USDA Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

HPAI H5N1 Event Briefing

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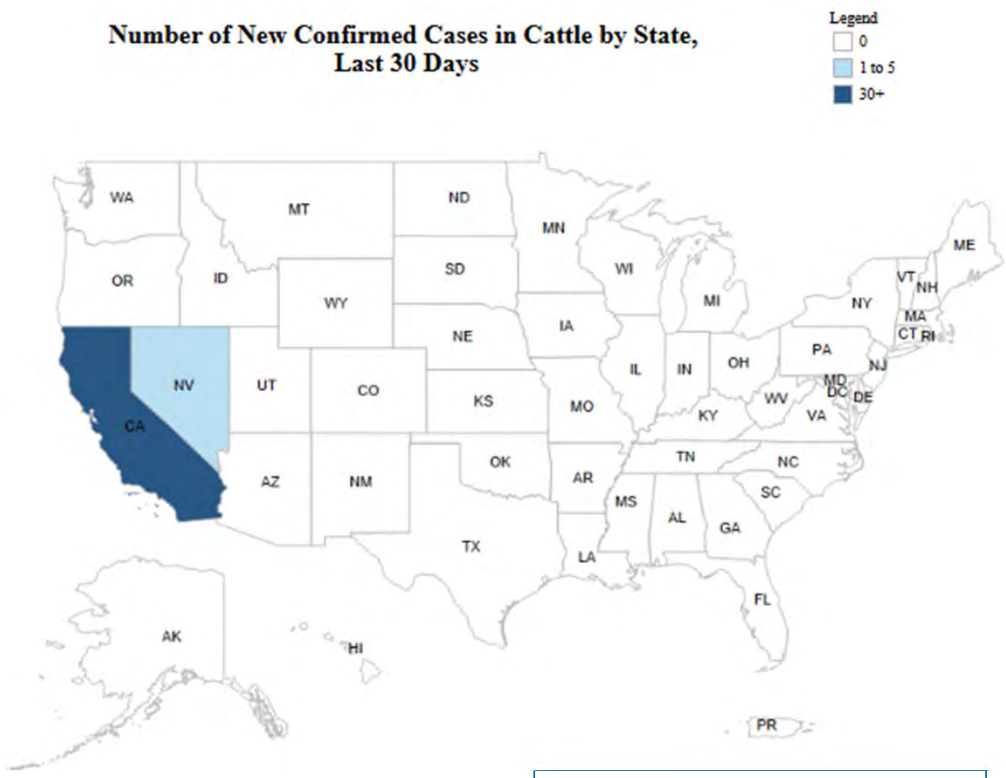
NATIONAL SUMMARY OVERVIEW OF HPAI H5N1 IN DOMESTIC LIVESTOCK: 30-DAY OVERVIEW

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 **February 6, 2025**, the total confirmed detections for the domestic livestock incident includes **961** premises in **17** states.

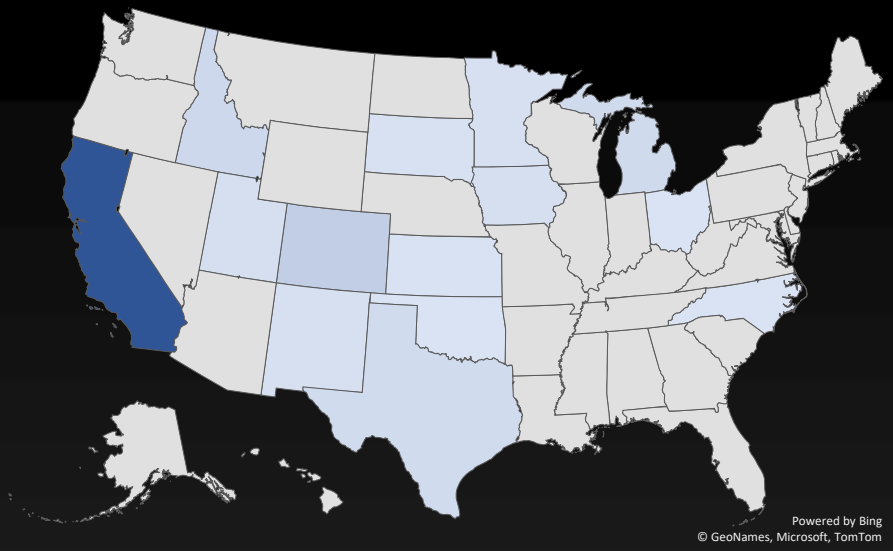
In the **last 30 days**, there were **38** confirmed cases in **2** states.

