

Northwest Community EMS System
February 2022 CE: Infectious Diseases & Sepsis | Decisional Capacity | Myths & Facts
Credit Questions KEY

Name (Print):		EMS Agency:		
EMS Educator:				
Date submitted	Score:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Not acceptable	<input type="checkbox"/> Incomplete <input type="checkbox"/> Incorrect answers	Date returned w/ feedback
Resubmission received:	Score:	<input type="checkbox"/> Acceptable <input type="checkbox"/> Not acceptable	<input type="checkbox"/> Incomplete <input type="checkbox"/> Incorrect answers	Date returned w/ feedback:
# CE Hours awarded:		Date		

This packet should take 2 hours to complete – which earns the equivalent of the 2 hour live CE class.

Sources of information/answers

February CE Participant slide deck handout, Decisional Capacity Worksheet, System Memo #402, **SOPs: Psych | Sepsis**

1. What three major categories of questions must EMS answer to determine if a patient may (must) be transported without consent?

2. What are the components of a complete decisional capacity assessment? Fill in the chart below.

Decisional capacity assessment: If *any* of these are abnormal or impaired the pt may lack capacity. Attempt to assess & document if changes are new (acute) or features of chronic dx and how grossly abnormal EMS interprets the exam findings to be. No pt. access

Alertness				
Orientation				
Speech:				
Affect:				
Behavior:				
Cognition:)				
Memory:				
Insight:				
EMS impression:				
Physical exam findings (Consider usual baseline state and normal ranges for pt)				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
BALANCE/	EYES:			

NOTE: Orient to the Image Trend Decisional Capacity Worksheet screens to gain competency in documenting these pts.

3. EMS can depart a hospital without completing & leaving their full ImageTrend PCR while emergency rules in place
 True False
4. EMS cannot apply physical restrains to an agitated patient without law enforcement assistance.
 True False
5. An ALS pt always requires 2 licensed PMs and a BLS call requires 2 EMTs in the NWC EMSS?
 True False
6. During the drug shortage, what adaptation has been approved if hospitals cannot restock epinephrine 1 mg/10 mL for use in cardiac arrests?
A. Substitute with vasopressin
B. Give epinephrine (1 mg/1 mL) in 0.5 mg IM sequential injections
C. Mix epinephrine 1 mg/1 mL with 9 mL NS to make correct cardiac concentration
7. **Case 1:** A 65 y/o F with a suppressed immune system due to lymphoma Rx presents with malaise, HA, mild fever and intense skin pain, burning, tingling and itching. She has a red vesicular rash which wraps around back to flank on right side that began a few days after pain. The rash is extremely sensitive to the touch. Fluid-filled blisters have broken/crusted over. Which of these is evident?
A. Impetigo
B. Severe atopic dermatitis
C. Generalized pustular psoriasis
D. Shingles

Questions 8 & 9 refer to the illness above in question #7.

8. Who is at risk for this condition?

9. Is this patient contagious at the moment?

10. **Case 2:** 16 y/o c/o 3-day HPI of vomiting, fever, and a HA that went away 2 days ago. She has a slight nonproductive cough but no nasal congestion, sore throat, swollen lymph nodes, dyspnea, or chest pain and denies: loss of taste or smell; abdominal or flank pain; dysuria; diarrhea, GERD, aspiration, or other GI complaints; no unexplained wt. loss or night sweats VS - WNL except T 100.3 °F and P 133
Exam: No rashes, tonsillar exudates, crackles, flank tenderness, dehydration, or other findings
PMH: No known exposures to COVID-19 or flu; fully vaccinated; Pt admits to vaping; vague answer to any drug use; no known STDs or recent travel. Patient ended up in ICU with ARDS and was diagnosed with e-cigarette vaping product use-associated lung injury (EVALI)
List the top 3 most experienced clinical S&S of EVALI:

- How can it be distinguished from an upper respiratory infection?

11. **Case 3:** A young college student, living in a dorm, is c/o an acute onset of HA, fever, sore throat, GI distress, and mild bilateral leg weakness and facial droop. Pt denies travel, animal bites, or other PMH and is fully vaccinated with flu and COVID-19. Pt cannot wrinkle either side of forehead. CSS is positive for facial droop; no arm drift, speech is clear, fluid, and coherent. No visual or balance deficits noted. VS are normal. What condition should be suspected and why?

