

# Appendix E

## Psychomotor Skills Evaluations

The following skill evaluation instruments were developed by the National Registry of EMTs. They are in draft format and have not yet been approved for usage in Advanced Level National Registry examinations.

**National Registry of Emergency Medical Technicians  
Advanced Level Practical Examination**

**PATIENT ASSESSMENT-TRAUMA**

NOTE: Areas denoted by "\*" may be integrated within sequence of Initial Assessment

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
<b>SCENE SIZE-UP</b>		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional help if necessary	1	
Considers stabilization of spine	1	
<b>INITIAL ASSESSMENT/RESUSCITATION</b>		
Verbalizes general impression of the patient	1	
Determines responsiveness/level of consciousness	1	
Determines chief complaint/apparent life-threats	1	
Airway -Opens and assesses airway (1 point)                      -Inserts adjunct as indicated (1 point)	2	
Breathing -Assess breathing (1 point) -Assures adequate ventilation (1 point) -Initiates appropriate oxygen therapy (1 point) -Manages any injury which may compromise breathing/ventilation (1 point)	4	
Circulation -Checks pulse (1 point) -Assess skin (either skin color, temperature or condition) (1 point) -Assesses for and controls major bleeding if present (1 point) -Initiates shock management (1 point)	4	
Identifies priority patients/makes transport decision	1	
<b>FOCUSED HISTORY AND PHYSICAL EXAMINATION/RAPID TRAUMA ASSESSMENT</b>		
Selects appropriate assessment	1	
Obtains, or directs assistant to obtain, baseline vital signs	1	
Obtains SAMPLE history	1	
<b>DETAILED PHYSICAL EXAMINATION</b>		
Head -Inspects mouth**, nose**, and assesses facial area (1 point) -Inspects and palpates scalp and ears (1 point) -Assesses eyes for PEARRL **(1 point)	3	
Neck** -Checks position of trachea (1 point) -Checks jugular veins (1 points) -Palpates cervical spine (1 point)	3	
Chest ** -Inspects chest (1 point) -Palpates chest (1 point) -Auscultates chest (1 point)	3	
Abdomen/pelvis** -Inspects and palpates abdomen (1 point) -Assesses pelvis (1 point) -Verbalizes assessment of genitalia/perineum as needed (1 point)	3	
Lower extremities ** -Inspects, palpates, and assesses motor, sensory and circulatory functions (1 point/leg)	2	
Upper extremities -Inspects, palpates, and assesses motor, sensory, and circulatory functions (1 point/arm)	2	
Posterior thorax, lumbar, and buttocks** -Inspects and palpates posterior thorax (1 point) -Inspects and palpates lumbar and buttocks area (1 point)	2	
Manages secondary injuries and wounds appropriately (1 point/injury or wound)	1	
Ongoing assessment (1 point)	1	
<b>TOTAL</b>	<b>43</b>	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to initiate or call for transport of the patient within 10 minute time limit
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to determine scene safety
- \_\_\_\_\_ Failure to assess for and provide spinal protection when indicated
- \_\_\_\_\_ Failure to voice and ultimately provide high concentration of oxygen
- \_\_\_\_\_ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock (hypoperfusion)
- \_\_\_\_\_ Failure to differentiate patient's need for immediate transportation versus continued assessment and treatment at the scene
- \_\_\_\_\_ Does other detailed or focused history or physical examination before assessing and treating threats to airway, breathing and circulation
- \_\_\_\_\_ Orders a dangerous or inappropriate intervention

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**PATIENT ASSESSMENT-MEDICAL**

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
<b>SCENE SIZE-UP</b>		
Determines the scene/situation is safe	1	
Determines the mechanism of injury/nature of illness	1	
Determines the number of patients	1	
Requests additional help if necessary	1	
Considers stabilization of spine	1	
<b>INITIAL ASSESSMENT</b>		
Verbalizes general impression of the patient		
Determines responsiveness/level of consciousness	1	
Determines chief complaint/apparent life-threats	1	
Assesses airway and breathing -Assessment (1 point) -Assures adequate ventilation of patient (1 point) -Initiates appropriate oxygen therapy (1 point)	3	
Assesses circulation -Assesses/controls major bleeding (1 point) -Assesses skin (either skin color, temperature or condition) (1 point) -Assesses pulse (1 point)	3	
Identifies priority patients/makes transport decision	1	
<b>FOCUSED HISTORY AND PHYSICAL EXAMINATION/RAPID ASSESSMENT</b>		
History of present illness -Onset (1 point)                      -Severity (1 point) -Provocation (1 point)                -Time (1 point) -Quality (1 point)                       -Clarify questions (2 points) -Radiation (1 point)	8	
Past medical history -Allergies (1 point)                    -Last oral intake (1 point) -Medications (1 point)               -Events leading to present illness (1 point) -Past pertinent history (1 point)	5	
Performs focused physical examination (assess affected body part/system or, if indicated, completes rapid assessment) -Cardiovascular                        -Integumentary -Pulmonary                               -GI/GU -Neurological                            -Reproductive -Musculoskeletal                        -Psychological/Social	5	
Vital signs -Pulse (1 point)                         -Respiratory rate & quality (1 point each) -Blood pressure (1 point)             -AVPU (1 point)	5	
Diagnostics	2	
States field impression of patient	1	
Verbalizes treatment plan for patient and calls for appropriate intervention(s)	1	
Transport decision re-evaluated	1	
<b>ON-GOING ASSESSMENT</b>		
Repeats initial assessment	1	
Repeats vital signs	1	
Evaluates response to treatments	1	
Repeats focused assessment regarding patient complaint or injuries	1	
<b>TOTAL</b>	<b>48</b>	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to determine scene safety
- \_\_\_\_\_ Failure to voice and ultimately provide appropriate oxygen therapy
- \_\_\_\_\_ Failure to find or appropriately manage problems associated with airway, breathing, hemorrhage or shock (hypoperfusion)
- \_\_\_\_\_ Failure to differentiate patient's need for immediate transportation versus continued assessment and treatment at the scene
- \_\_\_\_\_ Does other detailed or focused history or physical examination before assessing and treating threats to airway, breathing and circulation
- \_\_\_\_\_ Failure to determine the patient's primary problem
- \_\_\_\_\_ Orders a dangerous or inappropriate intervention

