Northwest Community EMS System 2019 SOP Self-Assessment

FUNDAMENTALS

Intro; Scopes of Practice; Assessment/IMC; Pain mgt; POLST orders; Obese & Elderly pts, Airway obstruction, Basic & Advanced Airways; Tracheostomy/Laryngectomy, Respiratory Emerg, OB, & Peds SOPs

Name (Print):	Date of submission
EMS Agency:	Date graded/feedback sent:
PEMSC signature:	Initial Score:_____ ☐ Acceptable ☐ Not acceptable ☐ Incomplete ☐ Incorrect answers
EMS Educator signature:	Resubmission:_____ ☐ Acceptable ☐ Not acceptable

Instructions: Complete; discuss with your Provider EMS Coordinator; obtain their signature; **SUBMIT** to the NWC EMSS Office at least 1 week prior to date of System Entry written testing for this module

This document is designed to measure a candidates knowledge of important aspects of the June 1, 2019 NWC EMSS SOPs and assessments/interventions found in the System Procedure manual. Applicants are encouraged to also use the 2019 SOP Changes and Rationale document and SOP Q&A Document if needed (System website: www.nwcemss.org posted under 5/19 CE) as additional references.

INTRODUCTION; Scopes of Practice; GENERAL PATIENT ASSESSMENT and INITIAL MEDICAL CARE

1. What does the notation *time sensitive* mean in the SOPs?

   A. Load and go with no scene interventions
   B. Drive as quickly as possible to the nearest hospital
   C. Critical acuity, need for rapid interventions & short scene times
   D. Abort all ALS care; provide BLS care only in favor of rapid transport

2. What is meant by an Emergent level of patient acuity?

   _____

   _____

3. Which of these may be transported using lights and sirens without on-line medical control contact?

   A. Adult with chest pain and ST elevation in Leads II, III, and aVF
   B. BLS patient with chronic abdominal pain (6/10) and vital signs WNL
   C. Patient with a lower acuity allergic reaction who has received diphenhydramine PO
   D. Scheduled transfer of a stable nursing home patient who requires diagnostic testing

4. Which of these are ALL considered ALS assessments/interventions in the 2019 SOPs?

   A. Monitoring an OG/NG tube already inserted, epinephrine 1 mg/1mL and naloxone IM
   B. Insertion of an i-gel, ECG interpretation, vascular access, needle pleural decompression
   C. Application of CPAP, use of a mechanical CPR compression device, diphenhydramine PO
   D. Pulse oximetry and capnography monitoring, 12 L ECG acquisition, ondansetron rapid dissolve tab

5. List at least 3 indications for applying a capnography monitor:

   _____

   _____

6. Which of these is NOT harmed by hyperoxia?

   A. Post-cardiac arrest
   B. Uncomplicated Acute MI
   C. Newborn needing resuscitation
   D. Submersion incident/near drowning

7. If a patient has altered mental status, inadequate ventilatory effort, is in severe distress and has an SpO_2 of less than 90%, what O_2 liter flow and device are indicated?

   A. 1-6 L/nasal cannula
   B. 12-15 L/nonrebreather mask
   C. 12-15 L/bag and mask
   D. 15 L/CPAP mask

8. List 6 indications for obtaining a 12-L ECG in an adult based on chief complaint or Hx of present illness.

   _____

   _____,

   _____

9. Which of these is a candidate for an intraosseous line?

   A. Child whose only peripheral vascular site is an antecubital vein
   B. Awake and alert elderly pt w/ fragile veins who fell is c/o severe wrist pain
   C. Pt in extremis w/ circulatory collapse needing immediate administration of IV meds
   D. Awake and responsive stable pt where two attempts at venous access have been unsuccessful

10. An IO line has been started on a patient with 95% TBSA partial and full thickness burns who is awake and in extreme pain. The patient weighs 200 pounds. What should be infused first through the IO line?

    A. NS 200 mL
    B. Lidocaine 50 mg
    C. Fentanyl 90 mcg
    D. Sodium bicarbonate 50 mEq

11. Under what circumstances may paramedics use a central venous access devices already placed?

    _____

12. How must the 1st BP be obtained on all patients?

    A. Manually B. Mechanically using the automated cuff on the cardiac monitor

13. What initial dose and route of ondansetron that can be given by EMTs?

    A. 8 mg IM
    B. 4 mg slow IVP
    C. 8 mg per MAD device
    D. 4 mg per oral dissolve tablet

14. What is the max total dose of ondansetron that can be given by paramedics? _____

15. At a minimum, how many sets of vital signs are required on all stable transported ALS pts with a patient contact time of 15 minutes or less?

    _____

16. If a stable, conscious adult with decisional capacity expresses a desire to be transported to a hospital other than the one that is nearest by travel time, and there are no preexisting transport patterns (trauma, STEMI, stroke, OB, peds) or an exemption does not apply, what must be done?

    _____

Pain management

17. What is a person-centered approach to pain management?

    _____

    _____

    _____

18. What three factors should be considered prior to determining the best approach to pain management?

_____

_____

_____

19. What pain scale should be used for each of these?

Decisional adult who can communicate effectively: _____

People with dementia that cannot verbalize _____

20. What are the 7 Rights of drug administration? Right…

21. Which drugs require an independent cross-check with a qualified practitioner before giving?

_____

22. Is PO acetaminophen being added to hospital restock items? ☐ Yes ☐ No

Can it be given if stocked by Provider Agencies and/or available on scene? ☐ Yes ☐ No

23. A 70 y/o F with renal failure fell while walking into her dialysis center. She is alert, on the floor & c/o significant right hip pain (10/10). Rt. leg is shortened and externally rotated. IV is unsuccessful on the arm without the shunt. VS: BP 132/82; P 84; R 20; SpO_2 98%; glucose 276; weight 120 lbs. PMH: Diabetes, renal failure, CVD. Meds: Insulin, lisinopril, Prevacid. What should be the first dose of Fentanyl?

