

Equine Disease Surveillance and Data Management Innovations



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Overview of Topics

- Equine regulatory diseases tracked beyond NAHRS reporting
- Surveillance streams
- Equine Disease Communication Center (EDCC)
- Equine Arbovirus Dashboard
- Equine Infectious Anemia testing data pathways and improvements
- Equine disease outbreak data sharing
- Under development: Equine Health Dashboard

Equine Regulatory Diseases Tracked (beyond NAHRS reporting)

- State reportable outbreaks: EHM, strangles, EVA
- Domestic equine arboviral encephalidities (EEE, WNV)
- Equine infectious anemia (EIA)
- Equine piroplasmiasis (EP)
- Vesicular Stomatitis Virus (VSV)
- Contagious Equine Metritis (CEM)
- Emerging/unknown signaled by mortality events

Equine Infectious Disease Surveillance Streams

Disease	Method of Surveillance	Volume
State reportable (EHM, strangles, EVA, etc)	Passive: identified by private practitioner on clinical signs and diagnostics	Sporadic depending on disease
Domestic arboviruses (EEE, WNV)	Passive: identified by private practitioner on clinical signs and diagnostics	Several hundred cases confirmed per year, unknown total testing
Equine Infectious Anemia (EIA)	Active: testing for interstate movement, entry into shows/events, change of ownership	Averaging 1.3 million tests per year nationwide
Equine Piroplasmiasis	Active and Passive: testing to enter some sanctioned racetracks, export testing; clinical suspects	Averaging 20,000 tests per year nationwide
FADs and Emerging (VSV, CEM, mortality events)	Passive: Private practitioner reports to SAHO/AVIC based on suspected clinical presentation	Sporadic unless outbreak identified

Equine Disease Communication Center

equinediseaseecc.org



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BREAKING NEWS

USDA Update on Federal Response to New World Screwworm

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A photograph of a horse race in progress, showing several horses and jockeys galloping across a grassy field. The image is slightly blurred to convey motion.

Disease Alerts

EDCC: primary public reporting pathway for state reportable diseases with diagnostic confirmation

Strangles

Suwannee County, FL	Outbreak Identifier: 7152	
Alert ID: 4675	October 22, 2025	Confirmed Case(s) - Official Quarantine

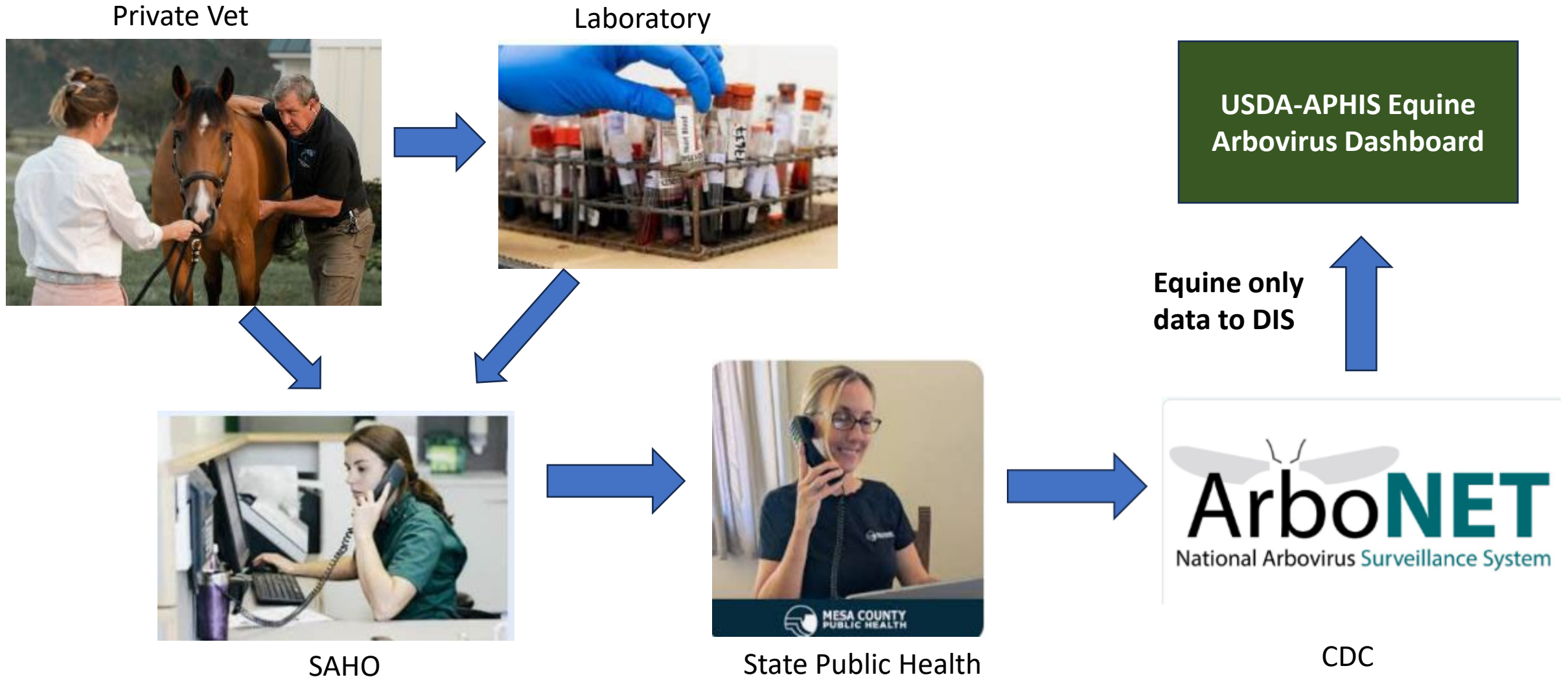
Source: FDACS Veterinary Medical Officer