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**VENTILATORY MANAGEMENT (ET)**

NOTE: If candidate elects to ventilate initially with BVM attached to reservoir and oxygen, full credit must be awarded for attempts denoted \*\*\*\* so long as first ventilation is delivered within initial 30 seconds.

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Opens the airway manually	1	
Elevates tongue, inserts simple adjunct (oropharyngeal or nasopharyngeal airway)	1	
<b>NOTE: Examiner now informs candidate no gag reflex is present and patient accepts adjunct</b>		
**Ventilates patient immediately with bag-valve-mask device unattached to oxygen	1	
**Hyperventilates patient with room air	1	
<b>NOTE: Examiner now informs candidate that ventilation is being performed without difficulty and that pulse oximetry indicates the patient's blood oxygen saturation is 85%</b>		
Attaches oxygen reservoir to bag-valve-mask device and connects to high flow oxygen regulator (12-15 L/minute)	1	
Ventilates patient at a rate of 10-20/minute with volumes of at least 800 ml	1	
<b>NOTE: After 30 seconds, examiner auscultates and reports breath sounds are present, equal bilaterally and medical direction has ordered intubation. The examiner must now take over ventilation.</b>		
Directs assistant to hyperventilate patient	1	
Identifies/selects proper equipment for intubation	1	
Checks equipment for:     - Cuff leaks (1 point) - Laryngoscope operational with bulb tight (1 point)	2	
<b>NOTE: Examiner to remove OPA and moves out of the way when candidate is prepared to intubate</b>		
Positions head properly	1	
Inserts blade while displacing tongue	1	
Elevates mandible with laryngoscope	1	
Introduces ET tube and advances to proper depth	1	
Inflates cuff to proper pressure and disconnects syringe	1	
Directs ventilation of patient	1	
Confirms proper placement by auscultation bilaterally over each lung and over epigastrium	1	
<b>NOTE: Examiner to ask, "If you had proper placement what should you expect to hear?"</b>		
Secures ET tube (may be verbalized)	1	
<b>NOTE: Examiner now asks candidate, "Please demonstrate one additional method of verifying proper tube placement in this patient."</b>		
Identifies/selects proper equipment	1	
Verbalizes findings and interpretations (Compares indicator color to the colorimetric scales and states reading to examiner)	1	
<b>NOTE: Examiner now states, "You see thick fluid in the tube and hear gurgling sounds with the patient's exhalation."</b>		
Identifies/selects a flexible suction catheter	1	
Pre-oxygenates patient	1	
Marks maximum insertion length with thumb and forefinger	1	
Inserts catheter into the ET tube leaving catheter port open	1	
At proper insertion depth, covers catheter port and applies suction while withdrawing catheter	1	
Ventilates/directs ventilation of patient as catheter is flushed with sterile water	1	
TOTAL	27	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to initiate ventilations within 30 seconds after applying gloves or interrupts ventilations for greater than 30 seconds at any time
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to voice and ultimately provide high oxygen concentrations (at least 85%)
- \_\_\_\_\_ Failure to ventilate patient at a rate of at least 10/minute
- \_\_\_\_\_ Failure to provide adequate volumes per breath (maximum 2 errors/minute permissible)
- \_\_\_\_\_ Failure to pre-oxygenate patient prior to intubation and suctioning
- \_\_\_\_\_ Failure to successfully intubate within 3 attempts
- \_\_\_\_\_ Failure to disconnect syringe immediately after inflating cuff of ET tube
- \_\_\_\_\_ Use of teeth as a fulcrum
- \_\_\_\_\_ Failure to assure proper tube placement by auscultation bilaterally and over the epigastrium
- \_\_\_\_\_ If used, stylette extends beyond end of the ET tube
- \_\_\_\_\_ Inserts any adjunct in a manner dangerous to the patient
- \_\_\_\_\_ Suctioning the patient for more than 15 seconds
- \_\_\_\_\_ Does not suction the patient

