

Current Events in Colorado Livestock

Livestock and Forage Grower Update

CSU Extension

2/22/2024

Raye Walck, DVM – Assistant Professor, MIP

Director - Western Slope Veterinary Diagnostic Lab



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Western Slope Veterinary Diagnostic Lab

Raye Walck, DVM

Highlighted services

Bovine Viral Diarrhea
Trich Testing
EIA - Coggin's

Ruminant Pregnancy
Abortion and Respiratory Screens
Necropsy Examination



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Colorado Current Livestock Diseases and Statuses:

- *Tritrichomonas foetus* – Cattle
- Equine Infectious Anemia – Horses
- *Brucella ovis* – Sheep
- Highly Pathogenic Avian Influenza – Poultry



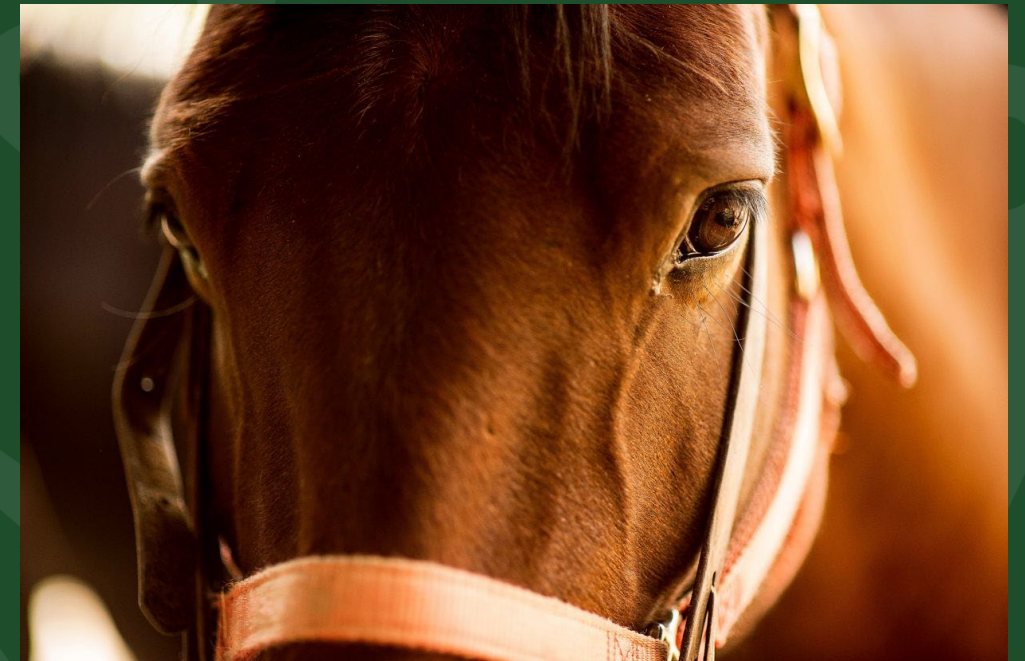
Equine Infectious Anemia – EIA/Coggins



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Equine Infectious Anemia *(EIA/Coggins)*

- Viral disease affecting only equidae family (horses, ponies, zebras, mules, and donkeys).
- No vaccine or treatment
- Infection often in-apparent & results in lifelong carrier state (if the horse survives the acute phase of infection).
- Found widely throughout the world
- NOT a threat to human health
- Reportable disease in all states



