

Agent	<p><i>Francisella tularensis</i> : Gram negative bacteria with 3 subspecies:</p> <ul style="list-style-type: none"> • <i>F. tularensis tularensis</i> (Type A): most virulent, • <i>F. tularensis holarctica</i> (Type B): most prevalent, found in aquatic rodents (eg beavers) • <i>F. tularensis novicida</i>: most rare, and also mildest clinical presentation
Susceptible species	<ul style="list-style-type: none"> • More than 250 species of mammals, birds, reptiles and fish can be affected • Most common in rabbits and aquatic wild rodents (beavers and muskrats) ; domestic sheep and cats particularly susceptible
Occurrence in BC and the world	<ul style="list-style-type: none"> • Tularemia occurs only in Northern hemisphere, with rare exceptions • Tularemia has been diagnosed in wildlife in BC, including 5 beavers and one case each of a snowshoe hare, muskrat and house mouse • There have been 10 documented human cases of tularemia in BC, reported between 1993 and 2009, 0-3 cases per year <ul style="list-style-type: none"> ○ Where exposure was known, infection was due to animal or insect bites
Transmission	<ul style="list-style-type: none"> • Ingestion, inhalation, arthropod–borne transfer (ticks and deer flies), or direct contact with mucous membranes and broken skin
<p>Diagnosis</p> <p>Clinical</p> <p>Laboratory</p>	<p>1-10 day incubation period</p> <p>Clinical signs variable, depending on route of transmission and species affected. May be sudden death, or signs of septicemia, depression, anorexia. Dogs and cattle appear relatively resistant</p> <ul style="list-style-type: none"> • Cats: sudden onset of fever, anorexia, lethargy, lymphadenopathy. High case fatality rate. • Sheep: late term abortion in ewes, illness and death in lambs, fever, anorexia, lethargy, lymphadenopathy <p><i>Differential diagnoses include: other causes of septicemia, acute pneumonia, tick paralysis</i></p> <p>Call the Animal Health Centre (1-800-661-9903) for diagnostic assistance if tularemia is suspected.</p> <p>Culture and PCR (Samples must be collected, handled and shipped with care due to zoonotic risk.)</p>
Prevention and control	<ul style="list-style-type: none"> • Treatment with antibiotics and supportive therapy • Prevention through tick control and prevent cats and dogs from hunting rodents
Zoonotic implications	<ul style="list-style-type: none"> • Occupational hazard for those in contact with infected animals, including hunters/trappers, farmers, conservation officers and veterinarians • Tularemia is not contagious from person-to-person
Reporting	<ul style="list-style-type: none"> • Tularemia is a reportable disease to the Chief Veterinary Officer (CVO) in BC <ul style="list-style-type: none"> ○ All <u>suspect and confirmed</u> cases should be reported within 24 hours (604-556-3013) ○ Veterinarians may be contacted by public health authorities for follow-up • Tularemia is an annually notifiable disease to the CFIA <ul style="list-style-type: none"> ○ All veterinary laboratories are required to comment on Canada's report to the OIE