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**CARDIAC ARREST SKILLS STATION  
DYNAMIC CARDIOLOGY**

	Possible Points	Points Awarded
Takes or verbalizes infection control precautions	1	
Checks level of responsiveness	1	
Checks ABC's	1	
Initiates CPR if appropriate (verbally)	1	
Performs "Quick Look" with paddles	1	
Correctly interprets initial rhythm	1	
Appropriately manages initial rhythm	2	
Notes change in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Correctly interprets second rhythm	1	
Appropriately manages second rhythm	2	
Notes change in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Correctly interprets third rhythm	1	
Appropriately manages third rhythm	2	
Notes change in rhythm	1	
Checks patient condition to include pulse and, if appropriate, BP	1	
Correctly interprets fourth rhythm	1	
Appropriately manages fourth rhythm	2	
Orders high percentages of supplemental oxygen at proper times	1	
TOTAL	24	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to deliver first shock in a timely manner due to operator delay in machine use or providing treatments other than CPR with simple adjuncts
- \_\_\_\_\_ Failure to deliver second or third shocks without delay other than the time required to reassess and recharge paddles
- \_\_\_\_\_ Failure to verify rhythm before delivering each shock
- \_\_\_\_\_ Failure to ensure the safety of self and others (verbalizes "All clear" and observes)
- \_\_\_\_\_ Inability to deliver DC shock (does not use machine properly)
- \_\_\_\_\_ Failure to demonstrate acceptable shock sequence
- \_\_\_\_\_ Failure to order initiation or resumption of CPR when appropriate
- \_\_\_\_\_ Failure to order correct management of airway (ET when appropriate)
- \_\_\_\_\_ Failure to order administration of appropriate oxygen at proper time
- \_\_\_\_\_ Failure to diagnose or treat 2 or more rhythms correctly
- \_\_\_\_\_ Orders administration of an inappropriate drug or lethal dosage
- \_\_\_\_\_ Failure to correctly diagnose or adequately treat v-fib, v-tach, or asystole

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**CARDIAC ARREST SKILLS STATION  
STATIC CARDIOLOGY**

NOTE: Only document incorrect responses in spaces provided

	Possible Points	Points Awarded
<b>STRIP #1</b> Diagnosis:	1	
<b>Treatment:</b>	2	
<b>STRIP #2</b> Diagnosis:	1	
<b>Treatment:</b>	2	
<b>STRIP #3</b> Diagnosis:	1	
<b>Treatment:</b>	2	
<b>STRIP #4</b> Diagnosis:	1	
<b>Treatment:</b>	2	
TOTAL	12	

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**INTRAVENOUS THERAPY**

	Possible Points	Points Awarded
Checks selected IV fluid for: -Proper fluid (1 point) -Clarity (1 point)	2	
Selects appropriate catheter	1	
Selects proper administration set	1	
Connects IV tubing to the IV bag	1	
Prepares administration set (fills drip chamber and flushes tubing)	1	
Cuts or tears tape (at any time before venipuncture)	1	
Takes/verbalizes infection control precautions (prior to venipuncture)	1	
Applies tourniquet	1	
Palpates suitable vein	1	
Cleanses site appropriately	1	
Performs venipuncture -Inserts stylette (1 point) -Notes or verbalizes flashback (1 point) -Occludes vein proximal to catheter (1 point) -Removes stylette (1 point) -Connects IV tubing to catheter (1 point)	5	
Releases tourniquet	1	
Runs IV for a brief period to assure patient line	1	
Secures catheter (tapes securely or verbalizes)	1	
Adjusts flow rate as appropriate	1	
Disposes/verbalizes disposal of needle in proper container	1	
TOTAL	21	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Exceeded the 6 minute time limit in establishing a patent and properly adjusted IV
- \_\_\_\_\_ Failure to take or verbalize infection control precautions prior to performing venipuncture
- \_\_\_\_\_ Contaminates equipment or site without appropriately correcting situation
- \_\_\_\_\_ Any improper technique resulting in the potential for catheter shear or air embolism
- \_\_\_\_\_ Failure to successfully establish IV within 3 attempts during 6 minute time limit
- \_\_\_\_\_ Failure to dispose/verbalize disposal of needle in proper container



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**EXTERNAL JUGULAR VEIN CANNULATION**

	Possible Points	Points Awarded
Checks selected IV fluid for: -Proper fluid (1 point) -Clarity (1 point)	2	
Selects appropriate catheter	1	
Selects appropriate administration set	1	
Connects IV tubing to IV bag	1	
Prepares administration set (fills drip chamber and flushed tubing)	1	
Cuts or tears tape (prior to venipuncture)	1	
Takes/verbalizes body substance isolation precautions prior to venipuncture	1	
Distends jugular vein	1	
Cleanses the puncture site	1	
Performs venipuncture: -Inserts stylette (1 point) -Notes or verbalizes flashback (1 point) -Occludes vein proximal to catheter (1 point) -Removes stylette (1 point)	4	
Connects IV tubing to catheter	1	
Runs IV for brief period to assure patent line	1	
Secures catheter (tapes securely or verbalizes)	1	
Adjusts flow rate as appropriate	1	
Disposes of needle in proper container	1	
<b>TOTAL</b>	<b>19</b>	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Exceeded the 6 minute time limit in establishing a patent and properly adjusted IV
- \_\_\_\_\_ Failure to take or verbalize infection control precautions prior to performing venipuncture
- \_\_\_\_\_ Contaminates equipment or site without appropriately correcting the situation
- \_\_\_\_\_ Any improper technique resulting the potential for catheter shear or air embolism
- \_\_\_\_\_ Inserts catheter against flow of blood
- \_\_\_\_\_ Failure to successfully establish an IV within 3 attempts during the 6 minute time limit
- \_\_\_\_\_ Failure to dispose of needle in proper container

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**INTRAVENOUS BOLUS MEDICATIONS**

NOTE: Check here (\_\_\_) if candidate did not establish a patent IV and do not evaluate these skills.

