

27. The primer increased my ability to recognize foodborne illnesses and increased the likelihood that I will consider such illnesses in my patients.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
28. The primer increased my knowledge and skills in the diagnosis and management of foodborne illness.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
29. This primer increased my knowledge of the role of public health authorities in the prevention and control of foodborne disease outbreaks.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
30. It is important to talk to my patients about food safety.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
31. As formatted, this primer is a useful physician education tool.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
32. The amount of information presented was appropriate for my needs.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
33. I will recommend this primer to my colleagues.
- A. Strongly Agree
 - B. Agree
 - C. Neither agree nor disagree
 - D. Disagree
 - E. Strongly Disagree
34. How much time did you spend working through this primer and completing this exam?
- A. Less than 1 hour
 - B. 1-2 hours
 - C. 2-3 hours
 - D. More than 3 hours

MMWR response form for continuing education credit

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Diagnosis and Management of Foodborne Illnesses

Continuing Medical Education: Questions

Produced collaboratively by the:

American Medical Association
American Nurses Association-American Nurses Foundation
Centers for Disease Control and Prevention
Center for Food Safety and Applied Nutrition, Food and Drug Administration
Food Safety and Inspection Service, US Department of Agriculture

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To receive continuing education credit, please answer all of the following questions.

1. Which of the following provide important clues to the possible etiology of a food-associated illness?
 - A. Incubation period
 - B. Duration of illness
 - C. Predominant clinical signs and symptoms (eg, vomiting, diarrhea, abdominal pain)
 - D. Travel history
 - E. All of the above
2. Which group is at higher risk for complications from foodborne illness?
 - A. Persons with weakened immune systems
 - B. Persons with liver disease
 - C. Pregnant women
 - D. Older adults
 - E. All of the above
3. Which of the following is NOT a safe food handling behavior?
 - A. Using the same cutting board for raw foods and cooked foods
 - B. Using a food thermometer to check the internal temperature of food before eating it
 - C. Rinsing raw produce with water
 - D. Washing hands before and after handling food

4. What is the appropriate method to determine if a hamburger is cooked to a proper temperature?
 - A. Cooking it until it is brown inside
 - B. Using a food thermometer to ensure that the internal temperature reaches 160°F
 - C. It is not necessary to determine if a hamburger is cooked to a proper temperature as it is too small
 - D. Taking a bite of the hamburger to ensure that it tastes cooked

5. If you suspect a foodborne outbreak of any kind, you should report it to the local health department. Which of the following would be helpful to contact at the health department:
 - A. Medical Officer
 - B. Epidemiology officer
 - C. Environmental health officer
 - D. Any of the above would be acceptable

6. Which of the following are NOT consistent with inflammatory diarrhea?
 - A. Presence of fecal leukocytes
 - B. Grossly bloody stool
 - C. Caused by infection with invasive or cytotoxigenic bacterial and protozoan species
 - D. Usually involves the small intestine

7. If a foodborne illness is suspected, which of the following should be considered?
 - A. Submit appropriate specimens for laboratory testing
 - B. Contact the state or local health department
 - C. Initiate oral rehydration therapy
 - D. All of the above

8. While intentional contamination of food is not common, which of the following would make you suspect that such an act has occurred? Note: It is the unusual nature of the whole picture or context that should induce thoughts about intentional contamination.
 - A. An unusual agent or pathogen in a common food
 - B. A common agent or pathogen affecting an unusually large number of people
 - C. A common agent or pathogen that is uncommonly seen in clinical practice
 - D. All of the above

9. Multidrug-resistant *Salmonella* Typhimurium cases:
 - A. Have been on the rise in the US since the 1990s
 - B. May be responsible for more invasive disease than other types
 - C. Often are resistant to ampicillin and sulfamethoxazole
 - D. Cause more cases in an outbreak than do sensitive strains
 - E. All of the above

10. Norovirus infection causes nausea, vomiting, and watery/large-volume diarrhea within 24-48 hours. The source of infection could be:
 - A. Poorly cooked shellfish
 - B. Inadequately cooked hamburger
 - C. Ready-to-eat foods, e.g. salads
 - D. Iced drinks
 - E. All but (b)

