



San Bernardino County  
EMS Officer's Association

Basic / Advanced Skills  
Training Guidelines &  
Testing Manual

**2024 Edition**

## *Foreword from EMS Officers*

*Greetings Colleagues,*

*This basic and advanced skills training guidelines and testing manual is for you! The San Bernardino County EMS Officer's association has created and supports this living and breathing document. This manual is supported by industry standards and resources (NREMT and ICEMA protocols/standards) utilized in educational institutions and organizations that set a national standard for Emergency Medical Services. As this is a living document, annual revisions will be updated based on feedback from users and administrators who utilize this for education and application purposes. Please don't hesitate to forward concerns to your respective EMS Officer representative to help uphold the industry standard for all.*

*Best Regards,*

*San Bernardino County EMS Officer's Association*

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## 12 Lead Electrography

### INDICATIONS

- Patient with complaint of chest pain, with suspected or at risk of having a myocardial infarction or any patient with predisposing factors that may benefit from the procedure.

### CONTRAINDICATIONS (Relative)

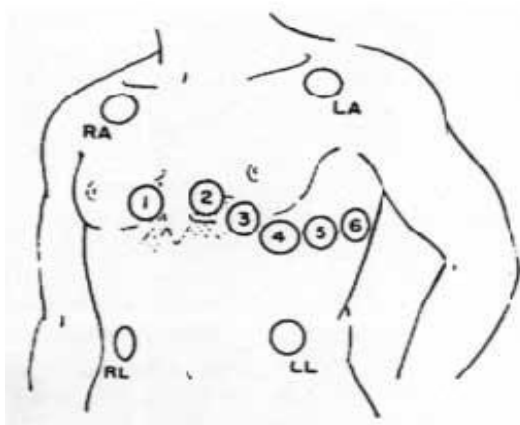
- Uncooperative patient
- Life-threatening conditions
- 12 Lead will impede immediate patient care needs.

### CONSIDERATIONS

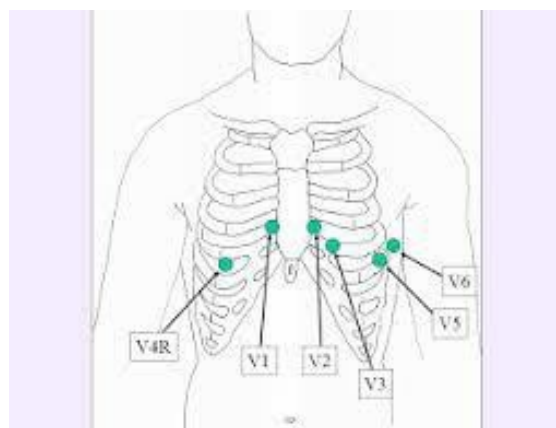
- Consider 12-lead ECG with atypical presentations (figure 2):
- Elderly Female
- Diabetic
- Unexplained or near syncope Shortness of Breath
- Generalized weakness (over fifty (50) years of age) Profound weakness, acute onset.
- Upper abdominal discomfort

**\*\* For suspected right sided MI, remove V4 lead and place it at the 5<sup>th</sup> intercostal space midclavicular line on the right side of the chest. Figure 1.**

Figure 1




<http://www.ems12lead.com/2008/10/17/>



<http://nuclearcardiologyseminars.com/electrocardiography>

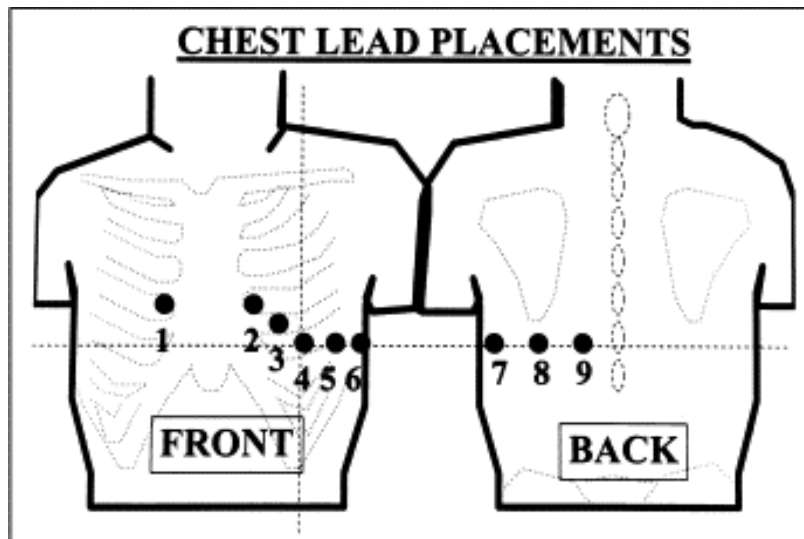
12-lead-ecg-lead-placement-diagrams/

Figure 2

			
I Lateral	aVR	V1 Septal	V4 Anterior
II Inferior	aVL Lateral	V2 Septal	V5 Lateral
III Inferior	aVF Inferior	V3 Anterior	V6 Lateral
SITE		FACING	RECIPROCAL
SEPTAL		V1, V2	NONE
ANTERIOR		V3, V4	NONE
ANTEROSEPTAL		V1, V2, V3, V4	NONE
LATERAL		I, aVL, V5, V6	II, III, aVF
ANTEROLATERAL		I, aVL, V3, V4, V5, V6	II, III, aVF
INFERIOR		II, III, aVF	I, aVL
POSTERIOR		NONE	V1, V2, V3, V4

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**\*15 Lead Placement**





## 12 Lead Electrography

### Skills Test

Examinee: \_\_\_\_\_ Date: \_\_\_\_\_

Examiner: \_\_\_\_\_ Pass  Pass/Counsel  Fail

#### Equipment:

- 12-lead electrodes
- Cardiac monitor with 12-lead capabilities
- Razor (as needed)

#### Assessment/Treatment indicators:

##### Indications

- Patient with complaint of chest pain, with suspected or at risk of having a myocardial infarction.
- Consider 12-lead ECG with atypical presentations:
  - Elderly
  - Female
  - Diabetic
  - Unexplained or near syncope
  - Shortness of Breath
  - Generalized weakness (over forty (40) years of age)
  - Profound weakness, acute onset
  - Upper abdominal pain

##### Contraindications

- Uncooperative patient
- Life-threatening conditions
- Delay caused by obtaining ECG could compromise care of that patient.
- 12 lead will impede immediate patient care needs

#### Procedure:

		Yes	No
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>
5.	Places the patient in a preferred position of comfort (if the patient cannot tolerate being supine, obtain the ECG in Semi-Fowlers or a more upright position)	<input type="checkbox"/>	<input type="checkbox"/>
6.	Instructs the patient to place their arms down by their side and to relax their shoulders	<input type="checkbox"/>	<input type="checkbox"/>
7.	Makes sure the patient's legs are uncrossed	<input type="checkbox"/>	<input type="checkbox"/>
8.	Dries the skin if it's moist or diaphoretic	<input type="checkbox"/>	<input type="checkbox"/>
9.	Shaves any hair that interferes with electrode placement	<input type="checkbox"/>	<input type="checkbox"/>
10.	Places precordial lead electrodes to patient per manufacturer's directions (Figure 1)	<input type="checkbox"/>	<input type="checkbox"/>

11.	Records and prints ECG findings per manufacturer's directions	<input type="checkbox"/>	<input type="checkbox"/>
12.	Paramedic interprets ECG, report and document findings (Figure 2) (Step 12 may be omitted with EMT only exam)	<input type="checkbox"/>	<input type="checkbox"/>
13.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• ECG findings</li><li>• Patient response to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Spinal Motion Restriction of a Seated Patient

### INDICATIONS

- Suspected spinal injuries, complaints of spinal pain.
- Determine if the patient meets criteria for full axial spinal precautions by following the indicators of the following acronym (NSAID):

**N** – Neuro deficit present?

**S** – Spinal tenderness?

**A** – Altered mental status?

**I** – Intoxication?

**D** – Distracting injury?

### CONTRAINDICATIONS

- No contraindications

### CONSIDERATIONS

- For pediatric patients: If the level of the patient's head is greater than that of the torso, use an approved pediatric spine board with a head drop or arrange padding in the board to keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board.
- For patients being placed on a backboard from the standing or sitting position, consider providing comfort by placing padding on the board.
- Any elderly or other adult patients, who may have a spine that is normally flexed forward, should be stabilized in the patient's normal anatomical position considering spinal curvatures.
- When a pregnant patient is placed in axial spinal stabilization, the board should be elevated at least four (4) inches on the left side to decrease pressure on the Inferior Vena Cava.
- Certain patients may not tolerate normal stabilization positioning due to the location of additional injuries. These patients may require stabilization in their position of comfort. Additional material may be utilized to properly stabilize these patients while providing for the best possible axial spinal alignment.
- ALS personnel may remove patients placed in axial spinal stabilization by first responders and BLS personnel if the patient does not meet the NSAID indicators after a complete assessment and documentation on the patient care report should be completed.

## Spinal Motion Restriction of a Seated Patient

### Skills Test

Examinee: _____ Date: _____				
Examiner: _____ Pass <input type="checkbox"/> Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>				
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• Cervical collar</li> <li>• Backboard</li> <li>• Padding (as indicated)</li> </ul>		<ul style="list-style-type: none"> <li>• Backboard straps</li> <li>• Spinal motion restriction device</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u>Indications</u>		<u>Contraindications</u>		
<ul style="list-style-type: none"> <li>• Per NSAID acronym</li> </ul>		<ul style="list-style-type: none"> <li>• Per NSAID acronym</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Directs assistant to place/maintain head in the neutral, in-line position	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Reassesses motor, sensory, and circulatory function in each extremity	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Applies appropriately sized extrication/cervical collar	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Positions the immobilization device appropriately	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Directs movement of the patient onto the backboard without compromising the integrity of the spine	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Applies padding to voids between the torso and the device as necessary	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Immobilizes the patient's torso to the device	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Evaluates and pads behind the patient's head as necessary	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Immobilizes the patient's head to the device	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Secures the patient's arms and legs to the device	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Reassessment of motor, sensory, and circulatory function in each extremity</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				

## Spinal Motion Restriction of a Supine Patient

### INDICATIONS

- Determine if the patient meets criteria for spinal motion restriction by following the indicators of the following acronym (NSAID):

**N** – Neuro deficit present?

**S** – Spinal tenderness?

**A** – Altered mental status?

**I** – Intoxication?

**D** – Distracting injury?

### CONTRAINDICATIONS

- Penetrating trauma without any NSAID indicators are not candidates for spinal motion restriction.

### CONSIDERATIONS

- Maintain 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.
- For standing patients with the complaint of neck or back pain; consider placement on a backboard while the patient remains in the standing position, executing the standing takedown technique.
- For pediatric patients: use an approved pediatric spine board with a head drop or arrange padding on the board to keep the entire lower spine and pelvis in line with the cervical spine and parallel to the board. All intubated neonatal and pediatric patients should be placed in full axial spinal immobilization.
- Any elderly or other adult patients should be stabilized in the patient's normal anatomical position.
- Pregnant patients placed in axial spinal stabilization; board should be elevated at least four (4) inches on the left side to decrease pressure on the Inferior Vena Cava.
- Certain patients may not tolerate normal stabilization positioning due to the location of additional injuries. These patients may require stabilization in their position of comfort.
- ALS personnel may remove patients placed in axial spinal stabilization by first responders and BLS personnel if the patient does not meet the NSAID indicators after assessment.

**\*\* Age of the patient, co-morbidities (osteoporosis, etc.) should always be a priority in the decision-making process.**

**\*\* 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 stabilization. Judicious application of the LBB for purposes other than extrication necessitates that healthcare providers 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.**

## Axial Spinal Immobilization of a Supine Patient

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>Cervical collar</li> <li>Backboard</li> <li>Padding (as indicated)</li> </ul>		<ul style="list-style-type: none"> <li>Backboard straps</li> <li>Head bed/ towel rolls / head blocks</li> </ul>	
<b>Assessment/Treatment indicators:</b>			
<u>Indications</u>		<u>Contraindications</u>	
<ul style="list-style-type: none"> <li>Per NSAID acronym</li> </ul>		<ul style="list-style-type: none"> <li>Per NSAID acronym</li> <li>Penetrating trauma without any NSAID indicators</li> </ul>	
<b>Procedure:</b>		<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>
5.	Directs assistant to place/maintain head in the neutral, in-line position	<input type="checkbox"/>	<input type="checkbox"/>
6.	Reassesses motor, sensory, and circulatory function in each extremity	<input type="checkbox"/>	<input type="checkbox"/>
7.	Applies appropriately sized extrication/cervical collar	<input type="checkbox"/>	<input type="checkbox"/>
8.	Positions the immobilization device appropriately	<input type="checkbox"/>	<input type="checkbox"/>
9.	Directs movement of the patient onto the backboard without compromising the integrity of the spine	<input type="checkbox"/>	<input type="checkbox"/>
10.	Applies padding to voids between the torso and the device as necessary	<input type="checkbox"/>	<input type="checkbox"/>
11.	Immobilizes the patient's torso to the device	<input type="checkbox"/>	<input type="checkbox"/>
12.	Evaluates and pads behind the patient's head as necessary	<input type="checkbox"/>	<input type="checkbox"/>
13.	Secures the patient's arms and legs to the device	<input type="checkbox"/>	<input type="checkbox"/>
14.	Immobilizes the patient's head to the device	<input type="checkbox"/>	<input type="checkbox"/>
15.	Reassess/Document: <ul style="list-style-type: none"> <li>Patient</li> <li>Motor, sensory, and circulatory function in each extremity</li> <li>Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Bleeding Control/Shock Management

### INDICATIONS

- Patient with blunt or penetrating trauma with active hemorrhage

### CONTRAINDICATIONS (Relative)

- No contraindications

### CONSIDERATIONS

- Cut and expose wound.
- Consider proper equipment needed for specific hemorrhage control.
- Consider appropriate manufacturer's guidelines for specific tourniquet application.
- Consider proper equipment needed for the treatment of shock  
Destination, time and specialty center required, need for HERT team.