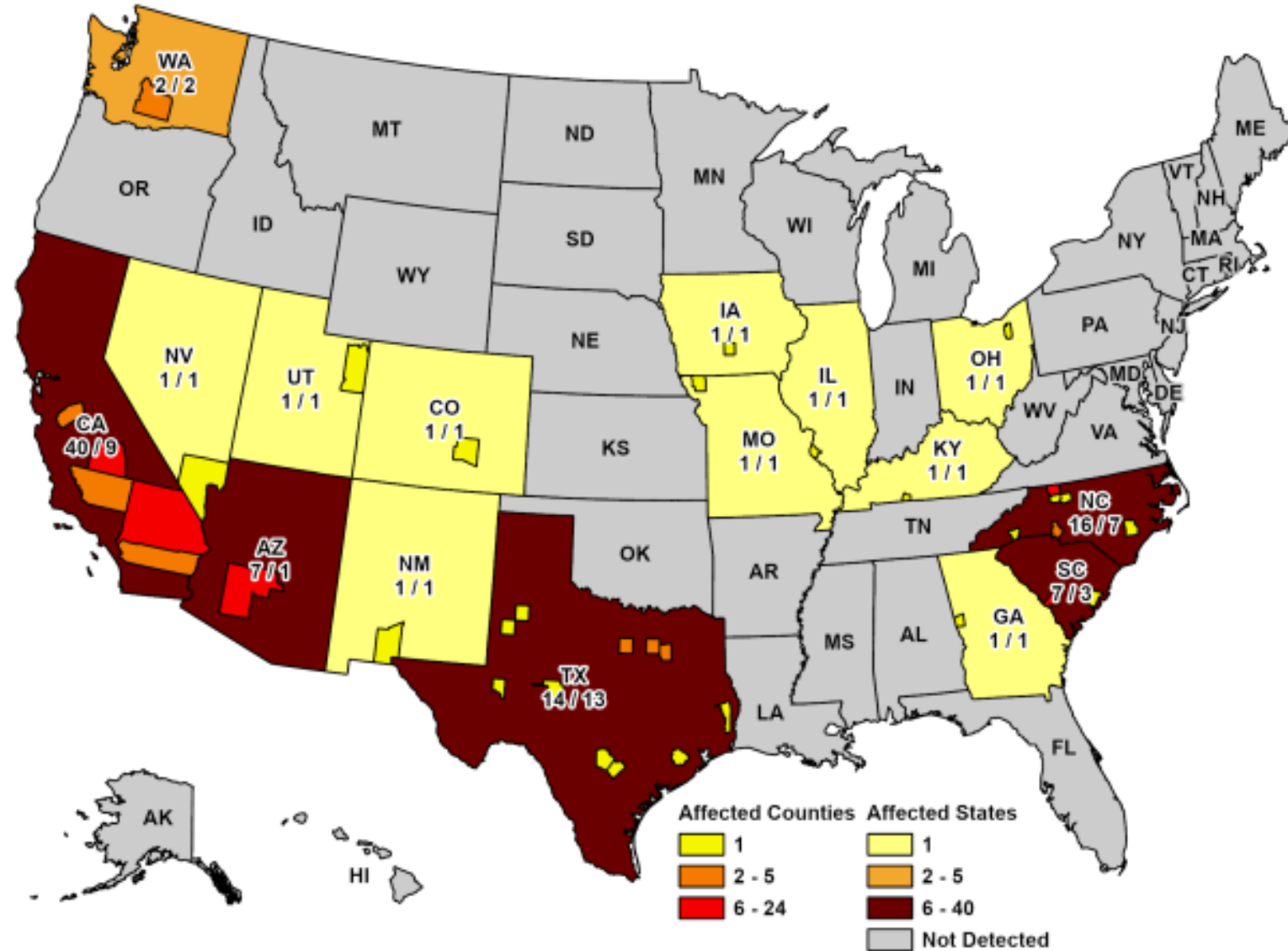
Positive horses are either quarantined for life or euthanized



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Equine Infectious Anemia ELA/Coggins

2022 States with positive horses:
California (40), Colorado, Georgia, Illinois, Iowa, Kentucky, Missouri, Nevada, New Mexico, North Carolina (16), South Carolina (7), Texas (14), Utah, Washington (2)



*No number indicates one case



Equine Infectious Anemia – EIA/Coggins

2022 EIA Cases:

United States

Tests performed - 1,349,759

Positive Horses – 96

Positive Premises – 45

Colorado

Tests performed – 25,650

Positive Horses - 1

Positive Premises - 1

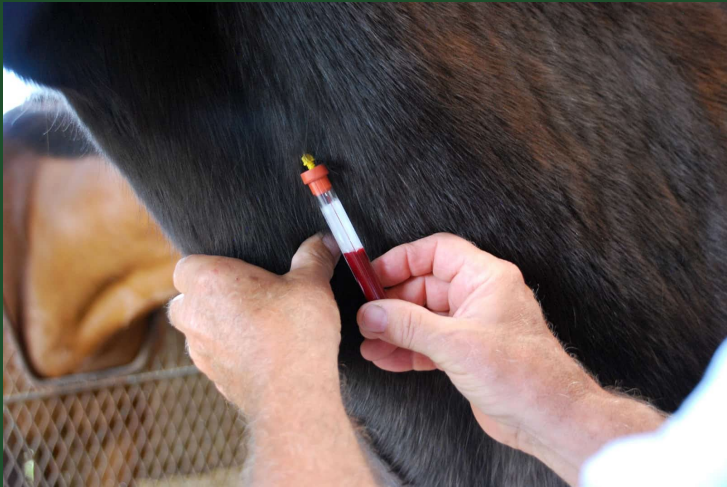


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Equine Infectious Anemia – EIA/Coggins

Prevention

- Reduce exposure to biting flies
- NEVER reuse needles, syringes, or IV sets
- Only use licensed and approved blood products
- Blood transfusions only by licensed veterinarians using EIA negative blood donors



Annual Testing - Surveillance

The Equine Infectious Anemia (EIA) test was developed by Dr. H. H. Ross, University of Kentucky. It is a rapid, sensitive, and specific test for the detection of EIA virus in horses. It is a rapid, sensitive, and specific test for the detection of EIA virus in horses. It is a rapid, sensitive, and specific test for the detection of EIA virus in horses.