11. The most common cause of "traveler's diarrhea" that can be transmitted by food or water is:
- A. *Campylobacter jejuni*
 - B. Enterotoxigenic *E. coli* (ETEC)
 - C. *Salmonella*
 - D. Norovirus
12. What is the most likely food- or water-related agent associated with persistent diarrhea (i.e., lasting > 14 days)?
- A. *Giardia lamblia*
 - B. *Shigella species*
 - C. *Campylobacter jejuni*
 - D. *Vibrio cholerae*
13. Which of the following food-associated diseases and conditions are not designated as notifiable at the national level?
- A. Botulism
 - B. Staphylococcal food poisoning
 - C. Trichinosis
 - D. Hepatitis A
14. A "routine" stool culture will likely isolate which of the following food-related pathogens?
- A. *Listeria monocytogenes*
 - B. *E. coli* O157:H7
 - C. *Vibrio cholerae*
 - D. Hepatitis A virus
 - E. *Salmonella species*
15. Which of the following foodborne pathogens can be prevented by vaccination?
- A. *Cyclospora cayetanensis*
 - B. *Campylobacter jejuni*
 - C. Hepatitis A virus
 - D. *E. coli* O157:H7
16. The examination of the stool for cysts and/or ova is the common diagnostic for which foodborne pathogen?
- A. Parasitic infections
 - B. Viral infections
 - C. Bacterial infections
 - D. Non-infectious agents
 - E. None of the above
17. A rapid incubation period of 2-6 hours prior to gastrointestinal symptoms is indicative of which of the following?
- A. Hepatitis A virus infection
 - B. Ciguatera fish poisoning
 - C. *Giardia lamblia* infection
 - D. *Brucella abortus* infection
18. A patient tells you that he has a diarrheal illness following consumption of seafood from a street vendor in the Caribbean. Which of the following should you do?
- A. Request your clinical microbiology laboratory to specifically test for *Vibrio* species in the patient's stool sample.
 - B. Request your clinical microbiology laboratory to examine the patient's stool samples for cysts and ova of *Cyclospora*.
 - C. Request your clinical microbiology laboratory to specifically test for *E. coli* O157:H7 in the patient's stool sample.
 - D. You need not request your clinical laboratory to specifically test for a pathogen as *Campylobacter jejuni* is part of a routine stool culture.

19. If you are counseling a pregnant patient, what food should she avoid to decrease her risk for listeriosis?
- A. Cheddar cheese
 - B. Smoked seafood
 - C. Sauerkraut
 - D. Ice Cream
20. A patient presents with a history of abdominal cramps, bloody diarrhea and dehydration. Which culture must you request the laboratory to perform, as it is not always a routine screening test?
- A. *Shigella* species
 - B. *E. coli* O157:H7
 - C. *Salmonella* species
 - D. *Campylobacter jejuni*
21. Which scenario(s) may present a risk to patients, especially the immunocompromised?
- A. Pet reptiles in the home
 - B. Eating sprouts on a sandwich
 - C. Eating raw oysters
 - D. Drinking non-pasteurized juices
 - E. All of the above
22. A patient presents to the Emergency Room with hoarseness, ptosis and upper extremity paralysis. He has a history of home canning and you suspect botulism. After you stabilize the patient and evaluate respiratory function, you
- A. Immediately induce vomiting
 - B. Contact the FDA
 - C. Contact the local or state health department
 - D. All of the above.
23. Which of the following foodborne illnesses has the longest incubation period?
- A. Staphylococcal intoxication
 - B. *Bacillus cereus* gastroenteritis
 - C. Cholera
 - D. Listeriosis
 - E. *E. coli* diarrhea
24. Which foodborne illness may present with chocolate-brown colored blood?
- A. Nitrite poisoning
 - B. Organophosphate poisoning
 - C. Botulism
 - D. Mercury poisoning
 - E. Tin poisoning
25. Why may the use of antibiotics in children with *E. coli* O157:H7 infection be contraindicated?
- A. *E. coli* O157:H7 is multiply resistant to antibiotics and thus not treatable with antibiotics.
 - B. Antibiotic use only serves to increase the stress on the kidneys.
 - C. Data indicates that antibiotics may increase the risk of hemolytic uremic syndrome.
 - D. The use of antibiotics is not contraindicated and data exists to show decreased illness severity following its use.
26. When choosing to use antimicrobial therapy for a foodborne illness, which of the following should be considered in the decision process?
- A. The clinical signs and symptoms of the illness
 - B. The organism that was isolated from clinical specimens
 - C. The results of antimicrobial susceptibility tests
 - D. The appropriateness of treating with an antimicrobial
 - E. All of the above