**\*\* Consider oxygen administration (follow oxygen administration guidelines)**



## Bleeding Control/Shock Management

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI equipment</li> <li>• Absorbent material</li> <li>• Bandaging material</li> <li>• Oxygen/ Oxygen delivery system</li> </ul>		<ul style="list-style-type: none"> <li>• Blanket</li> <li>• Tourniquets (Swat-T, Soft-T)</li> <li>• Quik-clot for junctional wounds</li> <li>• Israeli bandages – pressure dressings</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Signs of active hemorrhage</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Applies direct pressure to the wound	<input type="checkbox"/>	<input type="checkbox"/>	
The examiner advises “The wound continues to bleed.”				
3.	Applies tourniquet appropriately	<input type="checkbox"/>	<input type="checkbox"/>	
The examiner advises “The patient is now exhibiting signs and symptoms of hypoperfusion.”				
4.	Positions the patient Properly	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Administers high concentration oxygen (According to NAEMT and/or ICEMA protocol)	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Initiates steps to prevent heat loss from the patient	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Indicates the need for immediate transport	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Motor, sensory, and circulatory function in each extremity</li> <li>• Patient response/tolerance to intervention</li> <li>• Estimated blood loss</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				

## Blood Glucose Analysis

### INDICATIONS

- Altered mental status.
- Neurological dysfunction
- History of diabetes
- Vague or general symptoms or complaints
- Need to reassess following treatment of hypoglycemia.
- Nausea and vomiting
- Abdominal pain

### CONTRAINDICATIONS (Relative)

Recognize contraindications to blood sampling site selection:

- Signs of local infection
- Wounds or bleeding

### CONSIDERATIONS

- Reassess unusual and/or unexpected glucometer results.
- Consider new onset or gestational diabetes.
- Consider for pediatric patients with a history of vomiting and abdominal pain.

## Blood Glucose Analysis

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI Equipment / PPE</li> <li>• Glucometer</li> <li>• Alcohol preps</li> </ul>		<ul style="list-style-type: none"> <li>• Sharps container</li> <li>• Lancet(s)</li> <li>• Bandage</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u><b>Indications</b></u>		<u><b>Contraindications (Relative)</b></u>		
<ul style="list-style-type: none"> <li>• Altered Mental Status</li> <li>• Neurological dysfunction</li> <li>• History Diabetes or indications of new onset</li> <li>• Vague or General symptoms or complaints</li> <li>• Need to reassess following treatment of hypoglycemia</li> </ul>		<ul style="list-style-type: none"> <li>• Local infection, Wounds or bleeding at blood sampling site</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Setup appropriate equipment (glucometer, test strip, lancet, alcohol prep)	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure to patient	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Prepares glucometer: inserts test strip and, ensure glucometer is ready for use	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Select appropriate site Adult / Pediatric <ul style="list-style-type: none"> <li>• Fingertip side</li> </ul> Infant (less than one year) <ul style="list-style-type: none"> <li>• Heel of foot</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Use alcohol to clean site (allow site to dry completely before utilizing lancet)	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Obtain blood sample: prick the site with lancet	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Allow blood drop to form, transfer blood sample to the test strip following manufacturer's guidelines	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Place lancet in sharps container & apply bandage to site	<input type="checkbox"/>	<input type="checkbox"/>	

[20]

11.	Announce / Document glucometer result.	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Cardiac Arrest and AED

### INDICATIONS

- Cardiac/Respiratory Arrest

### CONTRAINDICATIONS

- DNR
- POLST directives
- End of Life Option Act

### CONSIDERATIONS:

- Ensure enough space to properly perform CPR with several rescuers Remove patient from standing water.
- Place patient in supine position.
- Determine probable cause of the arrest.

**\*\* AED patches should not be placed over implanted medical devices, jewelry, or transdermal medication patches**

## Cardiac Arrest and AED

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
• PPE		• AED		
<b>Assessment/Treatment indicators:</b>				
<u><b>Indications</b></u>		<u><b>Contraindications</b></u>		
<ul style="list-style-type: none"> <li>• Cardiac/Respiratory arrest</li> </ul>		<ul style="list-style-type: none"> <li>• DNR</li> <li>• POLST directives</li> <li>• End of Life Option Act</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Attempts to obtain information about event from bystanders	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Checks patient responsiveness, assess for signs of breathing (agonal, apneic, gasping) and carotid pulse (no more than 10 seconds)	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Immediately begins high performance chest compressions with appropriate rate and depth while allowing for complete chest recoil	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Requests additional assistance (as needed)	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Performs 2 minutes (5 cycles) of high performance (1 or 2-person) CPR	<input type="checkbox"/>	<input type="checkbox"/>	
10.	After 2 minutes, switches out rescuer performing compressions	<input type="checkbox"/>	<input type="checkbox"/>	
11.	When AED arrives, first rescuer turns it on	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Follows initial AED prompts	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Correctly attaches pads to patient. <b>** Avoids placing pads over implanted medical devices or medication patches</b>	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Follows additional AED prompts to clear and analyze rhythm	<input type="checkbox"/>	<input type="checkbox"/>	
15.	If shock advised, ensures the patient is clear of all bystanders and provides shock per AED instructions	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Ensures effective chest compressions are immediately resumed	<input type="checkbox"/>	<input type="checkbox"/>	

17.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Patient response/tolerance to interventions</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			



## HARE Traction Splint Device

### INDICATIONS

- Painful, swollen, deformed mid-thigh with no joint or lower leg injury.

### CONTRAINDICATIONS

- Open fracture
- Pelvis, hip, knee, ankle injury
- Excessive avulsion
- Partial amputation

### CONSIDERATIONS

- Utilize three rescuers to apply a traction splint, if possible



**HARE Traction Splint**

## Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
• PPE		• HARE Traction Splint		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>Painful, swollen, deformed mid-thigh with no joint or lower leg injury</li> </ul>		<ul style="list-style-type: none"> <li>Open fracture</li> <li>Pelvis, hip, knee, ankle injury</li> <li>Excessive avulsion</li> <li>Partial amputation</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Directs assistant to stabilize the injured leg	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Exposes the injured extremity	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Removes shoe and sock on injured leg	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Checks the circulation, motor and sensory function distal to the injury before moving leg or applying traction	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Positions the device parallel to the uninjured leg and adjusts the length to 10 inches beyond the foot	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Spaces the straps to support the upper and lower leg	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Applies the foot strap to the injured leg	<input type="checkbox"/>	<input type="checkbox"/>	
12.	While supporting the fracture site, directs the assistant to elevate the injured leg while maintaining continuous traction	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Positions the device under the injured leg with the top portion firmly against the ischium	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Directs the assistant to lower the leg onto the device while maintaining traction	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Secures the groin strap prior to application of mechanical traction	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Attaches the foot strap rings to winch and twists knob to apply mechanical traction	<input type="checkbox"/>	<input type="checkbox"/>	

17.	Releases manual traction after the mechanical traction is applied	<input type="checkbox"/>	<input type="checkbox"/>
18.	Rechecks the circulation, motor, and sensory function distal to the injury	<input type="checkbox"/>	<input type="checkbox"/>
19.	Splints the fracture without excessive motion of the leg	<input type="checkbox"/>	<input type="checkbox"/>
20.	Immobilizes the patient's hip joint to backboard or equivalent if spinal precautions not already in place	<input type="checkbox"/>	<input type="checkbox"/>
21.	Secures the limb straps and mechanical traction device. Does not strap over the fracture site or knee	<input type="checkbox"/>	<input type="checkbox"/>
22.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Patient response/tolerance to interventions</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Intramuscular Medication Administration

### INDICATIONS

- Unable to establish IV for medication administration.
- Desired route for administration of medication

### CONTRAINDICATIONS (Relative)

**If any of the following are noted at the site, select a different site:**

- Masses
- Tenderness
- Bruising
- Infection
- Abrasions
- Swelling

## Intramuscular Medication Administration

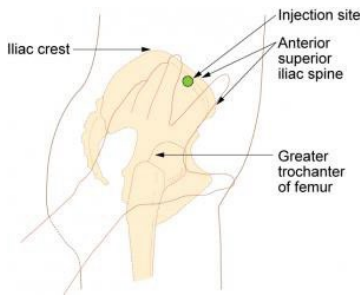
### Skills Test

Examinee: _____ Date: _____ Examiner: _____ Pass <input type="checkbox"/> Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>				
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI equipment</li> <li>• Syringe</li> <li>• Alcohol Prep</li> </ul>		<ul style="list-style-type: none"> <li>• Safety Needles (20-25g; 5/8 to 1 ½ inches in length)</li> <li>• Bandage</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications (relative to site)</u></b>		
<ul style="list-style-type: none"> <li>• Unable to establish IV for medication administration.</li> <li>• Desired route for administration of medication</li> </ul>		<ul style="list-style-type: none"> <li>• Masses</li> <li>• Tenderness</li> <li>• Bruising</li> <li>• Infection</li> <li>• Abrasions</li> <li>• Swelling</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares and checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure to patient/family	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Inspects desired site for contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Chooses appropriate medication	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Inspects site for significant muscle mass	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Withdraws medication	<input type="checkbox"/>	<input type="checkbox"/>	
8a.	Verbalizes no more than recommended solution per site: <b>Deltoid</b> (Upper Arm) (2ml) <b>Vastus Lateralis</b> (Anterior Thigh) (5mL) <b>Ventrogluteal</b> (Lateral Hip) (5mL)	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Positions patient and prepares site	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Removes air from needle (Pushes slightly on the plunger to bring a drop of solution to the level of the bevel of the needle)	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Supports the muscle to be injected (Without contaminating the site, spreads skin tight with non-dominant hand)	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Inserts needle with a dart like motion into site at 90° angle and stabilizes hub of syringe and aspirates for no blood return (no blood return indicates proper placement)	<input type="checkbox"/>	<input type="checkbox"/>	

13.	Slowly injects medication to reduce pain and tissue trauma	<input type="checkbox"/>	<input type="checkbox"/>
14.	Withdraws needle and properly disposes needle and syringe	<input type="checkbox"/>	<input type="checkbox"/>
15.	Applies direct pressure, massages site and apply bandage as needed	<input type="checkbox"/>	<input type="checkbox"/>
16.	<b>Reassess/Document:</b> <ul style="list-style-type: none"> <li>• Patient</li> <li>• Medication and dosage given.</li> <li>• Administration success</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

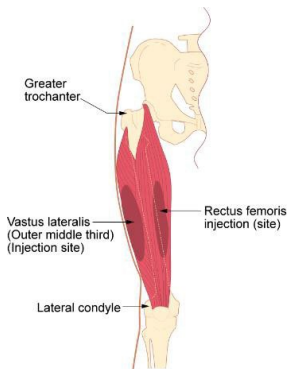
**Notes:**

### Ventrogluteal



Recommended needle length is based on patient weight and body mass index. Thin adults may require a 16 mm to 25 mm (5/8 to 1 inch) needle, average adult may require a 25 mm (1 inch) needle, larger adult (over 70 kg) may require a 25 mm to 38 mm (1 to 1 1/2 inch) needle. Children and infants will require shorter needles.

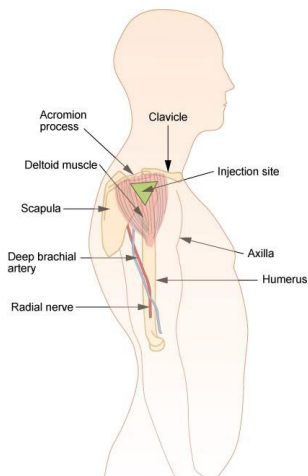
For the ventrogluteal muscle of an average adult, give up to 5 ml of medication.



### Vastus Lateralis

Recommended needle length for an adult is 25 mm to 38 mm (1 to 1 1/2 inch). A smaller gauge needle (22 to 25 gauge) should be used with children.