_____

Is she a good candidate for repeat doses? ☐ Yes ☐ No

24. A 40 y/o male is c/o severe lower back pain (10/10). The pt has a known herniated disc. Meds: Ketorolac. VS: BP 122/71; P 88; R 20; ECG NSR; SpO_2 98%; wt. 250 lbs. An IV is placed. Pain remains 9/10 after the first dose of fentanyl. What is indicated next?

A. 50 mcg fentanyl IVP
B. 100 mcg fentanyl IVP
C. Switch to ketamine 0.3 mg/kg IVP
D. Transport. No further pain intervention is indicated at this time

25. PMs have maxed the amount of fentanyl they can give by SOP to the above patient. What is the max total dose that he can receive by SOP + OLMC order?

A. 100 mcg
B. 135 mcg
C. 150 mcg
D. 300 mcg

26. What is the initial dose of ketamine for a patient in severe pain who is opiate tolerant or dependent, have an allergy to fentanyl, or who need mild sedation + pain relief? Weight 183 lbs (83 kg)

_____

27. What must be assessed after administration of all opiates or ketamine and at what time interval?

_____

RADIO REPORT/COMMUNICATIONS POLICY

28. When are paramedics in the NWC EMSS to attempt on-line medical control contact?

A. Before they transport
B. As soon as they make contact with a patient
C. As soon as practical under the circumstances
D. Before any ALS interventions may be performed

29. Which of these **DOES NOT** qualify for an abbreviated report?

A. Multiple patient incidents (MCIs)
B. BLS patients with normal assessment findings
C. Critical patients where priorities rest with patient care and manpower is limited
D. Stable ALS patients with complicated histories and multiple prehospital interventions

WITHHOLDING OR WITHDRAWING OF RESUSCITATIVE EFFORTS (Also see System Policy D5)

30. An unconscious adult is found pulseless and nonbreathing in bed. An IDPH POLST form is on the bedside table. What instructions on the form should be reviewed to determine indicated care at this point?

A. Section A: Has the patient marked DNR or attempt resuscitation?
B. Section B: How aggressively does the patient want to be treated?
C. Section C: Has the patient consented to artificial nutrition?

31. An adult presents with severe dyspnea and increased work of breathing. PMH: left heart failure & denies history of asthma or COPD. VS: BP 180/96; P 100; R 28 and labored; SpO_2 74%; $ETCO_2$ 45 with a square waveform. Lung sounds: bilateral wheezes. The patient produces an IDPH POLST form with DNR marked in Box A and Selective Treatment marked in Box B. What care is indicated?

A. Initiate NTG and CPAP per SOP and transport
B. Insert an advanced airway, give albuterol & ipratropium via in-line nebulizer, and transport
C. Provide comfort care only, have the patient sign a refusal form, do not transport

32. What action is needed if EMS is presented with an IDPH POLST form that contains only the patient's name and signature, physician's signature and date signed, and the DNR box checked in Section A?

A. Accept the valid order and withhold CPR
B. Disregard the invalid DNR; ask family their wishes
C. Call the physician who signed the DNR to verify validity
D. Seek an OLMC physician OK to accept the incomplete order

33. An unconscious elderly patient has agonal respirations and is found pulseless in idioventricular rhythm. A daughter presents you with a valid Ill POLST order with the patient's signature providing consent. Another daughter is very distraught and states that their father revoked the order yesterday. Neither have durable power of attorney for healthcare. Which of these is indicated?

A. Resuscitate the patient based on the daughter's request and transport ASAP.
B. Honor the DNR order. There is no conclusive evidence that it has been revoked and the daughter has no legal right to rescind the order.

34. Under what circumstances can a person with Power of Attorney for healthcare rescind a POLST order?

A. They disagree with the physician's order
B. They or another surrogate provided consent
C. The pt who provided original consent is now non-decisional
D. Family members need more time to agree on end of life decisions requested by the pt

ELDERLY PATIENTS

35. Which of these is indicated in an elderly patient who is chronically hypercarbic and prone to ventilatory failure due to ↓ lung compliance, inability to breathe deeply, and ↑ WOB?

    A. Short bursts of hyperventilation
    B. CPAP or ventilatory assist w/ BVM
    C. Aggressive and rapid reversal of hypercarbia
    D. Negative pressure ventilation optimizing venous return to the heart

36. Which of these are prescription medications that place an elderly patient at particular risk for expanding cerebral hematomas and rapid deterioration after blunt head trauma?

    A. Irbesartan (Avapro), Cozaar, Benicar
    B. Atenolol, Zebeta, Coreg, Lopressor/Toprol
    C. Bumex, Diazide, Lasix, hydrochlorothiazide
    D. Eliquis, Plavix, Pradaxa, Xarelto, Coumadin

37. Why may an elderly patient appear “stable” yet have a perfusion deficit due to a low CO for them?

    _____

38. A conscious and decisional 80 y/o pt tripped and fell sustaining superficial abrasions and bruises on both knees and a sore wrist. Assessment reveals normal mental status with intact neuro exam; there is no evidence of trauma to the head, chest, or abdomen and there is full range of motion and intact SMVs X 4. The patient is not taking any anti-coagulants. After cleansing and bandaging the wounds, placing a cold pack on the wrist, and affirming that the VS are WNL, the patient is refusing transport. Which of these is indicated per policy?”

