

Bovine Tuberculosis and Brucellosis Surveillance Results
Monthly Reports, Federal Fiscal Year (FY) 2014
October 1–31, 2013

New Information – Bovine Tuberculosis (TB)

- A new TB case was detected in an adult beef cow slaughtered in Texas. Tissue from this animal was compatible for mycobacteriosis, and PCR was positive. Culture is pending. The investigation is underway in Texas.
- A suspect TB case was detected in a fed heifer slaughtered in Pennsylvania. Tissue from this animal was compatible for mycobacteriosis, and PCR was negative. Culture is pending.

Update of Previously Reported Information

- TB was confirmed in a culled beef cow from San Diego County, California, in September 2013. Tissue from this animal was compatible for mycobacteriosis and PCR was positive, culture is pending. Herd testing is underway in the herd of origin.
- The final culture result for an adult Holstein cow (> 2 years of age) was *Mycobacterium kansasii*. The animal was slaughtered in Wisconsin in July 2013. Tissue from this animal was compatible for mycobacteriosis and PCR was negative.
- The final culture result for a fed steer was *M. avium* subsp. *hominissuis*. The animal was slaughtered in Kansas in August 2013. Tissue from this animal was compatible for mycobacteriosis and PCR was negative

Table 1. Bovine tuberculosis slaughter surveillance results, FY 2014.

Laboratory Status	New TB Cases October 1-31, 2013		Cumulative TB Cases October 1-31, 2013		
	Fed cattle	Adult cattle	Fed cattle	Adult cattle	Total
<i>M. bovis</i> cases, confirmed ^a	0	1	0	1	1
PCR pending	0	0	0	0	0
PCR negative, culture pending	1	0	1	0	1

^a Confirmed by PCR testing and/or culture.

Table 2. Livestock herds confirmed infected with bovine tuberculosis, FY 2014, including test-and-remove managed herds under quarantine and carried forward from previous fiscal years.

State (MI herd No.)	Federal Fiscal Year Detected	Method of Detection	Herd Type	Herd Management Plan	Origin and Number of Genotype Matches	Wildlife Surveillance Planned?	Approximate Number of Animal Traces	States With Traced Cattle
MI ^a (33)	2004	Area Test	Dairy	Test and removal	MI	Ongoing	Not applicable	Not applicable
MI ^a	2008	Surveillance	Cervid	Test and removal	MI	Ongoing	None	None
MI ^a	2008	Surveillance	Cervid	Test and removal	MI	Ongoing	None	None
MI ^a (53)	2012	Area Test	Beef	Partial depop ^b Balance of herd test and remove	New spoligo-type; VNTR ^c matches MI strains	Ongoing	73 traces of 166 animals None pending	MI
MI ^a (54)	2012	Area Test	Dairy	Test and removal	MI	Ongoing	58 traces of 163 animals	IN, MI
MI (55)	2013	Area Test	Dairy	Test and removal	MI	Ongoing	109 traces of 200 animals	MI, IN
CA	2013	Slaughter	Dairy	Test and removal	Same as FY 2002 CA case	Pending	625 EMRS traces of 2500 cattle, 77% complete	AZ (3), CA (133), FL (2), IA, ID (3), MN (2), NE, NM (1)
ND	2013	Trace	Beef	Test and removal	Same as FY 2012 TX herd	Pending	Pending	SD, TX

^a Five herds detected in previous fiscal years that remain under quarantine are included.

^b State funded partial depopulation.

^c Variable number tandem repeat

Brucellosis – Herds Remaining under Quarantine or Test-and-Remove Procedures or Awaiting Assurance Test Results

FY 2014

Montana:

- Affected beef herd: On September 2, 2013, one reactor (7-month-old bull) was detected on a whole-herd (560 head) Certified Brucellosis-Free herd recertification test in a beef herd in Park County. *Brucella abortus* biovar 1 was confirmed on October 11, 2013. This herd had been a Certified Brucellosis-Free herd since 2009. The herd is under quarantine. It has a designated surveillance area (DSA) herd plan.

Updates: An affected herd plan is in place. First whole-herd test (post reactor removal) was conducted on November 5, 2013, and all animals were negative. Next herd test is scheduled for March of 2014. Four adjacent herds have been identified and approximately 95% of these cattle have been tested. All adjacent herd animals that have been tested have been negative. Trace-in and trace-out herd identification is pending.

FY 2013

Montana

- Affected beef herd: On September 5, 2013, a single reactor (2-year-old female) was detected on a DSA change-of-ownership test of 42 head in Madison County. *Brucella abortus* biovar 1 was confirmed September 25, 2013. A whole-herd test (1116 head) detected two additional reactors and one suspect. The tissues from the suspect and additional reactors were submitted and *B. abortus* biovar one was isolated. The herd is under quarantine. It has a designated surveillance area (DSA) herd plan.