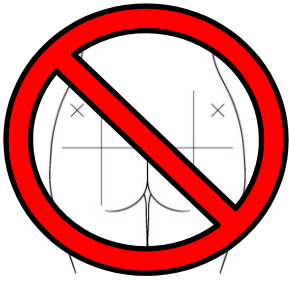
The maximum amount of medication for a single injection is 5 ml.



### Deltoid

Select needle length based on age, weight, and body mass. In general, for an adult male weighing 60 to 118 kg (130 to 260 lbs), a 25 mm (1 inch) needle is adequate. For women under 60 kg (130 lbs), a 16 mm (5/8 inch) needle is adequate, while for women between 60 and 90 kg (130 to 200 lbs), a 25 mm (1 inch) needle is required. A 38mm (1 1/2 inch) length needle may be required for women over 90 kg (200 lbs) for a deltoid IM injection. The maximum amount of medication for a single injection is 2 ml.

### **Dorsal gluteal muscle (Gluteus Maximus)**



**NEVER** give an IM injection in the dorsolateral muscle.

If the needle hits the sciatic nerve, the patient may experience **partial or permanent** paralysis of the leg.

AJN, American Journal of Nursing, April 1996, Volume: 96 Number 4, page 53 retrieved from:  
[https://www.nursingcenter.com/journalarticle?Article\\_ID=102892&Journal\\_ID=54030&Issue\\_ID=54821](https://www.nursingcenter.com/journalarticle?Article_ID=102892&Journal_ID=54030&Issue_ID=54821)

<https://opentextbc.ca/clinicalskills/chapter/6-8-iv-push-medications-and-saline-lock-flush/>

Data source: Berman & Snyder, 2016; Davidson & Rourke, 2014; Ogston-Tuck, 2014a; Perry et al., 2014

## **Intranasal Medication Administration**

### **INDICATIONS**

- Unable to establish IV for medication administration.
- Desired route for administration of medication

### **CONTRAINDICATIONS (Relative)**

- Significant nasal trauma
- Significant amount of blood or dried mucous discharge

## Intranasal Medication Administration

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• BSI Equipment</li> </ul>		<ul style="list-style-type: none"> <li>• Mucosal Atomization Device (MAD) or other IN medication device</li> </ul>	
<b>Assessment/Treatment indicators:</b>			
<u><b>Indications</b></u>		<u><b>Contraindications</b></u>	
<ul style="list-style-type: none"> <li>• Unable to establish IV for medication administration.</li> <li>• Desired route for administration of medication</li> </ul>		<ul style="list-style-type: none"> <li>• Significant nasal trauma</li> <li>• Significant amount of blood or dried mucous discharge</li> </ul>	
<b>Procedure:</b>		<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Explains procedure to patient/family	<input type="checkbox"/>	<input type="checkbox"/>
5.	Inspects the nostril for significant amount of mucus and/or blood	<input type="checkbox"/>	<input type="checkbox"/>
6.	Chooses appropriate medication	<input type="checkbox"/>	<input type="checkbox"/>
7.	Withdraws medication	<input type="checkbox"/>	<input type="checkbox"/>
8.	Places the administration end of IN device in the nostril (If repeating dose, if possible, use opposite nostril)	<input type="checkbox"/>	<input type="checkbox"/>
8a.	Verbalizes no more than 1mL of solution should be administered in each nostril	<input type="checkbox"/>	<input type="checkbox"/>
9.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Medication and dosage given.</li> <li>• Administration success</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			



## Joint Immobilization

### INDICATIONS

- Signs of possible dislocation or fracture of a joint including pain, deformity, crepitus, or swelling to a joint

### CONTRAINDICATIONS (Relative)

- No contraindications

### CONSIDERATIONS

- Cut and expose affected extremity.
- Prepare equipment for joint immobilization.

## Joint Immobilization

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI equipment</li> <li>• Splint, roller bandage, and/or tape</li> </ul>		<ul style="list-style-type: none"> <li>• Padding</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Signs of possible dislocation or fracture of joint deformity, crepitus, or swelling of joint.</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Directs application of manual stabilization of injury	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Assesses distal motor, sensory, or circulatory functions in the injured extremity, compares with uninjured extremity	<input type="checkbox"/>	<input type="checkbox"/>	
<b>The examiner advises "Motor, sensory and circulatory functions are present and normal."</b>				
4.	Selects the proper splinting material	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Immobilizes the site of injury	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Immobilizes the bone above the injury site	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Immobilizes the bone below the injury site	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Secures the entire injured extremity is secured	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Reassesses distal motor, sensory and circulatory functions in the injured extremity	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient, pain scale</li> <li>• Patient response/tolerance to interventions</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>The examiner advises "Motor, sensory and circulatory functions are present and normal."</b>				
<b>Notes:</b>				

## Neonate Resuscitation Post Delivery

### INDICATIONS

- Cardiac/Respiratory Arrest post delivery

### CONTRAINDICATIONS

- Known still birth.

### CONSIDERATIONS:

- Two patients
- Have second EMS personnel support mother emotionally.
- Continued medical support for mother.

## Neonate Resuscitation Post Delivery

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI Equipment / PPE</li> <li>• Obstetric Kit</li> <li>• Infant BVM</li> </ul>		<ul style="list-style-type: none"> <li>• Oxygen</li> <li>• OPA</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u><b>Indications</b></u>		<u><b>Contraindications</b></u>		
<ul style="list-style-type: none"> <li>• Cardiac / Respiratory arrest post-delivery to neonate</li> </ul>		<ul style="list-style-type: none"> <li>• Known still birth</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	After birth, assess the newborn for good tone, breathing or crying. Check heart rate >60 if <60 continue to #3.	<input type="checkbox"/>	<input type="checkbox"/>	
2.	If the infant is breathing at an appropriate rate or crying, warm and maintain normal temperature, position airway, clear secretions if needed, dry. Then give to mother for continued care.	<input type="checkbox"/>	<input type="checkbox"/>	
3.	If not breathing or agonal respirations check ABC's: <ul style="list-style-type: none"> <li>• Airway: Open airway, suction if needed, position</li> <li>• Breathing: Provide oxygen in high concentration, nonrebreather or assist ventilations as indicated (e.g., BVM)</li> <li>• Circulation: Assess perfusion, perform chest compressions as indicated (i.e. HR &lt;60/min with poor perfusion). All rates and procedures shall adhere to AHA guidelines.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Provide emotional support to mother and family.	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Continue to reassess and transport; keep infant warm.	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				

## OB/Emergency Childbirth

### INDICATIONS

- Patient with complaint of severe abdominal pain and signs of imminent birth

### CONTRAINDICATIONS (Relative)

Consider rapid transport if the following is found:

- Mother has uncontrolled hemorrhage with no imminent signs of delivery.
- Limb or cord presentation is visualized at the vaginal opening.

### CONSIDERATIONS:

Assess the patient by asking the following questions:

- a) Have you had prenatal care?
- b) Have you had any past pregnancies?
- c) How many live deliveries have you had in the past?
- d) What is your expected due date? Last menstrual period?
- e) Do you have the urge to bare down?
- f) Have you had excessive fluid; BOW broken, or plug passed?
- g) What have been the length and frequency of contractions?
- h) Are there any expected complications?

Consider preparing for in place delivery, if any of the following

are identified:

- a) Mother has the urge to push
- b) Mother states water has broken
- c) Bulging or crowning of the perineum is noted
- d) Contractions are less than three minutes apart lasting 30 seconds or longer Place the patient in supine or semi-Fowler's position

Instruct the patient to focus on breathing and notify you when contractions start and stop.

## OB/Emergency Childbirth

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI equipment</li> <li>• Obstetric kit</li> </ul>				
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Signs of imminent delivery</li> <li>• History of pregnancy with urge to push or bear down</li> </ul>		<ul style="list-style-type: none"> <li>• Limb presentation at vaginal opening</li> <li>• Respiratory or cardiac failure</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Asks patient appropriate assessment questions	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains and reassures the need to check for crowning or abnormal bleeding	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Observes for presentation of prolapsed cord or abnormal presentation	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Opens OB kit, cleans and drapes the area, being sure to keep a sterile zone	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Appropriately dons sterile gloves	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Explains procedure to patient before placing one hand to the baby's head applying gentle pressure to prevent explosive birth	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Uses second hand to apply gentle pressure to the perineum to prevent tearing of the opening	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Observes for nuchal cord	<input type="checkbox"/>	<input type="checkbox"/>	
<b>The examiner advises "The cord is wrapped around the baby's neck."</b>				
11.	Loosens and slips cord over baby's head	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Suctions mouth, then nose (once head is delivered)	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Applies gentle upward and downward pressure to head to help release the upper shoulders	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Once delivery is complete, holds baby securely	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Notes the time of birth and initial A-P-G-A-R	<input type="checkbox"/>	<input type="checkbox"/>	
<b>The examiner advises "The baby is out, has a pulse, but is not breathing."</b>				
16.	Provides tactile stimulation while drying the baby and rubbing the feet	<input type="checkbox"/>	<input type="checkbox"/>	
<b>The examiner notifies "The baby is now crying."</b>				

17.	Wraps the baby in a blanket, places hat on baby's head for warmth	<input type="checkbox"/>	<input type="checkbox"/>
18.	Verifies cord is no longer pulsating, clamps cord approximately 6 and 8 inches away from baby, verbalizing the cutting of the cord	<input type="checkbox"/>	<input type="checkbox"/>
19.	Gives baby to mother/encourages bonding and warmth	<input type="checkbox"/>	<input type="checkbox"/>
20.	Massages fundus, states why this is necessary	<input type="checkbox"/>	<input type="checkbox"/>
21.	Mother delivers placenta; places placenta in biohazard safe bag	<input type="checkbox"/>	<input type="checkbox"/>
22.	Places sanitary pad; have mom lower and close legs and assume position of comfort	<input type="checkbox"/>	<input type="checkbox"/>
23.	Addresses the need to observe and treat possible bleeding control of mother	<input type="checkbox"/>	<input type="checkbox"/>
24.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Newborn, document A-P-G-A-R at 1 and 5 minutes</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

## Apgar Scoring System

Indicator		0 Points	1 Point	2 Points
<b>A</b>	Activity (muscle tone)	Absent	Flexed arms and legs	Active
<b>P</b>	Pulse	Absent	Below 100 bpm	Over 100 bpm
<b>G</b>	Grimace (reflex irritability)	Floppy	Minimal response to stimulation	Prompt response to stimulation
<b>A</b>	Appearance (skin color)	Blue; pale	Pink body, Blue extremities	Pink
<b>R</b>	Respiration	Absent	Slow and irregular	Vigorous cry

**\*\* Assess Apgar at 1 and 5 minutes on all newborns**

<https://www.abclawcenters.com/practice-areas/diagnostic-tests/apgar-score-for-assessment-of-the-newborn/>

## Oxygen Administration

### INDICATIONS

- Patient complains of shortness of breath and/or chest pain.
- Signs and symptoms of chronic pulmonary disease, shortness of breath, coughing, wheezing, desaturation, pursed lip breathing, anxiety, accessory muscle use, cyanosis, decreased breath sounds, or ALOC.

### CONTRAINDICATIONS

- No contraindications, be cautious of potential for hyper-oxygenation.

### CONSIDERATIONS

- Oxygen needs of the patient.
- Verbalizes oxygen parameters set forth by ICEMA:
  - **Hypoxia:** Titrate O<sub>2</sub> at lower rate to maintain SP<sub>O</sub><sub>2</sub> at 94%
    - **Verbalizes understanding: No O<sub>2</sub> for SP<sub>O</sub><sub>2</sub> >95%**
  - **COPD:** Titrate O<sub>2</sub> at lower rate to maintain SP<sub>O</sub><sub>2</sub> at 90%
    - **Verbalizes understanding: No O<sub>2</sub> for SP<sub>O</sub><sub>2</sub> >91%**



## Oxygen Administration

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Nasal cannula, simple mask, or non-rebreather mask</li> </ul>		<ul style="list-style-type: none"> <li>• Oxygen tank</li> <li>• Oxygen regulator</li> <li>• Monitor with SpO2 capabilities</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u>Indications</u>		<u>Contraindications</u>		
<ul style="list-style-type: none"> <li>• Patient complains of shortness of breath and/or chest pain.</li> <li>• Signs and symptoms of chronic pulmonary disease, shortness of breath, coughing, wheezing, desaturation, pursed lip breathing, anxiety, accessory muscle use, cyanosis, decreased breath sounds, or ALOC</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication</li> <li>• Right dose</li> <li>• Right route</li> <li>• Right time</li> <li>• Allergies</li> </ul> <div style="margin-left: 40px;"> <b>D-Dose/Drug</b>  <b>I- Integrity of packaging</b>  <b>C-Clarity of solution</b>  <b>E-Expiration Date</b> </div>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Gathers appropriate equipment (i.e. oxygen tank, nasal cannula, simple mask, non-rebreather mask)	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Cracks valve on the oxygen tank	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Assembles the regulator to the oxygen tank	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Opens the oxygen tank valve	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Checks the oxygen tank pressure	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Checks for leaks	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Attaches (nasal cannula, simple or non-rebreather mask) to correct port of regulator	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Adjusts regulator to ensure oxygen flow rate appropriately per delivery device. <ul style="list-style-type: none"> <li>• Nasal cannula – 1 to 6 LPM</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

	<ul style="list-style-type: none"><li>• Simple mask – 6 to 10 LPM</li><li>• Non-rebreather mask – 10 to 15 LPM</li></ul>		
14.	Attaches adjunct to patients face and adjusts to patient comfort	<input type="checkbox"/>	<input type="checkbox"/>
15.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Lung sounds</li><li>• SpO<sub>2</sub> and CO<sub>2</sub> monitoring.</li><li>• Patient tolerance/response to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## **Patient Assessment/Management-MEDICAL**

### **INDICATIONS**

- Patient with a medical complain.

