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## EQUINE PIROPLASMOSIS, VESICULAR STOMATITIS, AND EQUINE ARBOVIRUS UPDATES

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## EP 2016: 68 new cases of *T. equi*

- Of the 68 new EP cases, 67 were in QH racehorses with involvement of iatrogenic transmission, 1 was an Azteca mare suspected of illegal movement from Mexico
  - Arkansas - 2 bushtrack QH (1 co-infected with EIA), 1 Azteca in same neighborhood; suspected illegal movement from Mexico
  - Arizona – Cluster of 3 QH racehorses
  - Illinois – 1 QH racehorse
  - New Mexico – 1 QH racehorse
  - Tennessee – Cluster of 17 QH bushtrack; unrelated cluster of 7 QH bushtrack
  - Texas – Cluster of 10 – QH racehorses associated with same trainer – some recently raced in Louisiana; unrelated cluster of 4 QH racehorses; new single positive QH racehorse (Sept) under investigation
  - Wyoming/Utah – Cluster of 21 QH racehorses



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## EP Current Issue – Reduction in Overall Surveillance Testing and Loss of Testing at Sanctioned QH Racetracks

Year	Total Horses Tested	# EP Positive
2009	9,170	9
2010	76,803	143
2011	75,680	31
2012	45,617	6
2013	38,939	27
2014	27,781	31
2015	23,212	16
2016 (Jan-Sept)	17,507	68
<b>Total</b>	<b>314,709</b>	<b>331</b>

\*11 states had EP test requirements to enter racetracks in 2010, now only 4 states have current EP test entry requirements (NM, TX, UT, WY)

\*Of the 331 positive horses found, 293 were racehorses (280 QH race)



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## EIA Case Update

- Increase in EIA cases found in QH racehorses over the past few years
- Increase in EP/EIA dual infections found
- Example: California has identified 37 EIA infected QH racehorses since 2013; 10 of them were EP/EIA dual infected
- Recent findings of EIA cases in historically EIA-negative states (NY, PA, Pacific NW)



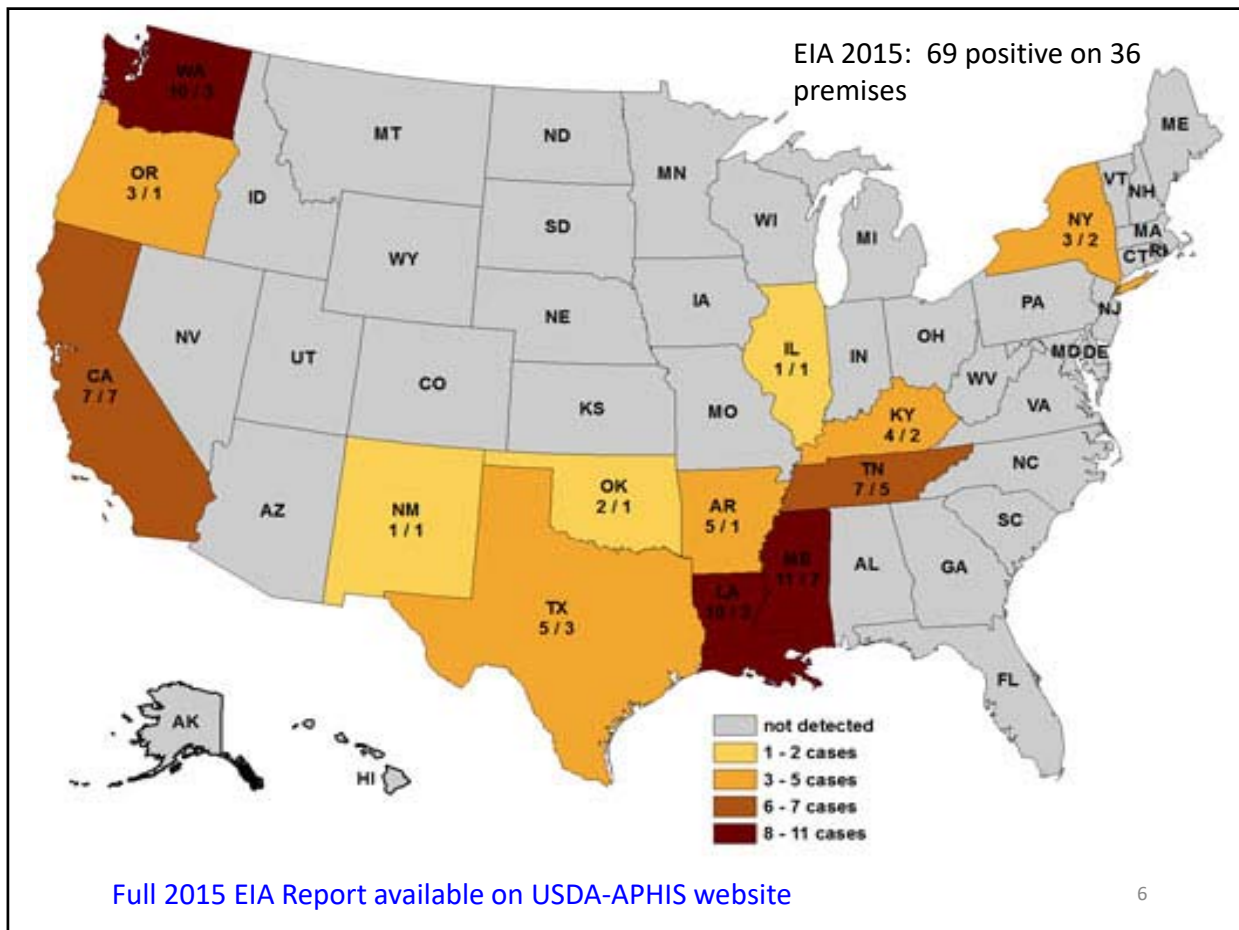
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## Recent EIA/EP cases – California

