



USDA Response to Highly Pathogenic Avian Influenza

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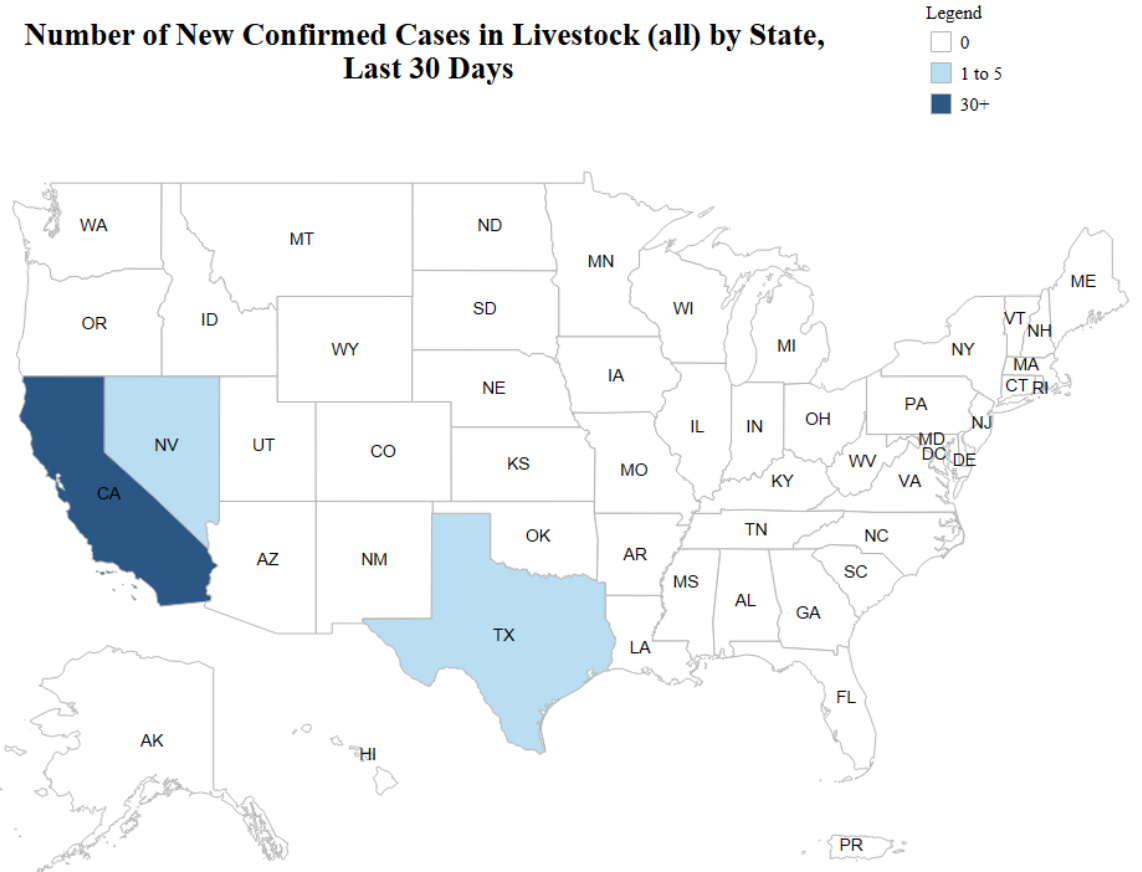
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NATIONAL SUMMARY OVERVIEW OF HPAI H5N1 IN DOMESTIC LIVESTOCK: 30-DAY OVERVIEW

On **March 25, 2024**, the USDA National Veterinary Services Laboratory confirmed the first detection of HPAI H5N1 clade 2.3.4.4b, genotype B3.13, in a Texas dairy herd. Phylogenetic analysis and epidemiology support a single introduction into this novel host followed by onward transmission.

As of **December 18, 2024**, the total confirmed detections for the domestic livestock incident includes **867** premises in **17** states.

In the **last 30 days**, there were **315** confirmed cases in **3** states.



