**The A-B-Cs of Kids and Medication: Re-Schooling Pharmacists and Families for Best Outcomes**

**Post-test For Pharmacists**

**EDUCATIONAL OBJECTIVES:**

**After participating in this activity, pharmacists will be able to:**

1. DISCUSS the most common acute and chronic diagnoses requiring medication administration at school, evidence-based treatments, and methods of decreasing dosing frequency
2. IDENTIFY national policy statements and state or local policies that affect the way medications must be provided to students
3. LIST conditions that predispose students to missed doses, exacerbated disease, or future addiction
4. REVIEW conditions that may require emergency injectables and mechanisms to ensure the injectables are available and all involved know how to use them
5. OUTLINE the pharmacist's role in increasing immunization uptake, ensuring appropriate medication use, and extending counseling to all stakeholders in school medication administration and policy

**TEST QUESTIONS**

**1. Which is TRUE of children with chronic health conditions?**

1. 4% to 6% of school-aged children have a chronic condition
2. 10% to 20% of school-aged children received medication during a typical school day
3. They spend 50% of their waking hours at school

**2. Which of the following is a good counseling point for children and caregivers about glucagon administration?**

1. Inject into the same injection site each time for consistency
2. Remove the needle immediately after injection to prevent insulin overdose
3. Inject subcutaneously at a 90° angle

**3. After administration of glucagon, the patient should be kept on his or her side \_\_\_\_\_\_\_\_\_.**

1. 15 to 20 minutes
2. Until they regain consciousness or emergency personnel arrive
3. B or C

**4. Which of the following is true of food allergies?**

1. An average of 8 children per classroom are affected
2. Two percent of children have a food allergy and most are allergic to tree nuts
3. 25% of people allergies experience a first anaphylactic reaction at school

**5. Which range best represents the percentage of children with Type 1 diabetes who will experience a diabetes-related emergency at school?**

1. 0 to 25%
2. 25 to 50%
3. 50 to 75%

**6. What can happen to an MDI if it is not stored in an upright position?**

1. Medication can leak out of the canister
2. The propellant can be compromised
3. The dose counter will malfunction

**7. Which of the following is true about naloxone?**

1. The entire intranasal dose should be given in one nostril
2. Clothing should be cut or removed before IM administration
3. It is dangerous to administer unless the patient is truly overdosing

**8. Emergency personnel should be called after administration of which agent?**

1. Epinephrine, glucagon, and naloxone
2. Epinephrine, insulin, and naloxone
3. Glucagon, methylphenidate, and naloxone

**9. After administration of an MDI, the user should hold their breath for \_\_\_\_\_\_\_\_, or as long as comfortably possible.**

1. 10 seconds
2. 30 seconds
3. One minute

**10. Which of the following is TRUE?**

1. Children carrying medication to self-administer leads to more medication errors
2. A school-aged child requires one epinephrine injector at school
3. Indicators of hypoglycemia can be mistaken for misbehavior in children

**11. Which of the following is a symptom of opioid overdose?**

1. Enlarged pupils
2. Labored breathing
3. Hyperactivity

**12. Which is the most commonly missed step in MDI administration?**

1. Shaking the inhaler before use to homogenize the suspension
2. Exhaling completely away from the inhaler
3. Holding your breath after administration

**13. Which school-aged child would be at increased risk of lifetime heroin use?**

1. A 12-year-old prescribed stimulants for ADHD
2. A 15-year-old prescribed opioid pain medication following wisdom tooth removal
3. A 16-year-old recreational marijuana user

**14. A school nurse asks your pharmacy to partner with her school for a vaccine catch-up program, but they are unsure where to start. Which vaccine would be most worthwhile to screen for?**

1. Meningococcal
2. Herpes zoster
3. Hepatitis B series

**15. A school nurse calls for advice regarding a student who has diabetes and will be transferring into his district. He asks for suggestions of what to keep on-hand in case of mild hypoglycemia. Which is a good recommendation?**

1. 4-ounce bottles of apple juice
2. 4-ounce cups of diet soda
3. Sugar-free hard candies

**16. A 10-year-old student who has diabetes approaches his teacher complaining of dizziness and sweaty palms. He receives meal-time insulin at school, but he did not finish his lunch. What is the recommended course of action?**

1. Suggest that he eat the carrots that were packed in his lunch today and put his haed on his desk
2. Send him to the nurse for a blood glucose check and to eat some quick-carbohydrates
3. Immediately administer glucagon; he is it great risk of going unconscious within minutes

**17. Which of the following is expected to occur following unnecessary glucagon administration?**

1. Excitability
2. Fever
3. Nausea/vomiting

**18. A father confides in you that his daughter’s teacher has noticed her skipping lunch, crying more than usual, and arguing with her peers. Which of the following would be a possible cause of these symptoms?**

1. Missed doses of insulin, causing high blood sugar during the school day
2. A food allergy to something served in the school cafeteria
3. Increased dose of the stimulant prescribed for her ADHD

**19. At what age should pharmacists begin to counsel school-aged children directly?**

1. 5 to 7 years, depending on when the child seems ready
2. 10 to 12, depending on when the child seems ready
3. Never, parents should always be in charge of that

**20. Which of the following statements best describes the role of the pharmacist in managing patients receiving medications during a school-day?**

1. Recognizing pediatric medications dosed at school and causes of errors surrounding administration
2. Setting up patients for success by labeling medications appropriately and suggesting more convenient alternatives
3. Both of these are excellent ways to help children, families, and schools manage children’s medications