

True Grit: The Truth about Highly Pathogenic Avian Influenza

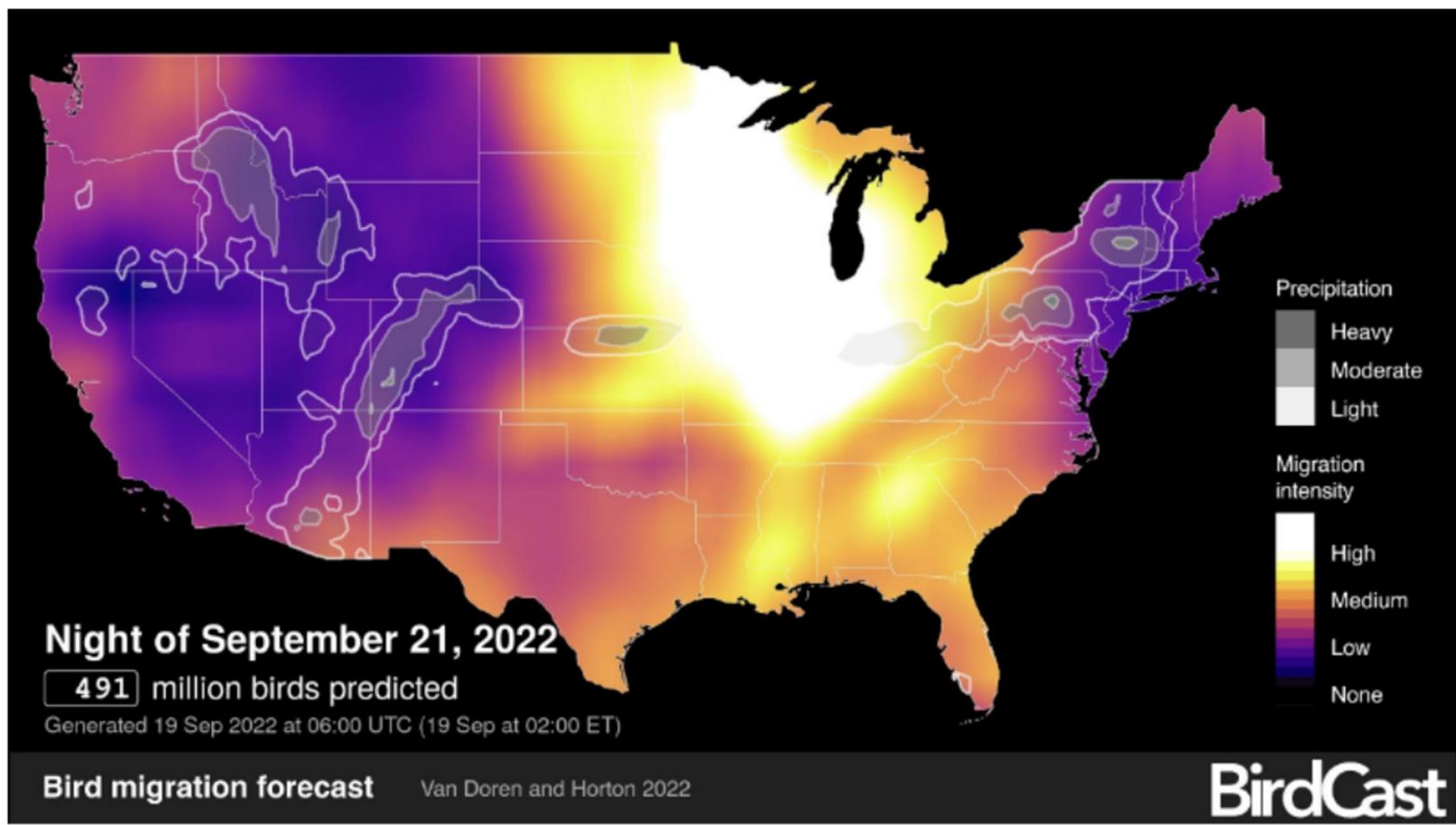
***Bret D. Marsh, DVM
Indiana State Veterinarian***