	Possible Points	Points Awarded
Asks patient for known allergies	1	
Selects correct medication	1	
Assures correct concentration of drug	1	
Assembles prefilled syringe correctly and dispels air	1	
Continues infection control precautions	1	
Cleanses injection site (Y-port or hub)	1	
Reaffirms medication	1	
Stops IV flow (pinches tubing)	1	
Administers correct dose at proper push rate	1	
Flushes tubing (runs wide open for a brief period)	1	
Adjusts drip rate to TKO (KVO)	1	
Voices proper disposal of syringe and needle	1	
Verbalizes need to observe patient for desired effect/adverse side effects	1	
<b>IV BOLUS SUB-TOTAL</b>	<b>13</b>	

**CRITICAL CRITERIA**

- \_\_\_ Failure to begin administration of medication within 3 minute time limit
- \_\_\_ Contaminates equipment or site without appropriately correcting situation
- \_\_\_ Failure to adequately dispel air resulting in potential for air embolism
- \_\_\_ Injects improper drug or dosage (wrong drug, incorrect amount, or pushes at inappropriate rate)
- \_\_\_ Failure to flush IV tubing after injecting medication
- \_\_\_ Recaps needle or failure to dispose/verbalize disposal of syringe and needle in proper container

**INTRAVENOUS PIGGYBACK MEDICATIONS**

	Possible Points	Points Awarded
Has confirmed allergies by now (award point if previously confirmed)	1	
Checks selected IV fluid for: -Proper fluid (1 point) -Clarity (1 point)	2	
Checks selected medication for: -Clarity (1 point) -Concentration of medication (1 point)	2	
Injects correct amount of medication into IV solution given scenario	1	
Connects appropriate administration set to medication solution	1	
Prepares administration set (fills drip chamber and flushes tubing)	1	
Attaches appropriate needle to administration set	1	
Continues infection control precautions	1	
Cleanses port of primary line	1	
Inserts needle into port without contamination	1	
Adjusts flow rate of secondary line as required	1	
Stops flow of primary line	1	
Securely tapes needle	1	
Verbalizes need to observe patient for desired effect/adverse side effects	1	
Labels medication/fluid bag	1	
<b>IV PIGGYBACK SUB-TOTAL</b>	<b>17</b>	

**CRITICAL CRITERIA**

- \_\_\_ Failure to begin administration of medication within 5 minute time limit
- \_\_\_ Contaminates equipment or site without appropriate correcting situation
- \_\_\_ Administers improper drug or dosage (wrong drug, incorrect amount, or infuses at inappropriate rate)
- \_\_\_ Failure to flush IV tubing of secondary line resulting in potential for air embolism
- \_\_\_ Failure to shut-off flow primary line

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**INTRAMUSCULAR/SUBCUTANEOUS MEDICATION ADMINISTRATION**

	Possible Points	Points Awarded
Confirms the verbal order	1	
Explains procedure to patient	1	
Takes/verbalizes body substance isolation precautions prior to administration of medication	1	
Checks for known allergies, contraindications, or incompatibilities	1	
Checks medication for: -Correctness (1 point) -Clarity (1 point) -Expiration date (1 point) -Concentration (1 point)	4	
Selects proper equipment	1	
Draws up appropriate amount of medication	1	
Identifies proper site for injection	1	
Cleanses site appropriately	1	
Introduces needle at appropriate angle with bevel up	1	
Aspirates for blood return	1	
Administers medication	1	
Withdraws needle and dresses the injection site	1	
Disposes of syringe and needle in proper container	1	
Verbalizes need to observe patient for desired/adverse side effects	1	
Voices proper documentation of medication administration	1	
TOTAL	19	

**CRITICAL CRITERIA**

- \_\_\_ Failure to administer medication within 3 minute time limit
- \_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_ Contaminates equipment or site without appropriately correcting the situation
- \_\_\_ Administers improper medication or dosage (wrong drug, incorrect amount, or pushes at an inappropriate rate)
- \_\_\_ Technique or equipment utilized would have resulted in medication being deposited into wrong tissue
- \_\_\_ Failure to dispose of needle and syringe in proper container

