West Nile Virus
Equine Surveillance 2004

Summary and Challenges

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Outline

• Summary of equine WNV activity
• Issues / Challenges
• Short and Long-term Solutions
• Outstanding Issues

• Discussion
2004* Equine WNV Data

• 535 WNV infected horses (32 Counties)

• 228 (43%) died / euthanized

• 12 properly vaccinated, 113 improperly vaccinated, 392 unvaccinated, 18 unknown

• First positive finding of WNV in 3 counties
  • Alpine, Colusa, Inyo

* as of Nov. 18, 2004
536* WNV confirmed cases as of November 18, 2004

- Green: Horses Tested Negative/Pending
- Pink: Horses Tested 1 or More Positive
- Gray: No Horses Tested
- Red Dot: Confirmed Case Location

*Number of positive cases displayed in the map may differ from those listed due to delay in receiving exact horse location.
## Equine WNV Data

<table>
<thead>
<tr>
<th>Year</th>
<th># Positive</th>
<th># Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>2003</td>
<td>1</td>
<td>205</td>
</tr>
<tr>
<td>2004*</td>
<td>535</td>
<td>1273</td>
</tr>
</tbody>
</table>

* as of Nov. 18, 2004
Equine WNV Surveillance

Neurological Horse

PH lab
  Head, brain
  Rabies testing

CAHFS
  Head, sera, tissues
  Necropsy, PCR, IgM Capture ELISA

CDFA
  Reportable disease to CDFA
  Case confirmation, questionnaire

DHS
  Update state database, report address, onset to local agencies

LHD

MVCD
Equine WNV Issues - 2004

- Incomplete data on sample submission form
  - Lack of info to determine if met case definition and determine location of horse
- Obtaining test results from commercial labs
  - Less familiar with reportable disease issues
- Under reporting by DVMs
  - After seeing a few cases, may make clinical Dx only
- Workload
  - Data collection / analysis
  - Few dedicated staff
  - Timely data dissemination to local agencies
- Rabies testing
  - Many seropositive horses euthanized, no rabies testing, late Local Health Dept. notification, barriers to having heads submitted
Equine WNV Solutions - 2004

- **Incomplete data on lab submission form**
  - Lack of info to determine if met case definition
  - **Letters/communication to DVMs stressing the importance of completing lab form completely**
  - **Phone call to DVM/owners to get info and administer case questionnaire**

- **Workload**
  - Data collection / analysis
  - Few dedicated staff
  - Timely data dissemination to locals
  - **Central database, streamlined questionnaire intake, redirected staff, routine location reports to local agencies**
Equine WNV Solutions - 2004

- Obtaining test results from commercial labs
  - Less familiar with reportable disease issues
  - Communication with private labs to assure timely reporting

- Under reporting by DVMs
  - After seeing a few cases, may make clinical Dx only
  - Letters/communication to DVMs
  - Subsidized testing costs
Equine WNV Solutions - 2004

Rabies testing

• Many seropositive horses euthanized, no rabies testing, late Local Health Dept. notification, barriers to having heads submitted

• Outreach to veterinarians advising them of the state rabies regulations

• Multiple discussions with health departments / labs on protocols – significant differences among jurisdictions regarding notification / testing criteria

• Subsidized rabies testing / equine necropsy costs
Outstanding Issues / Plans - 2005

- **Rabies testing**
  - Working with CCLHO for consensus on protocols
  - Possibly subsidizing specimen transport costs

- **Staffing / Workload**
  - Hiring additional dedicated staff
  - Increase outreach / education
  - Preparation for large outbreak

- **Data Dissemination**
  - Frequency
  - Level of detail
  - Method
  - Usefulness of data to local agencies?

- **Under reporting by DVMs**
  - Outreach, possibly subsidizing costs
Contact Information

- **California Dept. of Food and Agriculture**
  - [http://www.cdfa.ca.gov/ahfss/ah/wnv_info.htm](http://www.cdfa.ca.gov/ahfss/ah/wnv_info.htm)
  - 916-654-1447

- **California Dept. of Health Services**
  - [http://www.westnile.ca.gov](http://www.westnile.ca.gov)
  - 916-552-9740
Questions / Discussion