    A. Execute a BLS refusal; no OLMC is needed
    B. Execute an invallid assist, no OLMC is needed
    C. Attempt to convince pt to be tranported; execute a BLS refusal, call OLMC from scene
    D. Inform pt that they cannot refuse due to their age and must be transported for their safety

39. What is the preferred way to move an elderly patient with a possible hip fracture from the floor to the stretcher prior to applying spine motion restriction?

    A. Use a 3 man carry
    B. Use a scoop stretcher
    C. Log roll onto a long back board
    D. Have patient lift their buttocks so the spine board can be gently slid underneath them

40. Why can a neuro exam be unreliable for detecting S&S hypoxia, shock or hypoglycemia in an elderly patient?

    _____

EXTREMELY OBESE PATIENTS

41. Which of these should be done first to optimize airway and breathing in an extremely obese patient who is c/o dyspnea and has an SpO_2 reading of 86%?

    A. Lower the head of the stretcher & attempt DAI
    B. Apply CPAP w/ PEEP 5 – 10 cm H_2O; assist w/ BVM
    C. Assist ventilations with V_T 2 – 4 mL/kg to prevent air trapping in the lungs
    D. Start an albuterol treatment as abnormal breath sounds will be impossible to hear

42. Which of these should be done if an extremely obese patient experiences a respiratory arrest?

    A. Insert an alternate airway rather than attempting a difficult intubation
    B. Go directly to a cricothyrotomy as this will be the easiest route to secure
    C. Select an advanced airway one size larger than usual to account for increased body weight
    D. Nasal intubation is contraindicated as the nasal passages will be occluded from excess tissue

43. Which of these should be considered when assessing an extremely obese patient?

A. Expect SpO_2 readings of 88% – 92% on 6L oxygen/min by mask
B. They frequently hyperventilate, so a capnography reading of 30 is normal
C. Breath sounds are easier to assess as their lungs hold much more capacity
D. Peripheral pulse ox sensors are more reliable than central sensors due to fat distribution

44. An unconscious adult weighs 400 lbs. The patient passed out following a new vigorous exercise regimen to lose weight. VS: BP 100/66; P 110; ECG ST; R 20; SpO_2 94%; Glucose 30; skin extremely diaphoretic. No peripheral veins are palpable. Which of these is the best option for care?

A. Adult IO needle to distal femur
B. 45 mm IO needle to proximal humerus
C. Abort IV attempts and transport immediately
D. Longest 20 g peripheral IV catheter to antecubital site

45. Which is true regarding the assessment or management of an extremely obese patient?

A. Abdominal palpation is highly accurate for detecting intraperitoneal irritation
B. OLMC should be contacted for weight-adjusted drug doses to avoid sub-therapeutic levels
C. To maintain privacy, defer inspection of the skin under the pannus until pt is admitted to the ED
D. All stretchers support bariatric pts if 2 long back boards are used side by side to extend the width

46. If a standard size BP cuff does not fit around the upper arm of an extremely obese patient, which of these is an acceptable adaptation for assessing the BP?

A. Assume a strong radial pulse implies a SBP of >100 mmHg
B. Apply a central sensor and assume an SpO_2 >94% implies an OK SBP
C. Apply the standard size cuff to the forearm and listen over the radial artery
D. Assume that no change in pulse quality when pt changes from supine to sitting position implies an OK MAP

AIRWAY OBSTRUCTION (adult)

47. A foreign body is totally obstructing the upper airway of an unconscious adult. After BLS interventions are unsuccessful, what ALS intervention is indicated next?

A. 5 abdominal thrusts
B. Surgical cricothyrotomy
C. Intubate and push the obstruction into the right mainstem bronchus
D. Visualize the airway with laryngoscope and attempt to clear using forceps and/or suction

Advanced Airways/Drug assisted Intubation – Also **r**efer to procedure manual airway adjunct pages.

48. An adult with altered mental status (GCS 10) presents with snoring respirations. There is no evidence of trauma. The patient responds to a pressure stimulus and has an intact gag reflex. Repositioning of the mandible results in a patent airway with quiet ventilations. Which of these is indicated *first*?

A. I-gel airway
B. Oropharyngeal airway
C. Nasopharyngeal airway
D. Drug assisted intubation

49. An unconscious adult presents following an MVC with severe head trauma to the upper nose and forehead. Respiratory effort is poor, RR 6 and shallow with periods of apnea; GCS 3. Gag reflex is absent. There is thin, bloody fluid draining from the patient's nose with swelling and widening to the bridge of the nose. After positioning and BLS adjuncts fail to provide an airway, what intervention is indicated next?

A. Nasotracheal intubation
B. Surgical cricothyrotomy
C. Drug-assisted intubation using sedatives
D. Orotracheal intubation with in-line stabilization

50. An unconscious adult has no gag reflex and is in obvious ventilatory distress with an impaired airway. There is no trauma evident or suspected. Paramedics have attempted intubation X 2 without success and cannot ventilate with a BVM. Which of these is indicated next?

A. Insert an i-gel extraglottic airway
B. Perform a surgical cricothyrotomy
C. Continue intubation attempts enroute and transport rapidly
D. Insert two nasal airways & continue to attempt ventilations/BVM enroute

51. An awake adult presents with a severe asthma attack. The patient is exhausted with shallow RR of 40 and increased work of breathing. The skin is dusky, SpO_2 is 78% and capnography is 70 with a sharkfin waveform. Gag reflex is intact. Which intervention is indicated for this patient per SOP?

A. Drug-assisted intubation
B. Anterior or Kentucky intubation
C. Insertion of an i-gel extraglottic airway
D. Avoid intubation and provide ventilatory support with C-PAP

52. Advanced airway placement is required on a patient in heart failure with a RR of 24 and palpable pulse. Which of these reflects the correct preoxygenation process?