EQUINE INFECTION ANEMIA LABORATORY TEST			EIA-174102
			CERTIFIED COPY
SERIAL NO. A-174102	ACCESSION NO. 20-123456	DATE COMMITTED 4/20/08	COUNTY Smyth
Please attach Negative Results of the Horse and Donor's Adhesive Labels to Donor and Recipient Numbers 901 Not to be Programmed			
NAME & ADDRESS OF OWNER Sample, Owner 123 Lane Sample City, IA 50010 515-555-5555 Premises ID: 1234567	NAME & ADDRESS OF VETERINARIAN EVA, Sample Veterinary Clinic Sample Veterinarian 2528 N. Loop Drive Sample, IA 50010 515-298-3779 Premises ID: 7654321	NAME & ADDRESS OF STABLE/MARKET SS Sample Stable Rt 1 Sample City, IA 50010 515-123-4567 Premises ID: 7654321	
VETERINARY LICENSE OR ACCREDITATION NO. IA-100000	TEST TYPE AGID (Agar gel immunodiffusion)	REASON FOR TESTING Annual	
SIGNATURE OF FEDERALLY ACCREDITED VETERINARIAN 		SIGNATURE NAME Sample Veterinarian	DATE BLOOD DRAWN 4/20/08
SIGNATURE OF OWNER OR OWNER'S AGENT I certify that I have reviewed this form and, to the best of my knowledge and belief, the form is true, correct and complete.			
NAME OF HORSE Sample Horse		Breed Name Sample	Electronic ID 840123456789100
COLOR Chestnut	AGE OR DOB January 1, 2005	SHED Paint	SHED Station
NARRATIVE DESCRIPTION (See animal photograph(s) above)			
HEAD - connecting ear, eye, snip		OTHER MARKS AND BRANDS - Overo Pattern	
LEFT FORELEMB - white sock		RIGHT FORELEMB - none	
LEFT HINDLEMB - white stocking		RIGHT HINDLEMB - white sock	
FOR LABORATORY USE ONLY			
LABORATORY Coggins Testing Only (Do Not Choose This Lab) PO Box 4538 Sample City, IA 50010 515-298-0000	TECHNICIAN Technician, Sample	DATE RECEIVED 4/20/08	DATE REPORTED 4/20/08
		SIGNATURE OF TECHNICIAN 	TEST RESULTS Negative

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Tritrichomonas foetus

- Reproductive disease of cattle – protozoan parasite
- Sexually transmitted – lives in the prepuce of bulls
- Early fetal loss, abortion, delayed calving interval
- Most cows clear infection within 3-5 months, but immunity is short-lived, and reinfection is possible.
- Bulls may show NO signs, but can shed the organism indefinitely
- Testing of bulls is required prior to sale, import/export, turnout on public lands or in grazing pools.



Tritrichomonas foetus

Testing

- Accredited veterinarian collects sample and submits to CDA approved laboratory
- Preputial sample is collected and submitted to lab for PCR testing