Number Confirmed: 1;
Number Exposed: 7;
Facility Type: Private Facility;

Horse 1:
Age: 15; **Gender:** Mare; **Breed:** Pony; **Onset of Clinical Signs:** 10/14/2025; **Clinical Signs:** Cough, ocular and nasal discharge.; **Horse Status:** Recovering; **Vaccination Status:** Status Unknown;

Comments: This is Florida's 29th case of Strangles for 2025;

Domestic equine arboviruses reporting pathway



Equine Arbovirus Dashboard

Calendar Year: 2025, Latest Report: 9/30/2025

Choose Year

2025

Choose State

(All)

FAQ

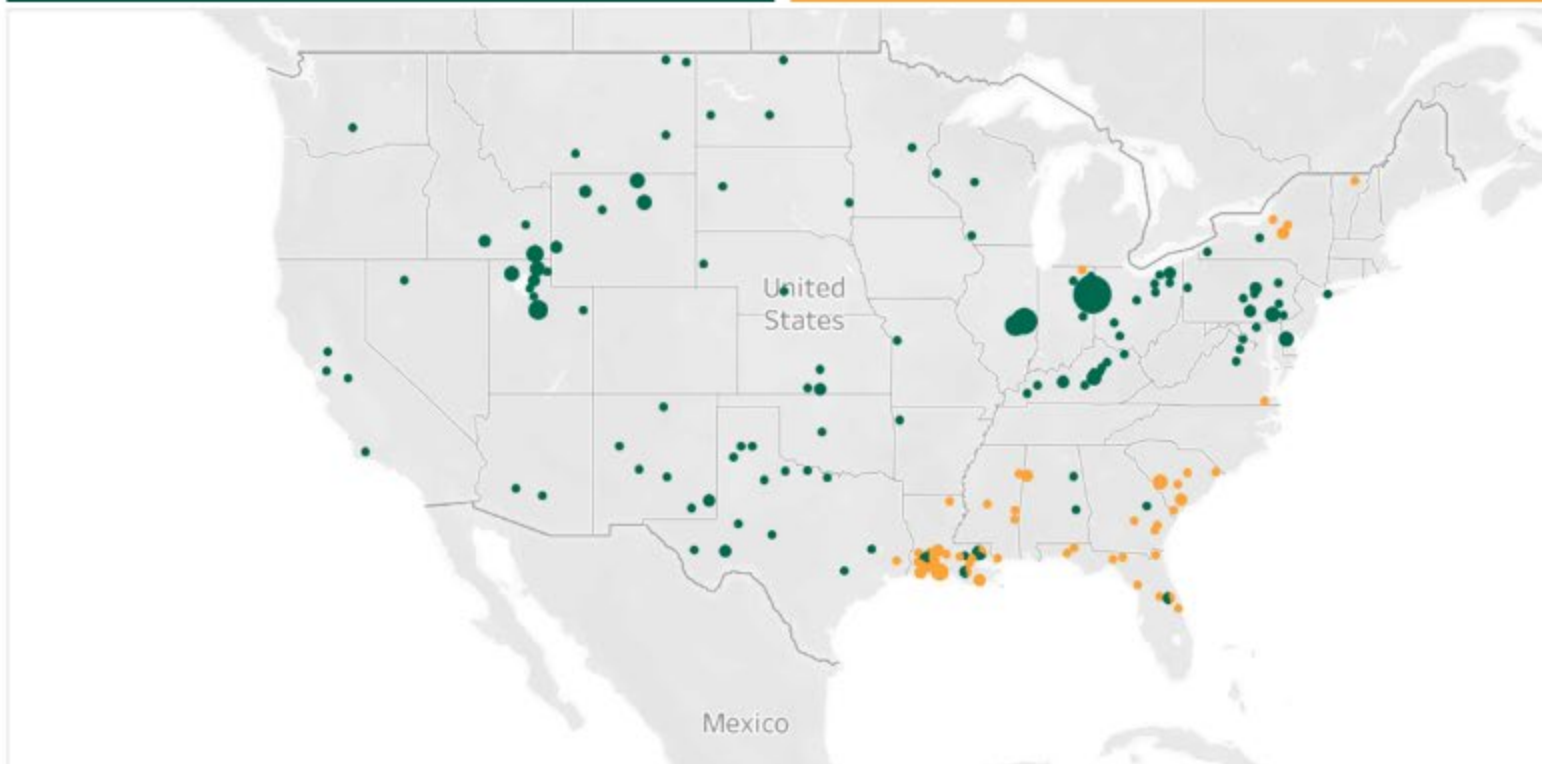
Download Data

186

West Nile Virus (WNV)
reported cases

61

Eastern Equine Encephalitis (EEE)
reported cases



<https://www.aphis.usda.gov/livestock-poultry-disease/equine/arbovirus-dashboard>

EIA Testing Data Pathways

- Nearly 400 USDA-approved EIA labs running approximately 1.3 million tests per year
- Since 2019 (VSG 15201.1) maintenance of USDA approval requires:
 - Monthly summary reporting by each lab including number of tests by test type (AGID, ELISA), pos/neg result, and horse state
 - Immediate reporting of non-negatives to SAHO/AVIC
 - All non-negatives forwarded to NVSL for confirmation within 48h
- Monthly summary testing data goes into USDA's Data Integration Services (DIS) and can be accessed by both state and federal animal health officials
- USDA Equine Health Team tracks confirmed positive cases and response procedures individually by horse/premises (also in EMRS)

← Back to analysis  Make a selection or change parameters to explore your analysis.

(x) (1) Submissions overview (2) **Submissions by Lab State** (3) Submissions by Horse State