A. Apply 15 L O_2/NC plus 15 L/NRM for 3 minutes
B. Apply O_2 15 L/NRM until the King Vision can be assembled; place ETT ASAP
C. Give 6 large breaths per BVM and proceed immediately to sedation and tube insertion

53. What type of suction catheters must be prepped and ready to go prior to advanced airway placement?

_____

What size and type of laryngoscope and blade must be prepped and ready for ETI?

_____

What size ETT must be used to intubate using the NWC EMSS-approved laryngoscope?

_____

54. How should an adult be positioned prior to ETI using the King Vision videolaryngoscope?

A. Sniffing position
B. Flat for optimal view, no head lift necessary

55. How should passive oxygen be delivered throughout advanced airway placement?

A. Hold oxygen tubing over the top of the advanced airway adaptor while tube is placed
B. Advance a suction catheter connected to O_2 alongside the King Vision blade
C. Hold the BVM mask near patient's face with 15 L O_2 for blow-by oxygen
D. 15 L O_2 per nasal cannula

56. An unconscious adult with a GCS of 8 presents with possible cardiogenic shock. They have no known PMH and are unable to protect their airway. Gag reflex is absent. VS: BP 60/30; HR 110; R 8 and shallow with period of apnea; SpO_2 86%; $ETCO_2$ 26 with square waveform. Which of these is indicated *first* for this patient during DAI?

A. Fentanyl
B. Ketamine
C. Etomidate
D. Midazolam

57. What is the dose of etomidate for an adult prior to DAI in the NWC EMSS?

A. 0.5 mg/kg max 40 mg
B. 5 mg; may repeat X 2
C. 1.5 mg/kg up to 50 mg
D. 2-10 mg titrated to patient response

58. Which of these is the initial adult dose for ketamine IVP when used for advanced airway sedation?

A. 0.3 mg/kg slow IVP (over one minute)
B. 1 mg/kg rapid IVP
C. 2 mg/kg slow IVP (over one minute)
D. 4 mg/kg rapid IVP

59. Which of these properties/actions make ketamine a particularly attractive sedating drug prior to DAI?

A. Hypotension and respiratory depression is transient
B. It produces transient paralyses in addition to sedation
C. Hypnotic analgesic, produces bronchodilation; may support BP
D. Pts remain fully awake and aware and can obey your commands during the procedure

60. Which of these is an advantage to bougie-assisted ETI? (See procedure manual)

A. Allows ETI without using a laryngoscope
B. PMs can blindly exchange an ET tube for an i-gel
C. Able to intubate despite inability to see any landmarks
D. Curved tip aids passage of ETT through the glottic opening

61. How must correct advanced airway placement be objectively and definitively confirmed and continually monitored by PMs because it is objective and not subject to caregiver interpretation?

A. Skin color
B. Quantitative waveform capnography
C. Symmetry of chest rise and fall with ventilations
D. Noting the diamond markings of the ET tube at the teeth

62. An intubated patient requires postinvasive airway sedation and analgesia (PIASA) due to an RASS score of -1. The pt is tachycardic and biting the tube. Which of these is NOT an option for PIASA?

A. Fentanyl
B. Ketamine
C. Etomidate
D. Midazolam

63. Which EMS intervention is indicated if advanced airway insertion is unsuccessful in an unconscious patient with a pulse and the pt. cannot be ventilated/oxygenated using BLS airways and a BVM?

A. Tracheostomy
B. Cricothyrotomy
C. Apply a C-PAP mask
D. Load and go and alert the receiving hospital of an incoming patient in critical condition

64. Which of these is an advantage of using an i-gel over a King LTS-D? (Procedure manual)

A. One size fits all patients
B. Easy placement and no cuff inflation
C. Tolerated well by patients with a gag reflex
D. Does not need to be secured after correct insertion

65. What size i-gel airway should be inserted into a patient who weighs 180 pounds?

A. 3 Small adult
B. 4 Medium adult
C, 5 Large adult

66. List two contraindications for i-gel insertion

_____

_____

67. Where should lubricant be applied to the i-gel airway prior to insertion?

A. Entire surface from bite block to distal tip
B. Distal tip and posterior surface, avoiding ventilatory openings
C. Back, sides and front of the cuff by pulling through lubricant placed on device cradle

68. An i-gel airway should be advanced until

A. definitive resistance is felt.
B. the cuff passes beyond the vocal cords.
C. the 22 cm mark is at the patient's front teeth.
D. the tube adaptor is entirely in the patient's mouth.

69. What gauge needle should be used in the NWC EMSS to do a needle cricothyrotomy on an adult?

A. 10
B. 14
C. 16
D. 18

70. Before performing a needle cricothyrotomy, what equipment assembly must be done (after removing the plunger from the syringe) to create an adaptor that fits on the needle hub to provide ventilations via BVM?

A. Insert a size 5 ETT adapter into the barrel of a 5 mL syringe
B. Insert a size 3 ETT adapter into the barrel of a 10 mL syringe
C. Insert a size 10 ETT adapter into the barrel of a 20 mL syringe
D. Insert a size 7 ETT adapter into the barrel of a 3 mL syringe

Allergic Reactions/Anaphylactic shock

71. An adult presents with dyspnea, anxiety, facial swelling, watery eyes, and sneezing following exposure to a cat. VS: BP 110/70; P 100; R 24; SpO_2 94%; $EtCO_2$ 28 with a shark fin waveform; lung sounds: diffuse wheezing. Which of these is indicated first?