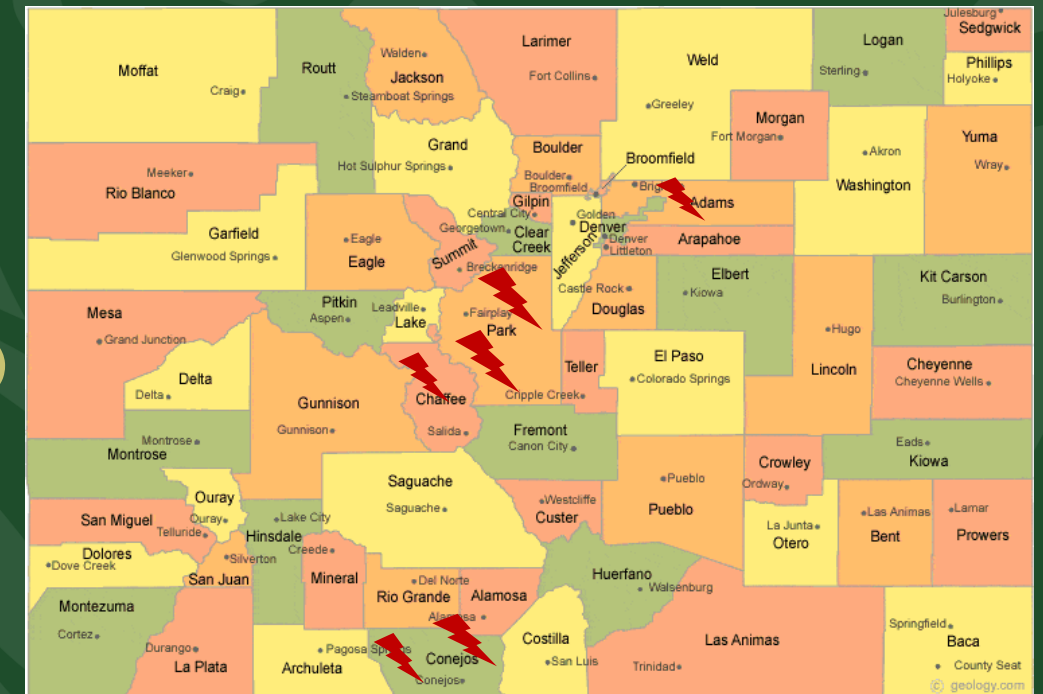


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Tritrichomonas foetus

Colorado Cases

- 2017 - 2 cases (Otero and Prowers)
- 2018 - 4 cases (Conejo, Custer, Otero and Ouray)
- 2019 - 4 cases (Las Animas (2), Lincoln and Otero)
- 2020 - 5 cases (Baca, Conejos, Eagle, Lincoln and Rio Grande)
- 2021 - 7 cases (Archuleta, Huerfano (3), Pueblo, Otero and Rio Grande)
- 2022 - 4 cases (Costilla, Huerfano, Logan (2))
- 2023 - 6 cases (Conejos (2), Park (2), Chaffee, Adams)



Tritrichomonas foetus

Risks

- Bull exposure from neighboring pastures/herds
- Cows commingling with neighboring pastures/herds
- Infected bulls crossing fences
- New bull additions without testing (non-tested bulls)
- Retaining open cows into the next breeding season



The foundation of building a prevention program is testing all the bulls that will have exposure to your cows.



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Tritrichomonas foetus

Prevention

- Pregnancy check cows
- Cull open or late-bred cows
- Test ANY bull that may be exposed to cows - ANNUALLY
- Breed virgin bulls to virgin heifers

Causes significant economic losses



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Brucella ovis

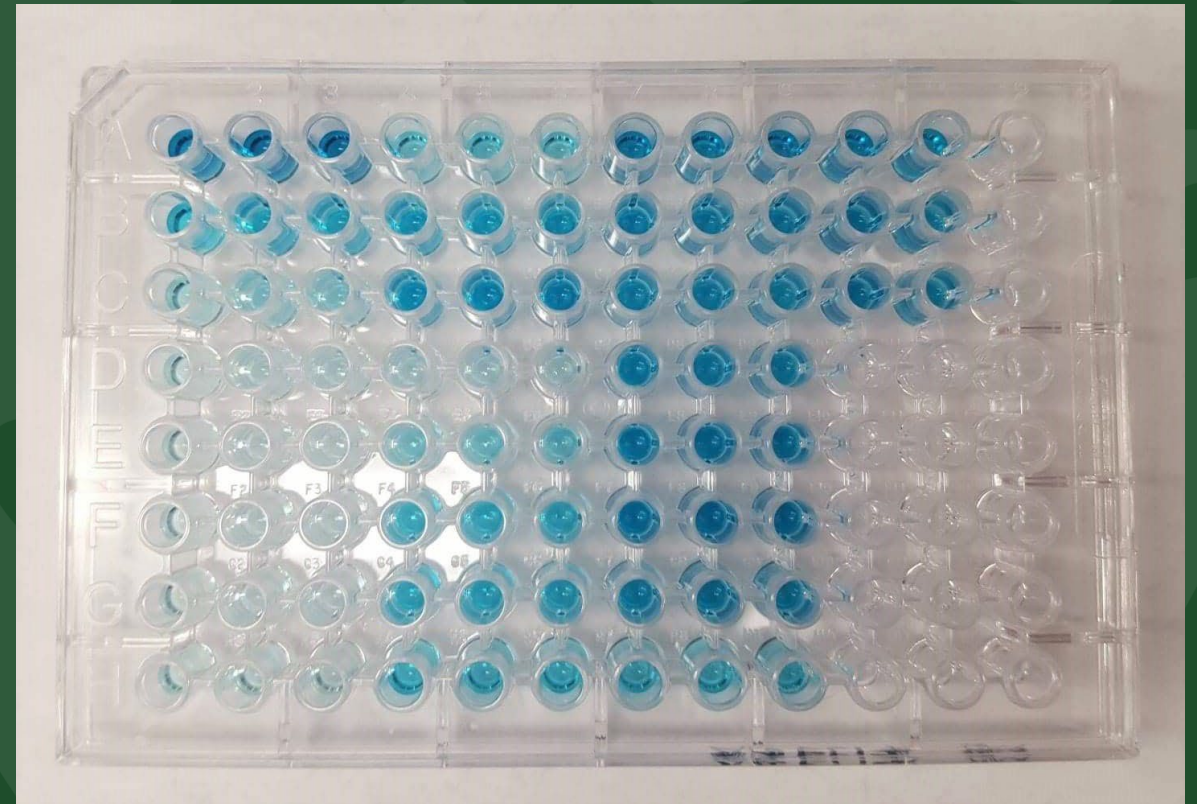
- Reproductive disease of sheep
- Ram epididymitis & orchitis
- Bacterial infection
- Sexually transmitted (AND ram to ram during non-breeding season)
- Causes infertility
- Early fetal loss, abortion, lengthened breeding season
- *Reduced lamb crop
- Increased ram to ewe ratio
- No vaccine
- NOT zoonotic



