TUBERCULOSIS

New Information – Bovine Tuberculosis (TB)

March 2019

- One histo compatible case was identified during routine slaughter.
  - PCR (+) case in a cull beef cow.
  - Official identification matched the lesion tissue.
  - Epi investigations are underway.
  - Whole genome sequencing (WGS) is unrelated to any other U.S. isolate in the National Veterinary Services Laboratories (NVSL) data bank.

February 2019

- A TB-affected dairy, ~10,000 head, was identified in Texas as a result of epi investigations of exposed cattle from known TB-affected dairies. WGS associated with this herd did not match the WGS of the previously known TB-affected dairies, which indicates this dairy was infected from a different, unidentified source.
- A TB-affected calf raising facility was identified as a result of an epi investigation of exposed calves from the newly identified TB-affected dairy. The calf raiser has ~70,000 calves, with ~14,000 identified as exposed.

January 2019

- A small TB-affected beef herd, ~100 head, was identified in North Dakota, as a result of epi investigations of the cow slaughter cases identified in November and December. The herd has been depopulated.
- One histo compatible case was identified during routine slaughter.
  - PCR (+) case in a 2 year old dairy heifer. Official identification matched the lesion tissue. Epi investigations are underway.

December 2018

- Two histo compatible cases were identified during routine slaughter.
  - PCR (+) case in a cow
    - Official identification device did match lesion tissue.
    - This cow was slaughtered late November and histo results were obtained in early December.
  - PCR (+) case in a fed steer
    - No ID was submitted.
- WGS is unrelated to any other U.S. isolate in the NVSL data bank.
- ID matching was re-run on the histo (+)/PCR (+) case reported in November and a match was reported in early December.

**November 2018**

- One histo compatible case was identified during routine slaughter.
  - PCR (+) case in a cow.
  - Official identification device did not match lesion tissue.

**October 2018**

- One TB-affected beef herd was identified in Michigan’s Modified Accredited Zone (MAZ) as a result of annual surveillance testing. This herd is approximately 260 head.
- A TB-affected dairy was identified in Wisconsin as a result of investigation of the September 2018 slaughter case. The herd is approximately 2,000 head.

**Table 1**. Bovine TB cases found through routine slaughter inspection, FY 2019.

<table>
<thead>
<tr>
<th>Laboratory Status</th>
<th>Fed cattle</th>
<th>Adult cattle</th>
<th>Fed cattle</th>
<th>Adult cattle</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>M. bovis</em> cases, confirmed</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

*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.

**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>Texas</td>
<td>February 2019</td>
<td>Epi Investigation</td>
<td>Calf Raiser</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>Texas</td>
<td>February 2019</td>
<td>Epi Investigation</td>
<td>Dairy</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>October 2018</td>
<td>Slaughter Trace</td>
<td>Dairy</td>
<td>Test-and Remove</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>Date</td>
<td>Surveillance Type</td>
<td>Species</td>
<td>Testing Method</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>-------------------</td>
<td>---------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Texas</td>
<td>October 2018</td>
<td>Area Surveillance</td>
<td>Beef</td>
<td>Test-and Remove</td>
</tr>
<tr>
<td>South Dakota</td>
<td>November 2017</td>
<td>Slaughter Trace</td>
<td>Beef</td>
<td>Depopulated</td>
</tr>
<tr>
<td>New Mexico</td>
<td>February 2017</td>
<td>Slaughter Trace</td>
<td>Dairy</td>
<td>Test-and Remove</td>
</tr>
<tr>
<td>MI-MAZ</td>
<td>November 2016</td>
<td>Area Testing</td>
<td>Beef</td>
<td>Test-and Remove</td>
</tr>
<tr>
<td>Texas</td>
<td>June 2015</td>
<td>Slaughter Trace</td>
<td>Dairy</td>
<td>Test-and Remove</td>
</tr>
</tbody>
</table>

**BRUCELLOSIS**

**New Information**

**March 2019**

- No update.

**February 2019**

- One brucellosis-affected beef herd in Wyoming’s Designated Surveillance Area (DSA) had second whole herd test performed mid February. All ~660 head tested negative. Next whole herd test will be a post calving test in May/June.
- The other brucellosis-affected beef herd in Wyoming’s DSA had second whole herd test performed early February. All of ~700 head tested negative. Next whole herd test will be a post calving test in June.

**January 2019**

- No update.

**December 2018**

- Fall testing of the Montana DSA livestock herd was completed in early December 2018. Thirty-three (33) reactors and three (3) suspects were found in the herd of ~2670 head. The next test is scheduled for Fall 2019.

**November 2018**

- Two brucellosis-affected beef herds were identified in Wyoming’s DSA as a result of herd plan testing.
  - A small beef herd of ~50 head voluntarily depopulated.
- A previously affected beef herd of ~700 head was released from quarantine in June 2017.

**October 2018**

- One brucellosis-affected beef herd was identified in Wyoming’s DSA as a result of herd plan testing. This herd is approximately 660 head.

**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.

<table>
<thead>
<tr>
<th>Location</th>
<th>Date Detected</th>
<th>Method of Detection</th>
<th>Herd Type&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Herd Management Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>WY-DSA</td>
<td>November 2018</td>
<td>DSA Surveillance Testing</td>
<td>Beef</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>WY-DSA</td>
<td>November 2018</td>
<td>DSA Surveillance Testing</td>
<td>Beef</td>
<td>Test-and-Remove</td>
</tr>
<tr>
<td>ID-DSA</td>
<td>November 2017</td>
<td>DSA Surveillance Testing</td>
<td>Beef</td>
<td>Test-and-remove</td>
</tr>
<tr>
<td>MT-DSA</td>
<td>November 2010</td>
<td>DSA Surveillance testing</td>
<td>Bison</td>
<td>Test-and-Remove</td>
</tr>
</tbody>
</table>

<sup>a</sup> Current Montana state statute prevents public disclosure of herd type. Previous herd type identification is “grandfathered” in prior to this law.