### **CONTRAINDICATIONS (Relative)**

- No contraindications

### **CONSIDERATIONS**

- Considers spinal motion restriction as needed.

## Patient Assessment/Management-MEDICAL

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• BSI Equipment</li> </ul>			
<b>Assessment/Treatment indicators:</b>			
<u>Indications</u>		<u>Contraindications</u>	
<ul style="list-style-type: none"> <li>• Patient with a medical complaint</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>	
<b>Procedure:</b>			<b>Yes</b>
			<b>No</b>
<b>SCENE SIZE-UP</b>			
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	Determines the scene/situation is safe	<input type="checkbox"/>	<input type="checkbox"/>
3.	Determines the nature of illness	<input type="checkbox"/>	<input type="checkbox"/>
4.	Determines the number of patients	<input type="checkbox"/>	<input type="checkbox"/>
5.	Requests additional EMS assistance if necessary	<input type="checkbox"/>	<input type="checkbox"/>
6.	Considers stabilization of the spine	<input type="checkbox"/>	<input type="checkbox"/>
<b>PRIMARY SURVEY/RESUSCITATION</b>			
7.	Verbalizes general impression of the patient	<input type="checkbox"/>	<input type="checkbox"/>
8.	Determines responsiveness/level of consciousness (AVPU)	<input type="checkbox"/>	<input type="checkbox"/>
9.	Determines chief complaint/apparent life-threats	<input type="checkbox"/>	<input type="checkbox"/>
10.	Assesses airway and breathing. <ul style="list-style-type: none"> <li>• Assures adequate ventilation.</li> <li>• Initiates appropriate oxygen therapy</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Assesses circulation. <ul style="list-style-type: none"> <li>• Re-prioritizes to CAB when necessary.</li> <li>• Checks pulse</li> <li>• Assesses skin (color, temperature or condition)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Identifies patient priority and makes treatment/transport decision	<input type="checkbox"/>	<input type="checkbox"/>
<b>HISTORY TAKING</b>			
13.	Obtains history of the present illness <ul style="list-style-type: none"> <li>• Onset</li> <li>• Provocation</li> <li>• Quality</li> <li>• Radiation</li> <li>• Severity</li> <li>• Time</li> <li>• Clarifying questions of associated signs and symptoms related to O-P-Q-R-S-T</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

14.	Obtains or attempts to obtain past medical history. <ul style="list-style-type: none"> <li>• Signs/Symptoms</li> <li>• Allergies</li> <li>• Medications</li> <li>• Past pertinent history</li> <li>• Last oral intake</li> <li>• Events leading to present illness</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>SECONDARY ASSESSMENT</b>			
15.	Assesses affected body part/system. <ul style="list-style-type: none"> <li>• Cardiovascular</li> <li>• Neurological</li> <li>• Integumentary</li> <li>• Reproductive</li> <li>• Pulmonary</li> <li>• Musculoskeletal</li> <li>• GI/GU</li> <li>• Psychological/Social</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>VITAL SIGNS</b>			
16.	Obtains or delegates the blood pressure, pulse, respiratory rate, quality and effort	<input type="checkbox"/>	<input type="checkbox"/>
17.	States field impression of patient	<input type="checkbox"/>	<input type="checkbox"/>
18.	Interventions (verbalizes proper interventions/treatment)	<input type="checkbox"/>	<input type="checkbox"/>
<b>REASSESSMENT</b>			
19.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Changes in patient's condition or vital signs</li> <li>• Patient response/tolerance to assessment and interventions</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Provides accurate verbal report to arriving EMS unit	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## **Patient Assessment/Management-TRAUMA**

### **INDICATIONS**

- Patient with blunt or penetrating trauma

### **CONTRAINDICATIONS (Relative)**

- No contraindications

### **CONSIDERATIONS**

- Considers spinal motion restriction as needed.

## Patient Assessment/Management-TRAUMA

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• BSI Equipment</li> </ul>				
<b>Assessment/Treatment indicators:</b>				
<u>Indications</u>		<u>Contraindications</u>		
<ul style="list-style-type: none"> <li>• Patient with possible or confirmed blunt or penetrating trauma</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
<b>SCENE SIZE-UP</b>				
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	Determines the scene/situation is safe	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Determines the mechanism of injury	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Determines the number of patients	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Requests additional EMS assistance if necessary	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Considers spinal motion restriction, delegates as needed	<input type="checkbox"/>	<input type="checkbox"/>	
<b>PRIMARY SURVEY/RESUSCITATION</b>				
7.	Verbalizes general impression of the patient	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Determines responsiveness/level of consciousness	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Determines chief complaint/apparent life-threats	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Airway <ul style="list-style-type: none"> <li>• Opens and assesses.</li> <li>• Inserts adjunct as indicated</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Breathing <ul style="list-style-type: none"> <li>• Assesses breathing.</li> <li>• Assures adequate ventilation.</li> <li>• Initiates appropriate oxygen therapy.</li> <li>• Manages any injury which may compromise breathing/ventilation</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Circulation <ul style="list-style-type: none"> <li>• Checks pulse</li> <li>• Assesses skin (color, temperature or condition)</li> <li>• Assesses for and controls major bleeding if present.</li> <li>• Initiates shock management (positions patient properly, conserves body heat)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

13.	Calculates GCS	<input type="checkbox"/>	<input type="checkbox"/>
14.	Identifies patient priority and makes treatment/transport decision (based upon calculated GCS)	<input type="checkbox"/>	<input type="checkbox"/>
<b>HISTORY TAKING</b>			
15.	Attempts to obtain SAMPLE history	<input type="checkbox"/>	<input type="checkbox"/>
<b>SECONDARY ASSESSMENT</b>			
16.	Head <ul style="list-style-type: none"> <li>• Inspects and palpates scalp, ears, and mastoid areas.</li> <li>• Assesses eyes, and pupils.</li> <li>• Inspects mouth, nose, and facial area</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Neck <ul style="list-style-type: none"> <li>• Checks position of trachea</li> <li>• Checks jugular veins.</li> <li>• Palpates cervical spine</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Chest <ul style="list-style-type: none"> <li>• Inspects and palpates chest.</li> <li>• Auscultates lung sounds</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Abdomen/pelvis <ul style="list-style-type: none"> <li>• Inspects and palpates abdomen.</li> <li>• Assesses pelvis.</li> <li>• Verbalizes assessment of genitalia/perineum as needed</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Lower extremities <ul style="list-style-type: none"> <li>• Inspects, palpates, and assesses distal motor, sensory and circulatory functions</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Upper extremities <ul style="list-style-type: none"> <li>• Inspects, palpates, and assesses distal motor, sensory and circulatory functions</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Posterior thorax, lumbar and buttocks <ul style="list-style-type: none"> <li>• Inspects and palpates posterior thorax.</li> <li>• Inspects and palpates lumbar and buttocks areas</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>VITAL SIGNS</b>			
23.	Obtains baseline vital signs (must include BP, P and R)	<input type="checkbox"/>	<input type="checkbox"/>
24.	Manages secondary injuries and wounds appropriately	<input type="checkbox"/>	<input type="checkbox"/>
25.	Verbalizes how and when to reassess the patient	<input type="checkbox"/>	<input type="checkbox"/>
<b>REASSESSMENT</b>			
26.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Lung sounds</li> <li>• SpO<sub>2</sub> and CO<sub>2</sub> monitoring.</li> <li>• Patient tolerance/response to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Notes:			



## Penetrating Trauma

### INDICATIONS

- Open chest wound that requires rapid initial care.

### CONTRAINDICATIONS (Relative)

- Uncontrolled hemorrhage from chest wound.

### CONSIDERATIONS

- No considerations

## Penetrating Trauma

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Occlusive dressing</li> </ul>		<ul style="list-style-type: none"> <li>• Tape</li> <li>• Stethoscope</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u><b>Indications</b></u>		<u><b>Contraindications</b></u>		
<ul style="list-style-type: none"> <li>• Open chest wound due to penetrating trauma</li> </ul>		<ul style="list-style-type: none"> <li>• Uncontrolled hemorrhage from chest wound</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Maintains an open airway and provides basic life support if necessary	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Exposes chest	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Removes occlusive dressing from packaging	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Places occlusive dressing over wound creating a seal on all sides. If no dressing is available uses gloved hand to create temporary seal	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Assesses for signs of tension pneumothorax. Removes dressing if signs of tension pneumothorax develop	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Administers high flow oxygen if indicated	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Auscultates lung sounds	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Treats for shock	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Places patient in position of comfort: <ul style="list-style-type: none"> <li>• Upright due to respiratory distress</li> <li>• Shock position if signs of shock appear.</li> <li>• On affected side, if possible, this allows the injured lung to expand without restriction</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

14.	Transport immediately	<input type="checkbox"/>	<input type="checkbox"/>
15.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Lung sounds</li><li>• Placement verification</li><li>• SpO<sub>2</sub> and CO<sub>2</sub> monitoring.</li><li>• Patient response/tolerance to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Pulse Oximetry

### INDICATIONS

- Chief complaint of respiratory, cardiovascular and neurological complications Abnormal vital signs
- Trauma patients
- Any patient that would benefit from monitoring.

### CONTRAINDICATIONS

- No contraindications

### CONSIDERATIONS

- Remove nail polish if necessary; acetone prep may be used for this.
- **Hypoxia:** Titrate O<sub>2</sub> at lower rate to maintain SpO<sub>2</sub> at 94%
  - **Verbalizes understanding: No O<sub>2</sub> for SpO<sub>2</sub> >95%**
- **COPD:** Titrate O<sub>2</sub> at lower rate to maintain SpO<sub>2</sub> at 90%
  - **Verbalizes understanding: No O<sub>2</sub> for SpO<sub>2</sub> >91%**

## Pulse Oximetry

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>PPE</li> <li>Pulse oximetry sensor</li> </ul>		<ul style="list-style-type: none"> <li>Monitor with SpO<sub>2</sub> capabilities</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<p style="text-align: center;"><b><u>Indications</u></b></p> <ul style="list-style-type: none"> <li>Patient complaints of respiratory, cardiovascular and neurological complications</li> <li>Abnormal vital signs</li> <li>Trauma patients</li> <li>Any patient, medic feels would benefit from monitoring</li> </ul>		<p style="text-align: center;"><b><u>Contraindications</u></b></p> <ul style="list-style-type: none"> <li>No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Gathers appropriate equipment (monitor, pulse oximetry sensor)	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Removes nail polish as needed	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Applies adhesive sensor or clip sensor to finger (light on nailbed)	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Utilizes monitor to provide pulse oximetry reading (normal = 94% - 98%) <ul style="list-style-type: none"> <li><b>Hypoxia:</b> Titrate O<sub>2</sub> at lower rate to maintain SpO<sub>2</sub> at 94% <ul style="list-style-type: none"> <li><b>Verbalizes understanding: No O<sub>2</sub> for SpO<sub>2</sub> &gt;95%</b></li> </ul> </li> <li><b>COPD:</b> Titrate O<sub>2</sub> at lower rate to maintain SpO<sub>2</sub> at 90% <ul style="list-style-type: none"> <li><b>Verbalizes understanding: No O<sub>2</sub> for SpO<sub>2</sub> &gt;91%</b></li> </ul> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Reassess/Document: <ul style="list-style-type: none"> <li>Patient</li> <li>Lung sounds</li> <li>Placement verification</li> <li>SpO<sub>2</sub> and CO<sub>2</sub> monitoring.</li> <li>Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				

## **SAGER Traction Splint**

### **INDICATIONS**

- Painful, swollen, deformed mid-thigh with no joint or lower leg injury.