Cases in the last 30 days

SUMMARY OF FIELD ACTIVITIES



Administering Epidemiology Questionnaires

- HPAI dairy questionnaire developed
- Questionnaire deployed to all States



On-Farm Field Research

- Priority topics in affected states
- Voluntary participation, ongoing in multiple states



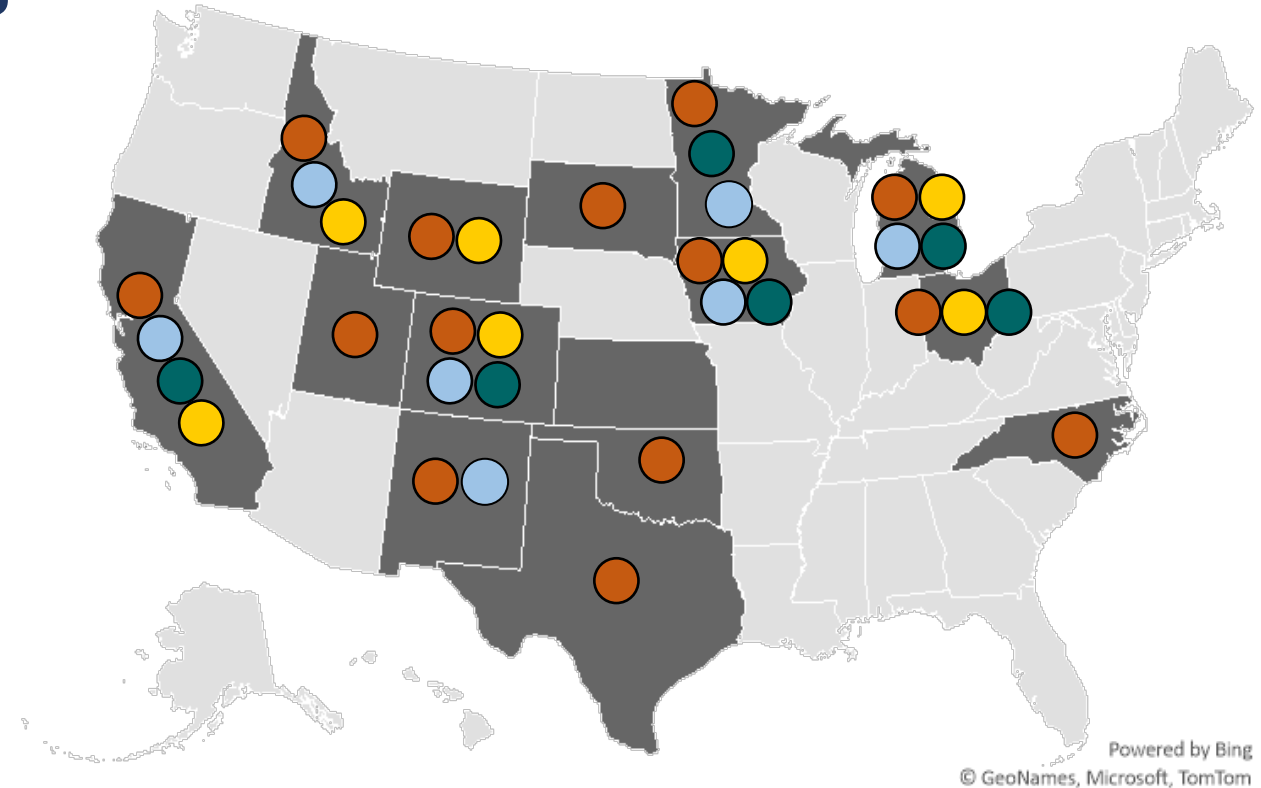
Wildlife and peri-domestic species sampling

- Sampling conducted by USDA APHIS Wildlife Services
- Sampling completed or in progress on or near dairy premises



Epidemiology Support (Strike) Team

- Support field epidemiology investigation
- Support rapid data collection and analysis



Data analyses

- Epidemiology questionnaires – continuous analyses as data are received with regular updates
- On-farm sampling recruitment/coordination, summary of results coordination
- Production and movement data analyses (e.g., Dairy Comp)

