If BVM is ineffective or tracheal suctioning is required, utilize waveform capnography to assess efficacy of compressions and ventilations. Place orogastric tube.
- Obtain blood glucose by heel stick.
  - If blood glucose less than 35 mg/dL, administer Dextrose per ICEMA Reference #11010 - Medication - Standard Orders.
- Evaluate airway for hypoxemia and assess body temperature for hypothermia then consider Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders, if heart rate less than 60 after one (1) minute.
- Contact base hospital if hypovolemia is suspected. Base hospital may order 10 ml/kg IV NS over five (5) minutes. If unable to contact base hospital and transport time is extended, administer 10 ml/kg IV NS over five (5) minutes, may repeat.
- For persistent hypotension despite adequate ventilation and fluid resuscitation, base hospital may order Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders, every ten (10) minutes. If unable to contact base hospital and transport time is extended, give indicated dosage and contact base hospital as soon as possible.

## V. REFERENCE

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |

# OBSTETRICAL EMERGENCIES

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Obstetrical emergencies (field delivery) with or without complications.

## II. BLS INTERVENTIONS

**UNCOMPLICATED DELIVERY**

- Administer oxygen as clinically indicated.
- Prepare for delivery.
- Massage fundus if placenta delivered.

**COMPLICATED DELIVERY**

- Excessive vaginal bleeding prior to delivery:
  - Attempt to control bleeding. Do not place anything into vagina.
  - Place in Trendelenburg position.
- Prolapsed Cord:
  - Elevate hips.
  - Gently push presenting part of head away from cord.
  - Consider knee/chest position for mother.
- Postpartum Hemorrhage:
  - Massage fundus to control bleeding.
  - Encourage immediate breast feeding.
  - Place in Trendelenburg position.
- Cord around infant's neck:
  - Attempt to slip cord over the head.
  - If unable to slip cord over the head, deliver the baby through the cord.
  - If unable to deliver the baby through the cord, double clamp cord, then cut cord between clamps.
- Breech presentation and head not delivered within three (3) to four (4) minutes:
  - Administer oxygen.

- Place in Trendelenburg position.
- Transport Code 3 to closest appropriate facility.

- Pregnancy Induced Hypertension and/or Eclampsia:
  - Initiate and maintain seizure precautions.
  - Attempt to reduce stimuli.
  - Limit fluid intake.
  - Monitor and document blood pressure.
  - Consider left lateral position.

## III. LIMITED ALS (LALS) INTERVENTIONS

**COMPLICATED DELIVERY**

- Obtain IV access and maintain IV rate as appropriate.
- Excessive vaginal bleeding or post-partum hemorrhage:
  - Administer fluid challenge of 500 ml, if signs of inadequate tissue perfusion persist may repeat fluid bolus.
  - Maintain IV rate at 150 ml per hour.

  Establish second large bore IV en route.
- Pregnancy Induced Hypertension and/or Eclampsia:
  - IV TKO, limit fluid intake.
  - Obtain $O_2$ saturation on room air, if possible.
  - Place in left lateral position and obtain blood pressure after five (5) minutes.
- Consider immediate notification of base hospital physician.

## IV. ALS INTERVENTIONS

**COMPLICATED DELIVERY**

- Obtain IV access and maintain IV rate as appropriate.
- Excessive vaginal bleeding or post-partum hemorrhage:
  - Administer fluid challenge of 500 ml. If signs of inadequate tissue perfusion persist may repeat fluid bolus.
  - Maintain IV rate at 150 ml per hour.
  - Establish second large bore IV en route.

- Blood transfusion for hemorrhagic shock due to severe postpartum hemorrhage meeting the following criteria: **[LOSOP for Approved Providers Only]**
  - SBP <70 or unable to obtain **or**
  - SBP < 90 AND HR ≥ 110 (SI >1.2)
    - Administer LTO+WB or pRBCs per ICEMA Reference #11010 - Medication - Standard Orders.

- Pregnancy induced hypertension:
  - Administer IV TKO. Limit fluid intake.
  - Obtain $O_2$ saturation on room air, if possible.
  - Place in left lateral position and obtain blood pressure after five (5) minutes.
  - Obtain rhythm strip with copy to receiving hospital.
- Eclampsia (Seizure/Tonic/Clonic Activity):
  - Administer Magnesium Sulfate per ICEMA Reference #11010 - Medication - Standard Orders.
  - Administer Midazolam per ICEMA Reference #11010 - Medication - Standard Orders.
- Consider immediate notification of base hospital physician.

**POSTPARTUM HEMMORHAGE (base hospital order only)**

- Tranexamic Acid (TXA) administration:
  - Must be within three (3) hours of onset and must have either:
  - Signs and symptoms of hemorrhagic shock with SBP less than 90 mm
  - Significant hemorrhage with heart rate greater than or equal to 120.

## V. REFERENCE

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 14010 | Respiratory Emergencies - Adult |

# NAUSEA AND VOMITING

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Nausea.
- Vomiting.
- Prophylactic treatment of narcotic induced nausea and/or vomiting.

## II. CONTRAINDICATIONS

**Patients under four (4) years of age.**

Known sensitivity to Ondansetron or other 5-HT3 antagonists:

- Granisetron (Kytril)
- Dolasetron (Anzemet)
- Palonosetron (Aloxi)

## III. ALS INTERVENTIONS

- Assess patient for need for anti-emetic therapy.
- Maintain airway.
- Position of comfort.
- Oxygen.
- Cardiac monitoring in patients with history of cardiac problems.
- Ondansetron per ICEMA Reference #11010 - Medication - Standard Orders.

## IV. DOCUMENTATION

Document patient response.

## V. REFERENCE

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |

# SHOCK (NON-TRAUMATIC)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Patient exhibits signs/symptoms of profound shock and hypotension with a SBP of less than 90 mm Hg for adults and a SBP less than 70 mm Hg for pediatrics.
- Determine history of illness.
- History of GI bleeding, vomiting, diarrhea, fever/sepsis or vaginal bleeding.
- Post ROSC for Out of Hospital Cardiac Arrest (OHCA).
- Consider hypoglycemia or narcotic overdose.

## II. LIMITED ALS (LALS) INTERVENTIONS

- Maintain airway with appropriate adjuncts, including perilaryngeal airway adjunct if indicated.
- Obtain oxygen saturation on room air or on home oxygen if possible.
- Place AED pads on patient as precaution in event patient goes into sudden cardiac arrest.
- Obtain vascular access.
- If hypotensive or have signs or symptoms of inadequate tissue perfusion, administer fluid challenges:
  - ADULT
    - Administer 500 ml IV bolus, may repeat one (1) time until tissue perfusion improves
  - PEDIATRIC
    - Administer 20 ml/kg IV bolus, may repeat one (1) time for tachycardia, change in central/peripheral pulses or altered level of consciousness.
- For patients with no respiratory difficulties and adequate signs of tissue perfusion:
  - ADULT/PEDIATRIC
    - Maintain IV at TKO.

## III. ALS INTERVENTIONS

- Perform activities identified in LALS Interventions.
- Maintain airway with appropriate adjuncts, including advanced airway if indicated. Obtain oxygen saturation on room air or on home oxygen if possible.

