

What is anthrax?

- A disease caused by a spore-forming bacterium called *Bacillus anthracis*.
- The disease occurs occasionally and can affect all mammals such as cattle, sheep, horses, goats, bison, antelope and humans.
- It is sometimes seen in animals in Saskatchewan.
- Anthrax bacteria can survive in the environment by forming spores. These spores can survive sunlight, heat and disinfectants and can live for years in soil or dried/processed hides.

How does a person get anthrax?

- A person becomes infected by skin contact, ingestion, or inhalation of spores.
- It is most commonly spread through direct contact with an infected animal or by contact with contaminated hair, wool, hides or products made from them such as rugs, drums, or brushes.
- *Bacillus anthracis* may enter the body through a break in the skin and is most commonly seen on the hands, wrists, neck, or face.
- A person can become infected by eating infected meat that is undercooked.
- Inhalation anthrax is the rarest form but is the most dangerous. A person can become infected by breathing in a large number of anthrax spores suspended in the air.
- Person to person transmission is very rare. In the case of cutaneous or skin anthrax, there is a small risk of direct infection from the infected areas on another person's body.

What are the signs and symptoms?

- Symptoms develop within a few hours to 7 days, usually within 2 to 5 days after a person has been infected. It can be as long as 60 days.
- Symptoms are determined by the route of transmission:
 - **Cutaneous or skin anthrax** - an itchy bump develops, becomes a blister and then a painless skin ulcer with a black centre. In most people the lesion heals in about 6 weeks. Some people also develop headache, muscle aches, fever and vomiting.
 - **Intestinal anthrax** - includes nausea, loss of appetite, vomiting, and fever followed by abdominal pain, vomiting blood and bloody diarrhea.
 - **Inhalation or pulmonary anthrax** - resembles the common cold and progress to severe breathing problems and shock.

How is anthrax treated?

- See your doctor for antibiotic treatment.

How is anthrax prevented?

- Use proper personal protective equipment like gloves, masks, and overalls while caring for sick animals.
- Clean or dispose of equipment and clothing that has been in contact with sick animals.
- Clean skin abrasions as soon as possible with soap and water.
- Always wash hands thoroughly:
 - after working outside in the field or garden
 - after touching animals
 - after using the toilet
 - before preparing and handling food.
- Thoroughly cook meat and other foods.
- Wash raw vegetables and fruits well.
- Industries handling raw animal materials should ensure proper dust control and adequate ventilation in facilities.
- If anthrax is suspected to be the cause of an animal death, contact your local veterinarian or the Canadian Food Inspection Agency (CFIA). They will confirm the cause of death and provide further information on the handling of the carcass and what to do with other animals.
- Control the disease in animals:
 - contact your local veterinarian or the CFIA.
 - immunize at-risk animals annually
 - symptomatic animals can be treated with antibiotics

- control of the disease in humans ultimately depends on control of disease in animals.
- There is a vaccine against anthrax, but it is not approved for general use. It is sometimes given to people who may be exposed to anthrax through their occupation. Some examples are tannery workers and military personnel.

Quick Facts

- Anthrax is a disease of animals; rarely seen in humans.
- In humans, three forms of anthrax occur depending on the route of infection:
 - skin anthrax – by direct contact with infected animal or contaminated products.
 - intestinal anthrax – by eating undercooked infected meat.
 - inhalation anthrax – by breathing in a large number of anthrax spores.
- It is treated with an antibiotic.
- Always wash your hands after contact with animals.

For more information contact your doctor
or Population and Public Health at **306-655-4612**