### **CONTRAINDICATIONS**

- Open fracture
- Pelvis, hip, knee, ankle injury
- Excessive avulsion
- Partial amputation

### **CONSIDERATIONS**

- Utilize three rescuers to apply a traction splint, if possible

**SAGER Traction Splint**

## Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
• PPE		• SAGER Traction Splint		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>Painful, swollen, deformed mid-thigh with no joint or lower leg injury</li> </ul>		<ul style="list-style-type: none"> <li>Open fracture</li> <li>Pelvis, hip, knee, ankle injury</li> <li>Excessive avulsion</li> <li>Partial amputation</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Directs assistant to stabilize the injured leg	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Exposes the injured extremity	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Removes shoe and sock on injured leg	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Checks the circulation, motor and sensory function distal to the injury before moving leg or applying traction	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Places the device between patient's legs, resting the cushion against the groin and applies the groin strap	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Folds the pads on the ankle hitch as needed to fit the patient. Applies and secures. under the foot	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Extends the device, providing approximately 10% of the patient's body weight in axial traction (Max 15 pounds for single leg or 25 pounds bilateral)	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Applies leg straps; one over the mid-thigh, one over the knee, and one over the lower leg	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Applies the foot strap or cravat around both feet to prevent rotation	<input type="checkbox"/>	<input type="checkbox"/>	
14.	Directs the assistant to lower the leg onto the device while maintaining traction	<input type="checkbox"/>	<input type="checkbox"/>	
15.	Secures the groin strap prior to application of mechanical traction	<input type="checkbox"/>	<input type="checkbox"/>	
16.	Attaches the foot strap rings to winch and twists knob to apply mechanical traction	<input type="checkbox"/>	<input type="checkbox"/>	

17.	Releases manual traction after the mechanical traction is applied	<input type="checkbox"/>	<input type="checkbox"/>
18.	Rechecks the circulation, motor and sensory function distal to the injury	<input type="checkbox"/>	<input type="checkbox"/>
19.	Splints the fracture without excessive motion of the leg	<input type="checkbox"/>	<input type="checkbox"/>
20.	Immobilizes the patient's hip joint to backboard or equivalent, if spinal precautions not already in place	<input type="checkbox"/>	<input type="checkbox"/>
21.	Secures the limb straps and mechanical traction device. Does not strap over the fracture site or knee	<input type="checkbox"/>	<input type="checkbox"/>
22.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Patient response/tolerance to interventions</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			



## Continuous Positive Airway Pressure Device (CPAP)

### INDICATIONS

Awake, alert patient able to follow commands in severe respiratory distress as evidenced by:

- Respiratory rate  $\geq$  24 breaths per minute and/or
- SpO<sub>2</sub> less than 90% and/or
- Accessory muscle use

### CONTRAINDICATIONS

- Apnea
- Unconscious
- Pediatric (appearing to be less than 15 years of age)
- Suspected pneumothorax
- Vomiting
- Systolic blood pressure 90 mmHg or less (relative contraindication)

### CONSIDERATIONS

- Midazolam, 1 mg (single dose only), IV/IO/IM/IN for anxiety related to application of CPAP mask.

## Continuous Positive Airway Pressure Device (CPAP)

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• CPAP mask</li> <li>• CPAP circuit or device</li> <li>• Cardiac monitor</li> </ul>		<ul style="list-style-type: none"> <li>• Oxygen tank with spare available</li> <li>• Capnography monitoring device</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u>Indications</u>		<u>Contraindications</u>		
<p>Awake, alert patient able to follow commands in severe respiratory distress as evidenced by:</p> <ul style="list-style-type: none"> <li>• Respiratory rate <math>\geq</math> 24 breaths per minute and/or</li> <li>• SpO<sub>2</sub> less than 90% and/or</li> <li>• Accessory muscle use</li> </ul>		<ul style="list-style-type: none"> <li>• Apnea</li> <li>• Unconscious</li> <li>• Pediatric (appearing younger than 15 years old)</li> <li>• Suspected pneumothorax</li> <li>• Vomiting</li> <li>• Systolic blood pressure 90 mmHg or less (relative contraindication)</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment. Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D</b>-Dose/Drug</li> <li>• Right dose                <b>I</b>- Integrity of packaging</li> <li>• Right route                <b>C</b>-Clarity of solution</li> <li>• Right time                 <b>E</b>-Expiration Date</li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Provides supplemental oxygen as clinically indicated	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Positions patient sitting upright	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Considers providing 1 mg Versed IV/IO/IM/IN one time for any anxiety related to CPAP mask application	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Assembles CPAP mask, circuit and device	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Applies mask and begins CPAP at 0-2cm H <sub>2</sub> O (or lowest level allowed by the device); instruct patient to inhale through nose and exhale through mouth	<input type="checkbox"/>	<input type="checkbox"/>	

10.	Slowly titrates in 3cm increments up to maximum of 15cm H <sub>2</sub> O according to patients' tolerance while instructing patient to continue exhaling against increasing pressure.	<input type="checkbox"/>	<input type="checkbox"/>
11.	Attaches ET CO <sub>2</sub> monitoring device	<input type="checkbox"/>	<input type="checkbox"/>
12.	Verbalizes understanding of CPAP being continued until patient is placed on CPAP device at the receiving hospital Emergency Department (ED)	<input type="checkbox"/>	<input type="checkbox"/>
13.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient work of breathing, level of anxiety, and level of comfort</li> <li>• CPAP level /reading</li> <li>• O<sub>2</sub> saturation, vital signs, lung sounds</li> <li>• Capnography monitoring</li> <li>• Patient tolerance/response to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## End Tidal Capnography Monitoring Device

### INDICATIONS

**\*\* MANDATORY: to rule out esophageal intubation and confirm and monitor endotracheal tube position in all intubated patients, monitor perfusion with any pain medication administrations and post sedation on excited delirium patients.**

- To identify endotracheal tube dislodgement
- To assist in monitoring ventilation and perfusion in all ill or injured patients or those who have been medicated with any narcotic.
- To monitor quality of chest compressions to confirm ROSC.
- To monitor status of asthmatic, CHF, COPD, PE patient
- To confirm mechanical capture during Transcutaneous Cardiac Pacing

### CONTAINDICATIONS

- No considerations

### CONSIDERATIONS

- In cases of suspected head trauma (signs of herniation), maintain ET CO<sub>2</sub> between 30-35mmHg (figure 1).
- Aggressive hyperventilation should be avoided in all patients.

## End Tidal Capnography Monitoring Device

### Skills Test

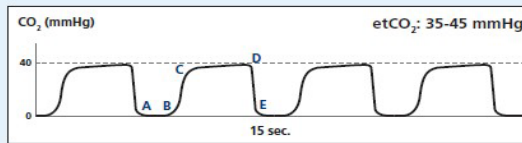
Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Cardiac monitor</li> </ul>		<ul style="list-style-type: none"> <li>• Oxygen device</li> <li>• ET CO2 cable with sensor</li> </ul>	
<b>Assessment/Treatment indicators:</b>			
<u><b>Indications</b></u>		<u><b>Contraindications</b></u>	
<ul style="list-style-type: none"> <li>• <b>MANDATORY: to rule out esophageal intubation and confirm and monitor endotracheal tube position in all intubated patients, monitor perfusion with any pain medication administrations and post sedation on excited delirium patients.</b></li> <li>• To monitor quality of chest compressions</li> <li>• To confirm ROSC</li> <li>• To identify endotracheal tube dislodgement.</li> <li>• To assist in monitoring respiration, metabolism and perfusion in all ill or injured patients or those who have been medicated with any narcotic.</li> <li>• To monitor the status of an asthmatic, CHF, COPD, PE patient</li> <li>• To confirm mechanical capture during Transcutaneous Cardiac Pacing</li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>	
<b>Procedure:</b>			
		<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>
5.	Attaches the capnography sensor to the endotracheal tube or oxygen delivery device without increasing dead space	<input type="checkbox"/>	<input type="checkbox"/>
6.	If not previously attached, attaches the ET CO2 connector to the cardiac monitor	<input type="checkbox"/>	<input type="checkbox"/>
7.	Ideally, maintains ET CO2 output between 35-45 mmHg	<input type="checkbox"/>	<input type="checkbox"/>
8.	If suctioning is required, takes caution to not dislodge "T" sensor	<input type="checkbox"/>	<input type="checkbox"/>
9.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Respiratory status</li> <li>• Intubation or oxygen delivery</li> <li>• ET CO<sub>2</sub> reading, waveform and respiratory rate</li> <li>• Patient response/tolerant to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
Notes:			

### Normal Capnogram

The normal capnogram is a waveform which represents the varying CO<sub>2</sub> level throughout the breath cycle.

**Waveform Characteristics:**

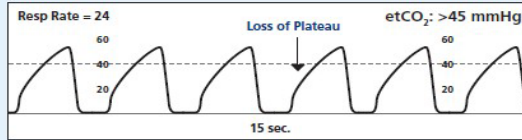
- A-B: Baseline
- C: Expiratory Upstroke
- D: End-Tidal Concentration
- E: Inspiration
- C-D: Expiratory Plateau



### Bronchospasm/Asthma

**Other Possible Causes:**

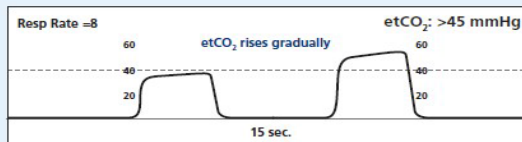
- Bronchospasm/COPD
- Obstruction in the expiratory limb of the breathing circuit
- Presence of a foreign body in the upper airway
- Partially kinked or occluded artificial airway



### \*Increasing etCO<sub>2</sub> (Hypoventilation)

**Other Possible Causes:**

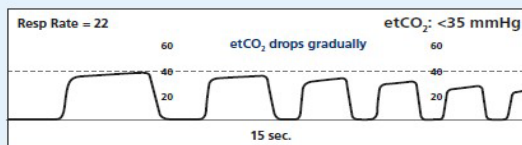
- Decrease in respiratory rate
- Decrease in tidal volume
- Increase in metabolic rate
- Rapid rise in body temperature (malignant hyperthermia)



### \*Decreasing etCO<sub>2</sub> (Hyperventilation)

**Other Possible Causes:**

- Increase in respiratory rate
- Increase in tidal volume
- Metabolic acidosis
- Fall in body temperature

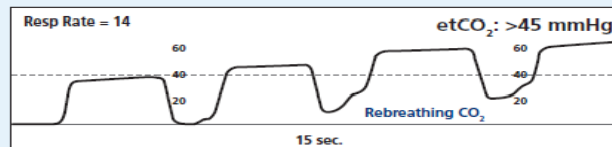


\*Assumes adequate circulation and alveolar gas exchange

### Rebreathing CO<sub>2</sub>

**Other Possible Causes:**

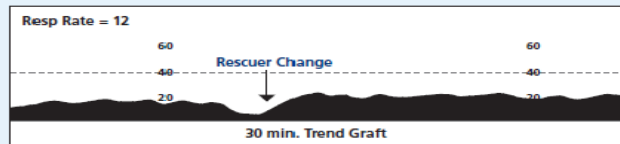
- Faulty expiratory valve
- Inadequate inspiratory flow
- Partial rebreathing
- Insufficient expiratory time



### Cardiac Arrest

**Other Possible Causes:**

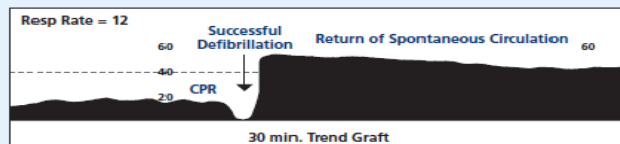
- Decreased or absent cardiac output
- Decreased or absent pulmonary blood flow
- Sudden decrease in CO<sub>2</sub> values



### Return of Spontaneous Circulation

**Other Possible Causes:**

- Increase in cardiac output
- Increase in pulmonary blood flow
- Gradual increase in CO<sub>2</sub> production



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### NORMAL RANGES:

**CAPNOG: 35-45mmHg**

**pH: 7.35 – 7.45**

**PCO<sub>2</sub>: 35-45mmHg**

• CO<sub>2</sub> is an ACID

**HCO<sub>3</sub>: 22-28mmol/L**

• Bicarb regulates pH

**5mL** is the maximum airflow to be used with the capnography cannula or the sampling will be diluted and incorrect (wash out)

Capnography cannulas **CAN BE USED** with CPAP masks.

The masks are designed to properly seal with a nasal capnography adjunct in place.

An elevated RR may be due to the buildup of CO<sub>2</sub>; the body compensates by blowing off this acid.

Figure 1

**With capnography, one can monitor Respiration, Metabolism and Perfusion**

**It is imperative to have capnography in place to measure the FIRST (assisted or unassisted) breath to establish a baseline for each patient.**

## External Jugular Vein Access

### INDICATIONS

- Patient conditions require IV access and other peripheral IV access attempts are unsuccessful.

### CONTRAINDICATIONS

- Patient eight (8) years of age or younger

### CONSIDERATIONS

- If possible, place the patient into the Trendelenburg position.

