

**Strategy and Policy (SP)
Ruminant Health Center
Bovine Tuberculosis and Brucellosis Surveillance Results
Monthly Reports, Federal Fiscal Year (FY) 2020**

TUBERCULOSIS

New Information

January 2020

- Routine annual surveillance testing in December in the Modified Accredited Zone (MAZ) of Michigan detected seven comparative cervical test (CCT) reactors/suspects in a small beef operation (herd #77). Six of the seven animals had gross lesions consistent with bTB, were histocompatible at NVSL and confirmed via PCR as mycobacterium tuberculosis in January 2020. Culture and whole genome sequencing are pending. This herd will remain under quarantine until it completes a test and remove program.
- One histocompatible case was identified during routine slaughter in an adult dairy cow with unofficial ID only. DNA on included tissue matched lesion. Traced to dairy herd in Texas (TX 20-1), herd test in progress.

Table 1. Bovine TB cases found through routine slaughter inspection, FY 2020.^a

Laboratory Status	New TB Cases January 1 – 31, 2020		Cumulative TB Cases October 1, 2019 – January 31, 2020		
	Fed cattle	Adult cattle	Fed cattle	Adult cattle	Total
<i>M. bovis</i> cases, confirmed	0	0	1	1	2

^a Animals detected only through routine Food Safety and Inspection Service (FSIS)/State-inspected slaughter. Animals sent to slaughter for diagnostic purposes on a 1-27 permit, “Permit for Movement of Restricted Animals” are not included.

^b Confirmed by *M. bovis* identification; or Histo compatible and PCR positive for *M. TB* complex.

December 2019

- One histocompatible case was identified during routine slaughter in a fed cow and traced to a herd in Nebraska that voluntarily sent the remaining animals to slaughter.
- One histocompatible case was identified during routine slaughter in an adult Angus cow and traced to a feedlot in Oklahoma.

November 2019

- One Texas dairy herd successfully completed its test and remove herd plan.

October 2019

- Herd #73 in MI MAZ was released from quarantine mid October 2019, following completion of the test and remove program and implementation of the herd plan, including infrastructure improvements to mitigate wildlife risk.
- A New Mexico herd was released from quarantine following completion of their test and remove program. Their annual post quarantine release assurance test is scheduled for September 2020.

Table 2. Livestock herds confirmed infected with bovine TB and under quarantine. Includes test-and-remove managed herds under quarantine from previous years. Herds will be removed when the quarantine on the TB-affected premises has been released.

Location	Date Detected	Method of Detection	Herd Type	Herd Management Plan
MI-MAZ #77	January 2020	Area Surveillance	Beef	Test-and-Remove
TX 20-1	January 2020	Slaughter Trace	Dairy	Test-and-Remove
TX 19-3	August 2019	Slaughter Trace	Beef	Test-and-Remove
NM 19	May 2019	Slaughter Trace	Dairy	Test-and-Remove
MI-AFZ #76	May 2019	Epi Investigation	Beef	Test-and-Remove
MI-AFZ #75	April 2019	Area Surveillance	Beef	Depopulated
MI-MAZ #74	April 2019	Area Surveillance	Beef	Test-and-Remove
TX 19-2	February 2019	Epi Investigation	Calf Raiser	Test-and-Remove
TX 19-1	February 2019	Epi Investigation	Dairy	Test-and-Remove
WI 18	October 2018	Slaughter Trace	Dairy	Test-and Remove
MI-MAZ #67	November 2016	Area Testing	Beef	Test-and-Remove
TX 15	June 2015	Slaughter Trace	Dairy	Test-and-Remove

BRUCELLOSIS

New Information

January 2020

- An affected Wyoming DSA (WY 20-4) bison herd was detected and placed under quarantine in November 2019. A single two year old bison heifer was found to be a serological reactor in a herd of approximately 600 (female) bison. The tissues submitted for culture were negative for *B. abortus* but the herd was designated affected in January 2020 based on serology, the epidemiological investigation, and herd history. Herd management practices indicate this herd will employ once/year testing.
- An Idaho DSA (ID 20-1) captive elk herd was detected from a MCI sample and placed under quarantine in November 2019. Initial whole herd test revealed 3 reactor elk cows, 1 suspect elk cow, and 5 reactor elk bulls. All three elk cows were culture positive for *B. abortus* in January 2020 for samples submitted to NVSL. One of the elk cows was without identification and was believed to be a wild elk that had entered the captive pens and became the transmission source. There is a herd of 510 cattle on the premises under the same owner that will be managed as a separate epidemiological unit.
- An affected Wyoming DSA (WY 20-1) beef herd detected in November 2019 has now passed two whole herd tests with negative results. Next herd test will be a post calving test in late spring.
- An affected Wyoming DSA (WY 20-3) beef herd detected in November 2019 has passed one whole herd test in early January with negative results. Next herd test will be in mid-March.

December 2019

- An affected Wyoming DSA (WY 20-2) beef herd was detected and placed under quarantine in December 2019. A single reactor heifer in a whole herd test was culture positive for *B. abortus* in samples submitted to NVSL. The heifer herd is epidemiologically separate from the cow herd and has passed two whole group tests with negative results. Next herd test will be a post calving test in late spring.
- An affected Montana DSA (MT 20-1) livestock herd was detected on an annual test and placed under quarantine in November 2019. A DSA annual herd test revealed a single three year old reactor cow. This cow was culture positive for *B. abortus* in December 2019 for samples submitted to NVSL. Herd management practices indicate this herd will employ once/year testing. All adjacent premises engage in annual testing also and were all negative.
- An affected Wyoming DSA (WY 20-3) beef herd was detected and placed under quarantine in November 2019. A single reactor cow was culture positive in December 2019 for *B. abortus* in samples submitted to NVSL. Next whole herd test will be conducted in January.

November 2019

- An affected Wyoming DSA (WY 20-1) beef herd was detected and placed under quarantine in November 2019. Two reactor heifers were found in a herd of approximately 480 head. Only one of the reactors was available for necropsy and it cultured negative for

B. abortus. The herd was designated as affected based on serology and the epidemiological investigation. This herd has passed two whole herd tests with negative results. Next herd test will be a post calving test in late spring.

- Fall testing of the Montana DSA (MT 10) livestock herd started early November and was completed in December. Testing revealed 4 suspects. Next test is scheduled for fall 2020.

October 2019

- No update.

Table 1. Livestock herds confirmed with brucellosis and under quarantine. Includes test-and-remove managed herds under quarantine from previous years. Herds will be removed when the quarantine on the brucellosis-affected premises has been released.

Location	Date Detected	Method of Detection	Herd Type ^a	Herd Management Plan
WY 20-4	January 2020	DSA Surveillance testing	Bison	Test-and-Remove
ID 20-1	January 2020	DSA Surveillance testing	Elk/Beef	Test-and-Remove
MT 20-1	December 2019	DSA Surveillance testing	Livestock	Test-and-Remove
WY 20-3	December 2019	DSA Surveillance testing	Beef	Test-and-Remove
WY 20-2	December 2019	DSA Surveillance testing	Beef	Test-and-Remove
WY 20-1	November 2019	DSA Surveillance testing	Beef	Test-and-Remove
MT 10	November 2010	DSA Surveillance testing	Livestock	Test-and-Remove