 Show data

Total Tests Performed, by Lab and Month

Lab Testing Approval Status: **Approved**, Year: 2025

	State... String	Lab_Name String			R S.	January Integer	February Integer	March Integer	April Integer		
35	Delaware	Delaware Department of Agriculture	0	***	A	***	2025	149	192	233	
36	Florida	Antech Diagnostics - ORLANDO	0	***	A	***	2025	2,122	2,020	null	
37	Florida	Equine Medical Center of Ocala	0	***	A	***	2025	2,621	1,557	2,157	
38	Florida	Equine Reproduction Center of ...	***	0	***	A	***	2025	1,077	840	944
39	Florida	Florida Department of Agricult...	***	0	***	A	***	2025	1,627	1,398	1,598
40	Florida	Harbour Ridge Equine	0	***	A	***	2025	105	107	91	
41	Florida	Mid-Florida Veterinary Lab	0	***	A	***	2025	2,422	908	1,047	
42	Florida	Ocala Equine Hospital Lab	0	***	A	***	2025	1,566	814	1,011	
43	Florida	On Track Labs / Palm Meadows ...	***	0	***	A	***	2025	3,804	876	1,914
44	Florida	PHD Veterinary Services- EIA Lab	0	***	A	***	2025	117	69	81	
45	Florida	Pace Large Animal Laboratory	0	***	A	***	2025	275	369	470	
46	Florida	Russell Equine Sports Medicine	0	***	A	***	2025	284	205	178	
47	Florida	Springhill Equine Veterinary Clinic	0	***	A	***	2025	171	100	100	

2019 - Getting the data into DIS...started out a bit rough (although automated from beginning)

EIA Monthly Report Submission v2 (created 08/2020)
Complete all applicable green fields and sections to meet the EIA monthly summary reporting requirements in USDA-APHIS-Veterinary Services Guidance Document 15001.1. Start with entering Lab and Date information and then proceed to Testing Results. Helpful prompts are provided to guide data entry and information will hover by each green cell when selected. For additional help completing this form please see the included Form_Instructions sheet. THANK YOU for protecting American Equine Health!

(1 of 2) Provide Lab and Date Information:

Lab Name		Helpful prompts:	System Time:
NVSL Lab Code	List of NVSL EIA Labs and Lab Codes	Select or Type your Lab Name	
Lab Email		Type your NVSL Lab Code	
State Where Lab Is Located		Type your Lab Email	
Reporting Month		Select a State	
Reporting Year		Select a Month	
		Select a Year	

(2 of 2) Provide Testing Results: Number of Test Results Completed for this Reporting Month, Determine "State" by the state in which the animal is located.

	AGID				ELISA		
	Negative	Positive	Total		Negative	Positive	Total
Alabama			0	Alabama			0
Alaska			0	Alaska			0
Arizona			0	Arizona			0
Arkansas			0	Arkansas			0
California			0	California			0
Colorado			0	Colorado			0
Connecticut			0	Connecticut			0
Delaware			0	Delaware			0
Florida			0	Florida			0

Monthly_Report Form_Instructions

Excel reporting template



Email spreadsheet as Excel file to equine.health@usda.gov

Series of code moved emails with Excel files to shared folder

More code to validate and extract data from spreadsheet



If file or data validation failed, then data entry into DIS by hand (Angela)

Automated data upload into DIS (maybe)

EP Testing Data Pathways

- 12 USDA-approved EP labs (NAHLN only) and NVSL running approximately 20,000 tests per year (cELISAs for *T. equi* and *B. caballi*)
- VSG 15200.2 - maintenance of USDA approval requires:
 - Immediate reporting of non-negatives to SAHO/AVIC
 - All non-negatives and clinical suspects forwarded to NVSL within 48h for confirmation or clinical workup
- Quarterly reporting of EP testing numbers for *T. equi* and *B. caballi* through NAHLN
- USDA Equine Health Team tracks confirmed positives, response procedures, and treated horses individually (also in EMRS)