H5N1 in Dairy Cows

- Causes sudden drop in milk production
- Milk may become thickened or colostrum-like
- Cows may run a fever, go off feed, or otherwise do poorly
- Recovery within 30 days, on average
- Milk production returns as cows recover but may not return to 100%
- Unknown whether H5N1 affects future pregnancies or milk production





Transmission and Epidemiology

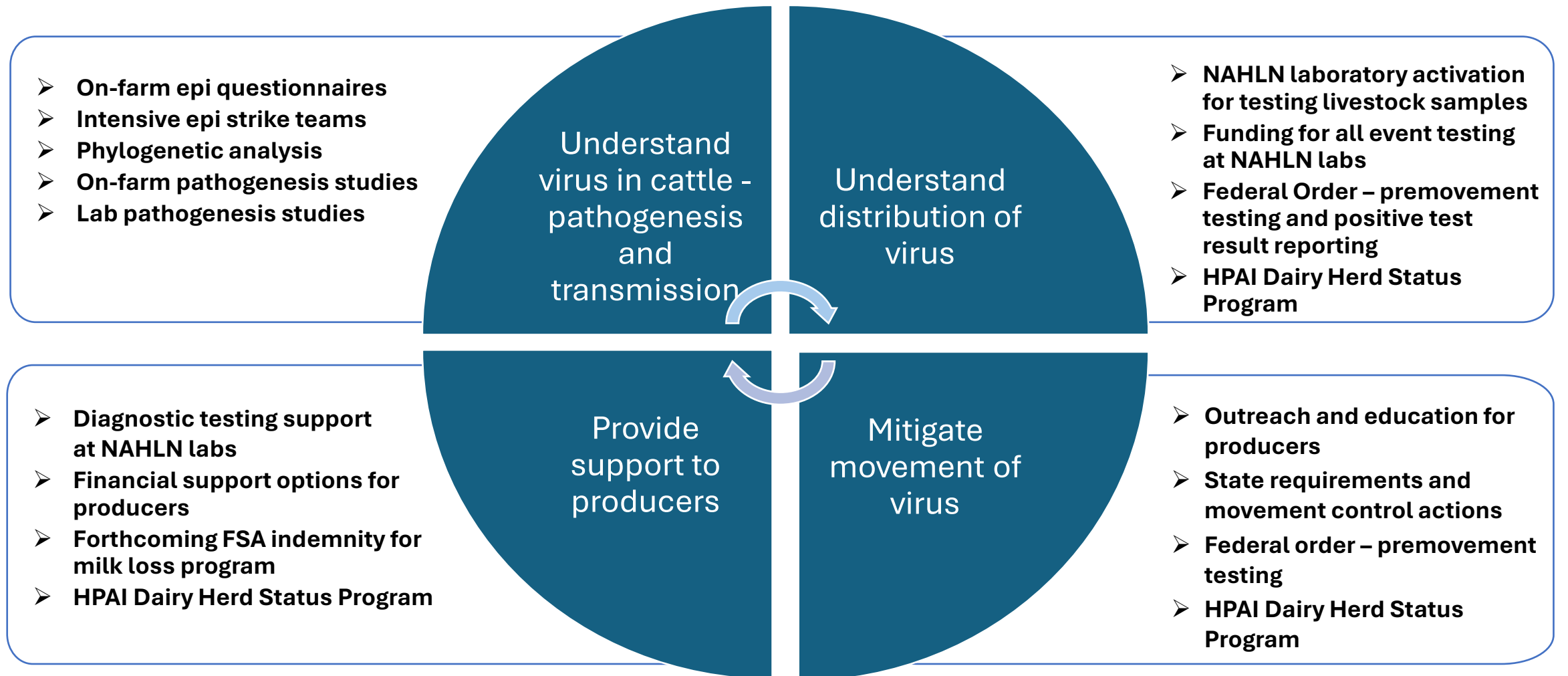


Key Messages

- Spread of H5N1 between states is linked to cattle movements (*versus independent wild bird introduction*) with further local spread between dairy farms in some states
- Disease spread between dairy cattle farms is likely multi-factorial (direct and indirect transmission routes)
- Biosecurity is key to mitigate the risk of disease spread