A. Diphenhydramine 1 mg/kg IM
B. Albuterol & ipratropium via HHN
C. Epinephrine 1mg/1mL 0.3 mg IM
D. Epinephrine 1mg/10mL 0.1 mg IVP

72. An adult presents with scratchiness in the back of the mouth and throat, nasal congestion, eye tearing, and persistent sneezing following yard work. VS: BP 130/80; P 84; R 16; SpO_2 98% on room air; $EtCO_2$ 38 with a square waveform, and lung sounds are clear. Which of these is indicated?

A. Diphenhydramine PO
B. Epinephrine 1mg/1mLIM
C. Epinephrine 1mg/10mL IVP
D. Albuterol & ipratropium/HHN

73. An adult presents with an acute onset of dyspnea, hives, and itching on the face, neck, and palms following dinner at a restaurant. The patient has edema of the lips, tongue, and eyelids, facial flushing, stridor, and is anxious, lightheaded, and struggling to breathe. VS: BP 84/60; P 120; R 32. Breath sounds are diminished bilaterally. Allergies: peanuts. IMC has NOT been completed and there is no IV access yet. Which of these is indicated *first*?

A. Diphenhydramine 50 mg IO
B. Albuterol and ipratropium via HHN
C. Epinephrine 1mg/1mL 0.5 mg (mL) IM
D. Start IV and give epinephrine (1mg/10mL) 1 mg slow IVP

74. What drug (dose and route) should be given to the above patient as soon as vascular access is obtained?

_____ Titrated to a total max dose (IM + IVP/IO) of _____

75. What adjustment should be made to the treatment of a patient in anaphylactic shock who experiences a cardiac arrest due to V-fib witnessed by EMS personnel?

A. Defer all drugs until an advanced airway is placed
B. Start 2 IV line, infuse IVF 20 mL/kg; give epinephrine IVP q. 2 minutes
C. Delay defibrillation until epinephrine and diphenhydramine have been given
D. Defibrillate at the highest possible joule setting for the monitor-defibrillator being used

Asthma/COPD

76. If an adult with a severe asthma attack requires assisted ventilations, at what rate per minute should the patient be ventilated?

A. 6 -8
B. 10 -12
C. 12 - 14
D. 16 – 20

77. An adult presents with severe respiratory distress from an asthma attack. Lungs sounds are diminished bilaterally with slight wheezing. VS: BP 150/90; P 150; ECG ST; R 32 & shallow; SpO_2 92%; capnography 26 with shark fin waveform. After applying CPAP at 10 cm PEEP, the BP drops to 94/60. Which of these is indicated *first*?

A. Titrate the PEEP downward to 5 cm
B. Supplement the CPAP O_2 with a NC
C. Remove the CPAP mask and intubate
D. Prepare a dopamine drip to support the BP

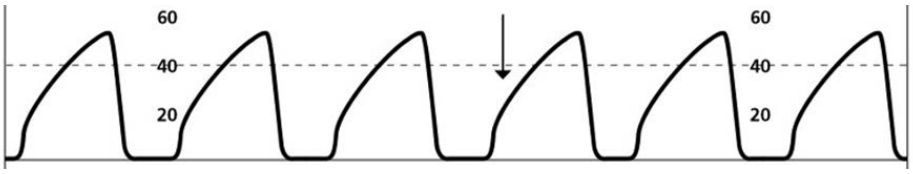
78. Which of these is indicated if a patient with a chronic hypercarbic state (COPD) presents with acute respiratory failure?

A. Give 1 amp of bicarb to reverse the acidosis
B. Slowly reduce the $EtCO_2$ (not more than 5 mmHg/hr)
C. If intubated, hyperventilate to an $EtCO_2$ of 30-35 mmHg
D. Correct the acute resp. acidosis back to a normal $EtCO_2$ as quickly as possible

79. What should be the first intervention for an adult with COPD in profound respiratory distress with bilaterally diminished breath sounds, altered mental status, fatigue, exhaustion, severe hypoxia (SpO_2 84%) and capnography 70 with a shark fin waveform?

A. CPAP at 10 cm PEEP
B. Epinephrine 1mg/1mL 0.3 mg IM
C. PreOx and prepare to intubate per DAI SOP
D. Albuterol 2.5 mg & ipratropium 0.5 mg /HHN

80. An awake and alert adult with a history of asthma presents with severe dyspnea, good ventilatory effort using accessory muscles but is unable to speak in full sentences. The patient is prescribed Azmacort and Singulair but has not taken either in some time. VS: BP 110/68; P 100; R 28; RA SpO_2 92%; $ETCO_2$ 50 and waveform below. Breath sounds are diminished in all lung fields; there is no fever or productive cough. The patient denies any pain.



Which of these is indicated first?

A. Drug assisted intubation
B. IMC and magnesium slow IVP
C. Albuterol and ipratropium via HHN
D. CPAP and epinephrine (1mg/1mL) IM

81. What is the dose of magnesium sulfate for adults with severe asthma who are non-responsive to the initial medications?

A. 5 grams given undiluted IVP over 2 min
B. 0.25 mg/kg followed by 10 mL NS rapid IVP
C. 1 mg/kg mixed with 7 mL NS IVP over 10 min
D. 2 grams mixed with 16 mL NS IVP over 5-10 min

82. An adult with a history of chronic bronchitis is sitting upright complaining of respiratory distress that has gotten progressively worse over the past 12 hours. The patient denies chest pain. There is diffuse wheezing in all lung fields, + JVD, edema of the feet and ankles, and peripheral cyanosis. The patient smoked for years and always has a productive cough of thick white mucus. Skin is warm and dry. VS: BP 160/90; P 100; R 28; SpO_2 88% on home O_2 at 2 L/NC; capnography 45 with a sharkfin waveform; T 98° F; 12 L ECG is normal. After IMC with CPAP, which of these is indicated first for the above patient?