Updates: Epidemiological work has determined the exposure to the reactors occurred sometime in the spring of 2013. Next two whole-herd tests are scheduled for January and April of 2014. An affected herd plan is in place. Nine adjacent herds have been identified and 99% of these cattle have been tested. All adjacent herd animals that have been tested have been negative. Trace-in and trace-out herd identification is pending.

FY 2012

Idaho:

- Affected beef herd: A cattle herd (65 head) was traced from a slaughter sample from California. This herd was outside of the Idaho's DSA; the DSA has been expanded since detection of this herd. This herd is under quarantine with movement controls and an affected herd management plan in place. All trace-out and trace-in epidemiological investigations associated with this herd have been completed and closed. Heifer calves born in 2013 will be spayed in fall 2013. The whole herd was tested on October 11, 2013, and all animals were brucellosis test negative. A post-calving whole-herd test is planned for spring 2014.

Updates: None

- Affected privately owned bison herd: A privately owned bison herd (268 head), assembled and located in the DSA in 2010, was tested to meet Idaho's DSA requirements. Quarantine and movement controls are in place. An updated affected herd management plan is pending owner's signature. All trace-out and trace-in epidemiological investigations associated with this herd have been completed and closed. The herd test tentatively scheduled for late November 2013.

Updates: None

Montana:

- Affected privately owned bison herd: A brucellosis-affected privately owned bison herd located in Madison County within Montana’s DSA was detected on November 14, 2011. This herd is under quarantine with movement controls and an affected herd management plan in place. All trace-out and trace-in epidemiological investigations associated with this herd have been completed and closed.

Updates: Fall testing of approximately 590 head began late October.

FY 2011

Montana:

- Affected privately owned bison herd: A brucellosis-affected privately owned bison herd was detected in Gallatin County in November 2010. This herd was detected as part of Montana’s DSA herd management plan testing. This herd is under quarantine with movement controls and an affected herd management plan in place. All trace-out and trace-in epidemiological investigations associated with this herd have been completed and closed.

Updates: None

Wyoming:

- Affected bison herd: A brucellosis-affected privately owned bison herd inside the DSA (Park County) was disclosed in November 2010. This herd consists of two groups – the Main herd and the Preferred herd. The Main herd remains under quarantine with movement controls and an affected herd management plan in place. The Preferred herd has undergone four negative tests and was released from quarantine in late January 2012. All trace-out and trace-in epidemiological investigations associated with this herd have been completed and closed.

Updates: None

Table 3: Livestock herds confirmed infected with brucellosis FY 2013, 2012 and 2011

State/ FY	Method of Detection	Herd Type	Affected Herd Management Plan	Genotyping Descriptive Results	Wildlife Surveillance Planned	Animals Being Traced	States Receiving Traced Cattle/ Bison
MT 2014	Certified Brucellosis- Free Herd Recertificati on Test	Beef	Quarantine with test & remove	Clusters with other isolates recovered from both wildlife & domestic livestock from the area	Yes	?	Identification & testing of trace-in & trace-out herds is pending
MT 2013	DSA Required change-of- ownership test	Beef	Quarantine with test & remove	Common ancestor with wild elk from the same area	Yes	?	Identification & testing of trace-in & trace-out herds is pending

State/ FY	Method of Detection	Herd Type	Affected Herd Management Plan	Genotyping Descriptive Results	Wildlife Surveillance Planned	Animals Being Traced	States Receiving Traced Cattle/ Bison
ID 2012	MCI trace	Beef	Quarantine with test & remove	Similar to 2006 & 2010 ID cattle isolates	Yes	48 animals	One trace-in State: ID, 3 herds - all negative All trace-ins closed. 4 trace-out States: TX, UT, ID, & NM. All trace-outs closed.
ID 2012	DSA required test	Bison	Quarantine with test & remove	Similar to ID elk isolates	No	349 animals	5 trace-in States: ND, SD, MT, OK, ID. All trace-ins closed. One trace-out State: ID closed.
MT 2012	Epi link to 2011 bison herd	Bison	Quarantine with test and remove	Unique profile but the profile clusters with other isolates associated with GYA elk & bison	Yes	3169 animals	One trace-in State: NE closed. 6 trace-out States: MT, CO, OR, SD, NE & ID All trace-outs closed
MT 2011	DSA herd management plan testing	Bison	Quarantine with test & remove	Exact match to a 2009 MT elk isolate	Yes	7510 animals	3 trace-in States: NM, NE & MT All trace-ins closed. 5 trace-out States: MT, NE, WY, KS & ID All trace-outs closed.
WY 2011	Pre-sale test on farm	Bison	Main herd remains under quarantine with test & remove. Preferred herd released from	Similar to 2007 & 2010 WY elk & 2010-2011 cattle isolates.	Yes	870 animals	1 trace-in State: SD - closed. 4 trace-out States: MT, WY, CO & NV All trace-outs closed.