



TULAREMIA

What is tularemia?

Tularemia is a zoonotic disease (diseases spread from animals to people) caused by the bacteria *Francisella tularensis*. It is found mainly in the Northern Hemisphere and is carried by many wild and domestic animals, especially rabbits. Tularemia infection in people is not common in Canada.

What are the symptoms?

Symptoms can appear within one to 14 days and depend on the entry of bacteria into the body – skin, gastrointestinal tract, eyes or lungs. Skin exposures can cause skin ulcers and swollen glands. Gastrointestinal exposures, for example eating an infected animal, may produce a throat infection, abdominal pain, diarrhea and vomiting. Infected eyes can be swollen, red, and painful. Breathing in the bacteria may cause fever and pneumonia. Serious complications can develop.

How is tularemia spread?

People can become infected through direct contact or touching infected animals or animal carcasses (especially rabbits, hares and rodents). Bacteria enter the body through cuts in the skin or the mucous membranes (skin around the eyes, nose and mouth). Infections can occur by eating contaminated meat. Ticks and flies can become infected and the disease spread by tick or fly bites. Less common means of spread include drinking contaminated water or breathing in dust from contaminated soil.

How is tularemia diagnosed?

Tularemia is diagnosed by symptoms, history of exposure and laboratory testing.

Who is at risk of tularemia infections?

Usually occupational exposures to infected animals result in infections (veterinarians and persons handling rabbit, hare and rodent carcasses).

How can tularemia be prevented?

Practise good personal hygiene. Wash hands thoroughly with soap and water after using the toilet, after handling animals, after handling raw meats and before preparing or eating food.

Practise basic food safety precautions. Thoroughly cook all meats (meat, poultry and seafood). Prevent contact of cooked foods with raw meats or poultry.

Avoid water that might be contaminated. Do not drink untreated surface water.

Follow basic precautions when handling animals. Wear waterproof gloves and thoroughly wash hands after handling animals. Insect repellents and long clothing should be used when walking through areas known to contain infected deer flies and ticks.

How is tularemia treated?

Antibiotics are effective in treating tularemia.

What is the Public Health response?

Health care providers and laboratories must notify cases of tularemia to Public Health. Public Health staff may interview the health care provider and patient (or caregivers) to find out how the infection occurred, identify other people at risk of infection, implement control measures and provide other advice.

Further Information

For additional information, contact your health care provider, local [Public Health office](#), or Telecare 811.

Useful websites:

Public Health Agency of Canada
www.phac-aspc.gc.ca