Brucella ovis

Prevention

- Buy NEGATIVE rams
 - Prevent exposure – quarantine new rams until tested
 - Encourage neighbors to test and cull
 - Perform ram Breeding Soundness exam AND *B. ovis* test
-
- Colorado regulated disease
 - Testing of rams is required within 30 days prior to sale, import/export.



Highly Pathogenic Avian Influenza



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Highly Pathogenic Avian Influenza

- Severe and highly transmissible
- Natural reservoirs = waterfowl and shorebirds (usually asymptomatic)
- Transmission = fecal-oral, aerosol, fomites, and mechanical vectors
- Introduced by migratory birds and infected poultry or pet birds
- Very high morbidity and mortality (90-100%)

Did You Know?



There is an outbreak of a highly pathogenic Avian Influenza (bird flu) affecting both wild and domestic birds in the US. If you have backyard poultry, learn how to protect them and yourself against bird flu.

For more info, visit: ph.lacounty.gov/vet/AI.htm

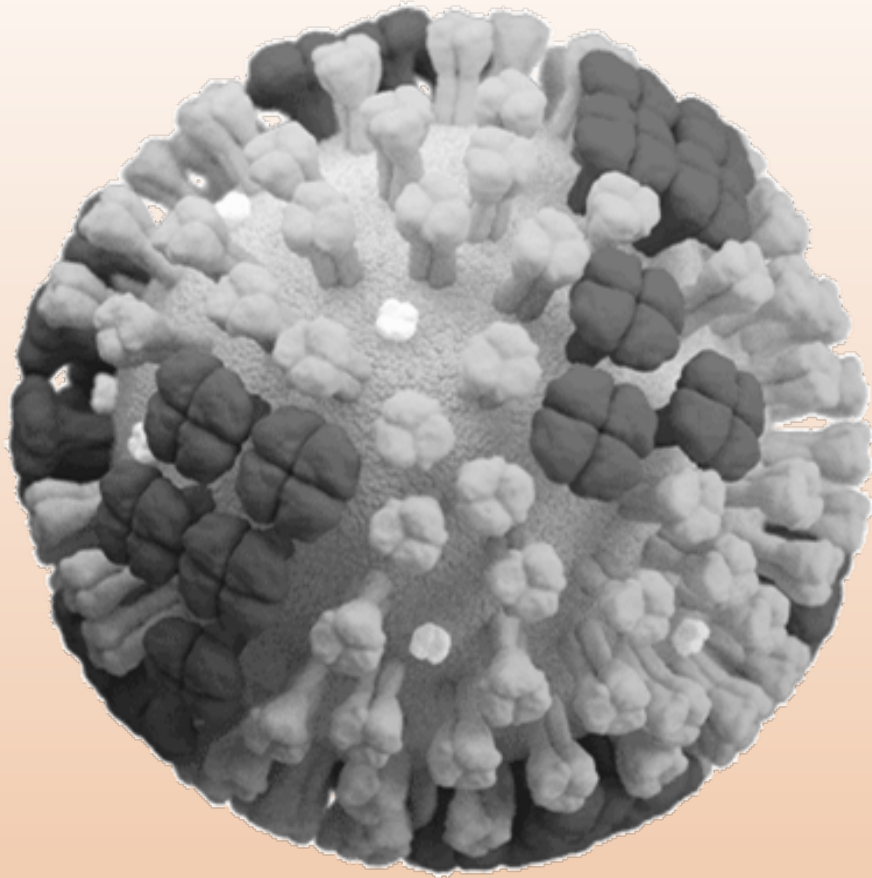


2022-2023

Economic losses in the billions nationally. Colorado has euthanized over 6 million birds to date.



