

Yersinia enterocolitica

1. **What is yersiniosis?** - Yersiniosis is an infectious disease caused by a bacterium, *Yersinia*. In the United States, most human illness is caused by one species, *Y. enterocolitica*. Infection with *Y. enterocolitica* can cause a variety of symptoms depending on the age of the person infected. Infection occurs most often in young children. Common symptoms in children are fever, abdominal pain, and diarrhea, which is often bloody. Symptoms typically develop 4 to 7 days after exposure and may last 1 to 3 weeks or longer. In older children and adults, right-sided abdominal pain and fever may be the predominant symptoms, and may be confused with appendicitis. In a small proportion of cases, complications such as skin rash, joint pains or spread of the bacteria to the bloodstream can occur.

2. **How do people get infected with *Y. enterocolitica*?** - Infection is most often acquired by eating contaminated food, especially raw or undercooked pork products. The preparation of raw pork intestines (chitterlings) may be particularly risky. Infants can be infected if their caretakers handle raw chitterlings and then do not adequately clean their hands before handling the infant or the infant's toys, bottles, or pacifiers. Drinking contaminated unpasteurized milk or untreated water can also transmit the infection. Occasionally *Y. enterocolitica* infection occurs after contact with infected animals. On rare occasions, it can be transmitted as a result of the bacterium passing from the stools or soiled fingers of one person to the mouth of another person. This may happen when basic hygiene and hand washing habits are inadequate. Rarely, the organism is transmitted through contaminated blood during a transfusion.

3. **How common is infection with *Y. enterocolitica*?** - *Y. enterocolitica* is a relatively infrequent cause of diarrhea and abdominal pain. Based on data from the Foodborne Diseases Active Surveillance Network (FoodNet), which measures the burden and sources of specific diseases over time, approximately one culture-confirmed *Y. enterocolitica* infection per 100,000 persons occurs each year in the United States. Children are infected more often than adults, and the infection is more common in the winter.

4. **How can *Y. enterocolitica* infections be diagnosed?** - *Y. enterocolitica* infections are generally diagnosed by detecting the organism in a stool sample. Many laboratories do not routinely test for *Y. enterocolitica*, so it is important to

notify laboratory personnel when infection with this bacterium is suspected so that special tests can be done. The organism can also be recovered from other sites, including the throat, lymph nodes, joint fluid, urine, bile, and blood.

5. How can *Y. enterocolitica* infections be treated? - Uncomplicated cases of diarrhea due to *Y. enterocolitica* usually resolve on their own without antibiotic treatment. However, in more severe or complicated infections, certain classes of antibiotics may be useful.

6. What can be done to prevent the infection?

- a. Avoid eating raw or undercooked pork.
- b. Consume only pasteurized milk or milk products.
- c. Wash hands with soap and water before eating and preparing food, after contact with animals, and after handling raw meat.
- d. After handling raw meats, especially pork products such as chitterlings, clean hands and fingernails scrupulously with soap and water before touching infants or their toys, bottles, or pacifiers. Someone other than the foodhandler should care for children while chitterlings are being prepared.
- e. Prevent cross-contamination in the kitchen: Use separate cutting boards for meat and other foods. Carefully clean all cutting boards, counter-tops, and utensils with soap and hot water after preparing raw meat.
- f. Dispose of animal feces in a sanitary manner.

7. For more information about *Y. enterocolitica*:

http://www.cdc.gov/ncidod/dbmd/diseaseinfo/yersinia_g.htm

This fact sheet provides general information. Please contact your physician and or veterinarian for specific clinical information related to you or your animal.

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