## External Jugular Vein Access

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• Appropriately sized IV catheter</li> <li>• Alcohol swabs</li> </ul>		<ul style="list-style-type: none"> <li>• Occlusive dressing</li> <li>• IV tubing/fluids (if indicated)</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<u>Indications</u>		<u>Contraindications</u>		
<ul style="list-style-type: none"> <li>• Patient condition required IV access and other peripheral IV access attempts are unsuccessful</li> </ul>		<ul style="list-style-type: none"> <li>• Patient eight (8) years of age or less</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D</b>-Dose/Drug</li> <li>• Right dose                <b>I</b>- Integrity of packaging</li> <li>• Right route                <b>C</b>-Clarity of solution</li> <li>• Right time                 <b>E</b>-Expiration Date</li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Utilizes axial spinal stabilization in trauma patients. (f not in axial spinal stabilization, extend and stabilize patient's neck); maintain manual axial spinal stabilization if the need to remove c-collar arises	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Places patient in Trendelenburg position or apply slight pressure at base of vein for tourniquet effect	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Obtains external jugular vein access with appropriately sized IV catheter	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Securely tapes catheter with occlusive dressing in place and continue to monitor for patency	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Rechecks site frequently for signs of infiltration	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>EJ IV placement and s/s of infiltration</li> <li>• Patient tolerance/response to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<b>Notes:</b>				



## i-gel™ Supraglottic Airway

### INDICATIONS

Use of i-gel™ may be performed on those patients who meet **ALL** the following:

- Patient is in respiratory or cardiac arrest without contraindications to i-gel™ placement.
- Unresponsive.
- Apneic (less than 8 breaths per minute).
- No gag reflex.
- Appropriately sized airway available.
- **Unsuccessful airway management with BVM and/or oral endotracheal intubation.**

### CONTRAINDICATIONS

- Conscious patients with an intact gag reflex
- Known ingestion of caustic substances
- Suspected foreign body airway obstruction (FBAO)
- Facial and/or esophageal trauma
- Patients with known esophageal disease (cancer, varices, surgery, etc.)

### CONSIDERATIONS

- Only those who have successfully completed the training in the use of the i-gel™ can utilize the device.
- Only water-based lubricant should be used.
- Device is not proven to protect airway from the effects of regurgitation and aspiration.
- Maintain cervical stabilization as needed.

Color	Weight	i-gel™ size
Pink	2 - 5 kg	0
Blue	5 - 12 kg	1
Grey	10 - 25 kg	2
White	25 - 35 kg	2.5
Yellow	30 - 60 kg	3
Green	50 - 90 kg	4
Orange	90+ kg	5

### COMPLICATIONS

- Upper airway injury.
- High airway pressures can divert air into stomach.

## i-gel™ Supraglottic Airway

### Skills Test

Examinee: \_\_\_\_\_ Date: \_\_\_\_\_  
 Examiner: \_\_\_\_\_ Pass  Pass/Counsel  Fail

#### Equipment:

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Appropriately sized i-gel™ SGA</li> <li>• End tidal CO2 continuous monitoring device.</li> <li>• Colormetric device</li> <li>• Water soluble lubricant</li> <li>• Suction set-up</li> <li>• Gloves</li> </ul> | <ul style="list-style-type: none"> <li>• Goggles</li> <li>• BVM</li> <li>• Oropharyngeal Airway</li> <li>• Oxygen</li> <li>• Stethoscope</li> <li>• Tube holder or tape</li> </ul> |
|--|--|

#### Assessment/Treatment indicators:

##### Indications

Use of i-gel™ SGA may be performed on those patients who meet **ALL** the following:

- Patient is in respiratory or cardiac arrest without contraindications to i-gel™ placement.
- Unresponsive
- Apneic (less than 8 breaths per minute)
- No gag reflex.
- Appropriately sized airway available
- Unsuccessful airway management with endotracheal intubation
- Unsuccessful airway management with BVM

##### Contraindications

- Conscious patients with intact gag reflex
- Known ingestion of caustic substances
- Suspected foreign body airway obstruction (FBAO)
- Facial and/or esophageal trauma
- Patients with known esophageal disease or mass (cancer, varices, surgery, etc.)

#### Procedure:

Procedure:		Yes	No
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Confirms patient is being ventilated with 100% O <sub>2</sub> and has an OPA/NPA in place	<input type="checkbox"/>	<input type="checkbox"/>
5.	Place patient on pulse oximetry	<input type="checkbox"/>	<input type="checkbox"/>
6.	Choose correct size based on patient's estimated weight	<input type="checkbox"/>	<input type="checkbox"/>
7.	Open the i-gel™ package and remove accessory pack from protective cradle	<input type="checkbox"/>	<input type="checkbox"/>
8.	Place a small amount of lubricant onto the middle of the smooth surface of the protective cradle	<input type="checkbox"/>	<input type="checkbox"/>
9.	Lubricate the back, sides and front of the cuff with a thin layer of lubricant then place i-gel™ back into protective cradle in preparation for insertion	<input type="checkbox"/>	<input type="checkbox"/>

10.	Ensure patient has been pre-ventilated. Instruct assistant to pause ventilations	<input type="checkbox"/>	<input type="checkbox"/>
11.	Position the head in a sniffing or slightly extended position. Neutral position is acceptable if there is suspected spinal injury	<input type="checkbox"/>	<input type="checkbox"/>
12.	Open patients' mouth by applying downward pressure to the chin and remove OPA	<input type="checkbox"/>	<input type="checkbox"/>
13.	Grasp i-gel™ along integral bite block and remove from protective cradle. Position device so the i-gel™ cuff outlet is facing towards the chin of the patient	<input type="checkbox"/>	<input type="checkbox"/>
14.	Introduce i-gel™ leading soft tip into the patient's mouth in a direction towards the hard palate	<input type="checkbox"/>	<input type="checkbox"/>
15.	Glide device downwards and backwards along the hard palate until definitive resistance is met	<input type="checkbox"/>	<input type="checkbox"/>
16.	Verify incisors are resting along the integral bite block near position guide	<input type="checkbox"/>	<input type="checkbox"/>
17.	Attach capnography / capnometry device to end of bag valve device	<input type="checkbox"/>	<input type="checkbox"/>
18.	Attach bag valve device to i-gel™ and begin ventilations while simultaneously assessing for ease of ventilation	<input type="checkbox"/>	<input type="checkbox"/>
19.	Steps 11-16 completed in 30 seconds	<input type="checkbox"/>	<input type="checkbox"/>
20.	Confirm tube placement: <ul style="list-style-type: none"> <li>• Chest rise</li> <li>• Bilateral breath sounds</li> <li>• Verification of CO<sub>2</sub> by capnography/capnometry</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Secure i-gel™ with support strap (can tape down from maxilla to maxilla if support strap is not available) ** Reconfirm placement every time patient/tube is moved/manipulated.	<input type="checkbox"/>	<input type="checkbox"/>
22.	Reassess patients' respiratory status every 5 minutes or when patient condition changes	<input type="checkbox"/>	<input type="checkbox"/>
23.	If after three attempts, continue with BVM/BLS airway management		
24.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Lung sounds</li> <li>• Continuous monitoring (auscultation, chest movement, ETCO<sub>2</sub>, SPO<sub>2</sub>)</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## **Intraosseous Insertion/Infusion (IO)**

### **INDICATIONS**

- Primary vascular access in cardiac patients eight (8) years of age and younger Any patient where venous access is unavailable by any other mean.

### **CONTRAINDICATIONS**

- Fracture of target bone
- Previous IO attempt and marrow entry at target site
- Infection at target site
- Severe burn to the extremity
- Crush injuries
- Known bone disease.

### **CONSIDERATIONS**

- Anterior distal femur, 2cm above the patella; base station order (Figure 1) Lidocaine for pain control
- Pressure infusion device.

## Intraosseous Infusion

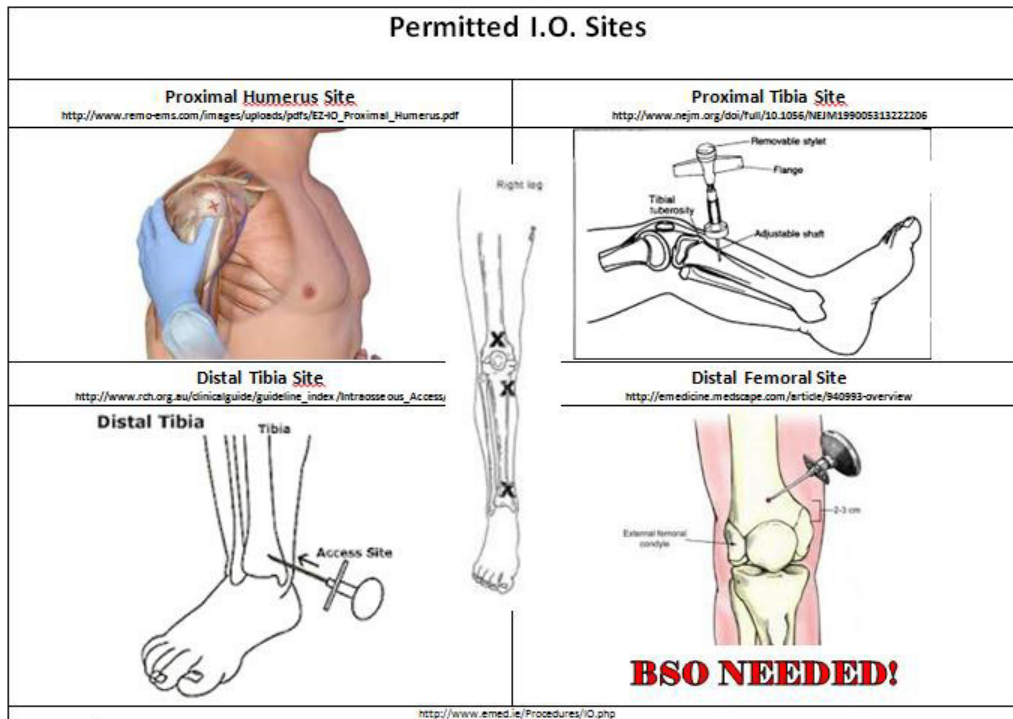
### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input checked="" type="checkbox"/> Counsel <input type="checkbox"/>	Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• IV Solution</li> <li>• IV administration set</li> <li>• 3-way stopcock</li> <li>• IO needle/driver (25mm, 45mm)</li> <li>• Povidone – iodine OR</li> <li>• Chlorhexidine skin cleaner</li> </ul>		<ul style="list-style-type: none"> <li>• Extension tubing</li> <li>• Sharps container</li> <li>• Tape</li> <li>• Splint</li> <li>• Pressure infuser or BP cuff</li> <li>• Syringe</li> <li>• Sterile gauze pads</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<p style="text-align: center;"><b><u>Indications</u></b></p> <ul style="list-style-type: none"> <li>• Primary vascular access in cardiac patients eight (8) years of age and younger</li> <li>• Any patient where venous access is unavailable by any other means</li> </ul>		<p style="text-align: center;"><b><u>Contraindications</u></b></p> <ul style="list-style-type: none"> <li>• Fracture to the target bone</li> <li>• Previous IO attempt and marrow entry at target site</li> <li>• Severe burn to the extremity</li> <li>• Crush injuries</li> <li>• Known bone disease.</li> <li>• Infection at target site</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the “five patient rights, plus one.” <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D</b>-Dose/Drug</li> <li>• Right dose                <b>I</b>- Integrity of packaging</li> <li>• Right route                <b>C</b>-Clarity of solution</li> <li>• Right time                 <b>E</b>-Expiration Date</li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Selects appropriate solution/administration set. <ul style="list-style-type: none"> <li>• Prepares IO and attaches 3-way stopcock (as needed), extension tubing, and syringe</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Selects the appropriately sized needle for insertion. <ul style="list-style-type: none"> <li>• Attaches needle to driver</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Select the appropriate site of insertion and cleans with selected skin cleanser. <p>a) <b>Anterior medial aspect of the proximal tibia</b> – approximately 1-3cm below the tibial tuberosity (preferred site for pediatrics eight (8) years of age and younger)</p>	<input type="checkbox"/>	<input type="checkbox"/>	

	<p>b) <b>Anterior medial malleolus (distal tibia)</b> – approximately 1-3cm above the medial malleolus (one of the preferred sites for adults nine (9) years of age and older)</p> <p>c) <b>Proximal humeral head</b> – approximately 1-3cm from the humeral tuberosity when the hand is rotated inward toward the body (adults nine (9) years of age and older only)</p> <p>d) <b>Distal Femur</b> – approximately 1-3cm above the distal head  <b>** Base Station Order (BSO) only</b></p>		
8.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>
9a.	<p>Insertion (EZ-IO):</p> <p>a. <b>Anterior Tibia</b> (example)</p> <ul style="list-style-type: none"> <li>• Swabs dominant hand with Povidone-iodine and relocate the landmark, with other hand stabilizing the leg.</li> <li>• Positions the IO needle and driver perpendicular to the patient's leg (90-degree angle)</li> <li>• Inserts the needle through the skin to the bone until the needle rests against the bone.</li> <li>• Visualizes the 5mm mark above the skin.</li> <li>• Depresses the trigger on driver to insert IO needle until there is a sudden decrease of resistance (or "pop")</li> <li>• Removes the driver and the stylet; ensures proper disposal.</li> <li>• Attaches primed IV extension tubing to hub of needle</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
9b.	<p>Insertion (manual):</p> <p>a. <b>Anterior Tibia</b> (example)</p> <ul style="list-style-type: none"> <li>• Swabs dominant hand with Povidone-iodine and relocate the landmark while stabilizing the leg.</li> <li>• Positions the IO needle perpendicular to the patient's leg (90-degree angle)</li> <li>• Applies downward pressure in a twisting motion perpendicular to the surface of the target site.</li> <li>• Upon entrance into medullary cavity, slightly advances needle 1-2cm</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
10.	<p>Confirms IO placement.</p> <ul style="list-style-type: none"> <li>• Loss of resistance on insertion</li> <li>• Needle free standing</li> <li>• IO flushes freely</li> <li>• Aspiration of blood/marrow and does not extend past the hub.</li> <li>• No extravasation</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
11.	<p>Secures IO</p> <ul style="list-style-type: none"> <li>• Leaves site uncovered, hinge tapes tubing to extremity</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
12.	<p>Pain control for conscious patients</p> <ul style="list-style-type: none"> <li>• Utilize 2% Lidocaine <ul style="list-style-type: none"> <li>▪ Primes extension tubing with 0.5 mg/kg of 2% Lidocaine and infuse slowly (over 2 minutes), not to exceed 40mg</li> </ul> </li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
13.	<p>Determines how IV fluid/medication may be administered:</p> <ul style="list-style-type: none"> <li>• Using a syringe, pressure device or B/P cuff</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
14.	<p>Reassess/Document:</p> <ul style="list-style-type: none"> <li>• Patient</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>

	<ul style="list-style-type: none"> <li>• Placement/size/site for signs of extravasation</li> <li>• Medication: dose, time, route/location,</li> <li>• Patient response/tolerance to intervention</li> </ul>		
<p><b>Notes:</b></p>			

Figure 1



## Nasogastric/Orogastric Tube Insertion

### INDICATIONS

- Any ventilated patient where gastric distention may impede ABC's.
- Conscious patients with continuous vomiting and inability to maintain airway.