A. Magnesium slow IVP
B. Epinephrine 1mg/1mL IM
C. Diphenhydramine 50 mg IVP
D. Albuterol and ipratropium via HHN

Pts w/ TRACHEOSTOMY/LARYNGECTOMY

83. What 4 steps are required if a trach tube has become completely dislodged?

_____

_____

_____

_____

84. A patient with a tracheostomy presents in respiratory distress: When manually attempting to ventilate through the tube, resistance is met: Which of these is indicated first?

A. Remove and replace the trach tube
B. Insert an ETT until cuff just passes the stoma
C. Attempt to pass a suction catheter through the trach tube; suction
D. Remove the inner cannula; suction; clear inner cannula of secretions; replace

85. A patient with a well healed, mature laryngectomy stoma presents with severe dyspnea that progresses rapidly to apnea. How should ventilations be provided to this patient?

A. Bag/mask over stoma (peds mask); NOT face
B. Insert OPA and ventilate with mask over nose and mouth; cover stoma with Tegaderm dressing

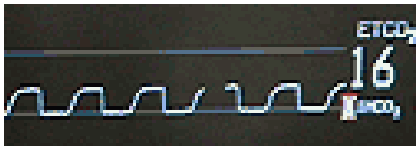
Respiratory Emergencies

86. A conscious and alert middle aged adult presents with a two day history fever (103°F), chills, cough, sore throat, severe muscle aches, nasal congestion, HA, and fatigue. The pt denies vomiting and diarrhea. Today, the pt started experiencing pleuritic chest pain and productive cough of thick yellow-green mucus with isolated crackles in the right middle and lower lobes. VS: BP 110/76; HR >114; ECG: ST; 12 L: no acute ischemia; SpO_2 <92%; $ETCO_2$ 32 w/ square waveform. Splashes or sprays of respiratory secretions or other infectious material are not expected. Which of these is indicated?

A. Droplet precautions and surgical mask on pt and mask on each EMS responder
B. Contact precautions with gloves, face shields, and fluid-repellant gowns

87. An obese, sedentary, adult w/ NO hx of lung disease presents with a sudden onset of severe sharp pleuritic chest pain; severe dyspnea, tachypnea, restlessness, tachycardia and clear lung sounds. SpO_2 doesn't register and you see the capnogram (right). Which of these is likely?

A. Severe atelectasis
B. Pulmonary embolus
C. Acute pulmonary edema
D. Spontaneous pneumothorax



OBSTETRICAL EMERGENCIES

88. A G4; P3 pregnant pt presents in active labor with strong regular contractions 3 min apart. The BOW has broken. There is no crowning or involuntary pushing. Prenatal care up to this point has not revealed any problems. Her desired hospital of delivery is 20 miles outside of the EMS agency's transport zone. Which of these is indicated?

A. Stay on scene to do the delivery
B. Transport to the nearest hospital with an OB unit
C. Transport to the nearest hospital with a Level III NICU
D. Give partner the option of driving her to their desired hospital as delivery is not imminent

89. In what position should a laboring woman be placed for a prehospital delivery in the NWC EMSS?

A. In a squatting position over a toilet
B. Sitting straight up on a chair with full back support
C. Flat on her back with her knees bent and buttocks elevated
D. Semi-sitting (head up 30°) with knees bent or side lying on a firm surface

90. How should a paramedic facilitate delivery of the head in a normal vertex presentation?

A. Use Magill forceps to apply traction and facilitate delivery.
B. Perform a small perineal nick with the sterile scalpel to open the vaginal inlet.
C. Accelerate the rate of descent by having the mother push hard with each contraction.
D. Place one palm over the occiput and apply pressure to the perineum with the other hand.

91. What intervention is indicated first after the head delivers if there is no evidence of meconium in the amniotic fluid during in a normal vertex delivery?

A. Feel around the infant's neck for a nuchal cord
B. Suction the nose and mouth with a bulb syringe
C. Rotate the head so the infant is facing downwards
D. Gently pull the head upwards to deliver the posterior shoulder

92. Which of these describes the recommended way to deliver the anterior shoulder in a normal delivery?

A. Rotate the infant so it faces downward
B. Support and lift the head and neck slightly
C. Twist the infant in a spiral to ease passage through the pelvic inlet.
D. After the head passively turns to one side, gently guide it downwards

93. Which of these is appropriate to facilitate delivery if a shoulder dystocia occurs?

A. Grasp head and pull gently
B. Instruct mom to pant during contractions
C. Flex mom's knees alongside her abdomen
D. Insert gloved fingers and attempt to disimpact the shoulders

94. After delivery of the head, the umbilical cord if found to be wrapped tightly around the infant's neck. Initial attempts to loosen the cord are unsuccessful. Which intervention is indicated next?

A. Double clamp and cut the cord to facilitate delivery
B. Put the mother in Trendelenburg position and transport rapidly
C. Insert a gloved hand into the vagina to prevent delivery of the shoulders
D. Attempt to push the cord onto the infant's chest to provide some slack for delivery

95. When should the umbilical cord be clamped following a normal delivery?

A. After it stops pulsating
B. After the placenta is delivered
C. After the 1 minute APGAR score
D. Immediately after the baby is delivered

96. If the baby's head does not deliver within 30 sec after the shoulders in a breach presentation, what action is indicated?

