

**Northwest Community EMS System**  
**April 2026 CE: Medical Emergencies: Endocrine, Diabetes & Thyroid**  
**Credit Questions**

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**

April 2026 CE PowerPoint PDF, videos from Dr. Jordan, NWCEMSS SOPs, and NWC EMSS Procedure Manual.

1. What is the NEW IV tubing drip rate that is now being stocked at Northwest Community Hospital?
  - A. 15 drops/mL
  - B. 20 drops/mL
  - C. 60 drops/mL
  - D. 10 drops/mL
  
2. True or False: According to System Memo #442, there were many policies within the Northwest Community EMS System that were updated to reflect recent IDPH Rule and/or System Changes. It is each practitioner's responsibility to be aware and adopt these changes into their practice. A list of all the changes can be found in the NWCEMSS System Plan Amendment Tracking Document, which can be found on the [www.nwcemss.org](http://www.nwcemss.org) website.
  
3. In Dr. Jordan's video about pediatric intubations, he cites a few different reasons why we no longer perform this skill within our system. List 2 of the reasons he discusses:
 

---



---
  
4. In his second video, Dr. Jordan discusses the topic of medication errors. There are several methods to employ that reduce the risk of medication errors, but the number one thing that he mentions in the video that can be done to significantly reduced the risk of a medication error is:
 

---
  
5. Which of the following statements is true?
  - a. Over 30 million Americans are living with diabetes.
  - b. Over 40 million Americans are living with diabetes.
  - c. Over 70 million Americans are living with diabetes.
  - d. Over 76 million Americans are living with diabetes.
  
6. Hypothermia, mental status change, bradycardia, respiratory depression and myxedema facies are all signs and symptoms of what medical emergency?
  - a. Myxedema Coma
  - b. Graves' Disease
  - c. Hyperlipidemia
  - d. Addison's Disease

7. Hashimoto's is to hypothyroidism as \_\_\_\_\_ is to hyperthyroidism?
8. This is an autoimmune condition in which the immune system attacks the insulin-producing cells in the pancreas:
- a. Type 2 diabetes
  - b. Pancreatitis
  - c. Hashimoto's disease
  - d. Type 1 diabetes

9. List 5 signs and/or symptoms of an adrenal crisis:

---

---

10. For someone experiencing an adrenal crisis, what is the definitive treatment?

- a. Steroid injection of hydrocortisone to replace cortisol
- b. IM injection of Benadryl to clear up the skin reaction
- c. Insulin infusion to decrease elevated levels of blood glucose
- d. NorEpi to increase dangerously low blood pressure

11 – 13. Match the name of the insulin with the appropriate type:

- |                    |                        |
|--------------------|------------------------|
| i. Novolin N _____ | a. Rapid acting        |
| ii. Tresiba _____  | b. Intermediate acting |
| iii. Humalog _____ | c. Long acting         |
| iv. Lantus _____   | d. Ultra-long acting   |

14. What does HHNS stand for? Describe what is happening in a patient with this condition.

---

---

---

15. EMS finds a 45 y/o male with a GCS of 11, blood glucose of 42. An IV is established, what treatment is indicated?

---

16. Also known as primary adrenal insufficiency, this is a rare, chronic disorder where the adrenal glands fail to produce enough cortisol and aldosterone.

- a. Parkinson's Disease
- b. Addison's Disease
- c. Crohn's Disease
- d. Lupus

17. This autoimmune disease produces antibodies that damage the thyroid cells, causing persistent tiredness, dry skin, weight gain, depression and joint pain: \_\_\_\_\_

18. EMS has a 73 y/o female pt, unresponsive, glucose of 37. IV unsuccessful x2, no IO. What treatment is indicated?

---

19. Which of the following is NOT a key function of the thyroid gland?

- a. Energy regulation
- b. Heart and respiratory control
- c. Temperature management
- d. Produces new skin cells
- e. Growth and development

20. List 4 signs and symptoms of hypothyroidism:

---

---

21. What are 3 neurological signs of hypoglycemia?

---

22. Your patient is experiencing a thyroid storm (extreme hyperthyroidism). Circle all the signs/symptoms they may exhibit.