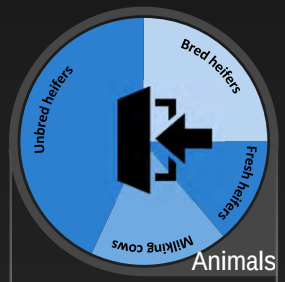


Cases in the last 30 days

Transmission and Epidemiology

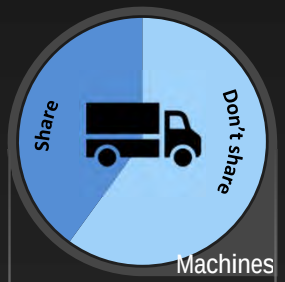
H5N1 IN DAIRY CATTLE - 2024





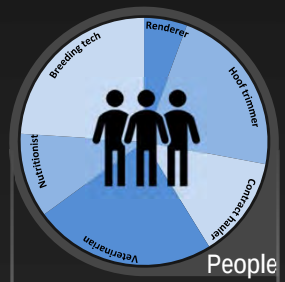
60%

Received *any* cattle within 30 days of clinical signs



39%

Moved cattle using trucks or trailers shared with other farms



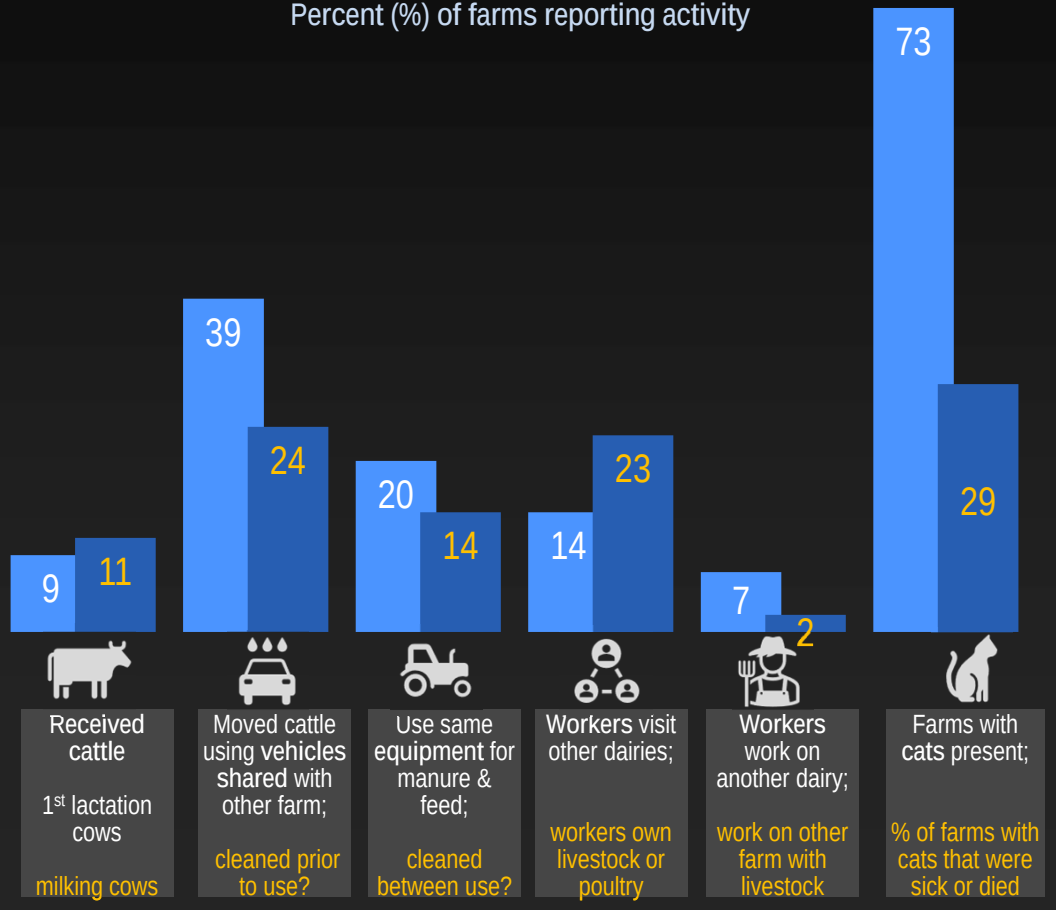
67%

Had frequent visitors who had contact with cattle

Data as of 11/25/24; analysis is ongoing and updated as new information received

Select epi findings
488 questionnaires

Percent (%) of farms reporting activity



What We've Learned

Clinical Picture

- Decrease in milk production, dehydration, drop in feed consumption, fever, minor respiratory signs
- Cattle generally recover with treatment

Transmission and Epidemiology

- High viral load in milk; opportunities for lateral transmission with unpasteurized milk
- Some respiratory involvement and systemic infection in some cattle – not the most prominent clinical signs
- Lateral transmission is multifactorial: people, vehicles, trucks
- Poultry are more susceptible to small amounts of virus; cattle seem to require a larger amount of virus to become infected
- Infection in other mammals is possible; likely from high environmental load of virus on premises and spillover events, but has not played a role in onward transmission
- Increased apparent 'spillover' from dairy to poultry farms industry; warrants additional biosecurity on poultry premises; and communication/collaboration between industries.

Food Safety

- Studies confirmed pasteurized milk and dairy products are safe; raw milk consumption remains a risk for multiple diseases
- Studies confirmed cooking hamburger product to recommended temperature inactivates the virus. While one study did identify virus in muscle tissue and there have been recent detections in raw pet foods, additional studies and testing are needed; continued vigilance to FSIS' process and condemnation of sick cattle is important

Human Health

- CDC monitors human cases
- Most cases are farm workers with direct exposure to potentially infected animals; symptoms included conjunctival infections, fatigue, and respiratory signs.