APHIS Action Strategy



➔ Ensure safe food supply

➔ Maintain trust of producers

➔ Coordination and collaboration

Biosecurity Recommendations

Biosecurity can only work if EVERYONE on the operation follows the established biosecurity plan ALL of the time

Enhanced biosecurity can include:

- Limiting visitors.
- Using separate boots from one farm premises to another.
- Disinfecting all vehicles, trailers and tires, and any equipment that may be shared between premises.
- Avoiding mixing species.
- Keeping livestock and pets away from birds.
- Checking animals regularly for signs of illness.
- Isolating and reporting any potentially sick animals to your veterinarian and the local [APHIS Area Veterinarian in Charge \(AVIC\)](#).

[Secure Milk Supply](#)

[Healthy Farms Healthy Agriculture](#)

Biosecurity Recommendations - Farms

- Only allow people on farm who need to be there
- Use one entrance and exit for the farm
- Keep a record of all farm visitors
- Give visitors disposable shoe covers to wear on the farm
- Keep a separate pair of boots for use on the farm around your animals
- Use a footbath with a disinfectant solution (4 ounces of bleach in 1 gallon of water) to clean footwear before entering the farm
- Spray disinfectant on all vehicle and trailer tires before returning to the farm
- Don't borrow tools or equipment from other farms
- Don't use untreated water from ponds or streams



Biosecurity Recommendations - People

Protect Yourself From H5N1 When Working With Farm Animals

H5N1 is a bird flu virus that could make you sick. Wear recommended personal protective equipment (PPE) when working directly or closely with sick or dead animals, animal feces, litter, raw milk, and other materials that might have the virus.

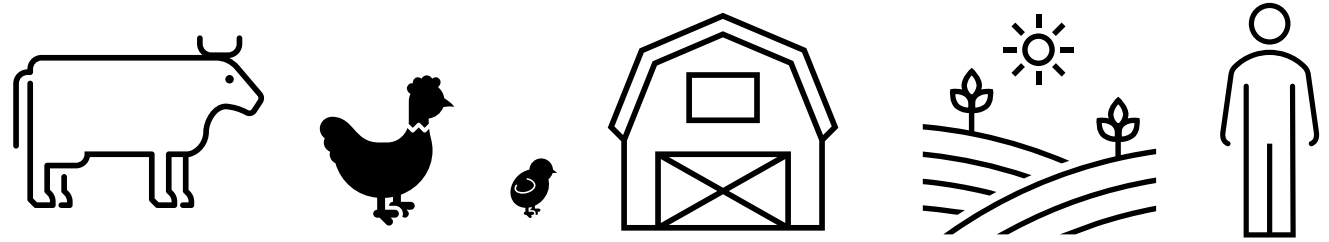


Wash hands with soap and water, then put on PPE in this order:

1. Fluid-resistant coveralls
2. Waterproof apron, if needed for job task
3. NIOSH Approved® Respirator (e.g., N95® filtering facepiece respirator or elastomeric half mask respirator)
4. Properly-fitted unvented *or* indirectly vented safety goggles or face shield
5. Head cover or hair cover
6. Gloves
7. Boots



One Health Coordination



- Response to HPAI requires a coordinated, One Health, approach to mitigate spread in livestock and prevent spread to humans.
- How has the US Federal Government responded from a One Health perspective?
 - A coordinated, multiagency, group (the UCG) meets several times per week and involves:
 - The White House Office of Pandemic Preparedness and Response (OPPR)
 - Centers for Disease Control and Prevention (CDC)
 - Food and Drug Administration (FDA)
 - United States Department of Agriculture (USDA)
 - Routine, timely, data sharing between USDA and CDC
 - Coordination and communication from USDA and FDA with state public health partners with and without affected herds in collaboration with CDC