- |                         |                            |
|-------------------------|----------------------------|
| a. Extremely high fever | d. Significant bradycardia |
| b. Agitation/delirium   | e. Severe itchy skin       |
| c. Severe tachycardia   | f. Heart failure           |

23. The following statement describes which condition: *This occurs when there is not enough sugar in the blood to match the amount of insulin (or other medications) taken, to move that sugar into cells.*

- A. DKA
- B. Respiratory acidosis
- C. Hyperglycemia
- D. Hypoglycemia



24. What does AID stand for?

---

25. Fill in the blank:

CGM (continuous glucose monitor) data has a \_\_\_\_\_ lag time.

26. List 5 benefits of fluids for a diabetic patient experiencing HHNS or DKA:

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_
- d. \_\_\_\_\_
- e. \_\_\_\_\_

- 27 – 31. For each symptom or description, match the type of diabetes that goes with it: Type 1 or Type 2:
- “Crisis” onset is typically slow, over a few days to weeks \_\_\_\_\_
  - Some insulin production but body cannot use effectively, small amount of insulin is enough to prevent large-scale breakdown of fat into ketones, so the person does not typically become acidotic \_\_\_\_\_
  - Absolute insulin deficiency, cells cannot use glucose for energy, the body breaks down fat for fuel, leads to the production of ketones \_\_\_\_\_
  - In this type of diabetes, the signaling pathway is interrupted, so when insulin binds to the receptor, the cell does not open the “glucose gates” as it should \_\_\_\_\_
  - When a patient with this type of diabetes is hyperglycemic and dehydrated, they may present with the following symptoms: fruity-smelling breath, N/V, abdominal pain, Kussmaul breathing \_\_\_\_\_
32. For a patient to be considered to be in DKA, they have to have symptoms in 3 categories. What are they?
- Hyperglycemia, Albuminuria, Dehydration
  - Hypoglycemia, Altered Mental Status, Dyspnea
  - Dementia, Acidosis, Hyperglycemia
  - Dehydration, Acidosis, Hyperglycemia
33. Metformin and Glipizide are examples of \_\_\_\_\_ and typically are used to treat this type of diabetes \_\_\_\_\_?
34. Select which of the following would be severe symptoms of hypoglycemia?
- |                   |                          |
|-------------------|--------------------------|
| a. Lethargy       | e. Vomiting              |
| b. Seizures       | f. Hyperthermic          |
| c. Elevated SBP   | g. Loss of consciousness |
| d. Gaze deviation | h. Coma                  |
35. EMS is dispatched for a diabetic emergency. They arrive to find a 47 y/o female, slightly confused but otherwise alert and able to follow commands. Patient has a glucose of 62 and EMS feels she can safely swallow. What treatment is indicated first for this patient?
- Allow pt to take up to 15g of a rapidly-absorbed oral carbohydrate (glucose tablets, soda, honey, etc.)
  - Dextrose 10% (25g/250mL) IVPB titrated to response
  - Glucagon 1mg IN/IM
  - D50% if D10% is not available
36. Which of the following treatments would NOT be indicated for a patient experiencing a thyroid storm?
- Active cooling for severe hyperthermia
  - Fluid resuscitation to treat dehydration
  - Monitor and treat appropriately for tachycardia
  - Passive rewarming for hypothermia
37. List 4 signs and symptoms of Addison’s Disease (primary adrenal insufficiency).
-

38. In type 1 diabetes, lymphocytes destroy this kind of cell in the pancreas. They are responsible for insulin production.

- a. Alpha cells
- b. Beta cells
- c. Calcium cells
- d. T-cells

39. Your patient is a 7 y/o boy weighing 27kg. His glucose is 47 and he is lethargic and diaphoretic. What is his tx?

- a. Dextrose 10% 1g/kg = 27g
- b. Dextrose 50% 0.5g/kg = 13.5g
- c. Dextrose 10% 0.5g/kg = 13.5g
- d. Dextrose 10% 0.25g/kg = 6.75g

40. Myxedema facies is a complication of the life-threatening condition, Myxedema Coma. Describe what myxedema facies is and why it could be a complication for a patient.

---

---