- Place on cardiac monitor.
- Obtain vascular access.
- If hypotensive or has signs or symptoms of inadequate tissue perfusion, administer fluid challenges:
  - ADULT
    - Administer 500 ml IV bolus, may repeat one (1) time to sustain a SBP of more than 90 mm Hg or until tissue perfusion improves.
    - If no response to fluid administration, stop fluids and administer Push Dose Epinephrine per ICEMA reference #11010 - Medication - Standard Orders.
  - PEDIATRIC
    - Administer 20 ml/kg IV bolus, may repeat one (1) time for tachycardia, change in central/peripheral pulses or altered level of consciousness.
    - If no response to fluid administration, stop fluids and administer Push Dose Epinephrine per ICEMA reference #11010 - Medication - Standard Orders.
- For postpartum hemorrhage with continued signs of inadequate tissue perfusion, not responsive to fluid challenge consider administration of TXA (base hospital order) per ICEMA reference #11010 – Medication – Standard Orders.
  - Must be within three (3) hours of onset and must have either:
  - Signs and symptoms of hemorrhagic shock with SBP less than 90 mm Hg.
  - Significant hemorrhage with heart rate greater than or equal to 120.
- For adults with sustained SBP of more than 90 mm Hg, pediatrics with sustained SBP more than 70 mm Hg, no respiratory difficulties and adequate signs of tissue perfusion:
  - ADULT
    - Maintain IV at TKO.
  - PEDIATRIC
    - Maintain IV at TKO.

**Base Hospital May Order**

- Establish 2nd large bore IV enroute.

## IV. REFERENCE

| Number | Name |
|---|---|
| 11010 | Medication -Standard Orders |

# SUSPECTED ACUTE MYOCARDIAL INFARCTION (AMI)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Chest pain (typical or atypical).
- Syncopal episode.
- History of previous AMI, Angina, heart disease, or other associated risk factors.

## II. BLS INTERVENTIONS

- Recognition of signs/symptoms of suspected AMI.
- Reduce anxiety, allow patient to assume position of comfort.
- Oxygen as clinically indicated.
- Obtain oxygen saturation.
- May assist patient with self-administration of Nitroglycerin and/or Aspirin.

## III. LIMITED ALS (LALS) INTERVENTIONS

- Aspirin per ICEMA Reference #11010 - Medication - Standard Orders.
- Consider early vascular access.
- For patients with chest pain, signs of inadequate tissue perfusion and clear breath sounds, administer 300 ml NS bolus, may repeat.
- Nitroglycerin per ICEMA Reference #11010 - Medication - Standard Orders.
- Consider establishing a saline lock enroute on same side as initial IV.
- Complete thrombolytic checklist, if time permits.
- Contact base hospital.

## IV. ALS INTERVENTIONS

- Aspirin per ICEMA Reference #11010 - Medication - Standard Orders.
- Consider early vascular access.
- For patients with chest pain, signs of inadequate tissue perfusion and clear breath sounds, administer 300 ml NS bolus, may repeat.

- 12-Lead Technology:
  - Obtain 12-lead ECG. Do not disconnect 12-lead cables until necessary for transport.
  - If signs of inadequate tissue perfusion or if inferior wall infarct is suspected, obtain a right-sided 12-lead (V4R).
  - If right ventricular infarct (RVI) is suspected with signs of inadequate tissue perfusion, consider 300 ml NS bolus, may repeat. Early consultation with base hospital or receiving hospital in rural areas is recommended. (Nitrates are contraindicated in the presence of RVI or hypotension.)
  - With documented ST segment elevation in two (2) or more contiguous leads make early STEMI notification to the STEMI Receiving Center while preparing patient for expeditious transport, refer to ICEMA Reference #4040 - ST Elevation Myocardial Infarction Critical Care System Designation (San Bernardino County Only). In Inyo and Mono Counties, the assigned base hospital should be contacted for STEMI consultation.
  - Repeat 12-lead ECG at regular intervals, but do not delay transport of patient. If patient is placed on a different cardiac monitor for transport, transporting provider should obtain an initial 12-lead on their cardiac monitor and leave 12-lead cables in place throughout transport.
  - EMS field personnel shall ensure that a copy of the 12-lead ECG is uploaded or attached as a permanent part of the patient's ePCR.
- Nitroglycerin per ICEMA Reference #11010 - Medication - Standard Orders. Utilize Fentanyl for cardiac chest pain control when Nitroglycerin is contraindicated.
- Fentanyl per ICEMA Reference #11010 - Medication - Standard Orders. Consider concurrent administration of Nitroglycerin with Fentanyl if there is no cardiac chest pain relief from the initial Nitroglycerin administration. Contact base hospital for further Fentanyl orders.
- Consider establishing a saline lock as a secondary IV site.

## V. REFERENCES

| Number | Name |
|---|---|
| 4040 | ST Elevation Myocardial Infarction Critical Care System Designation (San Bernardino County Only) |
| 11010 | Medication - Standard Orders |

# DETERMINATION OF DEATH ON SCENE

## I. PURPOSE

To identify situations when an EMT, AEMT or EMT-P may be called upon to determine death on scene.

## II. POLICY

An EMT, AEMT or EMT-P may determine death on scene if **pulselessness and apnea** are present with any of the following criteria. The EMT-P is authorized to discontinue BLS CPR initiated at scene if a patient falls into the category of obvious death. In any situation where there may be doubt as to the clinical findings of the patient, BLS CPR must be initiated and the base hospital contacted. When death is determined, the County Coroner must be notified along with the appropriate law enforcement agency.

## III. DETERMINATION OF DEATH CRITERIA

- Decomposition.
- Obvious signs of rigor mortis such as rigidity or stiffening of muscular tissues and joints in the body, which occurs any time after death and usually appears in the head, face and neck muscles first.
- Obvious signs of venous pooling in dependent body parts, lividity such as mottled, bluish-tinged discoloration of the skin, often accompanied by cold extremities.
- Decapitation.
- Incineration of the torso and/or head.
- Massive crush injury.
- Penetrating injury with evisceration of the heart, and/or brain.
- Gross dismemberment of the trunk.

## IV. SPECIAL CONSIDERATIONS

- In the event that a patient progresses to cardio/pulmonary arrest while enroute to the hospital in the setting of a completed and verified limitation of treatment document (POLST, DNR, Advanced Directive) the field provider should honor the written limitations and transport the patient to the closest receiving Emergency Department for a medical evaluation" and "The Base Station should advise crew to honor patient's wishes as verified in the valid limitations of treatment and transport to the closest receiving facility for medical evaluation without calling TOD".
- A copy of the patient care report must be made available for the coroner. This will be transmitted to them, when posted, if the disposition is marked "Dead on Scene" and the Destination is marked "Coroner, San Bernardino County" on the electronic patient care report (ePCR).

- The completed ePCR must be posted to the coroner before the end of the shift.
- If unable to post, the use of an approved paper patient care report as a “downtime” form is permitted by ICEMA Reference #5030 - Requirements for Patient Care Reports.

**LIMITED ALS (LALS) PROCEDURE**

- All terminated LALS resuscitation efforts must have an AED event record attached to the ePCR.

**ALS PROCEDURE**

- Medical cardiac arrest patient in ventricular fibrillation should be resuscitated on scene until ROSC is achieved. If patient remains in VF/VT after 20 minutes of CPR, consult base hospital.
- Severe blunt force trauma, pulseless, without signs of life (palpable pulses and/or spontaneous respirations) and cardiac electrical activity less than 40 bpm or during EMS encounter with the patient meets Determination of Death criteria. All terminated ALS resuscitation efforts must have an ECG attached to the patient care report.
- Consider termination of resuscitation efforts in the prehospital setting if any of the criteria are met in the ICEMA Reference #14050 - Cardiac Arrest - Adult.

## V. SUSPECTED SUDDEN INFANT DEATH SYNDROME (SIDS) INCIDENT

It is imperative that all EMS field personnel be able to assist the caregiver and local police agencies during a suspected SIDS incident.