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- Devastating, highly contagious, and deadly disease
- Many potential routes of entry into US
- Significant impact to producers, communities, and the economy
- Control = depopulation of affected or exposed flocks
- No approved vaccine or treatment available

HPAI – the virus

Avian influenza virus

- Genus Influenzavirus A
- Family Orthomyxoviridae

Classified into subtypes based on surface antigens:

- Hemagglutinin – 16 types
- Neuraminidase – 9 types



Highly Pathogenic Avian Influenza

Sudden death
Systemic disease
Drop in egg production
Neurological signs
Depression, anorexia
Ruffled feathers
Combs swollen, cyanotic
Conjunctivitis and respiratory signs



Highly Pathogenic Avian Influenza

- Colorado (as of 2/20/24)
- 11 commercial premises
- Current quarantine area – Delta County
- 6.3 million domestic poultry

>90% of Colorado table egg layers were lost in 2022

Control = depopulation of affected or exposed flocks

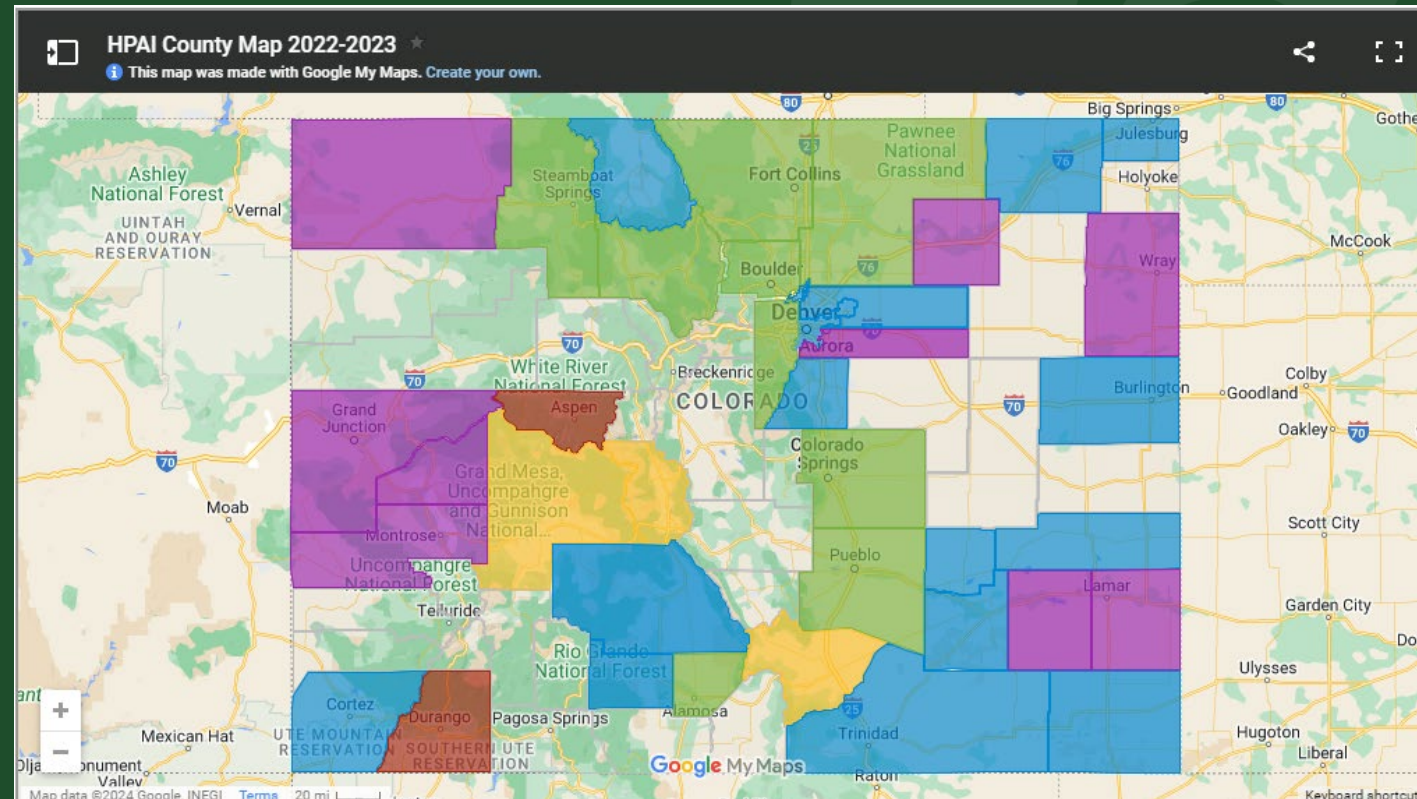


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Highly Pathogenic Avian Influenza