Annual Surveillance and Case Reports

<https://www.aphis.usda.gov/livestock-poultry-disease/equine>



2023 Equine Infectious Anemia Cases in the United States

January 1 – December 31, 2023



2024 Equine Piroplasmiasis (EP) Annual Report

Animal and Plant Health Inspection Service

Veterinary Services

June 2024

Animal and Plant Health Inspection Service

Veterinary Services

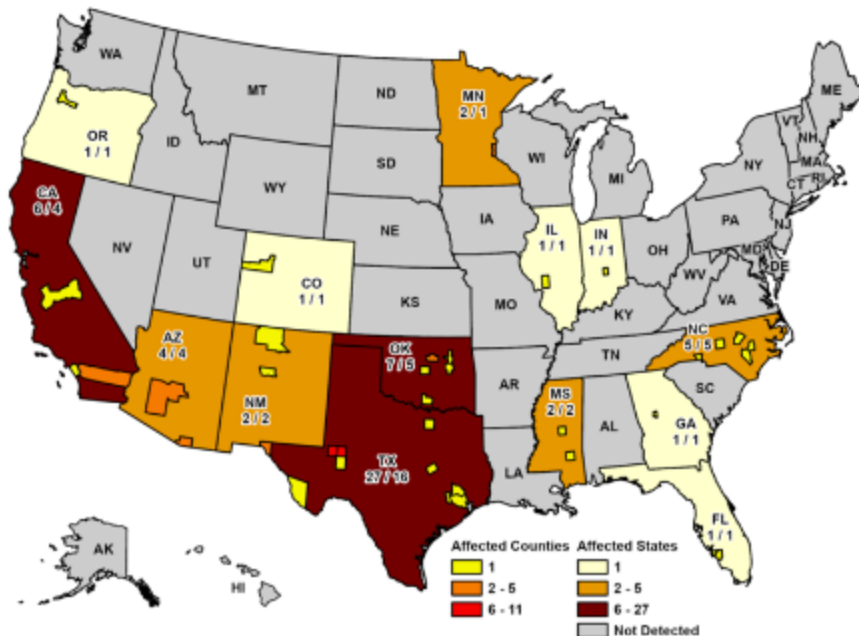


Figure 1. Reported numbers of horses and premises testing positive for EIA by state and county, 2023

2024 EP Cases by State: 12 EP-infected horses found in 7 states (Jan-Dec 2024)

State Found	# EP-positive (<i>T. equi</i> unless noted)	# Dual infected with EIA	Risk Group
Arizona	2	0	Pony and mule illegally moved from Mexico
Georgia	1	0	QH racehorse
Indiana	2	0	Mare illegally moved from Mexico and her yearling colt
Nebraska	1	0	QH racehorse
North Carolina	1	1	Former QH racehorse
Texas	4	1	2 QH racehorses, 1 horse illegally moved from Mexico, 1 yearling colt born to EP-positive mare
Wyoming	1	1	QH roping gelding illegally moved from Mexico
Total	12	3	5 QH racehorses; 5 equids illegally moved from Mexico; 2 yearling colts with mare-to-foal transmission

Equine FAD Outbreak Information Sharing



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2023-2024 Vesicular Stomatitis Virus (VSV) Situation Report – January 22, 2024

Information current as of 8:00 am MST, 1/22/2024

Since the last situation report (1/9/2024), there have been **no new VSV-affected premises identified in the United States**. All confirmed cases in the 2023-2024 outbreak were vesicular stomatitis New Jersey virus (VSNJV) serotype. Updates are as follows:

California

- No new suspect or confirmed positive premises identified since the last report
- Since the last situation report (1/9/2024), the following previously confirmed positive premises were released from quarantine: 2 premises in Sacramento County.
- The last VSV quarantines in California were released on January 18, 2024.

Classification of Cases

Premises that have diagnostic laboratory confirmation of VSV are categorized as confirmed positive premises. Once a county is confirmed as VSV-positive, new equine premises presenting



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2024-25 Contagious Equine Metritis (CEM) Situation Report – April 4, 2025

Information current as of 3:00 pm MST, 4/3/2025. *New information in blue.*

Current Case Count: Total of **53** cases, including 18 domestic ponies (2 stallions, 1 mare, 15 geldings), 19 riding horses of various breeds (all geldings), and 16 draft horses (all geldings) confirmed *Taylorella equigenitalis*-positive and connected to a single farm in Orange County, Florida. Forty-one (41) of the positive horses were located on the index farm in Florida and 12 positive geldings were trace outs from the index farm which were quarantined on 6 other farms in Florida, 1 farm in North Carolina, 1 farm in Maryland, 1 farm in Maine, 1 farm in Iowa, and 1 farm in South Carolina.

