

State of Ohio Intermediate 2002

- I. Pre-Certification Testing, Skills Evaluation
- a. These practical skills are to be administered by the accredited training agency and successfully passed by the student prior to sitting for the National Registry written and practical exam.
 - i. Pediatric Intraosseous Infusion
 - ii. Ventilatory Management – Pediatric
 - iii. IV Medication Knowledge and Administration Station
 - b. Skills Stations 1 and 2 will utilize the current National Registry of Emergency Medical Technicians (NREMT) skills sheets. These sheets will need to be maintained within the student’s permanent record.
 - i. Pass Criteria
 1. Critical Criteria as per the NREMT skill sheets
 2. Points (approximately 80% of total possible points)
 - a. Pediatric Intraosseous Infusion = 18 out of 23
 - b. Ventilatory Management – Pediatric = 13 out of 17
 - c. Skill Station 3 is specific to the State of Ohio 2002 Intermediate Curriculum and will consist of the following:
 - i. Implementation
 1. A scenario will be read to (by) the student. This scenario should be designed to direct the student toward a drug (s) that are appropriate for the given patient. There should be little question and answer needed between the evaluator and the student to determine the appropriate drug. (examples at end of document)
 2. The student selects the drug and discusses the actions, indications, side effects, administrative issues regarding this drug
 3. The student then administers the drug into an IV simulator
 4. The student then evaluates the effectiveness of the drug
 5. The student then evaluates possible side effects
 - ii. This IV Medication Knowledge and Administration station is meant to determine entry level competency for those medication that are not be covered on the NREMT Intermediate-85 (I-85) written examination which include:

50% Dextrose in Water	morphine sulfate
Aspirin	naloxone
lorazepam	Nitroglycerin
diphenhydramine	Nitrous Oxide
Bronchodilators	nalbuphine
meperidine	ketorolac
Epinephrine	diazepam
Glucagon	Or other analgesics for relief of pain

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iii. Pass Criteria

1. This station will be graded on a score sheet developed by the State of Ohio Division Of EMS. (See attached)
2. The Pass / Fail Criteria are as follows:
 - a. The student will need to pass two scenarios
 - b. Achieve a minimum of 18 out of 23 points per scenario
 - c. Critical criteria as described on evaluation form

II. Certification Testing

- a. Once the student receives a certificate of completion, they will be eligible to sit for the NREMT I-85 certification exam.
- b. The accredited training program will complete the State of Ohio EMT-Intermediate application form. On this form, the program coordinator will attest that the student has successfully demonstrated competency in the following skills.
 - i. Pediatric Intraosseous Infusion
 - ii. Ventilatory Management – Pediatric
 - iii. IV Medication Knowledge and Administration Station
- c. The certification exam will consist of the following:
 - i. Written Exam: NREMT I-85
 - ii. Practical Exam: NREMT I-85
 1. Intravenous Therapy
 2. Patient Assessment – Trauma
 3. ET or PTL / Combi-Tube
 4. Random Basic Skills (one of the following – as decided by the NREMT during the testing day)
 - a. Spinal Immobilization (seated patient)
 - b. Spinal Immobilization (supine patient)
 - c. Bleeding Control / Shock Management
- d. Upon successful completion of the certification exam, the student may apply to become NREMT I-85 certified and eligible to apply for State of Ohio certification.

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IV Medication Knowledge and Administration Station

Candidate: _____ Examiner: _____

Date: _____ Scenario: _____

	Possible Points	Points Awarded
States appropriate field impression for the patient	1	
Verbalizes appropriate treatment plan for the patient	1	
Identifies appropriate medication for the given scenario	1	
Asks for known allergies	1	
States common indications for the medication	2	
States common contraindications for the medication	2	
States appropriate “dose range” for the medication	2	
States the “initial dose” the patient will receive	1	
Assures correct concentration of drug	1	
Assembles prefilled syringe correctly and dispels air	1	
Establishes body substance isolation precautions	1	
Cleanses injection site [Y-port or hub]	1	
Reaffirms medication	1	
Stops IV flow [pinches tubing or shuts off]	1	
Administers correct dose at proper push rate	1	
Disposes / verbalizes proper disposal of syringe and needle in proper container	1	
Flushes tubing [runs wide open for a brief period]	1	
Adjusts drip rate to TKO / KVO	1	
Verbalizes need to observe patient for desired effect / adverse side effects	2	
TOTAL:	23	

CRITICAL CRITERIA

- _____ Failure to identify appropriate field impression
- _____ Failure to ask for known allergies
- _____ Contaminates equipment or site without appropriately correcting situation
- _____ 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
- _____ Failure to complete station in 7 minutes
- _____ Failure to achieve a minimum of 18 total points

You must factually document your rationale for checking any of the above critical criteria on the reverse side of this form.

