Surveillance, Preparedness and Response Services (SPRS)
Cattle Health Center
Bovine Tuberculosis and Brucellosis Surveillance Results
Monthly Reports, Federal Fiscal Year (FY) 2017

TUBERCULOSIS

New Information – Bovine Tuberculosis (TB)

March 2017
- No histo compatible cases were found during routine slaughter inspection.
- Two TB-affected beef herds were identified in South Dakota. The first was a result of tracing of three slaughter cases reported in February. The second was a result of epidemiological investigation of the first beef herd. Wildlife surveillance has been conducted in the area around these two herds.
- One TB-affected beef herd was identified in Michigan’s accredited-free zone. This herd was a result of an epidemiological investigation of a TB-affected herd in Indiana.

February 2017
- A histo compatible case reported as PCR (-) in November 2016 cultured as M. avium.
- Three histo compatible cases were identified during routine slaughter inspection.
  - Three PCR (+) cases in cows with confirmed official identification devices tracing to South Dakota.
- A TB-affected dairy herd was identified in New Mexico as a result of a slaughter case reported in December 2016. The herd is approximately 6,000 head.

January 2017
- Two histo compatible cases were identified during routine slaughter inspection.
  - PCR (+) case in a feeder with confirmed official identification device tracing to Baja California.
  - PCR (+) case in a feeder with confirmed official identification device tracing to Michigan.

December 2016
- One histo compatible case was identified during routine slaughter.
  - PCR (+) case in a cow with confirmed unofficial identification device tracing to New Mexico.
- A TB-affected dairy herd was identified in Michigan’s Modified Accredited Zone (MAZ) as a result of annual surveillance testing. The herd is approximately 275 head.
- A TB-affected beef herd was identified in Indiana as a result of area surveillance testing. The herd is approximately 50 head.

November 2016
- Two histo compatible cases were identified during routine slaughter.
  - One PCR (+) case in a feeder steer with confirmed identification devices tracing to
the Yucatan Region in Mexico.
  • One PCR (-) case in a feeder steer with no official identification submitted.
    Culture is pending.
  • A TB-affected beef herd was identified in Michigan’s MAZ as a result of annual
    surveillance testing. The herd is approximately 150 head.

October 2016
  • Three positive TB cases in fed cattle were identified during routine slaughter.
    • One with confirmed identification devices tracing to Nuevo Leon.
    • One with identification devices tracing to Michigan’s Presque Isle County north of
      Michigan’s MAZ.
    • One with identification implicating a Mexican origin animal however
      identification devices and lesion tissue did not match.

Table 1. Bovine TB cases found through routine slaughter inspection, FY 2017.\(^a\)

<table>
<thead>
<tr>
<th>Laboratory Status</th>
<th>New TB Cases March 1 - 31, 2017</th>
<th>Cumulative TB Cases October 1, 2016- March 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fed cattle</td>
<td>Adult cattle</td>
</tr>
<tr>
<td>(M. bovis) cases, confirmed(^b)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

\(^a\) Animals detected only through routine Food Safety 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.

