UPDATES ON EQUINE PIROPLASMOSIS, EQUINE INFECTIOUS ANEMIA, AND EQUINE ARBOVIRUSES

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EP Surveillance Testing by Year

25,942 horses tested in 2018
Over 379,000 horses tested since 2009
EP Positive Case Counts by Year

427 EP-positive horses since 2009
(370 QH racehorses, 14 TB racehorses, 33 previous imports, 10 other)
EP 2018: 31 new cases of *T. equi*

28 QH racehorses, 3 horses illegally moved from Mexico

<table>
<thead>
<tr>
<th>State</th>
<th># T. equi-positive</th>
<th>Risk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Georgia</td>
<td>15</td>
<td>QH racehorses; 4 dual infected with EIA</td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>Illegally moved from Spain via Mexico</td>
</tr>
<tr>
<td>Iowa</td>
<td>2</td>
<td>QH racehorses; both dual infected with EIA</td>
</tr>
<tr>
<td>Texas</td>
<td>13</td>
<td>11 QH racehorses; 2 horses illegally moved from Mexico</td>
</tr>
</tbody>
</table>
EP Ongoing Challenges

• Limited surveillance in high risk population
• Iatrogenic transmission
• Education and outreach
• Frequent change of ownership and movement
• Sanctioned ↔ Unsanctioned
• Movement into different disciplines
Figure 2. Reported numbers of EIA tests and positive cases in the United States, 2000-2017
2017 EIA Cases: 80 positive horses, 38 positive premises
### EIA Cases: 2018

39 EIA cases confirmed in 15 states (27 QH race)

<table>
<thead>
<tr>
<th>State</th>
<th># EIA Infected</th>
<th>Risk Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>1</td>
<td>Slaughter channel</td>
</tr>
<tr>
<td>Arkansas</td>
<td>2</td>
<td>Slaughter channel, Mule</td>
</tr>
<tr>
<td>Colorado</td>
<td>2</td>
<td>Slaughter buyer, unknown</td>
</tr>
<tr>
<td>Florida</td>
<td>1</td>
<td>16 y.o. QH - unknown</td>
</tr>
<tr>
<td>Georgia</td>
<td>6</td>
<td>QH race bushtrack</td>
</tr>
<tr>
<td>Illinois</td>
<td>2</td>
<td>QH race bushtrack</td>
</tr>
<tr>
<td>Indiana</td>
<td>1</td>
<td>QH race bushtrack</td>
</tr>
<tr>
<td>Iowa</td>
<td>2</td>
<td>QH race bushtrack</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1</td>
<td>QH race</td>
</tr>
<tr>
<td>Maryland</td>
<td>1</td>
<td>20 y.o. TB polo - unknown</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>1</td>
<td>Long term cohort to + horse</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>1</td>
<td>16 y.o. paint - unknown</td>
</tr>
<tr>
<td>Oregon</td>
<td>1</td>
<td>QH race (foal of + mare)</td>
</tr>
<tr>
<td>Tennessee</td>
<td>1</td>
<td>9 y.o. paint - unknown</td>
</tr>
<tr>
<td>Texas</td>
<td>16</td>
<td>14 QH race, 1 illegal import, 1 unknown</td>
</tr>
</tbody>
</table>
2017: EEE - 86 Cases
2017: WNV - 307 cases
2018 Case Counts via ArboNET

As of October 15, 2018:
- EEE – 83 equine cases in 10 states
- WNV – 231 equine cases in 34 states

Challenges in reporting
- August reporting cycle
- Lag time/absence of data entry
- Incorrect classification of cases
- Absence of epidemiology information
Ongoing issues: EEE, WNV

- Booster vaccination required
- Cases in unvaccinated or under-vaccinated equids
- Increase in cases during economic downturns
- Under-reporting of cases
VSV updates

- No new cases of VS in the U.S. since February 2016 (close of the 2015 outbreak)
- Watching for new incursions moving north from Mexico
- **VSV Grand Challenge research project with USDA-ARS**
  - 5 ARS labs and APHIS-VS
  - Multidisciplinary study
  - Evaluate the interactions of climatic, ecological, hydrological, virus, and host factors in disease incursion and spread
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