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**ENDOTRACHEAL MEDICATION ADMINISTRATION**

	Possible Points	Points Awarded
Confirms the verbal order	1	
Takes/verbalizes body substance isolation precautions prior to administration of medication	1	
Checks for known allergies, contraindications and incompatibilities	1	
Checks medication for: -Correctness (1 point) -Clarity (1 point) -Expiration date (1 point) -Concentration (1 point)	4	
Selects proper equipment to administer medication deeply into tracheobronchial tree	1	
Prepares medication	1	
Pre-oxygenates patient	1	
Injects medication	1	
Resumes ventilation of patient	1	
Disposes of syringe and needle into proper container	1	
Verbalizes need to observe patient for desired/adverse side effects	1	
Voices proper documentation of medication administration	1	
TOTAL	15	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to administer medication within 3 minute time limit
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Contaminates equipment or site without appropriately correcting the situation
- \_\_\_\_\_ Administers improper medication or dosage (wrong drug or incorrect amount )
- \_\_\_\_\_ Technique did not deliver medication in a manner to provide for deep tracheal absorption
- \_\_\_\_\_ Failure to appropriately adjust the concentration or increase the dose
- \_\_\_\_\_ Interruption of ventilations for greater than 30 seconds at any time
- \_\_\_\_\_ Failure to dispose of needle and syringe in proper container

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**AEROSOLIZED MEDICATION ADMINISTRATION**

	Possible Points	Points Awarded
Confirms the verbal order	1	
Explains procedure to patient	1	
Takes/verbalizes body substance isolation precautions prior to administration of medication	1	
Checks for known allergies, contraindications and incompatibilities	1	
Checks medication for: -Correctness (1 point) -Clarity (1 point) -Expiration date (1 point) -Concentration (1 point)	4	
Selects proper equipment	1	
Unscrews lid on nebulizer to expose medication cup	1	
Adds appropriate amount of medication to cup and reattaches lid	1	
Attaches mouthpiece and any extension tube to nebulizer	1	
Attaches oxygen supply to nebulizer cup and adjusts oxygen flow to create a fine mist of medication	1	
Coaches patient to breathe deeply through the mouth until all liquid is used	1	
Verbalizes need to observe patient for desired/adverse side effects	1	
Disposes of treatment delivery system into proper container	1	
Voices proper documentation of medication administration	1	
TOTAL	17	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to begin administration of the medication within 3 minute time limit
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Contaminates equipment without appropriately correcting the situation
- \_\_\_\_\_ Administers improper medication or dosage (wrong drug or incorrect amount)
- \_\_\_\_\_ Technique did not deliver medication in a manner to provide for adequate absorption
- \_\_\_\_\_ Failure to dispose of delivery system in proper container

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**PEDIATRIC (<2 yrs.) VENTILATORY MANAGEMENT (ET)**

NOTE: If candidate elects to ventilate initially with BVM attached to reservoir and oxygen, full credit must be awarded for steps denoted by "\*" so long as first ventilation is delivered within initial 30 seconds.

	Possible Points	Points Awarded
Takes or verbalizes body substances isolation precautions	1	
Opens the airway manually	1	
Elevates tongue, inserts simple adjunct (oropharyngeal or nasopharyngeal airway)	1	
<b>NOTE: Examiner now informs candidate no gag reflex is present and patient accept adjunct</b>		
**Ventilates patient immediately with bag-valve-mask device unattached to oxygen	1	
**Hyperventilates patient with room air	1	
<b>NOTE: Examiner now informs candidate that ventilation is being performed without difficulty and that pulse oximetry indicates the patient's blood oxygen saturation is 85%</b>		
Attaches oxygen reservoir to bag-valve-mask device and connects to high flow oxygen regulator (12-15 L/min)	1	
Ventilates patient at a rate of 20/minute and assures adequate chest expansion	1	
<b>NOTE: After 30 seconds, examiner auscultates and reports breath sounds are present, equal bilaterally and medical direction has ordered intubation. The examiner must now take over ventilation.</b>		
Directs assistant to pre-oxygenate patient	1	
Identifies/selects proper equipment for intubation	1	
Checks laryngoscope to assure operational with bulb tight	1	
<b>NOTE: Examiner to remove OPA and moves out of the way when candidate is prepared to intubate</b>		
Places patient in neutral or sniffing position	1	
Inserts blade while displacing tongue	1	
Elevates mandible with laryngoscope	1	
Introduces ET tube and advances to proper depth	1	
Directs ventilation of patient	1	
Confirms proper placement by auscultation bilaterally over each lung and over epigastrium	1	
<b>NOTE: Examiner to ask, "If you had proper placement, what should you expect to hear?"</b>		
Secures ET tube (may be verbalized)	1	
TOTAL	17	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to initiate ventilations within 30 seconds after applying gloves or interrupts ventilations for greater than 30 seconds at any time
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to voice and ultimately provide high oxygen concentrations (at least 85%)
- \_\_\_\_\_ Failure to ventilate patient at a rate of at least 20/minute
- \_\_\_\_\_ Failure to provide adequate volumes per breath (maximum 2 errors/minute permissible)
- \_\_\_\_\_ Failure to pre-oxygenate patient prior to intubation
- \_\_\_\_\_ Failure to successfully intubate within 3 attempts
- \_\_\_\_\_ Use of gums as a fulcrum
- \_\_\_\_\_ Failure to assure proper tube placement by auscultation bilaterally and over the epigastrium
- \_\_\_\_\_ Inserts any adjunct in a manner dangerous to the patient
- \_\_\_\_\_ Attempts to use any equipment not appropriate for the pediatric patient

