

Agent	<ul style="list-style-type: none"> • Spores of <i>Bacillus anthracis</i> (spore-forming bacteria)
Susceptible species	<ul style="list-style-type: none"> • All mammals susceptible • Cattle and sheep most commonly affected, pigs, dogs and cats less susceptible
Occurrence in BC and the world	<ul style="list-style-type: none"> • There are endemic foci globally; outbreaks usually in hot summer months • In Canada, anthrax cases have occurred from Alberta to western Ontario, with repeated outbreaks in the Mackenzie Bison Range in the Northwest Territories and in Wood Buffalo National Park in northern Alberta. Last BC outbreak in livestock in 1962, anthrax is not known to be endemic in BC wildlife . • 1 documented human cases of anthrax in BC in 2001, due to contact with an imported animal hide
Transmission	<ul style="list-style-type: none"> • Most common mode of transmission in animals is the ingestion or inhalation of spores during grazing • Eating contaminated meat (carnivores and humans) • Biting flies may play a role
Diagnosis Clinical Laboratory	<p><u>Incubation period</u>: 1-14 days, usually 2-7 days</p> <ul style="list-style-type: none"> • <u>Peracute</u> (common in cattle, sheep, bison, goats): sudden onset with rapid death • <u>Acute</u> (cattle, sheep, horses, bison): fever, excitement followed by depression, respiratory difficulty, convulsions, bloody discharge from orifices, edema • <u>Chronic</u>: (pigs, dogs) pharyngeal and lingual edema, foamy blood, discharge from mouth, death from asphyxiation <p>Postmortem: absence of rigor mortis, marked bloating and rapid body decomposition. The blood is dark and thickened and fails to clot readily. Hemorrhages of various sizes are common.</p> <p><i>Differential diagnoses: lightning strike, peracute blackleg, malignant edema, bacillary hemoglobinuria, hypomagnesemic tetany</i></p> <p>DO NOT PERFORM A NECROPSY! Call the Animal Health Centre (1-800-661-9903) for diagnostic assistance if anthrax is suspected.</p>
Prevention and control	<ul style="list-style-type: none"> • Vaccination in known endemic areas is the best protection against anthrax • Information about prevention, control, carcass disposal and cleaning and disinfection is available on the CFIA website (www.inspection.gc.ca)
Zoonotic implications	<ul style="list-style-type: none"> • Human infection may occur through direct contact with infected animal or animal products (hides, wool...) , and/or inhalation/ingestion of spores. Disease in humans may take a cutaneous, pulmonary or gastrointestinal form. • Persons exposed to a potentially infected animal should seek immediate medical attention
Reporting	<ul style="list-style-type: none"> • Anthrax is a reportable disease to the Chief Veterinary Officer (CVO) in BC <ul style="list-style-type: none"> ○ All <u>suspect or confirmed</u> cases of anthrax should be reported within 24 hours (604-556-3013). ○ Veterinarians may be contacted by public health authorities for follow-up • Anthrax is a reportable disease to the CFIA <ul style="list-style-type: none"> ○ Veterinarians must <i>immediately</i> report <u>suspect and confirmed</u> cases of anthrax to a CFIA district veterinarian