Recommendations to Mitigate Disease Spread Between Premises

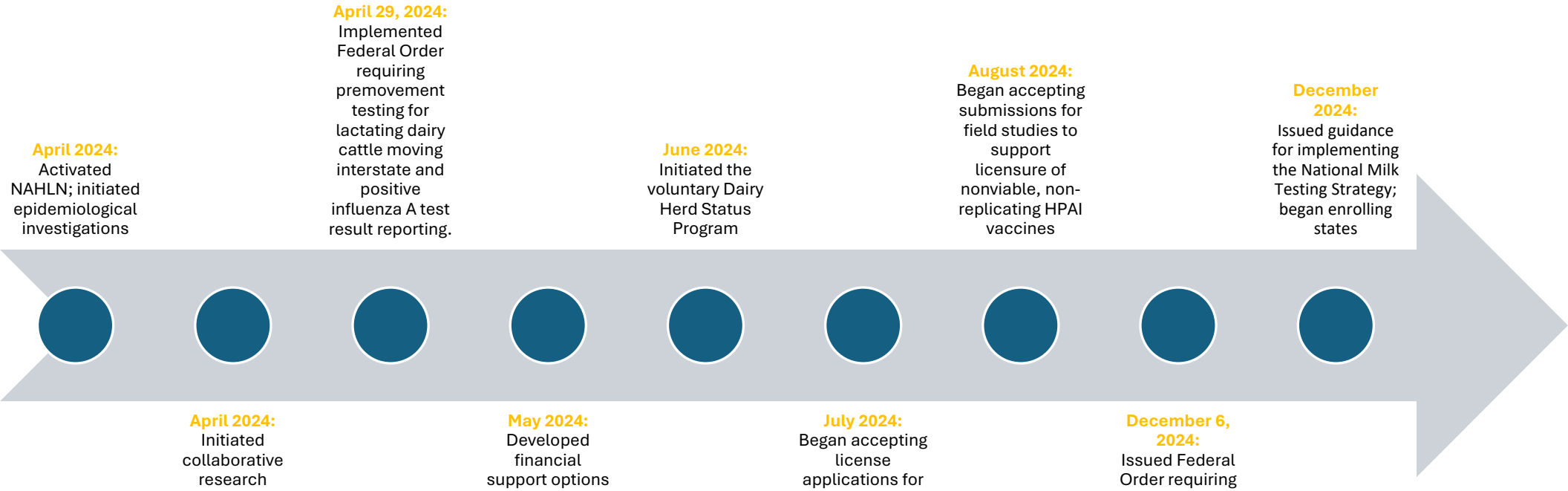
- ✓ Strong biosecurity practices continue to be key to mitigate the risk of disease spread – implement the biosecurity measures within the Secure Milk Supply Plan
- ✓ Test before and minimize movement of cattle
- ✓ Be diligent in monitoring and investigating sick cattle
- ✓ Identify potential interconnections between operations (people, conveyances, etc.) and mitigate risk