**PROCEDURE**

- Follow individual department/agency policies at all times.
- Ask open-ended questions about incident.
- Explain what you are doing, the procedures you will follow, and the reasons for them.
- If you suspect a SIDS death, explain to the parent/caregiver what SIDS is and, if this is a SIDS related death nothing they did or did not do caused the death.
- Provide the parent/caregiver with the number of the California SIDS Information Line: **1-800-369-SIDS (7437)**
- Provide psychosocial support and explain the emergency treatment and transport of their child.
- Assure the parent/caregiver that your activities are standard procedures for the investigation of all death incidents and that there is no suspicion of wrongdoing.
- Document observations.

## VI. REFERENCES

| Number | Name |
|---|---|
| 5030 | Requirements for Patient Care Reports |
| 14050 | Cardiac Arrest - Adult |

END OF LIFE CARE AND DECISIONS

## I. PURPOSE

To establish criteria that recognizes and accommodates a patient's designated end of life directives to limit prehospital treatment by Emergency Medical Service (EMS) field personnel in the prehospital setting, long-term care facilities, during transport between facilities and/or in the patient's home.

## II. POLICY

EMS field personnel shall make all attempts to honor a patient's end of life wishes. In doing so, all efforts should be made to obtain and verify applicable forms describing the patient's end-of-life instructions and provide any necessary supportive measures.

A Do Not Resuscitate **(**DNR) order only applies to resuscitative measures. An order not to resuscitate is not an order to withhold other necessary medical treatments, nutrition or supportive measures. The treatment given to a patient with a DNR agreement should, in all respects, be the same as that provided to a patient without such an agreement.

A patient with medical decision-making capacity can request alternative treatment or revoke a DNR or POLST by any means that indicates intent to revoke. A patient may withdraw or rescind their request for an aid-in-dying drug regardless of their mental state at any time.

Forms related to patient's end of life instructions that EMS field personnel may encounter include:

- Statewide EMSA/California Medical Association (CMA) Prehospital DNR form.
- POLST form.
- DNR medallion, bracelet or necklace.
- A Do Not Resuscitate Order in a patient's chart dated and signed by the physician.
- End of Life Options Act Directive and/or Final Attestation for An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner form.

## III. VALIDATION CRITERIA

**EMS Prehospital DNR**

- The EMS Prehospital DNR form should include the following to be considered valid:
  - Patient's name.
  - Signature of the patient or a legally recognized decision maker if the patient is unable to make or communicate informed healthcare decisions.
  - Signature of patients' physician, affirming that the patient/legal representative has given informed consent to the DNR instruction.
  - All signatures must be dated.

- Correct identification of the patient is crucial. If the patient is unable to be identified after a good faith attempt to identify the patient, a reliable witness may be used to identify the patient.

- In licensed healthcare facilities a DNR order written by a physician shall be honored.
  - The staff must have the patient's chart with the DNR order immediately available for EMS field personnel upon their arrival.
  - The order may contain the words Do Not Resuscitate, No CPR, or No Code and contain the patient's name and the date and signature of the physician.

**DNR Medallion, Bracelet or Necklace**

- The DNR medallion/bracelet/necklace is made of metal with a permanently imprinted medical insignia. For the medallion or bracelet/necklace to be valid the following applies:
  - Patient must be physically wearing the DNR medallion/ bracelet/necklace.
  - Medallion/bracelet/necklace must be engraved with the words "Do Not Resuscitate EMS" or "California POLST EMS", along with a toll-free emergency information telephone number and a patient identification number.

**Physician Order for Life Saving Treatment (POLST)**

- The POLST does not replace the Advanced Directive and should be reviewed along with other documents when available. The POLST:
  - Must be signed and dated by a physician, nurse practitioner or physician assistant acting under the supervision of a physician and within the scope of practice authorized by law.
  - Must be signed by the patient or decision maker.
  - **Is not valid without signatures**. Verbal or telephone orders are acceptable with follow-up signature by the physician in accordance with facility/community policy. There should be a box checked indicating who the authorized healthcare provider discussed the POLST orders with. By signing the form, the healthcare provider acknowledges that these orders are consistent with the patient's medical condition and preferences.

**End of Life Options Act Directive**

- A terminally ill and competent patient may elect to obtain medications to hasten their imminent death at a time and place of their choosing. They must satisfy extensive and stringent requirements as required by California law to obtain an Aid-In-Dying Drug and complete a "Final Attestation For An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner" within 48 hours prior self-administration.

- There are no standardized "Final Attestation For An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner" forms but the law has required specific information that must be in the final attestation. If available, EMS field personnel should make a good faith effort to review and verify that the final attestation contains the following information:

  - The document is identified as a "Final Attestation For An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner".

  - Patient's name, signature and dated.

  - EMS field personnel should review and verify that the "Final Attestation for An Aid-In-Dying Drug to End My Life in a Humane and Dignified Manner" is present.

  - Correctly identifies the patient's name, and is signed and dated by the patient or designated decision maker.

  - The Final Attestation for An Aid-In-Dying Drug must be completed within 48 hours prior to taking the medications.

  - Obtain a copy of the final attestation and attach it to the electronic patient care record (ePCR) whenever possible.

  - There is no mandate for the patient to maintain the final attestation in close proximity of the patient.

  - If a copy of the final attestation is available, EMS field personnel should confirm the patient is the person named in the final attestation. This will normally require either the presence of a form of identification or a witness who can reliably identify the patient.

## IV. PROCEDURE

**DNR, Medallion/Bracelet/Neckless or POLST**

In addition to the validation criteria, the following guidelines are provided for EMS field personnel when responding to a patient with Standardized Patient-Designated Directives.

- EMS field personnel shall validate the DNR request, medallion/bracelet/necklace, or POLST form. Patient may withdraw any directive at any time.

- The POLST may be used for both adults and pediatric patients.

- BLS field personnel shall continue resuscitative measures if a DNR or POLST cannot be validated.

- LALS and ALS field personnel shall contact a base hospital for direction if a DNR or POLST cannot be validated or for conflicting requests by family members. While ALS field personnel are contacting the base hospital for direction, BLS treatment must be initiated and continued. If contact cannot be made, resuscitative efforts shall continue.

- If a patient states that they wish resuscitative measures, the request shall be honored.

- If a family member requests resuscitative measures despite a valid DNR or POLST, continue resuscitative measures until base hospital contact is made.

- If patient is not in cardiac arrest and has a valid POLST form, EMS field personnel may provide comfort measures as described in Section B of the form.

- The patient shall be transported to the hospital if comfort measures are started by EMS field personnel.

- Direct any questions or conflicts in transporting the patient to the base hospital.

- EMS field personnel shall attach a copy of the approved DNR form or POLST form to the patient care report, along with any other appropriate written documentation. The DNR form should accompany the patient to the hospital so that it may be incorporated into the medical record at the receiving facility.

- When DNR orders are noted in medical records in licensed facilities, that fact should be recorded by the EMS provider, along with the date of the order and the physician's name. It should be noted on the ePCR that a written DNR order was present including the name of the physician, date signed and other appropriate information.

- All circumstances surrounding the incident must be documented on the EMS patient care report. If EMS field personnel are unable to copy the DNR or POLST form, the following shall be documented on the patient care report:

  - Presence of DNR or POLST form.

  - Date of order.

  - Name of physician who signed form.

- If a patient dies at home, and the patient is not under the care of Hospice, law enforcement must be notified. In all cases, the coroner must be notified. Refer to ICEMA Reference #14250 - Determination of Death On Scene.

- If a patient expires in a licensed healthcare facility, the facility has the responsibility to make the appropriate notification.