Colorado Status

February 8, 2024 - Delta County01



Blue Counties = Positive wild
bird cases
Red Counties = Positive
domestic bird cases
Purple Counties = Positive cases
in both domestic and wild birds
Yellow Counties = Positive
mammal cases
Green counties = Positive cases
in mammal cases and domestic
or wild birds

Highly Pathogenic Avian Influenza

Prevention = BIOSECURITY

- House birds indoors - prevent environmental exposure
- Keep visitors to a minimum - visitor log, Line of Separation (LOS)
- Trucks transporting feed, litter, products, etc. should follow transit biosecurity guidelines
- Know the signs of illness
- **Report** increased morbidity/mortality
- Clean/disinfect any fomites **INCLUDING YOURSELF**
- PPE (booties), dedicated shoes & disinfectant baths
- Change clothes before/after entering poultry houses
- Shower before and after
- Rodent control and restrict wildlife access





KEEP YOUR BIRDS SAFE FROM HPAI

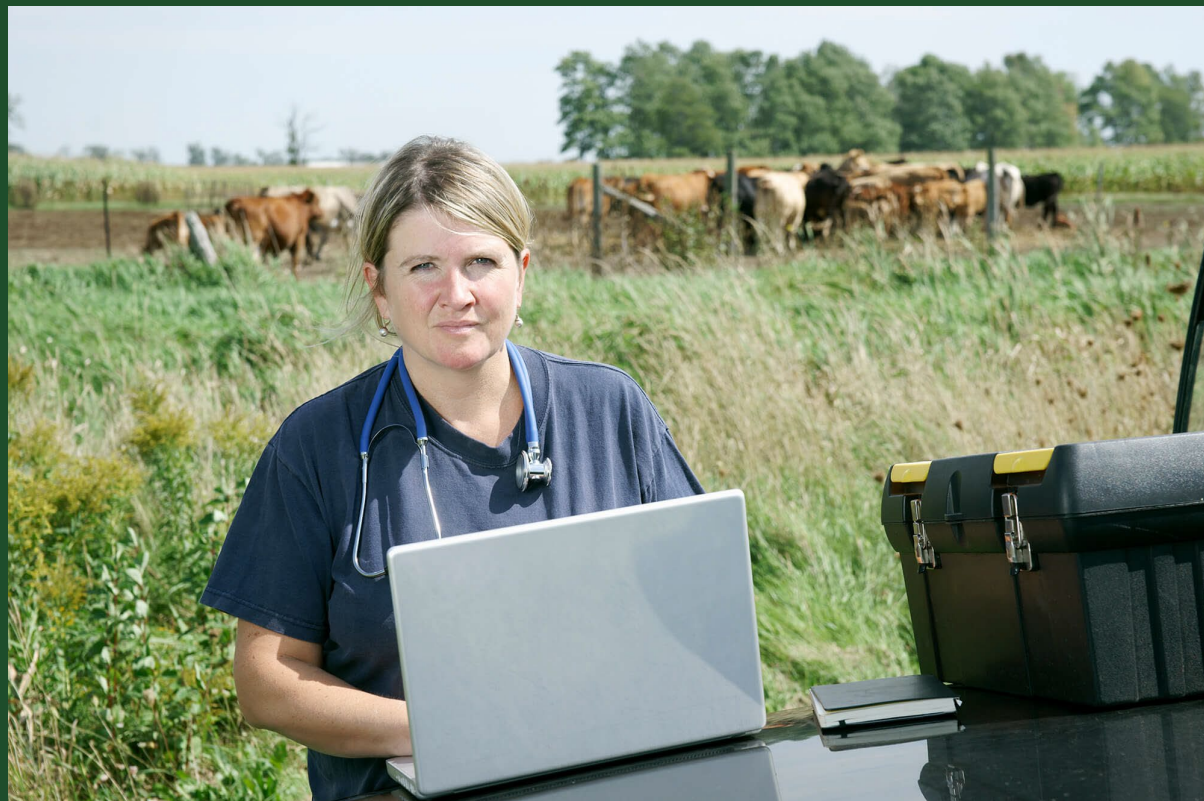
Learn more about
avian influenza and
how to increase your
biosecurity measures at
ag.colorado.gov/hpai

*Highly
Pathogenic Avian
Influenza*



Regulated Diseases Testing/CVIs

- Surveillance and Testing is an important part of preventing disease in livestock and poultry.
- Partner with veterinarians to develop testing/management strategies.
- Many diseases are life threatening and economically devastating to producers and national/international markets.
- In Colorado, testing for Trich, B. ovis, and EIA is required for transit, export and/or sale of animals



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Any Questions?



