

A photograph of several pigs in a field. One pig is in the foreground, looking towards the camera, while others are in the background. The ground is covered with dry grass and some snow.

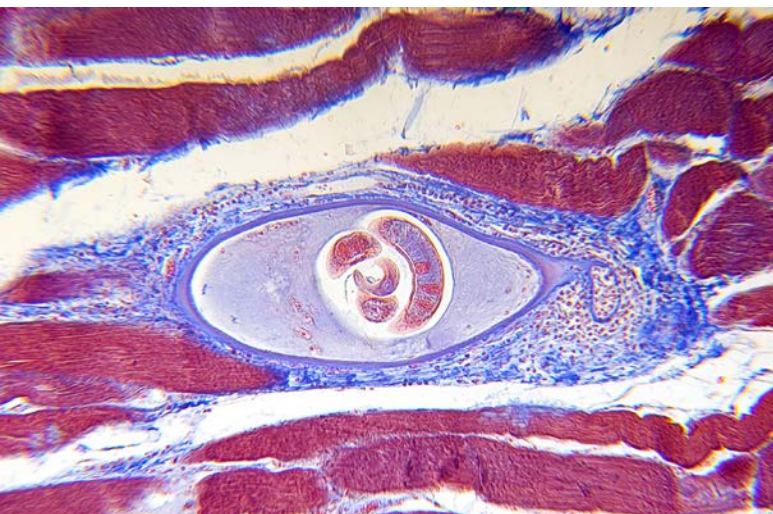
F9 | TRICHINELLA

WHAT IS TRICHINELLA?

Trichinella is a parasite that can cause the disease trichinellosis in humans. The parasite can be transmitted from affected animals to humans and pigs. Among the various species, *Trichinella spiralis* is the most significant one. It is a small roundworm and its infectious form, the larva, locates itself in cysts within the muscle of infected animals, including pigs.

WHY BE CONCERNED ABOUT TRICHINELLA?

- *Trichinella* is a food safety and public health risk, and the presence of trichinella is a barrier to trade.
- Although there is no recent evidence of *Trichinella* being present in the domestic pig population in Canada, the severity of its potential impact on human health means that we need to be ever-conscious of it and ensure that we have risk mitigation strategies in place to prevent its occurrence.
- The severity and duration of trichinellosis vary. If the infection is severe, patients may have difficulty coordinating movements and experience heart and respiratory problems. In very severe cases, death can occur.
- Less severe symptoms can include nausea, diarrhea, other gastrointestinal issues, fatigue, fever, flu-like symptoms, swelling of the face and eyes, aching joints and muscle pains.



HOW DOES INFECTION OCCUR?

- The domestic cycle of the parasite includes animals such as pigs, which are very susceptible to *Trichinella*. Within this cycle, susceptible animals can become infected by coming into contact with the parasite through infected meat, infected rodents, or contaminated soil. See Figure 1.
- Feeding food waste or garbage to pigs is another risk factor for *Trichinella* and is illegal in Canada.
- Humans can be infected by consuming undercooked meat of animals that contain cysts caused by the *Trichinella* parasite.

WHICH FARMS NEED TO PAY EXTRA ATTENTION TO TRICHINELLA PREVENTION?

- When pigs are raised outdoors, they have access to more potential sources of contamination.
- *Trichinella* can infect all mammals, and is more common in wild animal populations, such as wild pigs, bears, skunks, raccoons, rodents, and other scavenging carnivores. *Trichinella spiralis* has been shown to survive up to four months in infected, dead animals, and can also survive in soil for long periods of time. See Figure 1.
- It is much more difficult to prevent pigs that are raised outdoors from coming into contact with the parasite, especially in areas with a lot of wildlife. These systems therefore need to put additional measures in place to reduce the likelihood of infection by the parasite.
- Rodents can also be carriers of *Trichinella* and the exclusion/control of rodents is an important mitigation strategy.

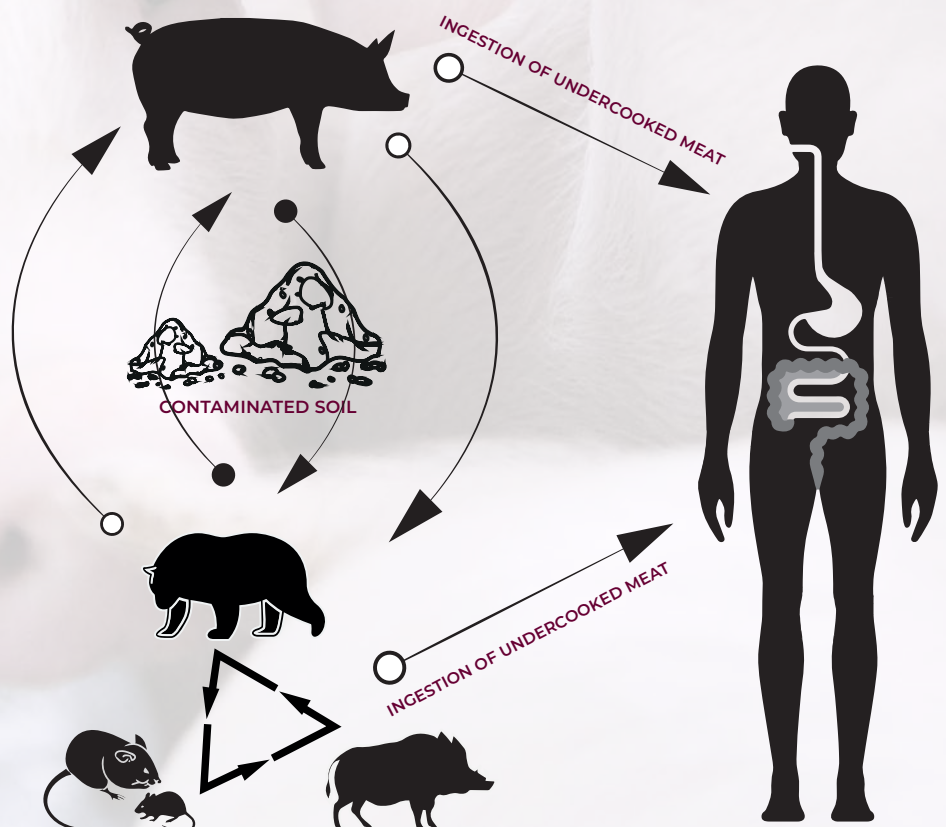


FIGURE 1

HOW DO I PREVENT TRICHINELLA ON-FARM?

- Ensure outdoor facilities are surrounded with fencing that prevents wildlife from having access to pig housing facilities.
- If wild animals are present, take appropriate actions to deter them. Prevent exposure to rodents and wildlife.
- Design and locate the feeding areas to make it difficult for wildlife and rodents to access feed.
- Be vigilant about controlling rodents. For example, use additional bait stations.



PORK PREPARATION

- Cooking pork to the recommended end internal temperature of 71°C (160°F) ensures it is safe to eat, even in the presence of *Trichinella*.

FOR LINKS TO ADDITIONAL INFORMATION ON TRICHINELLA, REFER TO THE ELECTRONIC FACT SHEET AVAILABLE ON THE CANADIAN PORK COUNCIL WEBSITE.