**End of Life Options Act**

In addition to the validation criteria, the following guidelines are provided for EMS personnel when responding to a patient who has self-administered an aid-in-dying drug.

- The law offers protections and exemptions for healthcare providers but is not explicit about EMS response for End-of-Life Option Act patients.

- Provide supportive measures whenever possible.

- Withhold resuscitative measures if patient is in cardiopulmonary arrest.

- The patient may withdraw or rescind their request for an aid-in-dying drug regardless of the patient's mental state at any time. EMS field personnel are encouraged to consult with their base hospital whenever necessary.

- Family members may be at the scene of a patient who has self-administered an aid-in-dying drug. If conflict arises as to resuscitation efforts, inform the family that only

supportive measures will be provided according to the patient's wishes and consider base hospital contact to attempt resolution.

- All circumstances surrounding the incident must be documented on the EMS patient care report. If EMS field personnel are unable to obtain a copy of the End-of-Life Options Act Final Attestation form, the following shall be documented on the patient care report:
  - Presence of the End-of-Life Options Act Attestation form.
  - Date of order.
  - Name of physician who signed form.
- If a patient dies at home and the patient is not under the care of Hospice, law enforcement must be notified. In all cases, the coroner must be notified. Refer to ICEMA Reference #14250 - Determination of Death On Scene.
- If a patient expires in a licensed healthcare facility, the facility has the responsibility to make the appropriate notification.

## V. SUPPORTIVE MEASURES

- Medical interventions and/or treatment that may provide for the comfort, safety and dignity of the patient should be utilized.
- The patient should receive palliative treatment for pain, dyspnea, major hemorrhage or other medical conditions.
- Allow any family members/significant others to express their concerns and begin their grieving process.
- Unless a patient is actively dying, medical treatment for other conditions should not be withheld.

## VI. REFERENCE

| **Number** | **Name** |
|---|---|
| 14250 | Determination of Death On Scene |

# VENTRICULAR ASSIST DEVICE (VAD)

## I. PURPOSE

To establish guidelines for EMS field personnel in the prehospital assessment, treatment and transport of patients who have a Ventricular Assist Device (VAD).

## II. FIELD ASSESSMENT/TREATMENT INDICATORS

- The EMS field personnel shall first assess the patient and not the device. Utilize the American Heart Association's C-A-B recommendations, with one (1) addition:
  - C-Circulation/**Connections (Device)**
  - A-Airway
  - B-Breathing
- Clinical assessment of the patient is essential and the **most** important clinical observation (i.e., level of consciousness, skin signs, adequate perfusion).
- Follow appropriate ICEMA protocols for the patients' condition.
- There are no medication contraindications in relation to the VAD.
- If defibrillation or cardioversion is necessary, follow the appropriate ICEMA protocol. The pump is insulated, so electrical therapy should not be an issue.
- A patient with a VAD might not have a palpable pulse as this is a continuous flow device. However, they do have a heart rate and rhythm. The 12-lead ECG or heart monitor will show the patient's native heart rhythm and will not necessarily reflect the patient's circulatory function. Treat arrhythmias according to ICEMA protocols, except for chest compressions.
- Waveform capnography monitoring is appropriate as pulse oximetry may not be measurable or it may be inaccurate.
- VAD patients may not have a systolic and diastolic blood pressure obtainable by standard methods using a manual or automatic blood pressure cuff. It may be possible to auscultate. The mean arterial blood pressure (MAP) typical range is 70 - 90 mm Hg. To calculate the MAP, use the formula below:

$$MAP = \frac{SBP + (2 \times DBP)}{3}$$

MAP = mean arterial pressure

SBP = systolic blood pressure

DBP = diastolic blood pressure

## III. PROCEDURE

- A patient with a VAD will most likely have a trained companion with them. The companion is familiar with the VAD and emergency troubleshooting. The companion should accompany the patient during transport and be responsible for the VAD whenever possible.

- VAD patients and their companions are taught to call 9-1-1 in an emergency, then page the on-call VAD Coordinator immediately. The VAD Coordinator will typically be on the telephone to provide additional assistance to the EMS field personnel when they arrive.

- Contact information for the VAD Coordinator and the VAD Implant Center is usually attached to or located inside the patients' VAD equipment bag.

- When transporting these patients to the appropriate hospital, the VAD emergency bag, power module, power base unit, batteries, charger, and backup controller **must** all be brought to the hospital.

- Transport decision must be made by both the on-call VAD Coordinator and the base hospital, typically transported to the nearest appropriate VAD Implant Center (Loma Linda University Medical Center in ICEMA region), with preference given to their implanting center whenever possible.

**NOTE**: If the paramedic on scene has assessed the patient and observed the following:

- The patient is unresponsive and is asystole on the cardiac monitor, **and**

- All connections to the device have been assessed and not producing a "hum" over the apex of the heart upon auscultation, **and**

- Waveform Capnography is less than 10 and MAP is less than 50, **then** chest compressions can be performed as a last resort for patient condition.

SEPSIS-ADULT

**I. PURPOSE:** To facilitate rapid identification and treatment of patients with suspected sepsis.

**II. FIELD ASSESSMENT/TREATMENT INDICATORS**

For possible infection and two or more of the following:

- Temperature > 100.4 F or < 96.8 F
- Sustained HR >90
- EtCO2 ≤ 25 mmHg
- Sustained Respiratory rate >20

**III. BLS INTERVENTIONS**

- Oxygen therapy as clinically indicated.
- Position patient as tolerated and cover to avoid shivering. If altered, place in left lateral position.
- Obtain and assess blood glucose level. If indicated, administer Glucose - Oral per ICEMA Reference #11010 Medication - Standard Orders.

**IV. LIMITED ALS INTERVENTIONS**

- Perform activities identified in the BLS Interventions
- Obtain vascular access.
- Administer 500 ml IV bolus, may repeat one (1) time.
- If hypoglycemic:
  - Dextrose per ICEMA Reference #11010 - Medication - Standard Orders, **or**
  - If unable to establish IV, Glucagon may be given one (1) time per ICEMA Reference #11010 - Medication - Standard Orders.
- If hyperglycemic:
  - Administer 500 ml IV bolus may repeat one (1) time.

## V. ALS INTERVENTIONS

- Perform activities identified in the BLS and LALS Interventions.
- Place on cardiac monitor and obtain a 12-lead ECG as clinically indicated.
- Monitor EtCO2

For profound hypotension, unresponsive to fluid boluses, administer Push Dose Epinephrine per ICEMA Reference #11010 - Medication - Standard Orders

## VI. SPECIAL CONSIDERATIONS

- Risk Factors:
  - Indwelling catheters (foley, PICC line etc.)
  - Recent surgery
  - Open wounds
  - Bedridden or immobile patients
  - Compromised Immune system due to comorbidities (cancer, autoimmune disease, etc.)
- Prioritize early recognition, IV fluids and rapid hospital notification and transport.
- If signs of pulmonary edema, stop or limit fluid boluses.
- Hypotension is a late indicator for septic shock.

## VII. REFERENCES

| Number | Name |
|---|---|
| 11010 | Medication - Standard Orders |
| 11020 | Procedure - Standard Orders |

# ALLERGIC REACTION AND ANAPHYLAXIS (Authorized Public Safety Personnel)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Non-anaphylactic allergic reaction:
  - Involving only one organ system (localized angioedema that does not compromise the airway or not associated with vomiting).
- Anaphylaxis characterized by acute onset involving:
  - Skin or mucosa with either respiratory compromise or decreased BP or signs of end-organ dysfunction, **or**
  - Two (2) or more of the following occurring rapidly after exposure to a likely allergen:
    - Skin and/or mucosal involvement (urticarial, itchy, swollen tongue/lips)
    - Respiratory compromise (dyspnea, wheeze, stridor, hypoxemia)
    - Persistent gastrointestinal symptoms (vomiting, abdominal pain)
    - Hypotension or associated symptoms (syncope, hypotonia, incontinence)

## II. PUBLIC SAFETY INTERVENTION

**Non-Anaphylactic Allergic Reaction**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Provide supplemental oxygen, if authorized, per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel).
- Monitor for worsening signs and symptoms, and possible progression to anaphylaxis.

