

Yersinia

What is Yersinia?

Yersinia are bacteria that can cause illnesses in humans. *Y. enterocolitica* are the most common species causing human enteric (intestinal) yersiniosis.

Pigs are the major animal reservoir for the few strains of *Y. enterocolitica* that cause human illness, but rodents, rabbits, sheep, cattle, horses, dogs, and cats also can carry strains that cause human illness.

Where is Yersinia found?

Yersinia enterocolitica is harbored in the gastrointestinal tract of a range of mammals, including rodents, cattle, sheep, pigs, cats and dogs. Infected animals tend to become chronic carriers and excrete large numbers of bacteria, which may contaminate water and dairy products. Humans are infected by eating inadequately cooked meat (especially pork) or other contaminated food, or through contact with an infected domestic animal. In the USA, outbreaks associated with dairy products, chocolate and milk have been reported. The ability of *Y. enterocolitica* to grow at 39°F (4°C) means that refrigerated meat and meat products can become a potent source of infection. *Yersinia enterocolitica* sepsis has been reported following transfusion of blood stored for more than 3 weeks at 39°F (4°C).

How do animals get infected with Yersinia?

Many domesticated and wild animals carry *Yersinia* in their intestines. Spread to people occurs by eating food or water contaminated by infected human or animal faeces. Contact with infected pets and domestic stock may also cause infection.

Yersinia is able to multiply at temperatures in normal refrigerators, so sometimes if meat is kept without freezing large numbers of the bacteria may be present.

Yersinia is also occasionally transmitted by blood transfusion as it is able to multiply in stored blood products. This is why people are asked not to donate blood if they have had diarrhoea recently.

How do people get infected with Yersinia?

Most people become infected by eating contaminated food, especially raw or undercooked pork, or through contact with a person who has prepared a pork product, such as [chitlins](#). For example, babies and infants can be infected if their caretakers handle contaminated food and then do not wash their hands properly before handling the child or the child's toys, bottles, or pacifiers.

People occasionally become infected after drinking contaminated milk or untreated water, or after contact with infected animals or their feces.

On rare occasions, people become infected through person-to-person contact. For example, caretakers can become infected if they do not wash their hands properly after changing the diaper of a child with yersiniosis.

Even more rarely, people may become infected through contaminated blood during a transfusion.

What are the signs and symptoms of Yersinia?

Symptoms of yersiniosis can vary depending on the age of the person infected. In young children, common symptoms 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. Symptoms in older children and adults may include fever and pain on the right side of the abdomen, and may be confused with appendicitis. Complications are rare and can include skin rash, joint pains, or spread of bacteria to the bloodstream.

How do you prevent transmission of Yersinia?

Wash hands with soap and water before eating and preparing food, after contact with animals, and after handling raw meat.

Use separate cutting boards for meat and other foods and carefully clean all cutting boards, countertops, and utensils with soap and hot water after preparing raw meat.

Consume only pasteurized milk and milk products, such as soft cheese, ice cream, and yogurt.

After handling raw chitlins, clean hands and fingernails thoroughly with soap and water before touching infants or their toys, bottles, or pacifiers. Someone other than the person handling food should care for children while chitlins are being prepared.

Pick up and dispose of animal feces (poop), especially in areas where children might play. Wash your hands with soap and running water after contact with animal feces. Be sure to assist children with handwashing.