NVSL Salmonella, Mycoplasma and Pasteurella multocida Update

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NVSL Salmonella Update

- NPIP Group D and Salmonella serotyping proficiency tests to be sent 11/03/2015
Salmonella Serotyping

- 15,353 isolates submitted in 2014
  - 4,897 clinical
  - 6,687 non-clinical
  - 3,769 research and other*
- 5,876 from chicken/turkey sources
# Most Common Serotypes – Chickens 2014

<table>
<thead>
<tr>
<th>Rank</th>
<th>Clinical</th>
<th>Non-Clinical</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Enteritidis</td>
<td>Senftenberg</td>
</tr>
<tr>
<td>2</td>
<td>Kentucky</td>
<td>Mbandaka</td>
</tr>
<tr>
<td>3</td>
<td>Infantis</td>
<td>Kentucky</td>
</tr>
<tr>
<td>4</td>
<td>Typhimurium</td>
<td>Enteritidis</td>
</tr>
<tr>
<td>5</td>
<td>Senftenberg</td>
<td>Typhimurium</td>
</tr>
</tbody>
</table>
**Salmonella Group D**

- Chicken submissions, clinical + non-clinical
- 377 Group D isolates
- 343 (91%) were SE
- Other 9%: Javiana, Berta, Ouakam, and Dublin
## Most Common Serotypes - Turkeys 2014

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<th>Rank</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Senftenberg</td>
<td>Senftenberg</td>
</tr>
<tr>
<td>2</td>
<td>Heidelberg</td>
<td>Anatum</td>
</tr>
<tr>
<td>3</td>
<td>Albany</td>
<td>Hadar</td>
</tr>
<tr>
<td>4</td>
<td>Ouakam</td>
<td>Muenster</td>
</tr>
<tr>
<td>5</td>
<td>Montevideo</td>
<td>Agona</td>
</tr>
</tbody>
</table>
Molecular Typing: SE assay

- SE rule out testing for FDA egg rule
  - Receipt of samples that were not typeable via classic testing
    - Rough O:g,m:-
    - 9,12:poorly-motile
    - 9,12:non-motile
- xMAP *Salmonella* assay to determine the presence of *sdf* gene
  - *sdf* specific to SE
Salmonella Pullorum

- 437 *Salmonella* Pullorum serological tests
- 2,570 mL *Salmonella* Pullorum tube antigen provided
- 158 mL *Salmonella* Pullorum stained microtiter antigen provided
- 478 mL of control antisera provided
NVSL *Pasteurella multocida* Update

- 128 isolates for somatic typing
- 67 isolates for DNA fingerprinting
- 53 vials of antisera supplied
- 9 reference isolates supplied
NVSL Avian *Mycoplasma* Update

- 423 Hemagglutination inhibition tests
- 485 mL of Hemagglutination antigen supplied
  - 85 mL MG
  - 170 mL MM
  - 230 mL MS

- 648 mL of control antiserum supplied
  - 246 mL MG
  - 34 mL MM
  - 212 mL MS
  - 156 mL Negative control
Contact Information

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Questions?