97. Which of these is indicated if EMS personnel are confronted with a prolapsed cord?

A. Clamp and cut the cord to facilitate delivery
B. Pull on the cord to create enough slack to prevent compression
C. Push the cord back into the uterus so the baby can be delivered without impedance
D. Place gloved fingers between pubic bone and presenting part w/ cord between fingers

98. What intervention is indicated if a woman experiences a uterine inversion immediately after delivery?

99. If there is any possibility that an infant born prematurely may be 22 weeks gestation and the baby has cyanosis with spontaneous ventilations, a detectable slow heart beat by auscultation, or spontaneous movements, what care is indicated?:

100. A newborn has no muscle tone when the legs are extended, the feet are blue but the rest of the body is pink, HR 108, weak cry with retractions, RR 20, and the baby grimaces when a bulb syringe is placed in the nostril to suction. What is the Apgar score?

A. 7
B. 6
C. 5
D. 3

101. After drying, warming, stimulating, and suctioning the above baby, what should a paramedic do next?

A. Begin chest compressions at 120/min
B. Gain vascular access; give NS 10 mL/kg
C. Ventilate w/ neonatal BVM at 40-60 BPM & room air
D. Apply blow by O_2 and give epinephrine 1mg/10mL 0.02 mg/kg IVP

102. What is the pulse ox target following delivery of a newborn at 1 minute?

A. 60%-65%
B. 65%-70%
C. 75%-80%
D. 85%-95%

103. If ventilations have been assisted in a distressed newborn for 30 sec and the HR remains $\leq$ 60, what intervention is indicated next?

104. What is the epinephrine dose for a 3 kg newborn with severe bradycardia? _____

105. What is the minimum threshold for neonatal hypoglycemia in mg/dL?

A. 60
B. 50
C. 30
D. 20

106. How should the blood sample to assess for glucose be obtained in an infant?

A. Medial aspect right palm
B. Back of upper arm
C. Anterior abdomen
D. Heel stick

107. An adult female is complaining of moderate midline lower abdominal cramping that started one hour ago. PMH: LMP 12 weeks ago, positive pregnancy test. On exam, she is experiencing a moderate amount of vaginal bleeding but has not passed any tissue. The abdomen is soft with no guarding. Vital signs are stable within normal limits. Which of these is indicated?

A. Vaginal packing to control bleeding
B. Norepinephrine drip titrated to maintain BP
C. Magnesium sulfate 2 Gm IV over 5 minutes
D. If tissue is passed, transport with the patient

108. A 38-week pregnant woman presents with large amounts of bright red vaginal bleeding that began spontaneously when walking to the bathroom. The blood has saturated two bath towels. She has mild uterine cramping but the uterus is soft and non-tender between contractions. Skin is cool, pale and moist. VS: BP 86/60; P 132; RR 32; SpO_2 94%. Which is an appropriate OLMC order?

A. Place in Trendelenburg position and transport immediately
B. O_2 12-15 L NRM; warm IV NS titrated to SBP > 90; tilt patient to side
C. Pack vagina with hemostatic gauze dressings; warm IV NS wide open
D. O_2 6 L/NC; IV NS TKO (permissive hypotension), allow position of comfort

109. A 37 y/o female is 36 weeks pregnant and complaining of severe headache, diplopia, nausea and lethargy. Her hands and face are edematous and she has gained 10 lbs. in one week. VS: BP 194/110; P 100; R 24. Which of these is indicated for this patient?

A. NTG 0.4 mg SL
B. Rapid transport using lights and sirens for emergent C-section
C. MAGNESIUM (50%) 2 Gm in16 mL NS (slow IVP/IO) over 5-10 min. Max 1 Gm / minute.
D. MIDAZOLAM 2 mg increments IVP/IO q. 30-60 sec (0.2 mg/kg IN*)* up to 10 mg IVP/IO/IN

110. Which of these is indicated if the above patient experiences a generalized tonic clonic seizure following the above intervention?

A. MAGNESIUM (50%) 2 Gm in16 mL NS (slow IVP/IO) over 5-10 min. Max 1 Gm / minute.
B. MIDAZOLAM 2 mg increments IVP/IO q. 30-60 sec (0.2 mg/kg IN*)* up to 10 mg IVP/IO/IN

PEDIATRIC SOPs

111. The pediatric protocols should be used for all children _____ years or younger.

112. If providing rescue breathing without chest compressions, how often should a breath be given to a child?

_____

113. What is the compression depth when doing CPR on an 8-year-old child? _____

114. What amount of IV fluid is indicated *first* for a child who is volume depleted and weighs **30 lbs**?

A. 50-100 mL over 1 hour
B. 200-250 mL rapid IV push
C. 273-300 mL IV bolus in < 20 minutes
D. 360-400 mL wide open over 30 minutes

115. Which of these is a sign of severe cardio-respiratory compromise potentially requiring CV support in children younger than 6 years of age?

A. RR of 25-30
B. HR of 100 – 120
C. Capillary refill 1 second
D. SBP < 70+2x the child's age in years

116. Which is appropriate when caring for children in pain?

A. Assume that all crying children would rate their pain as 10
B. Transport rapidly for pain medication titration at the hospital
C. Use the Wong-Baker faces or FLACC scale to assess pain severity
D. Ask the parent to guess the degree of pain based on the child's appearance

117. An 8 y/o has an obvious deformity of the right forearm following a fall. Wt. 75 lbs. VS: BP 106/74; P 96; R 20; skin color normal, warm & dry; GCS 15; pain 10/10. Parents deny PMH or allergies. He strongly objects to any needles. Parents consent to care. Which of these should be given?

A. Fentanyl 34 mcg IN
B. Fentanyl 15 mcg IM
C. IV NS TKO; Fentanyl 15 mcg IVP
D. IV NS 20 mL/kg; Fentanyl 30 mcg IVP

118. A 5 y/o presents with a T 101°F and earache of < 24 hrs duration. The child is well hydrated, has been eating normally and responds appropriately to questions. VS WNL for age except for temp. The parents just wanted someone to listen to the breath sounds, which are clear bilaterally. They are now refusing transport. Which of these is indicated?

