

# Yersinia

## Food Act 2006

The genus *Yersinia* includes a group of bacteria that can be found in the intestines of infected pets, livestock and other animals. *Yersinia* can contaminate soil, water and food through contact with the faeces of animals, for example, through rainwater runoff from paddocks where animals graze or through use of manure fertilisers.

Most cases of foodborne illness, also known as yersiniosis, are caused by *Y. enterocolitica*. Foodborne illness can also be caused by less common species such as *Y. pseudotuberculosis*. However, foods containing any species of *Yersinia* are a cause for concern as they inhabit the same environments as pathogenic species.

## How does *Yersinia* cause foodborne illness?

Yersiniosis, is generally caused by eating food that has become contaminated with high numbers of the bacteria. Pigs are often considered to be a primary source of *Y. enterocolitica* and it has been isolated from raw or undercooked pork or pork products, particularly pork mince and sausages. It has also been isolated from unpasteurised milk, oysters, crabs, prawns, beef, poultry, raw vegetables and water.

The bacteria can occasionally spread from person to person or from infected pets and domestic animals.

*Y. enterocolitica* grows rapidly at temperatures up to 44°C, but is inactivated by cooking temperatures. If food is kept in the temperature danger zone (between 5°C and 60°C) for too long, *Y. enterocolitica* can multiply.

## Who is at risk?

Anyone can be affected by *Yersinia*, but certain people are at greater risk of severe illness, including:

- pregnant women
- young children (under 5 years)
- older adults (over 60 years)
- people with weakened immune systems
- people with underlying conditions such as iron overload or diabetes.

## Symptoms of *Yersinia* foodborne illness?

Most infected people will experience the following symptoms four to seven days after eating contaminated food:

- diarrhoea (sometimes bloody)

- abdominal pain and cramps, often severe and sometimes like appendicitis
- fever
- nausea
- vomiting.

Less common symptoms include:

- joint pain
- rashes.

Symptoms typically subside within two to three days but may last for one to three weeks.

## Prevention

The most effective way of preventing *Yersinia* foodborne illness is to prevent its growth in food. This can be achieved by:

- cooking food thoroughly and serving it immediately or keeping it hot (60°C or hotter) until serving
- when cooling cooked potentially hazardous food to be stored and used later, cool the food–
  - (a) within two hours - from 60°C to 21°C; and
  - (b) within a further four hours - from 21°C to 5°CHint: divide large amounts of hot food into small shallow containers to allow it to cool faster
- reheating cooked food quickly with a microwave or stovetop (to 60°C or above)
- making sure your refrigerator temperature is at 5°C or colder
- storing raw meats below ready-to-eat foods in the refrigerator or cold room to prevent cross contamination
- washing your hands with soap and drying them before preparing food, between preparing raw and ready-to-eat foods, after being in contact with animals, and after using the toilet
- keeping your kitchen clean and ensuring all food contact surfaces are cleaned and sanitised before preparing food and between preparation of raw foods and ready-to-eat foods
- wash fruit and vegetables thoroughly under running water.

## What to do if you suspect foodborne illness

If you suspect you have foodborne illness, seek medical advice.

A faeces (poo) sample may be required to confirm the presence of *Yersinia*.

Diarrhoea can cause dehydration, so it is important to drink plenty of fluids.

If you have a concern about a food product or a food business, Queensland Health provides an online form to make a food complaint. This is available at <https://phconnect-foodcomplaints.health.qld.gov.au>.

## Further information

For health advice, please contact your doctor or nearest health facility, or call 13 HEALTH ([13 43 25 84](tel:13432584)).

For food safety advice and further information relating to *Shigella* in food, contact your local Public Health Unit at [www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units](http://www.health.qld.gov.au/system-governance/contact-us/contact/public-health-units).

The Food Pantry has advice related to food safety for food businesses and consumers at [www.qld.gov.au/foodpantry](http://www.qld.gov.au/foodpantry).