Summary of the Incident

On May 23, 2024, the National Veterinary Services Laboratories (NVSL) in Ames, Iowa, reported confirmation by bacterial culture a positive case of *Taylorella equigenitalis*, the causative agent of

**Public information posted to
USDA-APHIS Equine website by
disease with alerts through EDCC:**

<https://www.aphis.usda.gov/livestock-poultry-disease/equine>



All Equine STRAND Test Results

More Data Analytics

Data Management Tools

Equine Infectious Anemia (EIA)

Piroplasmosis

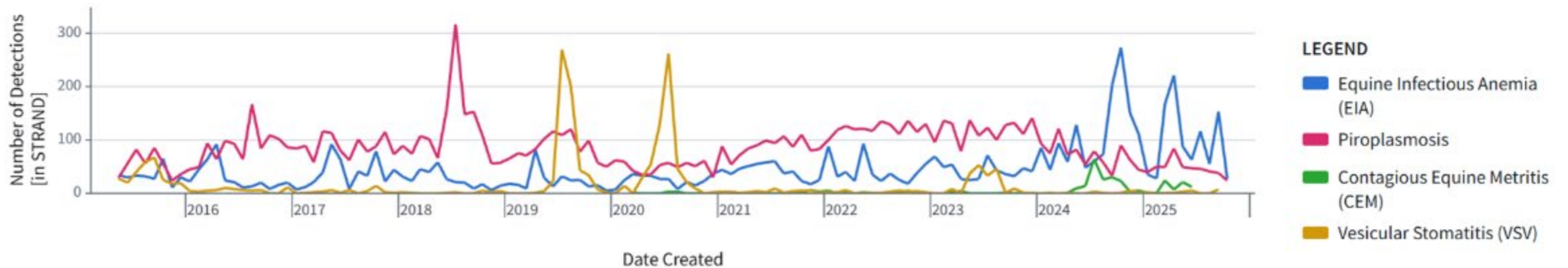
Contagious Equine Metritis (CEM)

Vesicular Stomatitis (VSV)

Parasitology

New Positives This Week (last 7 days) 11

All Equine STRAND Test Results over Time





Equine Health Data Management Workshop [DRAFT]

STRAND Data Last Pulled Fri, Oct 24, 2025, 4:21:52 AM



Filters

KEYWORD

Keyword

PURPOSE

- General Diagnostic 2,733
- FAD/EP Diagnostic 1,653
- Surveillance 1,613
- Pre Import 360
- Import 255

Show more

ANIMAL STATE

- TX 2,030
- No value 1,400
- CA 384

EIA STRAND Test Results

EIA -- Equine Health Events

Processing Actions



EIA "Positive" Test Results

6993

<input type="checkbox"/>	Suggested Test Interpretation	Accession	Unique Animal Sample	Owner Name	Animal County	Animal State	Collection Date	Rep
<input type="checkbox"/>	Confirmed	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Imn
<input type="checkbox"/>	Confirmed	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Imn
<input type="checkbox"/>	Confirmed	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Imn
<input type="checkbox"/>	Confirmed	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Imn
<input type="checkbox"/>	Presumptive	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Enz
<input type="checkbox"/>	Confirmed	25-026691	Ray -- Red Top, Purple Top -- ...	Bobby Bowman	Yadkin County	NC	Sep 10, 2025	Equ Imn
<input type="checkbox"/>	Confirmed	25-025681	24TGBL/Royal Sissy Irish -- ...	MP Horses	Garvin County	OK	Sep 23, 2025	Equ Imn
<input type="checkbox"/>	Presumptive	25-025681	24TGBL/Royal Sissy Irish -- ...	MP Horses	Garvin County	OK	Sep 23, 2025	Equ Enz
<input type="checkbox"/>	Presumptive	25-025681	24TGBL/Royal Sissy Irish -- ...	MP Horses	Garvin County	OK	Sep 23, 2025	Equ Linl
<input type="checkbox"/>	Confirmed	25-025681	24TGBL/Royal Sissy Irish -- ...	MP Horses	Garvin County	OK	Sep 23, 2025	Equ Imn

Questions?

