

# Bovine TB Surveillance in Alberta 2018

## Wildlife Information Bulletin

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In October 2016 bovine tuberculosis (bTB) was detected in a beef cow from southeastern Alberta. The Canadian Food Inspection Agency (CFIA) initiated an immediate investigation and also requested that the province consider looking for bTB in wildlife. Alberta Environment and Parks, Fish and Wildlife Branch, expanded our ongoing passive bTB surveillance of hunter-harvested deer, elk, and moose but did not find any evidence of the disease in Alberta in [2016](#).

During summer 2017, the province worked with CFIA to develop a program of active surveillance for bTB in wildlife that met international standards. The program is designed to build on ongoing disease monitoring efforts and focus on hunter-harvested elk at Canadian Forces Base (CFB) Suffield.

The goal is to test enough samples to demonstrate 95 per cent confidence in disease freedom at the 1 per cent level. With guidance from CFIA, we determined this requires testing 369 elk heads over three years (2017-2019). The target each year is ~120 elk from Wildlife Management Unit 732 (=CFB Suffield). Tissue samples collected by the province are provided to CFIA for testing.



## Passive Surveillance

### Public education

- largely delivered as in [2016](#) and [2017](#)
- online general bTB information and the situation in southeast AB
- bTB information in all daily hunter briefings at CFB Suffield

### Lymph node assessment

- ongoing examination of lymph nodes for visible evidence of bTB in all heads sampled for CWD.
- enlarged (2x normal) or abscessed nodes forwarded to Alberta Agriculture & Forestry (AF) and, if appropriate, further bTB evaluation undertaken. (Standardized protocol developed in conjunction with AF)

### General diagnostic response to individual hunter concerns

- the Wildlife Disease Unit responds to a wide range of hunter concerns associated with harvested animals. Any such situation suggestive of possible bTB infection is addressed with the hunter and, if appropriate, samples provided for lab evaluation.
- All appropriate diagnostic cases examined by the Wildlife Disease Unit consider bTB

## Active Surveillance

- sampling protocol established in conjunction with CFIA.

# Results from 2018/19

## Passive surveillance

### Education

Daily briefings provided at all CFB Suffield hunts.

Summary of 2016 and 2017 bTB surveillance provided on disease web pages.

Recreational hunters harvested 408 elk in WMU 732 in 2018/19. First Nations hunters harvested additional elk. All individuals who hunted at CFB Suffield were briefed about bTB.

### Lymph nodes

In 2017/18, 4,222 mule deer, 3,070 white-tailed deer, 361 elk, and 204 moose from across Alberta were tested for CWD. One mule deer had visible lesions consistent with possible abscess in one lymph node.

Specific to CFB Suffield: 269 of the elk harvested were tested for CWD. No lesions suggestive of bTB were reported by hunters or seen by CWD staff.

### Diagnostics

One diagnostic case had lesions that met criteria for being suggestive of bTB infection. A pronghorn harvested by a hunter had a few abscesses in the neck muscle and adjacent lymph nodes.

Bovine TB was ruled out in both the mule deer and the pronghorn with visible lesions as no acid-fast bacteria were present in either case.

## Active surveillance (Final Results)

Appropriate samples from 120 elk harvested in WMU 732 in 2018/19 were provided to CFIA for bTB testing.

August 12, 2019: All testing is complete and all elk were NEGATIVE for bTB.

### Summary

All testing is finished. No visible evidence of bTB during the 2018/19 hunting seasons in Alberta.

## Additional Information

Southeastern Alberta bovine tuberculosis info:

CFIA: [www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/tuberculosis/investigation-western-canada/eng/1477438380160/1477438380659](http://www.inspection.gc.ca/animals/terrestrial-animals/diseases/reportable/tuberculosis/investigation-western-canada/eng/1477438380160/1477438380659)

Government of Alberta, Bovine Tuberculosis in Wildlife

<https://open.alberta.ca/publications/0778535509>