A. Have parents execute a refusal form and call OLMC from scene
B. Have parents execute a refusal form; no OLMC needed due to BLS refusal
C. Take the child under protective custody and transport against parent's wishes
D. Have parents execute a refusal form; no OLMC needed because parents are on scene

119. If a conscious infant less than one year presents with an upper airway obstruction, which intervention is indicated first after repositioning the head and attempting to ventilate?

A. Five abdominal thrusts
B. Five back slaps followed by 5 chest thrusts
C. Direct laryngoscopy and removal with the Magill forceps
D. Intubate and push the obstruction into the right mainstem bronchus

120. A 9 y/o child presents after rapidly losing consciousness following a severe headache. The pt's airway is filled with foamy secretions and the child does not respond to pain. After a jaw thrust maneuver and inserting an OPA, the airway remains impaired. Which of these is indicated first?

A. Suction, consider need for i-gel insertion
B. Intubate child based on a persistently impaired airway
C. Perform a surgical cricothyrotomy as approved by OLMC
D. Continue efforts to suction and assist ventilations with peds BVM into hospital

121. A six year old who weighs 40 lbs requires sedation prior to advanced airway insertion. What sedative and specific dose do they require?

_____

122. An infant is found unresponsive with frothy blood tinged secretions around the nose and mouth. The baby is cold and there is profound dependent lividity. The parents are pleading with you to do something. What should a paramedic do according to the SOPs?

A. Begin CPR until the child can be removed to the ambulance, then stop
B. Quickly zip the infant into a body bag so the parents do not have to look at it
C. Confirm the absence of VS; notify police; and gently help parents begin grieving
D. Defibrillate X 3 and show the parents the straight line on the monitor to confirm death

123. An infant <1 yr presents following a sudden, brief, and now resolved episode of cyanosis, decreased and irregular breathing; marked change in muscle tone and altered level of responsiveness. The symptoms have all resolved upon EMS arrival. Which of these should be suspected?

A. Aborted SIDS
B. Foreign body aspiration
C. Sleep apnea syndrome
D. Brief Resolved Unexplained Event

124. What is the pediatric dose of diphenhydramine when given to a child with an allergic reaction?

_____

125. What is the pediatric dose and route of epinephrine to give to a child with a severe asthma attack who weighs 35 lbs?

_____

126. What is the pediatric dose of magnesium for a child who weighs 48 pounds?

_____

127. A conscious and alert 6 y/o child presents with a rapid onset of severe respiratory distress, difficulty swallowing and a very sore throat that started 6 hours ago and worsened rapidly. The patient has labored ventilations with cyanosis, muffled speech, tachycardia and drooling but is still moving air. VS: BP 90/palp; P 130; RR 48; T 105° F; SpO_2 90%. Lungs are clear. Which of these is indicated first?

A. Perform a needle cricothyrotomy
B. Epinephrine 1mg/10mL 0.5 mg (5 mL) per nebulizer
C. Administer 2 chewable ASA tablets and cool with wet sheets
D. Insert an advanced airway and ventilate with O2 15 L/peds BVM

128. If a child <2 years presents with S&S of bronchiolitis including a runny nose, cough, and mild fever that progresses to labored breathing with a high fever, severe retractions, prolonged expiration w/ air trapping and wheezing and increasing exhaustion; what condition is likely?

A. Asthma
B. Pertussis
C. Epiglottitis
D. RSV infection

129. What is the first drug, concentration and dose to give to a pediatric patient with unstable bradycardia with a pulse who is in moderate to severe distress and weighs 66 pounds?

_____

130. What is the pediatric dose of adenosine? _____

131. What is the pediatric dose of amiodarone for monomorphic VT?

_____

132. What is the dose for epinephrine when treating a pediatric patient in V-fib or asystole?

_____ (concentration) _____ mg/kg IV/IO up to _____

133. A 6 y/o with type 1 diabetes presents unconscious with a bG of 30. The mother states that the child weighs 53 lbs (24 kg). How much dextrose 10% should be given? Dose 0.5g/kg up to 25 g (5mL/kg)

A. 6 grams = 60 mL
B. 12 grams = 120 mL
C. 25 grams = 250 mL
D. 48 grams = 500 mL

134. What is the peds dose of glucagon if a child weighs <20 kg (44 lbs)? _____ ≥ 20 kg (45 lbs)? _____

135. If a child is suspected of having diabetic ketoacidosis, what should be the volume and timing of IV fluids?

_____

_____

136. What EMS intervention is indicated for a febrile child who has experienced a generalized tonic clonic seizure and is now postictal?

A. Electrolyte solution like Pedialyte given orally
B. Actively cool with cold wet towels and ice packs
C. 2 chewable aspirin crushed in some applesauce or bananas
D. Passively cool by removing all clothing but the diaper/underwear

137. What is the peds dose for naloxone?

_____

_____.

138. What is the total maximum dose of midazolam that may be given intra-nasally (IN) by SOP to a 5 y/o (20 kg) child who is experiencing a generalized tonic-clonic seizure?

A. 0.01 mg/kg (0.2 mg)
B. 0.2 mg/kg (4 mg)
C. 1 mg/kg (20 mg)
D. 2 mg/kg (40 mg)

139. Are NWC EMSS paramedics allowed to give intrarectal diazepam?

A. Yes, in the form of Diastat if present on scene
B. No, this is a dangerous route for medication administration in the field

140. What number should be called if EMS personnel suspect that a child has been abused?

_____