Is this the new face of EIA?



Photos courtesy of  
Dr. Katie Flynn,  
CDFA





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## EIA Cases: 2016

- 36 EIA cases confirmed so far by NVSL in 2016 in 11 states (more cases likely confirmed at the state-level and not yet reported)
- Interesting findings include:
  - 2 separate unrelated cases in PA (1<sup>st</sup> reported EIA cases in PA in more than 10 years)
  - 2 EIA clusters in Amish horses in NY – historically untested population
  - 1 case in FL with traceback to tribal lands – large untested population where offers to provide free testing have been declined
  - QH and bushtrack racehorse cases in AL, AR, OR, TX

# Vesicular Stomatitis Update

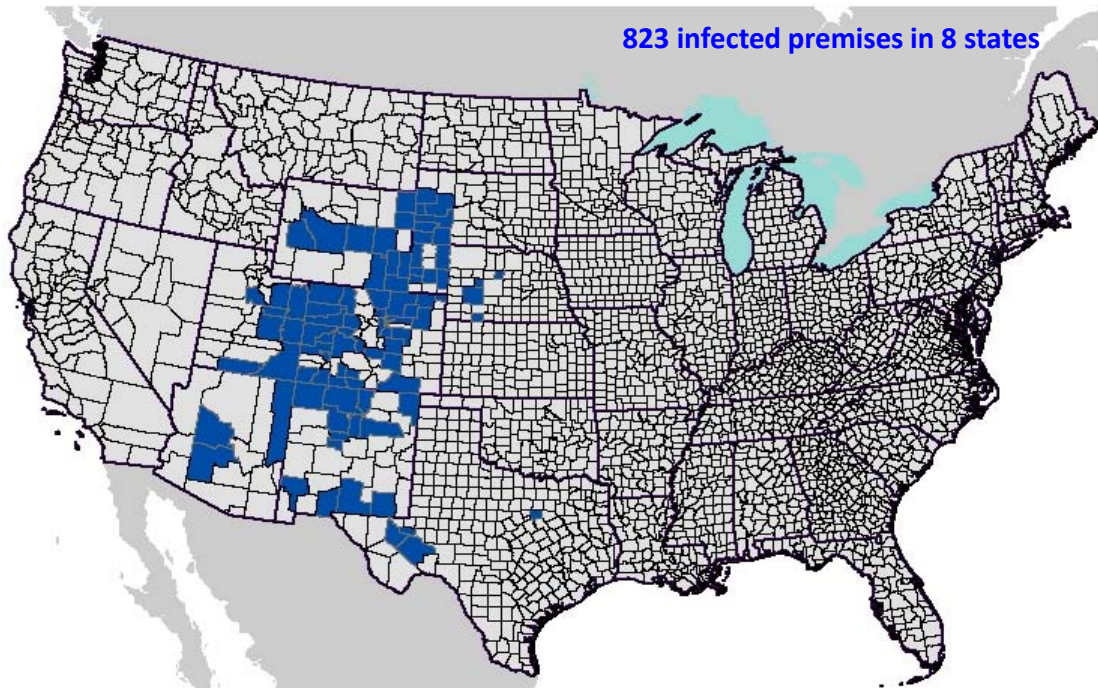






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## 2015 VSV Outbreak: April 2015-March 2016





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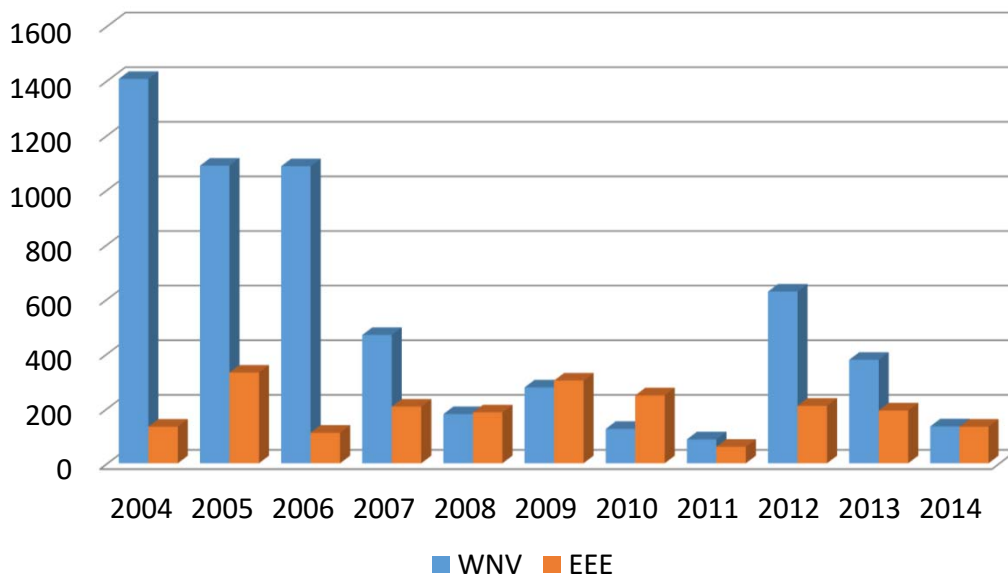
## We prepared for VSV 2016, but....