just 2 hrs later



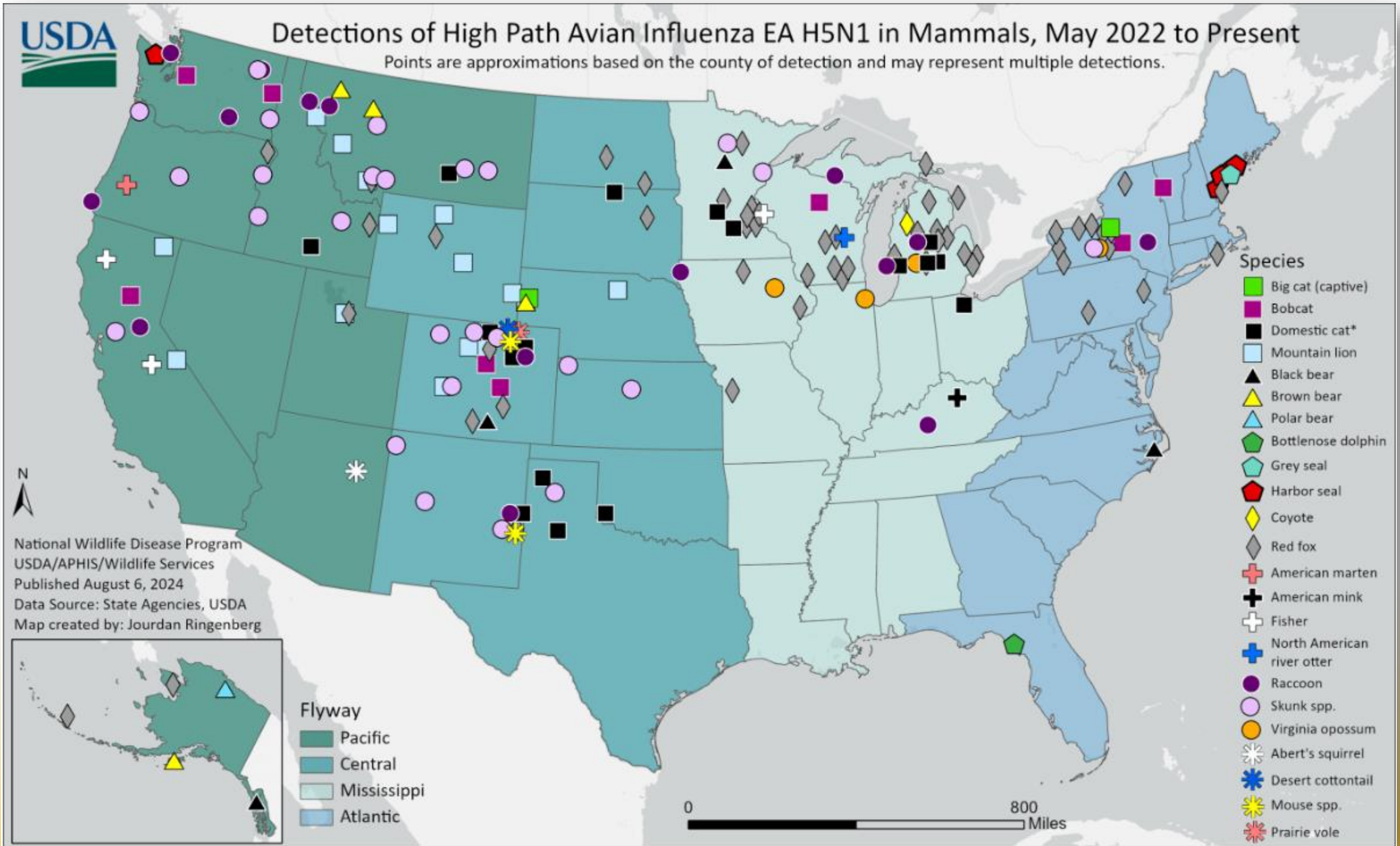






Detections of High Path Avian Influenza EA H5N1 in Mammals, May 2022 to Present

Points are approximations based on the county of detection and may represent multiple detections.



Disease of Unknown Origin

- Dairy farms in Texas panhandle
- Clinical Signs:
 - Decrease in feed consumption, rumination and rumen motility.
 - Clear nasal discharge; and subsequent acute drop in milk production.
 - Abnormal tacky or loose feces, lethargy, dehydration, and fever.
 - Severely affected cattle may have thicker, concentrated, colostrum-like milk or produce no milk at all.



Detection of HPAI H5N1

- Confirmed March 25 after extensive rule-out of other diseases
- Infected cattle may be asymptomatic (subclinical) or symptomatic (clinical)
- Virus is predominantly found in milk and mammary tissue, regardless of symptoms



Federal Order

- Effective April 29
- Mandatory testing of lactating dairy cattle for interstate movement
- Mandatory reporting positive Influenza A diagnostic results