### CONTRAINDICATIONS (Relative)

- History of esophageal strictures, varices and/or other esophageal disease
- Caustic ingestion
- Significant facial or head trauma
- History of bleeding disorders

### CONSIDERATIONS

- Oral route for patients with mid-facial trauma and all patients less than six (6) months of age



## Nasogastric/Orogastric Tube Insertion

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/>	
		Fail <input type="checkbox"/>		
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Naso/Orogastric tube (appropriately sized)               <ul style="list-style-type: none"> <li>▪ Adult 16-18fr</li> <li>▪ Pediatric 8-10fr</li> <li>▪ Infant 5-6fr</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• Water soluble lubricant or viscous Lidocaine gel</li> <li>• 30-60 ml syringe</li> <li>• Suction Setup</li> <li>• Emesis Basin</li> <li>• Tape</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<p style="text-align: center;"><b><u>Indications</u></b></p> <ul style="list-style-type: none"> <li>• Any ventilated patient where gastric distention may impede ABC's.</li> <li>• Conscious with continuous vomiting and unable to support airway.</li> </ul> <p style="text-align: center;"><b><u>Considerations</u></b></p> <ul style="list-style-type: none"> <li>• Oral route for patients with mid-facial trauma and all patients less than six (6) months of age</li> </ul>		<p style="text-align: center;"><b><u>Relative Contraindications</u></b></p> <ul style="list-style-type: none"> <li>• History of esophageal strictures, varices and/or other esophageal disease</li> <li>• Caustic ingestion</li> <li>• Significant facial or head trauma</li> <li>• History of bleeding disorders</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D-Dose/Drug</b></li> <li>• Right dose                <b>I- Integrity of packaging</b></li> <li>• Right route                <b>C-Clarity of solution</b></li> <li>• Right time                 <b>E-Expiration Date</b></li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Selects appropriate size OG/NG tube	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Insertion	<input type="checkbox"/>	<input type="checkbox"/>	
7a.	Positions patient in high Fowler's unless otherwise contraindicated or unconscious	<input type="checkbox"/>	<input type="checkbox"/>	
7b.	Measures and marks the gastric tube for proper insertion length; have suction equipment and emesis basin readily available. <ul style="list-style-type: none"> <li>• <b>Nasogastric</b> – combined distance between the tip of the nose to the ear lobe to the xiphoid process</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

	<ul style="list-style-type: none"> <li>• <b>Orogastric</b> – combined distance between the corner of the mouth to the ear lobe to the xiphoid process</li> </ul>		
7c.	Examines both nares to determine the nare with best airflow or examine oropharyngeal cavity for obstructions or secretions	<input type="checkbox"/>	<input type="checkbox"/>
7d.	Lubricates distal third of the gastric tube with a water-soluble lubricant or viscous Lidocaine gel	<input type="checkbox"/>	<input type="checkbox"/>
7e.	Gently passes the tube posteriorly along the floor of nasal or oral cavity	<input type="checkbox"/>	<input type="checkbox"/>
7f.	Instructs patient to swallow (if conscious)	<input type="checkbox"/>	<input type="checkbox"/>
7g.	If resistance is met while using nasal route, removes and attempts the other nostril	<input type="checkbox"/>	<input type="checkbox"/>
7h.	Slowly rotates and advances tube during insertion until pre-designated mark is at tip of nose or corner of mouth	<input type="checkbox"/>	<input type="checkbox"/>
8.	Confirms proper tube placement. <ul style="list-style-type: none"> <li>• Aspiration of stomach contents</li> <li>• Injection of 30-60ml of air into tube and auscultate for the sound of air over the epigastric region</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Secures tube to bridge of nose or to side of mouth	<input type="checkbox"/>	<input type="checkbox"/>
10.	Attaches gastric tube to suction tubing and adjusts to low suction or other type of approved suction device	<input type="checkbox"/>	<input type="checkbox"/>
11.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Placement/size, number of attempts</li> <li>• Dose</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Needle Cricothyrotomy

### INDICATIONS

- Upper airway obstruction with severe respiratory distress
- When unable to ventilate utilizing conventional airway maneuvers or devices

### CONTRAINDICATIONS

Transection of distal trachea:

- **Symptoms:** respiratory distress, hoarseness, dysphonia (inability to produce voice sounds), cough, noisy breathing and stridor, dysphagia (inability to swallow)
- **Physical signs:** abnormal laryngeal contour, subcutaneous emphysema, cervical ecchymosis, hemoptysis (the coughing of blood from the respiratory tract below the level of the larynx)

### CONSIDERATIONS

- Inline cervical stabilization as needed.

## Needle Cricothyrotomy

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/>	
		Fail <input type="checkbox"/>		
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• NRB mask with 100% oxygen</li> <li>• Adult 10–15-gauge needle</li> <li>• Pediatric 12–15-gauge needle</li> <li>• Cannula adaptor</li> </ul>		<ul style="list-style-type: none"> <li>• Syringe</li> <li>• BVM or Translaryngeal Jet Ventilation (TLJV) device</li> <li>• Optional: 3-way stopcock or y-connector</li> <li>• End-tidal CO<sub>2</sub> and Pulse Oximetry</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Upper airway obstruction with severe respiratory distress</li> <li>• When unable to ventilate utilizing conventional airway maneuvers or devices</li> </ul>		<ul style="list-style-type: none"> <li>• Transection of distal trachea</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Supports ventilations, use inline cervical stabilization as needed	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Pre-oxygenates and place patient in supine position prior to attempting procedure	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Locates the soft cricothyroid membrane between the thyroid and cricoid cartilage	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Holds the trachea in place and provide skin tension with the thumb and middle finger of the non-dominant hand placed on either side of the trachea	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Uses the index finger to palpate the cricothyroid membrane	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Places the needle in the midline of the neck at the inferior margin of the cricothyroid membrane (to avoid the cricothyroid blood vessels located superiorly and laterally) <ul style="list-style-type: none"> <li>• Directing it caudally (toward the feet) at an angle of 30 to 45 degrees</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Punctures the skin and subcutaneous tissue. Advance the needle while continuously applying negative pressure on the syringe, until air bubbles are seen, confirming intratracheal placement	<input type="checkbox"/>	<input type="checkbox"/>	
12.	Advances the catheter forward off the needle until its hub rests at the skin surface	<input type="checkbox"/>	<input type="checkbox"/>	
13.	Removes the needle, attach a syringe and aspirate for air to confirm that the catheter remains in the trachea	<input type="checkbox"/>	<input type="checkbox"/>	

14.	Attaches cannula adaptor to BVM or use Translaryngeal Jet Ventilation (TLJV) device and ventilate with either BVM or TLJV <ul style="list-style-type: none"><li>• One (1) second on and three (3) seconds off</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Secures device	<input type="checkbox"/>	<input type="checkbox"/>
16.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Placement</li><li>• Lung sounds</li><li>• Chest expansion</li><li>• SpO<sub>2</sub> and ETCO<sub>2</sub></li><li>• Patient response/tolerance (if conscious) to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Needle Thoracostomy

### INDICATIONS

#### 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.

### CONTRAINDICATIONS

- No contraindications

### CONSIDERATIONS

Determine position for conscious and unconscious patient.

- If conscious, place the patient in an upright position if able to tolerate.
- If patient is unconscious or in spinal motion restriction, leave supine Determine best site:
- 5th intercostal space, mid-axillary (preferred site) or alternative site at the 2<sup>nd</sup> intercostal space at the mid-clavicular line
- Caution should be exercised in the later stages of pregnancy; a higher (3<sup>rd</sup>) intercostal space should be used to avoid injury to the liver or spleen.
- Consider bilateral needle thoracostomy if no improvements or in traumatic cardiac arrest.

## Needle Thoracostomy

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Needle Thoracostomy Kit; or</li> <li>• 14 or 16-gauge 3.25-inch needle (pts &gt;50 kg); or</li> <li>• 18-gauge needle 1.5-inch needle (pts &lt;50 kg)</li> </ul>		<ul style="list-style-type: none"> <li>• Antiseptic wipes</li> <li>• End tidal CO<sub>2</sub> monitoring device.</li> <li>• BVM</li> <li>• Tape</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<b>Clinical Indications:</b> <ul style="list-style-type: none"> <li>• Patients with hypotension (SBP less than 90), clinical signs of shock, and at least one of the following signs:             <ul style="list-style-type: none"> <li>• Jugular vein distention.</li> <li>• Tracheal deviation away from the side of the injury (often a late sign). Absent or decreased breath sounds on the affected side.</li> <li>• Increased resistance when ventilating a patient.</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>• No contraindications</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Preps chosen site with antiseptic wipes	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Inserts needle perpendicular to the chest wall at the level of the superior border of the fifth (5 <sup>th</sup> ) rib until pleura is penetrated as indicated by one or more of the following: <ul style="list-style-type: none"> <li>• A rush of air</li> <li>• Ability to aspirate free air into the syringe</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Removes the syringe and needle stylet and leave cannula in place	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Adds flutter valve	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Secures needle hub in place with tape or another device	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Placement/location</li> <li>• Lung sounds, respiratory status, SpO<sub>2</sub> and CO<sub>2</sub> monitoring</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

**Notes:**



## Oral Endotracheal Intubation

### INDICATIONS

- Unresponsive and apneic patient
- Agonal or failing respirations and/or no gag reflex present.
- Adequate ventilation cannot otherwise be achieved.