The Steamboat Pilot 3/19/19.
The Monger Ranch in the lower Elk River Valley. (Courtesy photo)

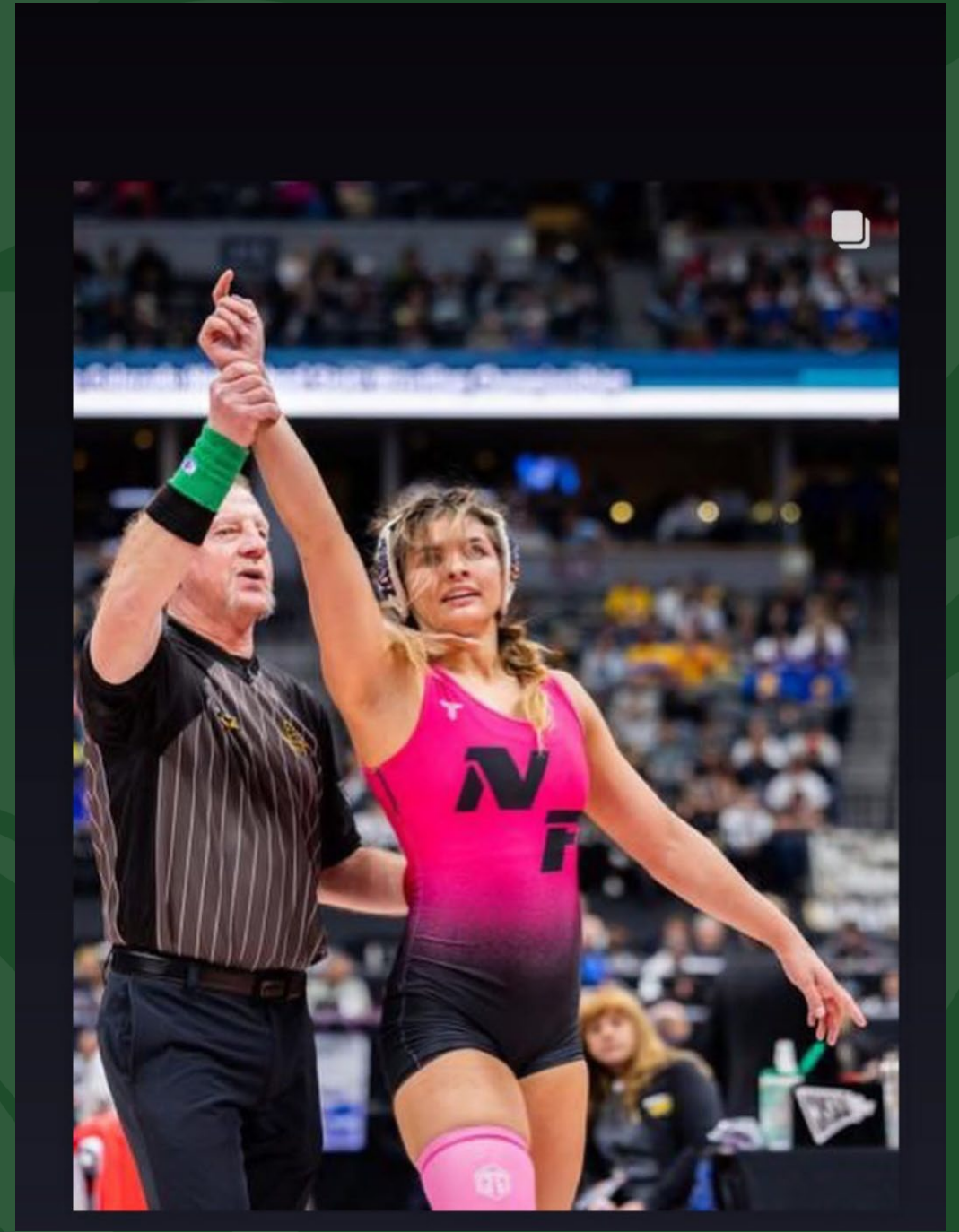
Thank you

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