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**INTRASOSEOUS INFUSION**

	Possible Points	Points Awarded
Checks selected IV fluid for: -Proper fluid (1 point) -Clarity (1 point) -Expiration date (1 point)	3	
Selects appropriate equipment to include: -IO needle (1 point) -Syringe (1 point) -Saline (1 point) -Extension (1 point)	4	
Selects proper administration set	1	
Connects administration set to bag	1	
Prepares administration set (fills drip chamber and flushes tubing)	1	
Prepares syringe and extension tubing	1	
Cut or tears tape (at any time before IO puncture)	1	
Takes or verbalizes body substance isolation precautions (prior to IO puncture)	1	
Identifies proper anatomical site for IO puncture	1	
Cleanses site appropriately	1	
Performs IO puncture: -Stabilizes tibia (1 point) -Inserts needle at proper angle (1 point) -Advances needle with twisting motion until "pop" is felt (1 point) -Unscrews cap and removes stylette from needle (1 point)	4	
Attaches syringe and extension set to IO needle	1	
Slowly injects saline to assure proper placement of needle	1	
Connects administration set and adjusts flow rate as appropriate	1	
Secures needle with tape and supports with bulky dressing	1	
Disposes of needle in proper container	1	
<b>TOTAL</b>	<b>24</b>	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to establish a patent and properly adjusted IO line within the 6 minute time limit
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions prior to performing IO puncture
- \_\_\_\_\_ Contaminates equipment or site without appropriately correcting situation
- \_\_\_\_\_ Any improper technique resulting in the potential for air embolism
- \_\_\_\_\_ Failure to assure correct needle placement before attaching administration set
- \_\_\_\_\_ Failure to successfully establish IO infusion within 2 attempts during 6 minute time limit
- \_\_\_\_\_ Performing IO puncture in an unacceptable manner (improper puncture site, incorrect needle angle, etc.)
- \_\_\_\_\_ Failure to dispose of needle in proper container

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**NASOGASTRIC TUBE INSERTION**

	Possible Points	Points Awarded
Takes or verbalizes body substance isolation precautions	1	
Explains procedure to patient	1	
Measures and marks NG tube to proper length	1	
Positions patient in upright or semi-sitting position	1	
Lubricates distal 3-6" of tube	1	
Slightly flexes patient's head	1	
Inserts tube into widest nostril and advances straight back until tube is visible in oropharynx	1	
Instructs patient to repeatedly swallow or sip water while continuing to advance tube	1	
Inserts tube until mark reaches outer edge of nostril	1	
Injects 20-35 ml of air into tube while auscultating epigastrium to confirm proper placement	1	
Secures tube	1	
TOTAL	11	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to explain procedure to patient before attempting to place tube
- \_\_\_\_\_ Failure to measure and mark NG tube to proper length prior to insertion
- \_\_\_\_\_ Failure to verify proper placement by auscultation over the epigastrium
- \_\_\_\_\_ Attempts to insert NG tube in a manner dangerous to patient



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**SPINAL IMMOBILIZATION  
SEATED PATIENT**

	Points Possible	Points Awarded
Takes, or verbalizes, body substance isolation precautions	1	
Directs assistant to place/maintain head in the neutral in-line position	1	
Directs assistant to maintain manual immobilization of the head	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
Applies appropriately sized extrication collar	1	
Positions the immobilization device behind the patient	1	
Secures the device to the patient's torso	1	
Evaluates torso fixation and adjusts as necessary	1	
Evaluates and pads behind the patient's head as necessary	1	
Secures the patient's head to the device	1	
Verbalizes moving the patient to a long board	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
TOTAL	12	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Did not immediately direct, or take, manual immobilization of the head
- \_\_\_\_\_ Released, or ordered release of, manual immobilization before it was maintained mechanically
- \_\_\_\_\_ Patient manipulated, or moved excessively, causing potential spinal compromise
- \_\_\_\_\_ Device moved excessively up, down, left or right on the patient's torso
- \_\_\_\_\_ Head mobilization allows for excessive movement
- \_\_\_\_\_ Torso fixation inhibits chest rise, resulting in respiratory compromise
- \_\_\_\_\_ Upon completion of immobilization, head is not in the neutral position
- \_\_\_\_\_ Did not assess motor, sensory and circulatory function in each extremity after voicing immobilization to the long board
- \_\_\_\_\_ Immobilized head to the board before securing the torso

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**SPINAL IMMOBILIZATION  
SUPINE PATIENT**

	Points Possible	Points Awarded
Takes, or verbalizes, body substance isolation precautions	1	
Directs assistant to place/maintain head in the neutral in-line position	1	
Directs assistant to maintain manual immobilization of the head	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
Applies appropriately sized extrication collar	1	
Positions the immobilization device appropriately	1	
Directs movement of the patient onto the device without compromising the integrity of the spine	1	
Applies padding to voids between the torso and the board as necessary	1	
Immobilizes the patient's torso to the device	1	
Evaluates and pads behind the patient's head as necessary	1	
Immobilizes the patient's head to the device	1	
Secures the patient's legs to the device	1	
Secures the patient's arms to the device	1	
Reassesses motor, sensory and circulatory function in each extremity	1	
TOTAL	14	