- ✓ Identify as many affected herds as possible to assist in assessing the scope of the event and allow decision-makers to better manage the response

SMS SECURE MILK SUPPLY

https://securemilksupply.org/

APHIS Response

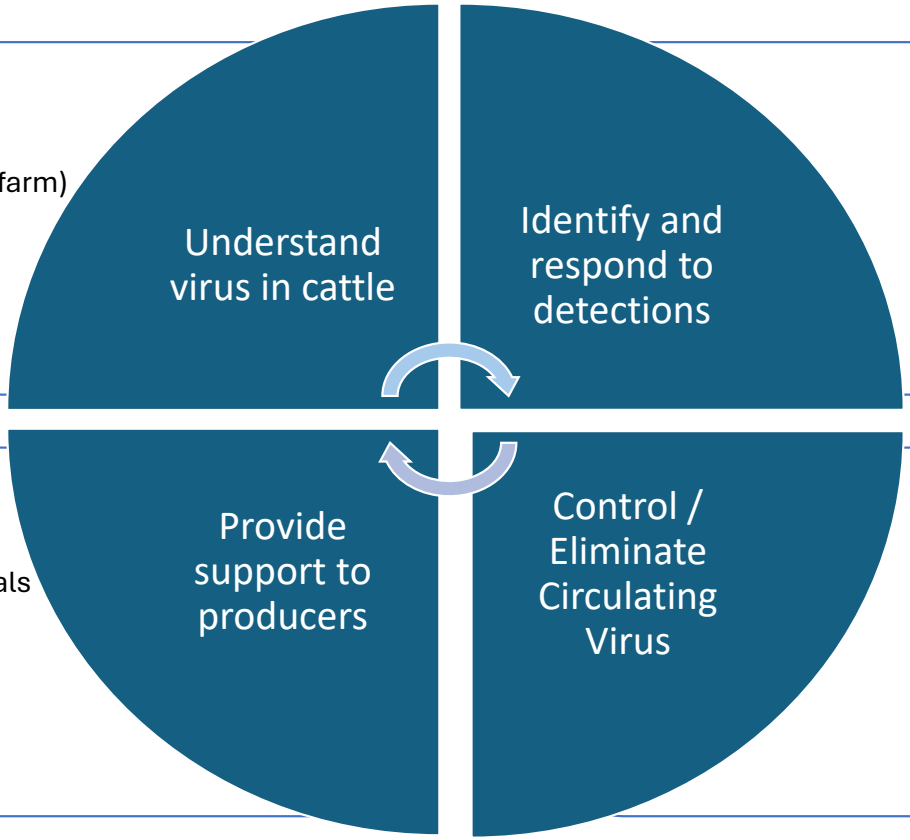
What We've Done: APHIS Response Actions



In Poultry: Since Feb 2022 – continue to work with the state to quarantine, depopulate, disinfect, conduct epidemiological investigations on positive HPAI poultry premises.

