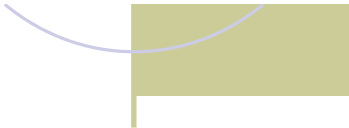


ACPE Credit for Pharmacists



**FREE CE for
Pharmacists**

Tool Kit Contains:

- * Childhood Immunization *
(Birth-6 years)
- * Adolescent Immunization *
(7-18 years)
- * Adult Immunization *
(19 years & older)
- * Talking To Families *
- * Vaccine Storage & Resources *

The AIM Provider Tool Kit is now accredited for pharmacy continuing education for pharmacists. Pharmacists wishing to receive credit for the tool kit need to complete the evaluation and posttest located in the tool kit. Original forms must be sent to the Michigan Pharmacists Association office by December 31, 2008, to be eligible for continuing education.

After reading this tool kit, participants will be able to:

- identify key resources available in Michigan for immunization providers.
- list the vaccines currently available on the U.S. market and compare and contrast their indications for use in various patient populations.
- identify an appropriate vaccination regimen, including vaccine dose and patient counseling parameters.
- list recommended patient screening questions for vaccinations and identify valid contraindications for vaccinations.
- explain principles and procedures for vaccine storage and handling.
- identify appropriate routes of vaccine administration in specific patient populations.



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Sponsored by the Michigan Pharmacists Association



The Michigan Pharmacists Association is accredited by the Accreditation Council for Pharmacy Education (ACPE) as a provider of continuing pharmacy education. ACPE Program 112-000-07-010-H01-P, 3.0 contact hours; initially released January 1, 2008

AIM Provider Tool Kit: Adult & Childhood Immunizations

Examination Questions

Please circle your answers (one per question) on the registration form.

1. Which of the following questions is not typically included on a screening questionnaire for children or teenagers?
 - a. Is the child sick today?
 - b. Does the child have migraines?
 - c. Has the child had a seizure, brain or nerve problem?
 - d. Has the child received vaccinations in the past four weeks?

2. Which of the following vaccines should be postponed if the patient is currently receiving chemotherapy?
 - a. MMR
 - b. Varicella
 - c. LAIV
 - d. All of the above

3. Which of the following vaccines should be given subcutaneously?
 - a. DTaP
 - b. Hep B
 - c. MMR
 - d. Hib

4. What is the preferred muscle for an intramuscular injection to an infant?
 - a. Anterolateral thigh muscle
 - b. Deltoid muscle
 - c. Triceps muscle
 - d. None of the above

5. Human papillomavirus vaccine should be given to girls who are 11 to 12 years old on what type of a schedule?
 - a. 0, 2, 4 and 8 months
 - b. 0, 4 and 8 months
 - c. 2, 4 and 6 months
 - d. 0, 2 and 6 months

6. Which *haemophilus influenzae* type b vaccine has a three-dose schedule?
 - a. ActHIB[®]
 - b. PedvaxHIB[®]
 - c. HibTITER[®]
 - d. PedHIB[®]

7. Which of the following statements is false?
 - a. LAIV should be kept frozen until immediately before it is used.
 - b. LAIV can be stored in the refrigerator for up to 60 hours after thawing.
 - c. LAIV can be refrozen.
 - d. LAIV should be stored in a frost-free freezer at an average temperature of 5 degrees Fahrenheit.

8. Which of the following childhood vaccines are administered orally?
 - a. IPV
 - b. Pediarix[®]
 - c. RotaTeq[®]
 - d. DTaP

9. What vaccines are contraindicated in a patient without a spleen?
 - a. OPV
 - b. LAIV
 - c. Pneumococcal
 - d. None of the above

10. If a patient has chronic renal failure, which secondary vaccines are recommended?
 - a. Pneumococcal, Influenza (TIV) and Hepatitis B
 - b. Pneumococcal, Meningococcal and Influenza (LAIV)
 - c. Meningococcal, Influenza (TIV) and Varicella
 - d. Pneumococcal, Influenza (LAIV) and Hib

11. The Vaccines for Children (VFC) program provides vaccines at no charge for children 18 years of age and younger who:
 - a. are Alaskan Native.
 - b. are enrolled in Medicaid.
 - c. have no health insurance or are underinsured.
 - d. All of the above.

12. Which childhood immunization is not required for child care or preschool in Michigan?
 - a. Diphtheria, Tetanus, Pertussis
 - b. Polio
 - c. Hepatitis A
 - d. Hepatitis B

13. Common reactions to vaccinations include all of the following except:
 - a. anaphylactic response.
 - b. redness and slight swelling at the injection site.
 - c. pain at the injection site.
 - d. mild fever.

14. All of the following vaccines are administered via the IM route except:
 - a. Hepatitis B.
 - b. MPSV4.
 - c. HPV.
 - d. MCV4.

15. Which of the following vaccines may be administered via the subcutaneous route?
 - a. MMR
 - b. Varicella
 - c. PPV
 - d. All of the above

16. Subcutaneous injections are typically administered using what length of needle?
 - a. 1 inch
 - b. 1/2 inch
 - c. 5/8 inch
 - d. 1 1/2 inches