### CONTRAINDICATIONS

- Suspected ALOC (initially)

### CONSIDERATIONS

- Utilize cervical stabilization as needed.
- Select appropriately sized endotracheal intubation tube.
- Add ETCO<sub>2</sub>

## Oral Endotracheal Intubation

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• PPE</li> <li>• Endotracheal Intubation Tube (<i>appropriately sized for age group</i>)</li> <li>• Stylet</li> <li>• Laryngoscope</li> </ul>		<ul style="list-style-type: none"> <li>• End tidal CO<sub>2</sub> monitoring device</li> <li>• BVM</li> <li>• Tape</li> </ul>		
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Unresponsive and apneic patient</li> <li>• Patient with agonal or failing respirations, and/or no gag reflex</li> <li>• Prolonger ventilation is required, and adequate ventilation cannot otherwise be achieved</li> </ul>		<ul style="list-style-type: none"> <li>• Suspected ALOC (initially)</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D</b>-Dose/Drug</li> <li>• Right dose              <b>I</b>- Integrity of packaging</li> <li>• Right route              <b>C</b>-Clarity of solution</li> <li>• Right time                <b>E</b>-Expiration Date</li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Selects appropriately sized ET tube	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
7a.	Supports ventilations with appropriate basic airway adjuncts	<input type="checkbox"/>	<input type="checkbox"/>	
7c.	Visualizes the vocal cords with the laryngoscope. Watch as the tube passes through the vocal cords. Advance the tube until the vocal cord marker is situated beyond the vocal cords. Placement efforts must stop after twenty (20) seconds for ventilation	<input type="checkbox"/>	<input type="checkbox"/>	
7d.	Maximum of three (3) attempts or identification of an unmanageable airway *If unsuccessful consider alternative airway management (i.e. I-gel or BVM)	<input type="checkbox"/>	<input type="checkbox"/>	

7e.	Inflates the balloon to the point where no air leak can be heard	<input type="checkbox"/>	<input type="checkbox"/>
7f.	Listens for bilateral breath sounds, resume ventilation with 100% oxygen and secure airway	<input type="checkbox"/>	<input type="checkbox"/>
8.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Lung sounds</li><li>• Placement verification</li><li>• SpO<sub>2</sub> and CO<sub>2</sub> monitoring</li><li>• Patient response to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Subcutaneous Medication Administration

### INDICATIONS

- Desired route for administration of medication

### CONTRAINDICATIONS (Relative)

If any of the following are noted at the site, select a different site:

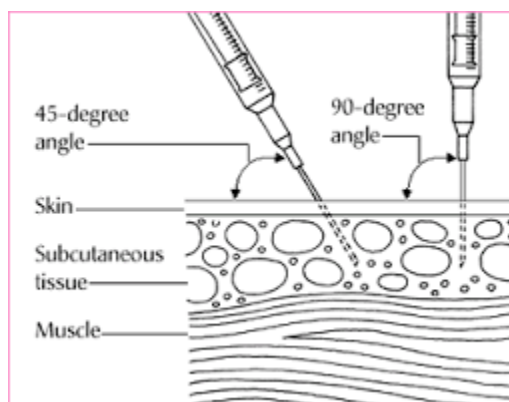
- Evisceration
- Masses
- Tenderness
- Bruising
- Infection
- Abrasions
- Swelling

## Subcutaneous Medication Administration

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/>
		Fail <input type="checkbox"/>	
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• BSI equipment</li> <li>• Syringe</li> <li>• Alcohol Prep</li> </ul>		<ul style="list-style-type: none"> <li>• Safety Needles (25g 1/2 -7/8 inch)</li> <li>• Bandage</li> </ul>	
<b>Assessment/Treatment indicators:</b>			
<b><u>Indications</u></b>		<b><u>Contraindications (relative to site)</u></b>	
<ul style="list-style-type: none"> <li>• Desired route for administration of medication</li> </ul>		<ul style="list-style-type: none"> <li>• Evisceration</li> <li>• Masses</li> <li>• Tenderness</li> <li>• Bruising</li> <li>• Infection</li> <li>• Abrasions</li> <li>• Swelling</li> </ul>	
<b>Procedure:</b>			<b>Yes</b>
			<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindication	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares and checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Explains procedure to patient/family	<input type="checkbox"/>	<input type="checkbox"/>
5.	Chooses and inspects desired site for contraindications Back of the upper arm (humeral region) Upper outer aspect of thigh	<input type="checkbox"/>	<input type="checkbox"/>
6.	Chooses appropriate medication	<input type="checkbox"/>	<input type="checkbox"/>
7.	Withdraws medication	<input type="checkbox"/>	<input type="checkbox"/>
8.	Positions patient and prepares site	<input type="checkbox"/>	<input type="checkbox"/>
9.	Remove air from syringe (Push slightly on the plunger to bring a drop of solution to the level of the bevel of the needle)	<input type="checkbox"/>	<input type="checkbox"/>
10.	Support the muscle to be injected (Without contaminating the site pinch skin with non-dominant hand)	<input type="checkbox"/>	<input type="checkbox"/>
11.	Inserts needle into the site at 45° angle, stabilizes hub of syringe and aspirates for no blood return (no blood return indicates proper placement)	<input type="checkbox"/>	<input type="checkbox"/>
12.	Slowly injects medication to reduce pain and tissue trauma	<input type="checkbox"/>	<input type="checkbox"/>
13.	Withdraws needle and properly disposes needle and syringe	<input type="checkbox"/>	<input type="checkbox"/>
14.	Applies direct pressure, massages site and applies bandage as needed	<input type="checkbox"/>	<input type="checkbox"/>

15.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Medication and dosage given</li><li>• Administration success</li><li>• Patient response/tolerance to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			



<http://www.ada-diabetes-management.com/administer-subcutaneous-injection/>

## Synchronized Cardioversion

### INDICATIONS

- Unstable ventricular tachycardia or wide complex tachycardias (sustained)
- Unstable narrow complex tachycardias

### CONTRAINDICATIONS

- Patient eight (8) years of age and younger

### CONSIDERATIONS

In typical pad placement, assess for:

- Transdermal medication patches (remove if found, wipe area clean)
- Implanted medical devices (avoid placing pads over devices or jewelry)

If patient's condition permits administer sedative medication for conscious patients with signs of adequate tissue perfusion:

- **MIDAZOLAM** 2.5 mg slow IV/IO or 5 mg IM/IN
- **FENTANYL** 50 mcg slow IV/IO over one (1) minute (initial dose) or 100 mcg slow IM/IN  
*In five (5) minutes subsequent doses may be repeated titrating to pain; not to exceed 200mcg total via IV/IO routes. If patient is medicated intranasally, 50 mcg may be repeated every ten (10) minutes; titrate to pain, do not exceed 200 mcg total regardless of route given.*

## Synchronized Cardioversion

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/>
		Fail <input type="checkbox"/>	
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• Pacing/Defibrillator pads</li> <li>• PPE</li> <li>• Cardiac monitor</li> </ul>			
<b>Assessment/Treatment indicators:</b>			
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>	
<ul style="list-style-type: none"> <li>• Unstable ventricular tachycardia or wide complex tachycardias (sustained)</li> <li>• Unstable narrow complex tachycardias</li> </ul>		<ul style="list-style-type: none"> <li>• Patient less than eight (8) years of age</li> </ul>	
<b>Procedure:</b>			<b>Yes</b>
			<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D-Dose/Drug</b></li> <li>• Right dose                <b>I- Integrity of packaging</b></li> <li>• Right route                <b>C-Clarity of solution</b></li> <li>• Right time                 <b>E-Expiration Date</b></li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>
6.	Applies defibrillation pads	<input type="checkbox"/>	<input type="checkbox"/>
7.	Selects 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 manufacturer guidelines)	<input type="checkbox"/>	<input type="checkbox"/>
8.	Sets monitor/defibrillator to synchronized cardioversion mode	<input type="checkbox"/>	<input type="checkbox"/>
9.	Makes certain all personnel are clear of patient	<input type="checkbox"/>	<input type="checkbox"/>
10.	Presses and holds the shock button to cardiovert (stays clear of the patient until you are certain the energy has been delivered)	<input type="checkbox"/>	<input type="checkbox"/>
11.	Assesses patient response and perform immediate defibrillation if the patients. rhythm has deteriorated into pulseless ventricular tachycardia or ventricular fibrillation	<input type="checkbox"/>	<input type="checkbox"/>



12.	Considers Midazolam 2.5mg slow IV/IO or 5mg IN/IM if patient is awake and alert	<input type="checkbox"/>	<input type="checkbox"/>
13.	Considers Fentanyl 50mcg IV/IO or 100mcg IN/IM to max of 200mcg for patient with complaint of pain	<input type="checkbox"/>	<input type="checkbox"/>
14.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Initial and post conversion cardiac rate/rhythm</li><li>• Medication administration</li><li>• Patient response/tolerance to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Transcutaneous Cardiac Pacing

### INDICATIONS

- Symptomatic Bradycardia

### CONTRAINDICATIONS

- Patient less than eight (8) years of age
- Asystole

### CONSIDERATIONS

Consider sedative medication for conscious patients:

- **MIDAZOLAM** 2.5mg slow IV/IO push or via intranasal route or 5mg IM/IN
- **FENTANYL** 50mcg slow IV/IO over one (1) minute (initial dose) or 100mcg slow IM/IN  
*In five (5) minutes subsequent doses may be repeated titrating to pain; not to exceed 200mcg total via IV/IO routes. If patient is medicated intranasally, 50mcg may be repeated every ten (10) minutes; titrate to pain, do not exceed 200mcg total regardless of route given*

## Transcutaneous Cardiac Pacing

### Skills Test

Examinee: _____		Date: _____		
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>	
<b>Equipment:</b>				
<ul style="list-style-type: none"> <li>• Pacing/defibrillator pads</li> <li>• PPE</li> <li>• Cardiac monitor</li> </ul>				
<b>Assessment/Treatment indicators:</b>				
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>		
<ul style="list-style-type: none"> <li>• Symptomatic Bradycardia</li> </ul>		<ul style="list-style-type: none"> <li>• Patient less than eight (8) years of age</li> <li>• Asystole</li> </ul>		
<b>Procedure:</b>			<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>	
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>	
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>	
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D</b>-Dose/Drug</li> <li>• Right dose                <b>I</b>- Integrity of packaging</li> <li>• Right route                <b>C</b>-Clarity of solution</li> <li>• Right time                 <b>E</b>-Expiration Date</li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
5.	Explains procedure	<input type="checkbox"/>	<input type="checkbox"/>	
6.	Applies pacing pads	<input type="checkbox"/>	<input type="checkbox"/>	
7.	Starts pacing at lowest setting available on monitor until capture is noted at a rate of 60	<input type="checkbox"/>	<input type="checkbox"/>	
8.	Assesses peripheral pulses to confirm correlation with paced rhythm (Utilize capnography to assist in monitoring improvement of perfusion, reassesses patient for signs of adequate tissue perfusion).	<input type="checkbox"/>	<input type="checkbox"/>	
9.	Determines lowest threshold by turning the output control down until capture is lost, and then turn it back up slightly until capture is noted again (maintains this capture)	<input type="checkbox"/>	<input type="checkbox"/>	
10.	Re-assesses peripheral pulses and confirm correlation with paced rhythm (Utilize capnography to assist in monitoring improvement of perfusion, reassesses patient for signs of adequate perfusion).	<input type="checkbox"/>	<input type="checkbox"/>	
11.	Considers Midazolam 2mg slow IV/IO or 2mg IN/IM if patient is awake and alert and exhibits signs of adequate tissue perfusion	<input type="checkbox"/>	<input type="checkbox"/>	

12.	Considers Fentanyl 50mcg IV/IO or 100mcg IN/IM to max of 200mcg for patient with complaint of pain	<input type="checkbox"/>	<input type="checkbox"/>
13.	Reassess/Document: <ul style="list-style-type: none"><li>• Patient</li><li>• Initial and post procedural cardiac rate/rhythm</li><li>• Capture threshold; rate and amperes</li><li>• Medication administration</li><li>• Patient response/tolerance to intervention</li></ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

## Vagal Maneuvers (Valsalva)

### INDICATIONS

- Stable narrow complex tachycardias

### RELATIVE CONTRAINDICATIONS

- Hypertension
- Suspected acute MI.
- Suspected head/brain injury

### CONSIDERATIONS

- No considerations

## Vagal Maneuvers (Valsalva)

### Skills Test

Examinee: _____		Date: _____	
Examiner: _____		Pass <input type="checkbox"/>	Pass/Counsel <input type="checkbox"/> Fail <input type="checkbox"/>
<b>Equipment:</b>			
<ul style="list-style-type: none"> <li>• Cardiac monitor</li> <li>• SpO<sub>2</sub> monitor</li> </ul>		<ul style="list-style-type: none"> <li>• 10ml syringe or straw</li> <li>• Ice water or cold washcloth as needed</li> </ul>	
<b>Assessment/Treatment indicators:</b>			
<b><u>Indications</u></b>		<b><u>Contraindications</u></b>	
<ul style="list-style-type: none"> <li>• Stable narrow complex tachycardias</li> </ul>		<ul style="list-style-type: none"> <li>• Hypertension</li> <li>• Suspected acute MI</li> <li>• Suspected head/brain injury</li> </ul>	
<b>Procedure:</b>		<b>Yes</b>	<b>No</b>
1.	Scene safety awareness/PPE usage	<input type="checkbox"/>	<input type="checkbox"/>
2.	States indications/contraindications	<input type="checkbox"/>	<input type="checkbox"/>
3.	Prepares/checks equipment	<input type="checkbox"/>	<input type="checkbox"/>
4.	Checks the "five patient rights, plus one." <ul style="list-style-type: none"> <li>• Right patient</li> <li>• Right medication      <b>D-Dose/Drug</b></li> <li>• Right dose              <b>I- Integrity of packaging</b></li> <li>• Right route              <b>C-Clarity of solution</b></li> <li>• Right time                <b>E-Expiration Date</b></li> <li>• Allergies</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Have patient perform one of the following techniques: <ol style="list-style-type: none"> <li>a. Pinch nostrils together, close mouth and blow against their closed glottis</li> <li>b. Bear down as if having a bowel movement.</li> <li>c. Submerge face in water or apply cold wet washcloth against face (preferred method for infants)</li> <li>d. Blow through straw or 10ml syringe</li> </ol>	<input type="checkbox"/>	<input type="checkbox"/>
6.	All procedures should be performed until arrhythmia is terminated or a max. of ten (10) seconds has passed; consider Adenosine and/or sync cardioversion	<input type="checkbox"/>	<input type="checkbox"/>
7.	Reassess/Document: <ul style="list-style-type: none"> <li>• Patient</li> <li>• Initial cardiac rate/rhythm</li> <li>• Subsequent cardiac rate/rhythm</li> <li>• Medication administration</li> <li>• Patient response/tolerance to intervention</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Notes:</b>			

**References**

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