APHIS Action Strategy

- On-farm epi questionnaires
- Phylogenetic analysis
- Pathogenesis studies (lab & on-farm)



- Testing at NAHLN lab and NVSL
- Federal orders – premovement & unpasteurized milk testing
- Biosecurity implementation
- State requirements and movement control actions

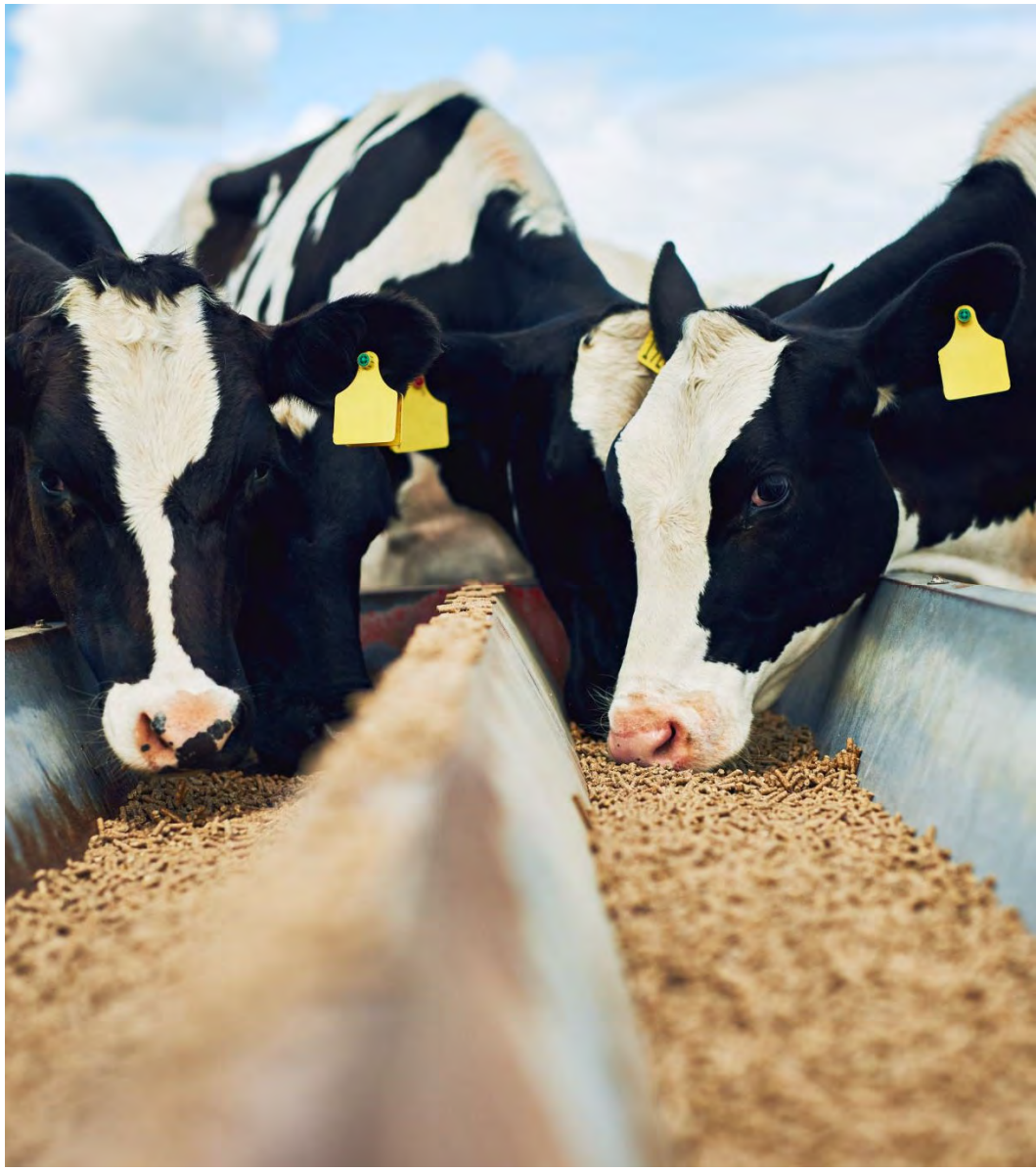
- Financial support options for producers
- Outreach and education materials