**CRITICAL CRITERIA**

- \_\_\_ Did not immediately direct, or take, manual immobilization of the head
- \_\_\_ Released, or ordered release of, manual immobilization before it was maintained mechanically
- \_\_\_ Patient manipulated, or moved excessively, causing potential spinal compromise
- \_\_\_ Patient moves excessively up, down, left or right on the patient's torso
- \_\_\_ Head immobilization allows for excessive movement
- \_\_\_ Upon completion of immobilization, head is not the neutral position
- \_\_\_ Did not assess motor, sensory and circulatory function in each extremity after immobilization to the device
- \_\_\_ Immobilized head to the board before securing the torso

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**BLEEDING CONTROL/SHOCK MANAGEMENT**

	Points Possible	Points Awarded
Takes, or verbalizes, body substance isolation precautions	1	
Applies direct pressure to the wound	1	
Elevates the extremity	1	
<b>NOTE: The examiner must now inform the candidate that the wound continues to bleed.</b>		
Applies an additional dressing to the wound	1	
<b>NOTE: The examiner must now inform the candidate that the wound still continues to bleed. The second dressing does not control the bleeding.</b>		
Locates and applies pressure to appropriate arterial pressure point	1	
<b>NOTE: The examiner must now inform the candidate that the bleeding is controlled.</b>		
Bandages the wound	1	
<b>NOTE: The examiner must now inform the candidate the patient is now showing signs and symptoms indicative of hypoperfusion.</b>		
Properly positions the patient	1	
Applies high concentration oxygen	1	
Initiates steps to prevent heat loss from the patient	1	
Indicates the need for immediate transportation	1	
TOTAL	10	

**CRITICAL CRITERIA**

- \_\_\_ Did not take, or verbalize, body substance isolation precautions
- \_\_\_ Did not apply high concentration oxygen
- \_\_\_ Applied a tourniquet before attempting other methods of bleeding control
- \_\_\_ Did not control hemorrhage in a timely manner
- \_\_\_ Did not indicate a need for immediate transportation

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**MOUTH TO MASK WITH SUPPLEMENTAL OXYGEN**

	Points Possible	Points Awarded
Takes, or verbalizes, body substance isolation precautions	1	
Connects one-way valve to mask	1	
Opens patient's airway or confirms patient's airway is open (manually or with adjunct)	1	
Establishes and maintains a proper mask to face seal	1	
Ventilates the patient at the proper volume and rate (800-1200 ml per breath/10-20 breaths per minute)	1	
Connects the mask to high concentration of oxygen	1	
Adjusts flow rate to at least 15 liters per minute	1	
Continues ventilation of the patient at the proper volume and rate (800-1200 ml per breath/10-20 breaths per minute)	1	
NOTE: The examiner must witness ventilations for at least 30 seconds		
TOTAL	8	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Did not take, or verbalize, body substance isolation precautions
- \_\_\_\_\_ Did not adjust liter flow to at least 15 liters per minute
- \_\_\_\_\_ Did not provide proper volume per breath (more than 2 ventilations per minute were below 800 ml)
- \_\_\_\_\_ Did not ventilate the patient at a rate a 10-20 breaths per minute
- \_\_\_\_\_ Did not allow for complete exhalation

**National Registry of Emergency Medical Technicians  
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**VENTILATORY MANAGEMENT  
DUAL LUMEN AIRWAY DEVICE (COMBITUBE OR PTL)**

NOTE: If candidate elects to initially with BVM attached to reservoir and oxygen, full credit must be awarded for steps denoted by "\*" as long as first ventilation is delivered within 30 seconds.