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Examples of scenarios for the IV Medication Knowledge and Administration Station

Programs should feel free to generate scenarios for this station. The main focus of this station is NOT to evaluate the assessment skills of the student, but to evaluate the ability to recognize the need for medication administration, plan, execute, and then evaluate that administration.

- 1) Dispatched to a softball field. Arrive to find a 26 year old male patient. According to the first base coach, the patient ran from first base to directly into second base. A loud snapping sound was heard from the patient's left leg as he slid. Your physical exam reveals the patient to be awake and alert and oriented, complaining of pain of +10 (1-10 scale) and an angulated (bent) lower left leg. The patient's vital signs are B/p 132/86, P 110 strong and regular, RR 18. The patient has no past medical history, takes no medications but states that he is allergic to morphine. You are facing a 45 minute transport time to the nearest hospital.
- 2) Dispatched to a residence for difficulty in breathing. Arrive to find a 23 year old female complaining of trouble breathing. She states that she was stung by a bee. The patient has a noticeable swollen area to her right forearm with hives beginning throughout her entire arm. The patient states that she has had bee sting reactions in the past. She is currently taking no medications, no allergies beyond bees and no past medical history. The patient's vital signs are B/p 156/90, P 108, RR 32. You note minor wheezing in both lung fields.

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NREMT Skill Sheet PEDIATRIC INTRAOSSEOUS INFUSION

Candidate: _____ Examiner: _____

Date: _____

	Points	Testing
Checks selected IV fluid for: - Proper fluid (1 point) - Clarity (1 point)	2	
Selects appropriate equipment to include: - IO needle (1 point) - Syringe (1 point) - Saline (1 point) - Extension set (1 point)	4	
Selects proper administration	1	
Connects administration set to bag	1	
Prepares administration set [fills drip chamber and flushes tubing]	1	
Prepares syringe and extension tubing	1	
Cuts 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	
Disposes of needle in proper container	1	
Attaches syringe and extension set to IO needle and aspirates	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	
Time Start: _____ Time End: _____ TOTAL:	23	

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
- ___ Performs 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 site, incorrect needle angle, etc]
- ___ Failure to dispose of needle in proper container
- ___ Orders or performs any dangerous or potentially harmful procedure
- ___ Failure to achieve a minimum of 18 points

You must factually document your rationale for checking any of the above critical criteria on the reverse side of this form.

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NREMT Skill Sheet PEDIATRIC (<2) VENTILATORY MANAGEMENT

Candidate: _____ Examiner: _____

Date: _____

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

	Points	Testing
Takes or verbalizes body substance isolation precautions	1	
Opens airway manually	1	
Elevates tongue and inserts a simple airway adjunct [oropharyngeal or nasopharyngeal airway]	1	
NOTE: Examiner now informs the candidate no gag reflex is present and the patient accepts the adjunct		
** Ventilates the patient immediately with bag-valve-mask device unattached to oxygen	1	
** Hyperventilates the patient with room air	1	
NOTE: Examiner now informs the candidate that ventilation is being performed without difficulty and that pulse oximetry indicates the patient’s blood oxygen saturation is 85%		
Attaches oxygen reservoir to bag-valve-mask device and connects to high flow oxygen regulator [12-15 L / minute]	1	
Ventilates the patient at a rate of 20-30 / minute and assures chest expansion	1	
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.		
Directs assistant to pre-oxygenate patient	1	
Identifies / selects proper equipment for intubation	1	
Checks laryngoscope to assure operational with bulb tight	1	
NOTE: Examiner to remove OPA and move out of the way when the candidate is prepared to intubate.		
Place patient in neutral or sniffing position	1	
Inserts blade while displacing the tongue	1	
Elevates the mandible with the laryngoscope	1	
Introduces ET tube and advances to proper depth	1	
Directs ventilation of the patient	1	
Confirms proper placement by auscultation bilaterally over each lung and over epigastrium	1	
NOTE: Examiner to ask, “If you had proper placement, what would you expect to hear?”		
Secures the 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 pad under the torso to allow neutral head position or sniffing position
- ___ Failure to voice or 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 of 2 errors / minute permissible]
- ___ Failure to pre-oxygenate prior to intubation
- ___ Failure to successfully intubate within 3 attempts
- ___ Uses gums as a fulcrum
- ___ Failure to assure proper tube placement by auscultation bilaterally **and** over the epigastrium
- ___ Inserts an adjunct in a manner dangerous to the patient
- ___ Attempts to use any equipment not appropriate for the pediatric patient
- ___ Failure to achieve a minimum of 13 points

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