**Anaphylaxis**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Open the airway using Basic Life Support techniques.
- Perform rescue breathing, if indicated, using a protective mouth shield.
- Provide supplemental oxygen, if authorized, per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel).

- Administer Epinephrine via auto-injector or EpiPen IM into outer thigh (may be administered through clothing).
- After Epinephrine administration, observe for improved breathing and consciousness. If breathing or consciousness does not improve, assist breathing with bag-valve-mask if available, and authorized.
- Begin CPR if no pulse and breathing detected.
- If symptoms persist after 15 minutes, repeat Epinephrine via auto-injector or EpiPen IM into opposite outer thigh.
- Report administration of Epinephrine via auto-injector to EMS field personnel for documentation on the electronic patient care report (ePCR).
- Public safety personnel shall complete report per the public safety agency's policy.

## III. REFERENCE

| **Number** | **Name** |
|---|---|
| 15040 | Respiratory Distress (Authorized Public Safety Personnel) |

NERVE AGENT EXPOSURE (Authorized Public Safety Personnel)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Confirmed or suspected exposure to nerve agent, carbamate or organophosphate.
- Signs and symptoms of nerve agent/organophosphate ingestion, inhalation, injection or surface absorption (**S**alivation, **L**acrimation, **U**rinary incontinence, **D**efecation, **G**astroenteritis, **E**mesis, **M**iosis).
- Public safety personnel (firefighter, lifeguard or peace officer) are only permitted to use the Nerve Agent Antidote Kit (NAAK) on self or other public safety personnel.

## II. PUBLIC SAFETY INTERVENTION

- Ensure EMS has been activated using the 9-1-1 system.

If treating self:

- Avoid continued exposure by exiting from area of exposure; remove contaminated clothing; follow decontamination procedures when available.
- Following exposure and in the presence of symptoms, administer NAAK containing full dose of Atropine/Pralidoxime Chloride (Mark I or DuoDote) into outer thigh (may be administered through clothing).
- Repeat Atropine/Pralidoxime Chloride administration using NAAK up to two (2) times every 10 to 15 minutes if symptoms persist.
- Report administration of NAAK to EMS field personnel for documentation on the electronic patient care report (ePCR).
- Public safety personnel shall complete report per the public safety agency's policy.

If treating other public safety personnel:

- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield, gown), avoid cross contamination.
- Remove patient from area of continued exposure; remove contaminated clothing; follow decontamination procedures when available.
- Assess patient's respiratory, mental and pupillary status.
- Open the airway using Basic Life Support techniques and perform rescue breathing, if indicated. Provide oxygen per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel).
- Following exposure and in the presence of symptoms, administer NAAK containing full dose of Atropine/Pralidoxime Chloride (Mark I or DuoDote) into outer thigh (may be administered through clothing).

- Repeat Atropine/Pralidoxime Chloride administration using NAAK up to two (2) times every 10 to 15 minutes if symptoms persist.
- Report administration of NAAK to EMS field personnel for documentation on the electronic patient care report (ePCR).
- Public safety personnel shall complete report per the public safety agency's policy.

## III. REFERENCE

| Number | Name |
|---|---|
| 15040 | Respiratory Distress (Authorized Public Safety Personnel) |

# OPIOID OVERDOSE (Authorized Public Safety Personnel)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Suspected narcotic overdose.
- Environment suspicious for illegal or prescription use of narcotics, **and**
- Victim is poorly responsive and respiratory (breathing) rate appears slow or shallow; or victim is unresponsive and not breathing.

## II. PUBLIC SAFETY INTERVENTION

**Poor Breathing and Decreased Consciousness**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Check for responsiveness using verbal or painful stimuli.
- Open the airway using Basic Life Support technique.
- Perform rescue breathing, if indicated, using a bag valve mask (BVM) or protective face shield.
- Administer Naloxone nasal spray.
  - Naloxone nasal spray 4 mg preloaded single dose device.
    - Administer full dose in one (1) nostril.
    - If partial response in breathing or consciousness, repeat Naloxone nasal spray 4 mg preloaded single dose administration in nostril opposite to the first dose.
- After Naloxone nasal spray administration, observe for improved breathing and consciousness. If breathing or consciousness do not improve, assist breathing if BVM is available per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel), or begin CPR if no pulse and breathing detected.
- If awakened by Naloxone nasal spray, be alert for sudden, agitated behavior or symptoms of opioid withdrawal, such as vomiting, abdominal cramps, or sweating.
- If CPR is not necessary, place patient on left side to avoid inhaling any possible vomit.
- Report administration of Naloxone nasal spray to EMS field personnel for documentation on the electronic patient care report (ePCR).
- Public safety personnel shall complete report per the public safety agency's policy.

**Not Breathing/Unresponsive**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Begin CPR (chest compressions with ventilation if BVM is available per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel).
- Administer Naloxone nasal spray.
  - Naloxone nasal spray 4 mg preloaded single dose device.
    - Administer full dose in one (1) nostril.
    - If partial response in breathing or consciousness, repeat Naloxone nasal spray 4 mg preloaded single dose administration in nostril opposite to the first dose.
- After Naloxone nasal spray administration, observe for improved breathing and consciousness. If breathing or consciousness do not improve, assist breathing if BVM is available per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel), or begin CPR if no pulse and breathing detected.
- If awakened by Naloxone nasal spray, be observant for possible sudden, agitated behavior or symptoms of opioid withdrawal, such as vomiting, abdominal cramps, or sweating.
- If CPR is not necessary, place patient on left side to avoid inhaling any possible vomit.
- Report administration of Naloxone nasal spray to EMS field personnel for documentation on the ePCR.
- Public safety personnel shall complete report per the public safety agency's policy.

## III. REFERENCE

| Number | Name |
|---|---|
| 15040 | Respiratory Distress (Authorized Public Safety Personnel) |

# RESPIRATORY DISTRESS (Authorized Public Safety Personnel)

## I. FIELD ASSESSMENT/TREATMENT INDICATORS

- Victim's respiratory (breathing) rate appears slow or shallow; or victim is unresponsive and not breathing.

## II. PUBLIC SAFETY INTERVENTION

**Slow or Shallow Respiration and/or Decreased Consciousness**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Check for responsiveness using verbal or painful stimuli.
- Open the airway using Basic Life Support techniques.
- Place nasopharyngeal/oropharyngeal airway as indicated.
- Administer oxygen using nasal cannula or non-rebreather mask as indicated.
- Place patient on left side to avoid inhaling any possible vomit.
- Report use of nasopharyngeal/oropharyngeal airway or administration of oxygen to EMS field personnel for documentation on the electronic patient care report (ePCR).
- Public safety personnel shall complete report per the public safety agency's policy.

**Not Breathing/Unresponsive**

- Ensure EMS has been activated using the 9-1-1 system.
- Maintain standard blood and body fluid precautions. Use appropriate personal protective equipment (gloves, face shield).
- Begin CPR (chest compressions with ventilation if bag valve mask (BVM) is available).
- Obtain AED if possible.
- Continue CPR as indicated.
- Place nasopharyngeal/oropharyngeal airway as indicated.
- Administer oxygen using non-rebreather mask or BVM as indicated.
- Consider environmental causes of decreased breathing, such as possible opioid overdose or exposure to nerve agents.