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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Date Detected</th>
<th>Method of Detection</th>
<th>Herd Type</th>
<th>Herd Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota</td>
<td>March 2017</td>
<td>Epi Investigation</td>
<td>Beef</td>
<td>Pending</td>
</tr>
<tr>
<td>Michigan - AFZ</td>
<td>March 2017</td>
<td>Epi Investigation</td>
<td>Beef</td>
<td>Depop</td>
</tr>
<tr>
<td>South Dakota</td>
<td>March 2017</td>
<td>Slaughter Trace</td>
<td>Beef</td>
<td>Depop</td>
</tr>
<tr>
<td>New Mexico</td>
<td>February 2017</td>
<td>Slaughter Trace</td>
<td>Dairy</td>
<td>Pending</td>
</tr>
<tr>
<td>Indiana</td>
<td>December 2016</td>
<td>Area Surveillance</td>
<td>Beef</td>
<td>Pending</td>
</tr>
<tr>
<td>Location</td>
<td>Date</td>
<td>Activity</td>
<td>Species</td>
<td>Status</td>
</tr>
<tr>
<td>-----------</td>
<td>------------</td>
<td>-------------------------</td>
<td>---------</td>
<td>-------------------------</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>December 2016</td>
<td>Area Testing</td>
<td>Dairy</td>
<td>Pending</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>November 2016</td>
<td>Area Testing</td>
<td>Beef</td>
<td>Pending</td>
</tr>
<tr>
<td>IN</td>
<td>June 2016</td>
<td>Slaughter Trace</td>
<td>Beef</td>
<td>Depopulated June 2016</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>May 2016</td>
<td>Epi Investigation</td>
<td>Beef</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>April 2016</td>
<td>Area Testing</td>
<td>Beef</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>December 2015</td>
<td>Area Testing</td>
<td>Beef</td>
<td>Depopulated July 2016</td>
</tr>
<tr>
<td>Texas</td>
<td>June 2015</td>
<td>Slaughter Trace</td>
<td>Dairy</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>August 2016</td>
<td>Movement Test</td>
<td>Beef</td>
<td>Test-and-Remove</td>
</tr>
</tbody>
</table>

**BRUCELLOSIS**

**New Information**

**March 2017**
- The Wyoming DSA affected herd will conduct its next whole herd test after calving in late May.

**February 2017**
- A whole herd test of the Wyoming DSA affected herd was conducted February 20th and all animals were negative. The next whole herd test will be conducted post-calving later this spring.

**January 2017**
- The Montana DSA Livestock herd detected in November 2016 conducted a second whole herd test on January 10, 2017, and all 178 animals tested negative. The next scheduled whole herd test will be conducted post-calving in the summer of 2017.
- The Wyoming DSA affected herd will conduct its next whole herd test in late February.
- Wyoming affected bison herd (off quarantine November 2015) conducted their assurance test on January 8, 2017. All animals tested negative.

**December 2016**
- The next herd test of the livestock herd detected in Montana’s DSA in November 2016 is...
scheduled for the second week in January 2017.

- Fall testing of a brucellosis-affected livestock herd detected in November 2010 in Montana’s DSA was completed December 7, 2016. Eight reactors total were found in the herd of ~4200 head. Next test is scheduled for fall 2017.
- The Wyoming DSA Brucellosis affected herd was tested on December 19-20, 2016. All 292 cattle tested were negative.

November 2016

- A new affected livestock herd was detected in the Montana DSA using DSA herd plan surveillance. Culture of *B. abortus* biovar 1 was confirmed by the National Veterinary Services Laboratories (NVSL) in two young bulls out of a herd of 180 head on November 22, 2016.

October 2016

- The Wyoming DSA Brucellosis affected herd was tested October 31–November 1, 2016. 404 head were tested with 2 reactors, serology confirmed at NVSL.

**Table 1.** Brucellosis cases found through routine slaughter inspection – cattle, FY 2017 Year to Date.a

<table>
<thead>
<tr>
<th>Laboratory Status</th>
<th>New Brucellosis Cases March 1 - 31, 2017</th>
<th>Cumulative Brucellosis Cases October 1 2016 – March 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fed cattle</td>
<td>Adult cattle</td>
</tr>
<tr>
<td><em>B. abortus</em> reactor cases</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

a Animals detected only through routine FSIS/State slaughter inspection. Animals sent to slaughter for diagnostic purposes on a 1-27 permit, “Permit for Movement of Restricted Animals” are not included.

**Table 2.** 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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Date Detected</th>
<th>Method of Detection</th>
<th>Herd Typea</th>
<th>Herd Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT-DGA</td>
<td>November 2016</td>
<td>DSA Surveillance testing</td>
<td>Livestock</td>
<td>Test and remove</td>
</tr>
<tr>
<td>WY-DGA</td>
<td>November 2015</td>
<td>Surveillance Testing</td>
<td>Cattle</td>
<td>Test-and-Remove</td>
</tr>
</tbody>
</table>
a. Current Montana state statute prevents public disclosure of herd type. Previous herd type identification is “grandfathered” in prior to this law.