BOVINE TUBERCULOSIS

Bovine Tuberculosis (bTB)



- Bovine TB (bTB) is a contagious disease caused by the bacteria *Mycobacterium bovis*.
- Cattle are the primary host for *M. bovis*, but it can infect many species.
- *M. bovis* has spilled over to wildlife in the U.S. and other countries, infecting deer, elk, black bear, bobcat, coyote, opossum, raccoons, and foxes.
- The disease is endemic in wildlife in parts of Hawaii, Michigan, Alberta, Manitoba.
 Sporadic cases in wildlife have occurred in Montana, New York, Minnesota, Indiana, and Ontario
- Humans can contract *M. bovis* by consuming unpasteurized dairy products, or through the inhalation or direct contact with the bacteria through an open wound, but cases are rare in the U.S.
- <u>bTB is not currently known to be</u> present in Montana wildlife

Why is it important?

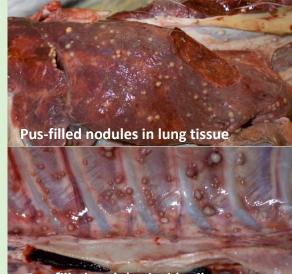
- bTB was detected in 6 Montana game farms in the early 1990's (Sheridan, Richland, Granite, Park, and Bighorn Counties).
- In 1993, a wild mule deer and two coyotes tested positive for bTB near the positive Bighorn County game farm
- More recently, bTB was detected in cattle in Alberta and South Dakota in 2016 & 2017.
- Once established in wildlife populations, the disease is very difficult and expensive to control or eradicate.
- Infected wildlife ultimately die of the disease, can become a source of infection for livestock, and could increase the risk of human exposure.

Identification of suspect animals



Abscessed lymph node

Pus in lung



Pus-filled nodules inside rib cage

Sampling animals with lesions

- Call FWP Wildlife Health Lab (406-994-6357)
- Wear personal protective equipment
- If fresh, collect blood
- Collect two sections of affected tissue place one in buffered formalin (1"x1") (DO NOT FREEZE), and one in a whirl-pak (2"x2"), double bagged and refrigerated (freeze if not shipping within 72 hrs)
- Use 10% bleach solution for 5 minutes to disinfect instruments, gloves, tables, etc.
- Incinerate carcass or double-bag and take to landfill