

<b>Agent</b>	<i>Trichinella spp</i> roundworms ( <i>T. spiralis</i> , <i>T. nativa</i> , and <i>T. pseudospiralis</i> of concern for BC)
<b>Susceptible species</b>	<ul style="list-style-type: none"> <li>• <i>T. spiralis</i>: hosts include swine, dogs, cats, rodents</li> <li>• <i>T. nativa</i>: mammalian carnivores including foxes, wolves, bears, walrus</li> <li>• <i>T. pseudospiralis</i> has been recovered from raptorial birds, wild carnivores and omnivores, including rats and marsupials</li> </ul>
<b>Occurrence in BC and the world</b>	<ul style="list-style-type: none"> <li>• <i>T. spiralis</i> found in temperate zones worldwide. <i>T. nativa</i> occurs in arctic and sub-arctic regions of North America, Europe and Asia. <i>T. pseudospiralis</i> is cosmopolitan in distribution and has been detected in Asia, North America, Europe and Australia.</li> <li>• Canada's swine herd is free from <i>T. spiralis</i></li> <li>• <i>T. nativa</i> known to affect wildlife in BC: surveys between 1951 and 1997 indicated that 35% of grizzly bears, 9.8% of cougars, 17.6% bobcats and 11.9% of black bears in addition to several other species in BC were infected with <i>Trichinella</i> sp</li> <li>• 2 documented human trichinosis outbreaks in BC (2005, 1997), both involving several people and due to consumption of bear meat</li> </ul>
<b>Transmission</b>	<ul style="list-style-type: none"> <li>• Consumption of infected tissues</li> </ul>
<b>Diagnosis</b>	Incubation period varies with infectious dose and possibly species involved.
<b>Clinical</b>	Infections in animals are usually subclinical.
<b>Laboratory</b>	<ul style="list-style-type: none"> <li>• Detect <i>Trichinella</i> larvae in muscle tissue: digestion assay, PCR, trichinoscopy</li> <li>• Detect antibodies: variety of immunological assays</li> </ul>
<b>Prevention and control</b>	<ul style="list-style-type: none"> <li>• Practice proper feeding practices: no animal carcasses or raw waste should be fed to swine (feeding of meat and meat by-products to swine is prohibited under the <i>Health of Animals Regulations</i>)</li> <li>• Prevention of contact between domestic swine and infected rodents</li> <li>• CFIA conducts abattoir surveillance of swine and horses</li> </ul>
<b>Zoonotic implications</b>	<ul style="list-style-type: none"> <li>• Human infection from consumption of raw or undercooked meat</li> <li>• Infection ranges from asymptomatic to fatal depending on the number of larvae ingested</li> <li>• Most species of <i>Trichinella</i> found in wildlife are resistant to freezing, and, therefore are not eliminated using the freezing guidelines developed for pork; instead this meat needs to be well cooked.</li> </ul>
<b>Reporting</b>	<ul style="list-style-type: none"> <li>• Trichinosis (<i>T. spiralis</i>) is a reportable disease to the Chief Veterinary Officer (CVO) in BC <ul style="list-style-type: none"> <li>○ All <u>suspect and confirmed</u> cases should be reported within 24 hours (604-556-3013)</li> <li>○ Veterinarians may be contacted by public health authorities for follow-up</li> </ul> </li> <li>• Trichinosis is a reportable disease to the CFIA <ul style="list-style-type: none"> <li>○ <u>Suspect and confirmed</u> cases of trichinosis must be immediately reported to a CFIA district veterinarian</li> </ul> </li> </ul>