12. A week later EMS is called back for the same pt (above) who states their lower extremity weakness has gotten worse. Pt also now reports blurred vision, neck weakness and lower extremity tingling; no rashes. Cranial nerves WNL; VS normal, pt cannot walk without assistance. What is the most likely diagnosis?
- A. Botulism
 - B. Toxoplasmosis
 - C. Epstein-Barr virus
 - D. Guillain-Barre Syndrome
13. Which of these is the current standard of care for EMS when caring for patients and entering a hospital?
- A. Wear a well-fitting cloth face mask
 - B. Mask all patients with an N95 respirator
 - C. Apply goggles only if performing an aerosolizing procedure
 - D. Perform hand hygiene before and after all pt contacts and glove changes
14. An adult just returned from a vacation in Central America and is experiencing generalized malaise, weakness, loss of appetite and states that food tastes different. The pt. also has dark urine and clay colored stools. Which of these is most likely?
- A. Lyme Disease
 - B. Hantavirus
 - C. Hepatitis A
 - D. Salmonella
15. An adult from a congregate living situation is experiencing dyspnea and a persistent cough. The pt has experienced steady weight loss and fatigue over the past month with a persistent low-grade fever and night sweats. Which of these is likely?
- A. SARS
 - B. Candidiasis
 - C. Tuberculosis
 - D. Bronchiolitis
16. An IV drug user is experiencing generalized fatigue, weakness and nausea. Exam reveals jaundiced sclera, RUQ tenderness, and normal VS. Breath sounds are clear and the pt denies a cough. Which of these is most likely?
- A. Hepatitis C
 - B. Pneumonia
 - C. Typhoid fever
 - D. Mononucleosis
17. Which of these is true regarding influenza?
- A. Transmission occurs by eating contaminated food
 - B. Infected people w/o S&S can still transmit the virus
 - C. Children have very low mortality rates due to strong immune responses
 - D. Immunization prevents one from contracting all types of influenza viruses
18. What respiratory tract infection is marked by a severe hacking cough followed by a high-pitched intake of breath that sounds like "whoop" and may last 100 days?
- A. Croup
 - B. Pertussis
 - C. RSV virus
 - D. Epiglottitis
19. A college athlete presents with swollen, painful, puss-filled red bumps along the back. The area is warm to the touch and the pt has a low grade fever. Onset began 48 hours after a wrestling match with a lesion that initially presented like a small "pimple or spider bite" and has progressively worsened. What should EMS suspect?
- A. MRSA
 - B. Rabies
 - C. Impetigo
 - D. Contact dermatitis

20. Which of these is indicated first if an EMS practitioner is stuck with a contaminated needle?
- A. Call the EMS MD for instructions
 - B. Irrigate wound with NS and apply antibiotic ointment
 - C. Wash wound with soap & water, contact their DICO
 - D. Go directly to the hospital ED where they are insured
21. A lethargic infant presents with a high-pitched cry that worsens when picked up. The baby has not been eating well, is febrile, and does not visually follow the mother's movements. Parents report that the child has been ill for several days with an ear infection. You note a tense, distended fontanelle. VS: P 160; R 60; T 104°F. What should EMS suspect?
- A. Meningitis
 - B. RSV virus
 - C. Gastroenteritis
 - D. Rheumatic fever

22. What three physiologic elements are needed to maintain adequate perfusion?

23. What are the goals of EMS sepsis management?

24. List four risk factors for infection that can lead to sepsis.

25. What are at least four clinical factors/S&S suggesting infection?

26. Name the Sepsis six.

27. Define septic shock. (SOP)
-
-
28. List at least two things that cause hypotension in septic shock?
-
29. What is the metabolic byproduct of anaerobic metabolism? _____
30. What assessment must be noted by EMS to suspect metabolic acidosis in sepsis? _____
31. Fill in the blank: What are the correlations between ETCO₂ and lactate levels and their significance?
- ETCO₂ _____ = Lactate _____ Significance: _____
- ETCO₂ _____ = Lactate _____ Significance: _____
32. What are the qSOFA criteria?
-
33. What are the three criteria that require a Sepsis alert to be called to OLMC?
-
34. What are airway/ventilatory support considerations for patients with sepsis or septic shock?
-
35. What is the preferred site and precautions when attempting an IV a patient with septic shock?
-
36. Describe the IV fluid volumes indicated for an adult with septic shock.
-
37. What intervention is indicated for an adult if hypotension persists after the first 500 mL of IVF?
-
38. How often must the BP be reassessed during initial norepinephrine administration? _____

39. **Case 4:** A 75 y/o F presents with a primary symptom of fever and generalized weakness. The pt denies trouble breathing, HA, nausea, or chest pain. She previously had chest pain on inspiration. She is A&O, found sitting in bed, lethargic and c/o dizziness. The family states the pt was not acting normally; and was diagnosed with a UTI 5 days ago. She had a low grade fever last night that spiked to 105°F this afternoon. PMH: HTN, Dt2; Meds: Tamsulosin, nitrofurantoin, metformin, lisinopril, Januvia
Chest: Productive cough with unspecified sputum color; basilar crackles in LLL; Skin: Hot to touch, moist

Time	BP	Pulse	RR	SpO2	GCS	ETCO2	Temp
1909	170/60 (97)	140	40		15	32	40.6
1916	166/60 (95)	138	44	88	15	32	40.6
1924	156/68 (97)	138	36	94	15	32	

Based strictly on presentation and the numbers reported; what is her level (severity) of illness right now?

- Infection Sepsis Septic shock

40. List at least four infection prevention / risk mitigation measures for patients and practitioners