	Possible Points	Points Awarded	
Takes or verbalizes body substance isolation precautions	1		
Opens the airway manually	1		
Elevates tongue, inserts simple adjunct (either oropharyngeal or nasopharyngeal airway)	1		
<b>NOTE: Examiner now informs candidate no gag reflex is present and patient accepts adjunct</b>			
**Ventilates patient immediately with bag-valve-mask device unattached to oxygen	1		
**Hyperventilates patient with room air	1		
<b>NOTE: Examiner now informs candidate that ventilation is being performed without difficulty</b>			
Attaches oxygen reservoir to bag-valve-mask device and connects to high flow oxygen regulator (12-15 liters/min)	1		
Ventilates patient at a rate of 10-20/min and volumes of at least 800 ml	1		
<b>NOTE: After 30 seconds, examiner auscultates and reports breath sounds are present and equal bilaterally and medical control has ordered insertion of a dual lumen airway. The examiner must now take over ventilation.</b>			
Directs assistant to hyperventilate patient	1		
Checks/prepares airway device	1		
Lubricates distal tip of the device (may be verbalized)	1		
<b>NOTE: Examiner to remove OPA and move out of the way when candidate is prepared to insert device</b>			
Positions the head properly	1		
Performs a tongue-jaw lift	1		
<input type="checkbox"/> USES COMBITUBE®	<input type="checkbox"/> USES PTL®		
Inserts device in mid-line and to depth so printed ring is at level of teeth	Inserts device in mid-line until bite block flange is at level of teeth	1	
Inflates pharyngeal cuff with proper volume and removes syringe	Secures strap	1	
Inflates distal cuff with proper volume and removes syringe	Blows into tube #1 to adequately inflate both cuffs	1	
Attaches/directs attachment of BVM to the first (esophageal placement) lumen and ventilates		1	
Confirms placement and ventilation through correct lumen by observing chest rise, auscultation over the epigastrium, and bilaterally over each lung		1	
<b>NOTE: The examiner states, "You do not see rise and fall of the chest and you only hear sounds over the epigastrium."</b>			
Attaches/directs attachment of the BVM to the second (endotracheal placement) lumen and ventilates		1	
Confirms placement and ventilation through correct lumen by observing chest rise, auscultation over the epigastrium and bilaterally over each lung		1	
<b>NOTE: The examiner confirms adequate chest rise, absent sounds over the epigastrium, and equal bilateral breath sounds.</b>			
Secures device or confirms that the device remains properly secured		1	
<b>TOTAL</b>		<b>20</b>	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to initiate ventilations within 30 seconds after taking body substance isolation precautions or interrupts ventilations for greater than 30 seconds at any time
- \_\_\_\_\_ Failure to take or verbalize body substance isolation precautions
- \_\_\_\_\_ Failure to voice and ultimately provide high oxygen concentrations (at least 85%)
- \_\_\_\_\_ Failure to ventilate patient at rate of at least 10/minute
- \_\_\_\_\_ Failure to provide adequate volumes per breath (maximum 2 errors/minute permissible)
- \_\_\_\_\_ Failure hyperventilate patient prior to placement of the dual lumen airway device
- \_\_\_\_\_ Failure to insert the dual lumen airway device at a proper depth or at either proper place within 3 attempts
- \_\_\_\_\_ Failure to inflate both cuffs properly
- \_\_\_\_\_ Combitube-failure to remove syringe immediately after inflation of each cuff
- \_\_\_\_\_ PTL-failure to secure the strap prior to cuff inflation
- \_\_\_\_\_ Failure to confirm that the proper lumen of the device is being ventilated by observing chest rise, auscultation over the epigastrium, and bilaterally over each lung
- \_\_\_\_\_ Inserts any adjunct in a manner dangerous to patient

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**VENTILATORY MANAGEMENT (EOA)**

NOTE: If candidate elects to initially ventilate with BVM attached to reservoir and oxygen, full credit must be awarded for steps denoted by "\*" so long as first ventilation is delivered within initial 30 seconds.

	Possible Points	Points Awarded
Takes or verbalizes infection control precautions	1	
Opens airway manually	1	
Elevates tongue, inserts simple adjunct (either oropharyngeal or nasopharyngeal airway)	1	
<b>NOTE: Examiner now informs candidate no gag reflex is present and patient accepts adjunct</b>		
**Ventilates patient immediately with bag-valve-mask device unattached to oxygen	1	
**Hyperventilates patient with room air	1	
<b>NOTE: Examiner now informs candidate that ventilation is being performed without difficulty</b>		
Attaches oxygen reservoir to bag-valve-mask device and connects to high flow oxygen regulator (12-15 liters/min)	1	
Ventilates patient at a rate of 10-20/min, and volumes of at least 800 ml	1	
<b>NOTE: After 30 seconds, examiner auscultates and reports breath sounds are present and equal bilaterally and medical control has ordered placement of an EOA. The examiner must now take over ventilation.</b>		
Directs assistant to hyperventilate patient	1	
Identifies/selects proper equipment	1	
Assembles airway	1	
Tests cuff	1	
Inflates mask	1	
Lubricates tube (may be verbalized)	1	
<b>NOTE: Examiner to remove OPA and move out of way when candidate is prepared to insert EOA</b>		
Positions head properly with neck in neutral or slightly flexed position	1	
Grasps tongue and mandible and elevates	1	
Inserts tube in same direction as curvature of pharynx	1	
Advances tube until mask sealed against face	1	
Ventilates patient while maintaining tight mask seal	1	
Directs confirmation of proper placement by auscultation bilaterally over epigastrium	1	
Inflates cuff to proper pressure and disconnects syringe	1	
Continues ventilation of patient	1	
<b>NOTE: Examiner to ask "if you had proper placement, what would you expect to hear?"</b>		
TOTAL	21	

**CRITICAL CRITERIA**

- \_\_\_\_\_ Failure to initiate ventilations within 30 seconds after applying gloves or interrupts ventilations for greater than 30 seconds at any time
- \_\_\_\_\_ Failure to take or verbalize infection control precautions
- \_\_\_\_\_ Failure to voice and ultimately provide high oxygen concentrations (at least 85%)
- \_\_\_\_\_ Failure to ventilate patient at a rate of at least 10/minute
- \_\_\_\_\_ Failure to provide adequate volumes per breath (maximum 2 errors/minute permissible)
- \_\_\_\_\_ Failure to hyperventilate patient prior to placement of the EOA
- \_\_\_\_\_ Failure to successfully place the EOA within 3 attempts
- \_\_\_\_\_ Failure to assure proper tube placement by auscultation bilaterally and over the epigastrium
- \_\_\_\_\_ Inserts any adjunct in a manner dangerous to patient