- HPAI Dairy Herd Status Program
- National Milk Testing Strategy

→ Ensure safe food supply **→ Maintain trust of producers** **→ Coordination and collaboration**

National Milk Testing Strategy (NMTS)

- The NMTS is a structured, national testing strategy to:
  - swiftly identify which states, and specific herds within them, are affected
  - support the rapid implementation of enhanced biosecurity measures to decrease the risk of transmission
  - inform critical efforts to protect farmworkers to help lower their risk of exposure
- As part of the NMTS, APHIS will work with each state in the contiguous United States to execute testing in a way that works for the state and that aligns with the NMTS standards. A state's status is determined based on the results from the surveillance and monitoring activities under NMTS.
- A map of enrolled states and their NMTS status is available at National Milk Testing Strategy | Animal and Plant Health Inspection Service



HPAI Dairy Herd Status Program Overview

Aims to ease burden of pre-movement testing for unaffected herds, reduce virus dissemination, provide additional testing to asymptomatic dairy herds, expand knowledge of disease, and support national strategy to monitor and control HPAI in dairy herds.

Establish herd status with 3 consecutive weeks of testing.

Weekly testing and regular monitoring will maintain a Monitored Unaffected herd status and be able to move animals without additional pre-movement testing.

Integration of sample collection with milk quality system: samples collected by State milk sample collectors

Samples tested at NAHLN lab

Producer Support Options

Information can be found at USDA Support Options for Dairy Herd Producers

USDA support includes:

- Financial support for PPE provision
- Assistance with development of biosecurity plans
- Funding for sick cow milk disposal
- Reimbursement for veterinary costs and fees
- Offset shipping costs for influenza A testing
- Milk loss offset through the Emergency Assistance for Livestock, Honeybees & Farm-Raised Fish Program (ELAP)

Interested producers should contact the Area Veterinarian in Charge or their local USDA Service Center (for ELAP) to enroll

Key Messages

- Spread of H5N1 between states is linked to cattle movements (*versus independent wild bird introduction*) with further local spread between dairy and poultry premises through direct and indirect transmission routes (people, equipment, etc.)
- Biosecurity is key to mitigate the risk of disease spread
- National surveillance testing is critical to understanding the distribution of the virus to quickly respond and eliminate circulating virus from the nation's livestock and poultry

One Health Response and Next Steps

The emergence of H5N1 in dairy cattle creates a unique and evolving situation that requires a total government response, in collaboration with industry and producers, to ensure the health and welfare of livestock, safety of our food supply, and the safety and wellbeing of our farmers, farmworkers, and their families.

APHIS' ongoing activities in this broad response include:

- Support States' response actions in dairy and poultry and leverage national surveillance and response to minimize impacts to farm producers and workers, animals, and the nation's food supply
- Collaborate with federal and state partners to coordinate research and response efforts across food safety, animal and public health, and vaccine development fields
- Continue engagement and enrollment in the NMTS, working to eliminate circulating virus as its detected in livestock herds
- Offer producer support options emphasizing biosecurity across all livestock premises

Questions