17. Which one of the following statements is true?
- Insert the needle at a 45 degree angle for an intramuscular injection.
 - Insert the needle at a 45 degree angle for a subcutaneous injection.
 - Insert the needle at a 90 degree angle for a subcutaneous injection.
 - Insert the needle at a 45 degree angle for an intramuscular or subcutaneous injection.
18. Which one of the following statements is true?
- A 1 to 1 1/2 inch needle should be used to administer an IM injection to an adult.
 - Injections given in the same area should be separated by a minimum of one inch.
 - The deltoid muscle is typically used to administer IM injections to an adult.
 - All of the statements are true.
19. Pneumococcal polysaccharide should be:
- given yearly.
 - given no more than twice in a lifetime.
 - given to all females ages nine to 26.
 - given in a three-dose series.
20. Which of the following statements is correct concerning tetanus vaccines?
- Td is indicated for children less than seven years old.
 - Tdap is indicated for those ages seven years and older.
 - Td is indicated for those ages seven years and older.
 - Tdap is indicated for children less than seven years old.
21. Pneumococcal vaccines should be spaced:
- five years apart.
 - six months apart.
 - two years apart.
 - five months apart.
22. Why are patients asked if they are pregnant prior to administering a vaccine?
- The pregnant patient will contract the flu if given an influenza vaccine.
 - A tetanus vaccine should only be administered in the first trimester.
 - No vaccines should ever be administered to a pregnant patient.
 - Live virus vaccines are contraindicated because of the theoretical risk of virus transmission to the fetus.
23. Which of the following statements is true?
- The flu shot can cause the flu.
 - Only older people need a flu vaccine.
 - The worst side effect a patient is likely to get from a flu shot is a sore arm.
 - Patients must get their flu shots before December each year.
24. All of the following are storage and handling requirements for the HPV vaccine except:
- store in the freezer.
 - protect from light.
 - shake well before use.
 - store in the refrigerator between 35 to 46 degrees Fahrenheit.
25. When screening patients for Hepatitis B, which test results warrant vaccination?
- HBsAG is negative, and anti-HBc and anti-HBs are positive.
 - HBsAG and anti-HBc are negative, and anti-HBs is positive.
 - HBsAG and anti-HBc are positive, and anti-HBs is negative.
 - HBsAG, anti-HBc and anti-HBs are all negative.

26. Which vaccine should be avoided during pregnancy?
- Tdap
 - HPV
 - Hep B
 - TIV
27. Which one of the following statements regarding tetanus vaccines is correct?
- DTaP is indicated for patients ages six weeks to six years.
 - Adacel[®] is indicated for patients 10 to 18 years old.
 - Boostrix[®] is indicated for patients 11 to 64 years old.
 - Td booster doses should be given every seven years.
28. Which of the following is incorrect?
- Menactra[™] is MCV4.
 - Gardasil[®] is HPV.
 - Adacel[®] is Tdap.
 - Boostrix[®] is DTaP.
29. Which of the following statements regarding shelf life is false?
- HPV and Rota should be protected from light.
 - Refreeze LAIV if not used within 60 hours.
 - Varicella should be discarded if not used within 30 minutes after reconstitution.
 - MMR should be discarded if not used within eight hours after reconstitution.
30. Which of the following statements regarding mercury is true?
- Thimerosal is a preservative that contains a type of mercury called ethylmercury.
 - There is no association between autism and vaccines containing thimerosal.
 - MMR, varicella and IPV have never contained thimerosal.
 - All of the above are true.

AIM Provider Tool Kit: Adult & Childhood Immunizations

(ACPE I.D. # 112-000-07-010-H01-P)

Registration for Continuing Pharmacy Education Credit

Please print clearly or type.

Name: _____ MPA I.D. #: _____

Address: _____

City: _____ State: _____ Zip: _____

Signature: _____

Examination

Please circle your answers (one answer per question).

- | | | | | |
|------------|-------------|-------------|-------------|-------------|
| 1. a b c d | 7. a b c d | 13. a b c d | 19. a b c d | 25. a b c d |
| 2. a b c d | 8. a b c d | 14. a b c d | 20. a b c d | 26. a b c d |
| 3. a b c d | 9. a b c d | 15. a b c d | 21. a b c d | 27. a b c d |
| 4. a b c d | 10. a b c d | 16. a b c d | 22. a b c d | 28. a b c d |
| 5. a b c d | 11. a b c d | 17. a b c d | 23. a b c d | 29. a b c d |
| 6. a b c d | 12. a b c d | 18. a b c d | 24. a b c d | 30. a b c d |

The passing score for this test is 70 percent. Upon successful completion of the test, MPA will mail you a statement of credit for 3.0 contact hours to the above address. Please allow two to four weeks for processing.

Program Evaluation

Please circle the appropriate rating number for items 1 through 5.

1. Will this knowledge be useful and relevant to your professional practice?
Not at all 1 2 3 4 5 Very useful/relevant
2. Was there evidence of commercial bias in this course?
Yes, describe: _____ No
3. What is your overall evaluation of the tool kit continuing education home study course?
Poor 1 2 3 4 5 Excellent
4. Please rate each learning objective:
 - a. How well did this program achieve its objective of identifying key resources available in Michigan for immunization providers?
Not at all 1 2 3 3 5 Very well
 - b. How well did this program achieve its objective of listing the vaccines currently available on the U.S. market and compare and contrast their indication of use in various patient populations?
Not at all 1 2 3 3 5 Very well
 - c. How well did this program achieve its objective of identifying an appropriate vaccination regimen, including vaccine dose and patient counseling parameters?
Not at all 1 2 3 3 5 Very well
 - d. How well did this program achieve its objective of listing recommended patient screening questions for vaccinations and identifying valid contraindications for vaccinations?
Not at all 1 2 3 3 5 Very well
 - e. How well did this program achieve its objective of explaining principles and procedures for vaccine storage and handling?
Not at all 1 2 3 3 5 Very well
 - f. How well did this program achieve its objective of identifying appropriate routes of vaccine administration in specific patient populations?
Not at all 1 2 3 3 5 Very well

It took me _____ hour(s) and _____ minute(s) to read this tool kit and complete the questions.

Mail completed form to:

Michigan Pharmacists Association · 815 North Washington Avenue · Lansing, MI · 48906-5198