- Report use of nasopharyngeal/oropharyngeal airway or administration of oxygen to EMS field personnel for documentation on the ePCR.

- Public safety personnel shall complete report per the public safety agency's policy.

OPTIONAL SKILLS AND MEDICATIONS (Authorized Public Safety Personnel)

## I. PURPOSE

To define the requirements for authorized public safety personnel to provide certain optional skills and administer selected medications within the ICEMA region, as specified in California Code of Regulations, Title 22, Division 9, Chapter 1.5, First Aid and CPR Standards Training for Public Safety Personnel.

## II. POLICY

Upon approval of a public safety agency or department, public safety personnel may administer the following medications and/or perform the following optional skills:

- Epinephrine by auto-injector for suspected anaphylaxis.
- Oxygen using nasal cannula, non-rebreather mask, or bag-valve-mask.
- Atropine and Pralidoxime Chloride by auto-injector for nerve agent exposure for self or peer care.
- Naloxone intranasal spray for suspected narcotic overdose.
- Oropharyngeal (OPA) or Nasopharyngeal (NPA) airways.

### Public Safety Agencies

- For those courses requiring ICEMA approval, Public Safety agencies must submit a request for course approval for each optional skill, per ICEMA Reference #2040 - Public Safety Optional Skills Course Approval.
- Public safety agencies approved for optional skills will be identified by ICEMA.
- Public safety agencies approved by ICEMA will determine deployment of the selected medications within their jurisdiction and notify ICEMA of those public safety personnel that carry any of the selected medications for emergency administration.

### Public Safety Personnel

- Public safety personnel working for ICEMA approved public safety agencies or departments who have completed ICEMA approved optional skill training may administer the associated medications or skills by authority of the ICEMA Medical Director.
- Retraining in each approved optional skill is required every two (2) years.
- Current certification in Basic Life Support (AHA, American Red Cross, or ICEMA approved equivalent) and training in Public Safety-First Aid and CPR is required of public safety personnel approved for any optional skill and medication.

## III. PROCEDURE

Public safety personnel working for authorized public safety agencies and who have completed the appropriate training/retraining may administer the following medications and perform the following optional skills:

- Epinephrine using EpiPen or Epinephrine auto-injector, per ICEMA Reference #15010 - Allergic Reaction and Anaphylaxis (Authorized Public Safety Personnel).
- Atropine and Pralidoxime Chloride using Mark I or DuoDote auto-injector (Nerve Agent Antidote Kit - NAAK), per ICEMA Reference #15020 - Nerve Agent Exposure (Authorized Public Safety Personnel).
- Naloxone intranasal spray, per ICEMA Reference #15030 - Opioid Overdose (Authorized Public Safety Personnel).
- Oxygen using nasal cannula, non-rebreather mask or bag-valve-mask, per ICEMA Reference #15040 - Respiratory Distress (Authorized Public Safety Personnel).
- Oropharyngeal (OPA) or Nasopharyngeal (NPA) airways as indicated per ICEMA Reference #15040 – Respiratory distress (Authorized Public Safety Personnel).

## IV. DATA COLLECTION

- Authorized public safety personnel shall report all uses of optional skills and medication to responding EMS field personnel.
- EMS field personnel shall document the “prior to arrival” administration of medication by public safety personnel.
- Public safety personnel shall complete report per the public safety agency’s policy.

## V. SAFETY AND MONITORING

- Optional skills and medication administration for public safety personnel will be evaluated and monitored per the ICEMA Quality Improvement Plan.
- Authorized public safety agencies and public safety personnel shall ensure that the storage and rotation of medications are consistent with the manufacturer’s policies.

## VI. REFERENCES

| Number | Name |
|---|---|
| 2040 | Public Safety Optional Skills Course Approval |
| 15010 | Allergic Reaction and Anaphylaxis (Authorized Public Safety Personnel) |
| 15020 | Nerve Agent Exposure (Authorized Public Safety Personnel) |
| 15030 | Opioid Overdose (Authorized Public Safety Personnel) |
| 15040 | Respiratory Distress (Authorized Public Safety Personnel) |

# PUBLIC SAFETY AED SERVICE PROVIDER

## I. PURPOSE

To define the requirements for approval of public safety automatic external defibrillator (AED) service providers in the ICEMA region, as specified in the California Code of Regulations, Title 22, Division 9, Chapter 1.5, First Aid and CPR Standards Training for Public Safety Personnel.

## II. POLICY

- Public safety AED service providers, other than State or federal agencies, in San Bernardino, Inyo or Mono Counties shall be approved by ICEMA prior to beginning service.
- A public safety AED service provider shall ensure compliance with the California Code of Regulations, Title 22, Division 9, Chapter 1.5.
- A public safety agency shall submit a Public Safety AED Service Provider Application every two (2) years) for approval. An application is available on the ICEMA website at ICEMA.sbcounty.gov.
- Courses requiring approval, as specified by California Code of Regulations, Title 22, Division 9, Chapter 1.5, shall be submitted to ICEMA per ICEMA Reference #2030 - Public Safety-First Aid and CPR Training Program Approval.

## III. PUBLIC SAFETY AED SERVICE PROVIDER APPROVAL

- A public safety agency shall be approved if they:
  - Provide orientation of the AED to authorized personnel.
  - Ensure maintenance of AED equipment.
  - Ensure initial training and continued competency of AED authorized personnel at least every two (2) years.
  - Authorize and maintain a listing of all public safety AED service provider's authorized personnel and provide list upon request to ICEMA or the EMS Authority

## IV. RECORD KEEPING AND REPORTING REQUIREMENTS

- An AED Use Notification form, which is found on the ICEMA website at ICEMA.sbcounty.gov, must be provided to the Public Safety AED service provider's Medical Director who is responsible for the provider's AED program within 24 hours of use.
- The following data shall be collected and reported to ICEMA annually by March 1st for the previous calendar year. An AED Annual Usage Report form is available on the ICEMA website at ICEMA.sbcounty.gov.
  - The number of patients with sudden cardiac arrest receiving CPR prior to arrival of emergency medical care if known.

- The total number of patients on whom defibrillatory shocks were administered, witnessed (seen or heard) arrest and not witnessed arrest.
- The number of these persons who suffered a witnessed cardiac arrest whose initial monitored rhythm was ventricular tachycardia or ventricular fibrillation.

## V. REFERENCE

| Number | Name |
|---|---|
| 2030 | Public Safety-First Aid and CPR Training Program Approval |

DEFINITIONS

## I. PURPOSE

**To provide definitions for common terms used throughout the ICEMA Policy and Protocol Manual.**

## II. DEFINITIONS

**Advanced Life Support (ALS)**: Special services designed to provide definitive prehospital emergency medical care including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel.

**Against Medical Advice (AMA)**: A term used when an individual refuses treatment and/or transport after EMS field personnel advise that it is indicated.

**Ambulance**: An emergency basic life support (BLS) or advanced life support (ALS) ambulance.

**Ambulance Arrival at ED**: The time the ambulance stops (actual wheel stop) at the location outside the hospital ED where the patient is unloaded from the ambulance.

**Ambulance Patient Offload Delay (APOD)**: Any delay in ambulance patient offload time (APOT) that exceeds the local ambulance patient offload time standard of 25/30 minutes. This shall also be synonymous with “non-standard patient offload time” as referenced in the Health and Safety Code.

**Ambulance Patient Offload Time (APOT)**: The interval between the arrival of an ambulance patient at an ED and the time that the patient is transferred to an ED gurney, bed, chair or other acceptable location and the ED assumes responsibility for care of the patient.