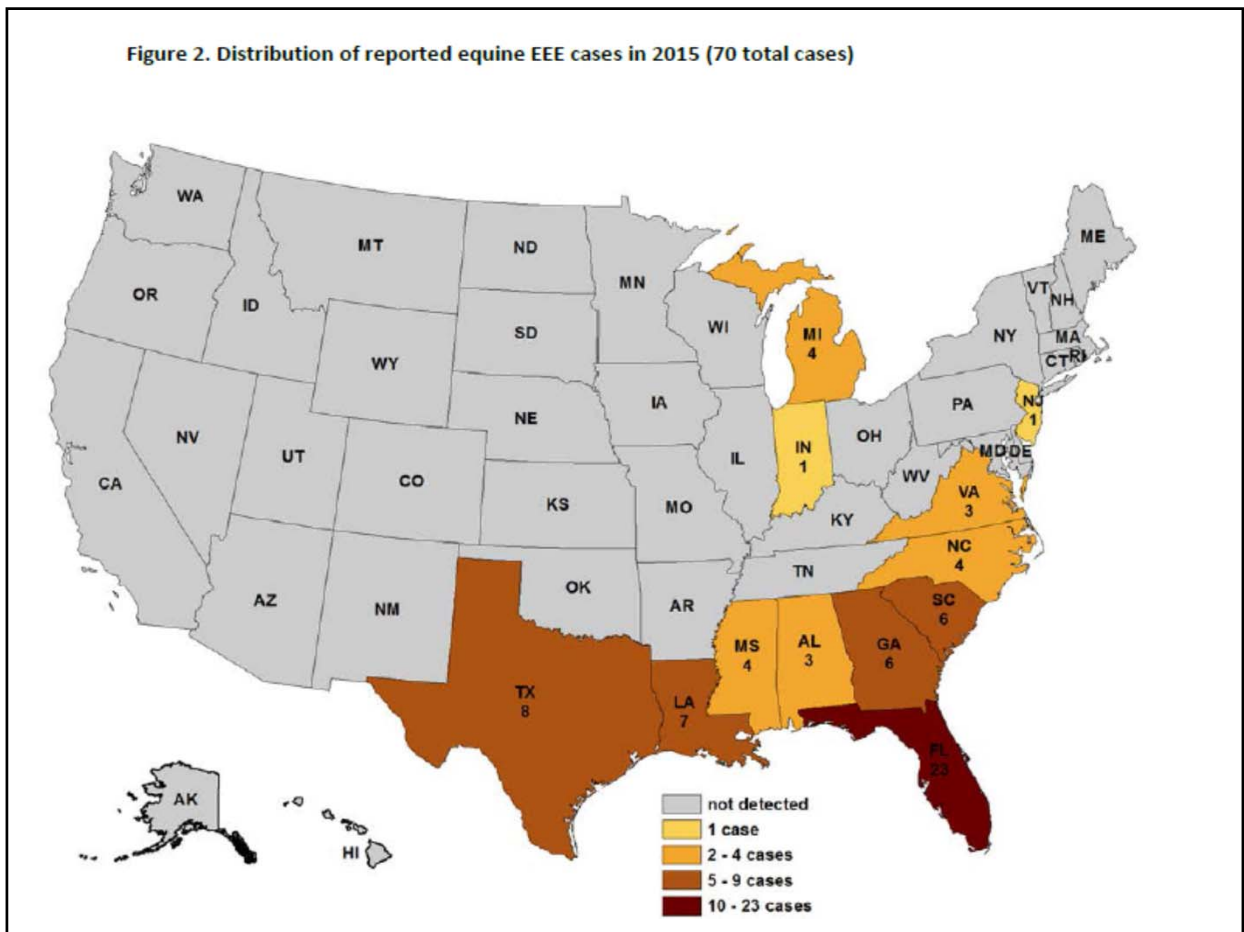
- No confirmed VSV cases have been identified to date
- 2016 VSV Field Guidance went out to state/federal animal health officials in early June
- Same response procedures used in 2015
- Reminders:
  - Suspicion of VSV in any species is still reportable to state and federal animal health officials in the U.S. and necessitates action outlined in the 2016 VSV Field Guidance.
  - Suspect equine cases in currently VSV-negative states still need to be assigned an FAD number and have samples collected for submission to NVSL-Ames. More flexibility in investigation and management of equine cases occurs in confirmed VSV-positive states.



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## Historic EEE/WNV Case Counts









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## 2016 Case Counts via ArboNET

- As of October 4, 2016:
  - EEE – 81 equine cases reported in 12 states
  - WNV – 183 equine cases reported in 26 states
- Challenges in reporting process
  - CDC contact begins providing ArboNET data to APHIS in August each year
  - Validation of data through state animal health officials shows significant lag time in ArboNET data entry or absence of data entry in some states
  - Occasional issues with incorrect classification of cases
  - No epidemiology information available



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## Current issues with EEE and WNV

- Vaccination is highly protective, but regular booster vaccination is necessary
- Cases are in unvaccinated or under-vaccinated equids
- Trends toward increase in cases during economic downturns – reduced spending on vaccinations
- Cases under-reported (case definition requires diagnostic testing - \$\$)



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