**Ambulance Patient Offload Time (APOT-1) Standard**: Ambulance patient offload time (APOT-1) of 25 minutes or less in San Bernardino County or 30 minutes or less in Riverside County (25/30).

**Ambulance Provider**: An entity properly permitted to operate an emergency ambulance service in one or more of the ICEMA’s regional areas, e.g., Inyo, Mono or San Bernardino County.

**Base Hospital**: A hospital or hospitals under contract with ICEMA authorized and responsible for the direct supervision by an Emergency Department physician or Mobile Intensive Care Nurse (MICN) of certified Emergency Medical Technician-Paramedic (EMT-Ps) caring for patients while at the scene of an emergency, during transport to a general acute care hospital, during interfacility transfer of patients, and while the EMT-P is caring for patients in a general acute care hospital during training or continuing education.

**Certificate**: A valid Emergency Medical Technician (EMT) certificate issued pursuant to the California Health and Safety Code.

**Certifying Entity**: The ICEMA Medical Director, a public safety agency or the office of the State Fire Marshal if the agency has a training program for EMT or Advanced EMT (AEMT) personnel that is approved pursuant to the standards established in the Health and Safety Code.

**Certificate Holder**: For the purpose of this policy, shall mean the holder of a certificate, as that term is described above.

**Consent**: Consent is defined as the agreement and acceptance as to opinion or course of action.

**Consent - Involuntary**: In the absence of a parent or legal representative, emergency treatment and/or transport may be initiated without consent.

**Consent - Voluntary**: Treatment and/or transport of a minor shall be with the verbal or written consent of the parent or legal representative.

**Consent - Minor**: **Except** for circumstances specifically prescribed by law, a minor is not legally competent to consent to or refuse medical care.

**Consent - Minor not requiring parental consent**: A person who is decreed by the court as an emancipated minor, has a medical emergency and parent is not available, is married or previously married, is on active duty in the military, is pregnant and requires care related to the pregnancy, is twelve (12) years or older and in need of care for rape and/or sexual assault, is twelve (12) years or older and in need of care for a contagious reportable disease or condition, or for substance abuse

**Designated Receiving Hospital**: A hospital that has been designated by the EMS Agency to receive EMS patients transported by ambulance.

**Disciplinary Cause**: An act that is substantially related to the qualifications, functions, and duties of an EMT or AEMT and is evidence of a threat to the public health and safety, per California Health and Safety Code (H&S 1798.200).

**Disciplinary Plan**: A written plan of action that can be taken by a relevant employer as a consequence of any action listed in California Health and Safety Code (H&S 1798.200c).

**Discipline**: Either a disciplinary plan taken by a relevant employer pursuant to the California Code of Regulations, Section 100206, or certification action taken by a medical director pursuant to the California Code of Regulations, Section 100204, or both a disciplinary plan and certification action.

**DNR Form - Prehospital**: Form developed by the California Medical Association (CMA) for use statewide for prehospital DNR requests. This form has been approved by EMSA and ICEMA. This form should be available to EMS field personnel in the form of the white original DNR form or as a photocopy. The original or copy of the DNR form will be taken with the patient during transport. **The DNR form shall not be accepted if amended or altered in any way.**

**DNR Medallion/Bracelet/Necklace**: A medallion/bracelet/necklace worn by a patient, which has been approved for distribution by the California Emergency Medical Services Authority (EMSA). There are currently only three (3) approved vendors that produce the DNR medallions and bracelets

**Do Not Resuscitate (DNR)**: A written order by a physician or the presence of a DNR medallion/bracelet or necklace indicating that an agreement has been reached between the physician and patient/or surrogate that in the event of cardiac or respiratory arrest the following medical interventions will **NOT** be initiated:

- Chest compressions
- Defibrillation
- Endotracheal intubation
- Assisted ventilation

- Cardiotonic drugs, e.g., Epinephrine, Atropine or other medications intended to treat a non-perfusing rhythm

**Emergency**: A condition or situation in which an individual has a need for immediate medical attention, or where the potential for such need is perceived by emergency medical personnel or a public safety agency. An unforeseen condition or situation in which the individual has need for immediate medical attention, or where the potential for immediate medical attention is perceived by EMS personnel or a public safety agency.

**Emergency Department Medical Personnel**: An ED physician, mid-level practitioner (e.g., Physician Assistant, Nurse Practitioner) or Registered Nurse (RN).

**Emergency Medical Dispatch (EMD)**: The reception, evaluation, processing and provision of dispatch life support; management of requests for emergency medical assistance; ongoing evaluation and improvement of the emergency medical dispatch process.

**Emergency Medical Dispatch (EMD) Centers**: Any dispatching center receiving and dispatching calls for emergency medical services, which provide pre-arrival medical care instructions and/or tiered response resource management.

**Emergency Medical Dispatcher**: An individual certified by the National Academy of Emergency Medical Dispatch (NAEMD) providing pre-arrival instructions and/or tiered response management.

**Emergency Medical Dispatch (EMD) Program**: The reception, evaluation, processing and provision of dispatch life support; management of requests for emergency medical assistance; ongoing evaluation and improvement of the emergency medical dispatch process.

**Emergency Medical Services (EMS) Field Personnel**: EMTs, AEMTs, EMT-II and/or EMT-Ps responsible for out of hospital patient care and transport consistent with the scope of practice as authorized by their level of credentialing. People who have been certified, authorized or accredited as qualified to provide prehospital emergency medical care pursuant to California Health and Safety Code.

**EMT-P Student Intern**: An individual who is enrolled in an approved California EMT-P training program and is required to complete a field internship in order to become eligible for a California EMT-P license.

**EMT-P Preceptor**: An individual licensed as an EMT-P, who has been working for an ICEMA authorized Advanced Life Support (ALS) service provider as a licensed EMT-P in the field for at least two (2) years, or an individual licensed as an EMT-P who has worked a minimum of five (5) years with one year for an ICEMA authorized ALS service provider, and completed an ICEMA approved preceptor training workshop. EMT-P preceptors must be in good standing with their employer and not subject to any disciplinary action against their license. Each training program is responsible for ensuring that the field preceptor has the required experience and training.

**EMS Provider**: First responder and/or ambulance provider participating in the EMD program. Any entity possessing a current ICEMA issued permit to provide air ambulance/air rescue service within the County. An organization employing BLS, LALS, or ALS field personnel (AEMT, EMT, EMT-P, RN) for the delivery of emergency medical care to the sick and injured at the scene of an emergency.

**First Responder Provider**: An organization authorized by ICEMA to participate in the EMS system that is the initial contact for patients in the prehospital setting.

**First Responder Vehicle**: An emergency basic life support (BLS) or advanced life support (ALS) non-transport vehicle operated by an EMS provider.

**Functioning Outside of Medical Control**: Prehospital emergency medical care which is not authorized by, or is in conflict with ICEMA policies or protocols, or any treatment instructions issued by the base hospital providing immediate medical direction.

**Hospital Emergency Response Team (HERT)**: Organized group of healthcare providers from a designated Level I or II Trauma Center, with local emergency medical services agency (LEMSA) approval as a HERT provider, who are available 24 hours/day, 7 days/week (24/7) to respond and provide a higher level of on scene surgical expertise.

**Imminent Death**: A condition wherein illness or injuries are of such severity that in the opinion of EMS field personnel, death is likely to occur before the patient arrives at the receiving hospital.

**Incident Commander (IC)**: Designated officer with overall responsibility for the management of the incident.

**Legal Representative**: A person who is granted custody or conservatorship of another person.

**Local Medical Emergency**: A Local Medical Emergency shall exist when a “local emergency” as that term is used in Government Code, Section 8630 has been proclaimed by the governing body of a city or county, or by an official so designated by ordinance.

**Medical Advisory Committee (MAC)**: Primary committee that advises the ICEMA Medical Director on the clinical or medical aspects of Emergency Medical Services (EMS) within the ICEMA region

**Medical Triage**: Medical sorting and prioritization of a patient by ED medical personnel. Medical triage includes acceptance of a verbal patient report from EMS field personnel.

**Minor**: Any person under eighteen (18) years of age.

**Mobile Intensive Care Nurse (MICN)**: A Registered Nurse (RN) who is functioning pursuant to the Business and Professions Code, Section 2725 and has been deemed qualified and authorized by the ICEMA Medical Director to provide Advanced Life Support services or to issue physician directed instructions to EMS field personnel within an Emergency Medical Services (EMS) system according to ICEMA developed standardized procedures and consistent with statewide guidelines.

**Mobile Intensive Care Nurse - Administrative (MICN-A)**: An ICEMA authorized MICN who has applied for, completed and achieved all ICEMA requirements for “MICN-A” designation and qualifies as a MICN-A to work in an administrative/supervisory capacity for an ALS provider approved by ICEMA.

**Mobile Intensive Care Nurse - Base Hospital (MICN-BH)**: An ICEMA authorized MICN who has applied for, completed and achieved all ICEMA requirements for “MICN-BH” designation and qualifies as a MICN-BH to issue physician directed instructions to EMS field personnel while working for a recognized base hospital within the ICEMA region.

**Mobile Intensive Care Nurse - Critical Care Transport (MICN-C)**: An ICEMA authorized MICN who has received additional training related to critical care transport and achieved all ICEMA requirements for “MICN-C” designation and qualifies to provide ALS services during critical care ground transports by approved EMS providers.

**Mobile Intensive Care Nurse - Flight (MICN-F)**: An ICEMA authorized MICN who has applied for, completed, and met all ICEMA requirements for “flight” designation and qualifies to provide prehospital ALS during flight operations aboard air ambulance and/or air rescue aircraft.

**Mobile Medic Specialty Program**: A specialty program that utilizes boats, bicycles, motorcycles, golf carts and/or powered all-terrain vehicles or for ALS or BLS response designed to deliver EMT, AEMT, and/or EMT-P to the scene of injury and/or transport a patient from the scene of injury to other awaiting EMS units.

**Model Disciplinary Orders (MDO)**: The Recommended Guidelines for Disciplinary Orders and Conditions of Probation (EMSA Document #134) which were developed to provide consistent and equitable discipline in cases dealing with disciplinary cause.

**Notification of Defense**: Notification sent to ICEMA by certificate holder that states certificate holder intends to defend actions through an administrative hearing process.

**Optional Scope Program**: Any EMT/AEMT/EMT-P program that may require approval from the Medical or Executive Director to function outside of the basic scope of practice that is not initiated region-wide.

**Patient**: An individual with a complaint of pain, discomfort or physical ailment. An individual regardless of complaint, with signs and/or symptoms of pain, discomfort, physical ailment or trauma. These signs/symptoms include, but are not limited to:

- Altered level of consciousness.
- Sign and/or symptoms of skeletal or soft tissue injuries.
- Altered ability to perceive illness or injury due to the influence of drug, alcohol or other mental impairment.
- Evidence that the individual was subject to significant force.

**Patient Contact**: Determined to be achieved when any on duty BLS, LALS, or ALS field personnel (AEMT, EMT, EMT-P, RN) comes into the presence of a patent.

**Physician Orders for Life-Sustaining Treatment (POLST)**: A physician's order that outlines a plan of care reflecting the patient's wishes concerning care at life's end. The POLST form is voluntary and is intended to assist the patient and family with planning that reflects the patient's end of life wishes. It is also intended to assist physicians, nurses, healthcare facilities and EMS field personnel in honoring a person's wishes for life-sustaining treatment.

**Policy(ies) - EMS System**: EMS system organization, principal functions and mode of operations for providers and healthcare facilities within the ICEMA region that guide EMS system operation.

**Protocol(s) - Patient Care**: Medical Standards that provide the framework for the medical treatment and care routinely provided to patients within the ICEMA region.

**Public Safety AED Service Provider**: An agency or organization which is responsible for and is approved to operate an AED, and employs public safety personnel (firefighter, lifeguard, or peace officer), and who obtain AEDs for the purpose of providing AED services to the general public.

**Reasonable Search**: A brief attempt by EMS field personnel to locate documentation that may identify a patient as a potential organ donor, or one who has refused to make an anatomical gift. This search shall be limited to a wallet or purse that is on or near the individual to locate a driver's license or other identification card with this information. A reasonable search shall not take precedence over patient care/treatment.

**Relevant Employer(s)**: Employers who provide ambulance services and/or a public safety agency where the EMT or AEMT works or was working for at the time of the incident under review, either as a paid employee or a volunteer.

**Specialty Program**: Any program that may require approval from the ICEMA Medical Director to function due to regulations or any variance from standard ICEMA policies or protocols either in equipment or procedures.

**Standardized Patient-Designated Directives**: Forms or medallions that recognize and accommodate patient's wish to limit prehospital treatment at home, in long term care facilities or during transport between facilities. Examples include:

- Statewide EMSA/California Medical Association (CMA) Prehospital DNR Form, (Ref. No. 815.1)
- Physician Orders for Life-Sustaining Treatment (POLST, Ref. No. 815.2)
- State EMS Authority-Approved DNR Medallion

**Supportive Measures**: Medical interventions used to provide and promote patient comfort, safety, and dignity. Supportive measures may include but are not limited to:

- Airway maneuvers, including removal of foreign body
- Suctioning
- Oxygen administration
- Hemorrhage control
- Oral hydration
- Glucose administration
- Pain control (i.e., Fentanyl)

**System Advisory Committee (SAC)**: Primary committee that advises the ICEMA EMS Administrator on the operational aspects of Emergency Medical Services (EMS) within the ICEMA Region.

**Tactical Medicine Specialty Program**: A specialty program that meets all the prerequisites established by POST/EMSA for the delivery of emergency medical care during law enforcement special operations.

**Transfer of Patient Care**: The orderly transition of patient care duties from EMS personnel to receiving hospital ED medical personnel.

**Unusual Event**: An incident that significantly impacts or threatens public health, environmental health or emergency medical services.

**Verbal Patient Report**: The face-to-face verbal exchange of key patient information between EMS field personnel and/or ED medical personnel.

**Written EMS Report**: The written report supplied to ED medical personnel (either through the electronic patient care report (ePCR), or actual written report (if ePCR is not available) that details patient assessment and care that was provided by EMS field personnel.

**Zone - Hot or Exclusive**: That area immediately around the spill where contamination does or could occur. It is the innermost of the three zones of a hazardous materials site. It is the zone where mitigation measures take place. Special protection is required for all personnel operating in this zone. All personnel exiting this zone will require decontamination.

**Zone - Warm or Contamination Reduction**: That area between the Exclusion Zone and the Support Zone. This zone contains the Contamination Reduction Corridor where the decontamination team decontaminates the personnel leaving the Exclusion Zone. This zone may require a lesser degree of protective equipment than the Exclusion Zone. This area separates the contaminated area from the clean area and acts as a buffer to reduce contamination of the clean area. No contamination should pass through to the clean area.

**Zone - Cold or Support**: The clean area outside of the Contamination Control Line. Special protective clothing is not required. This is the area where resources are assembled to support the hazardous materials operation.