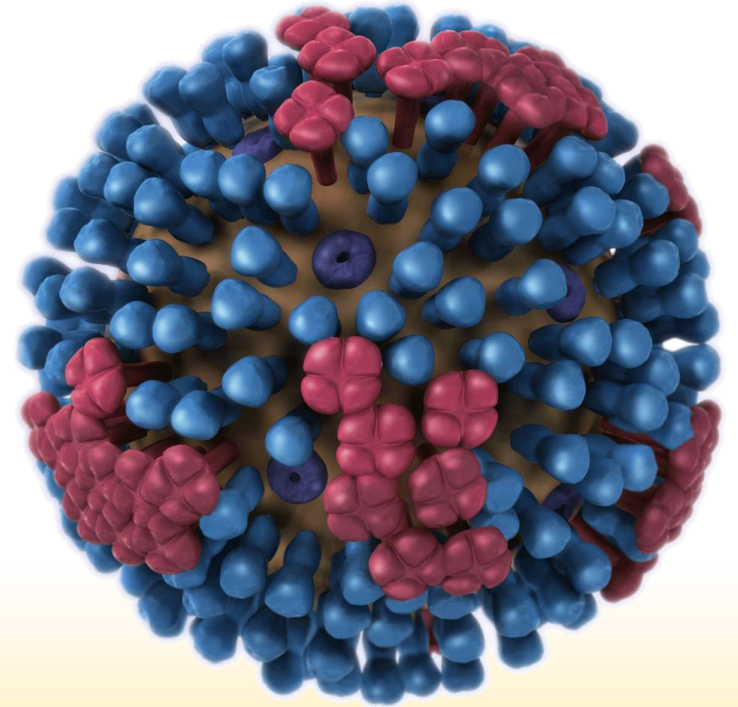
Current Epidemiological Findings

- Spillover event from wild birds
- 12-25 days between introduction and clinical signs
- Unknown role of peridomestic and domestic species
- Phylogenetic and epidemiological data of disease spread from cattle premises to poultry premises



Human Health

- **CDC:** current risk to general public is low.
- **USDA FSIS:** no virus present in retail ground beef samples; continue to use proper cooking temperatures.
- **FDA:** initial survey of 297 retail dairy products found to be negative for viable H5N1 HPAI virus.



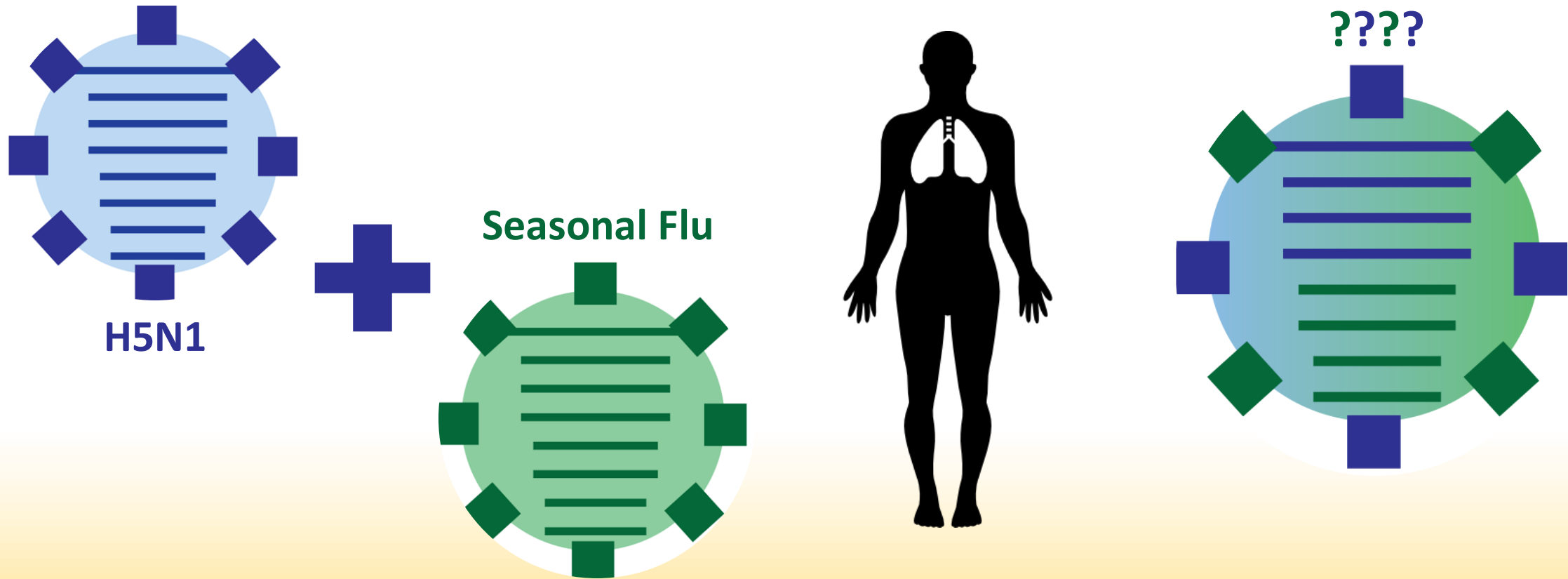
Human Health

US Health Officials to Spend \$100 Million on Bird Flu Surveillance

The US will pay Moderna \$176 million to develop an mRNA pandemic flu vaccine

US to spend \$10 million to curb bird flu in farm workers, including vaccine push

Influenza Reassortment



Human Health

- FDA and USDA issued joint letter to state regulatory partners
- Reiterates effectiveness of pasteurization at inactivating the H5N1 virus
- Ease concerns of milk processors from rejecting milk from dairy farms identified or suspected to have active H5N1 infection



Preparedness: Before the Detection

BOAH Partnerships & Outreach

- ISDA, IDOH, IDHS, IDNR, IDEM, ISP
- Farmers, Allied Industries
- Purdue Extension, Commodities, IFB

Traceability Efforts

- Premises Identification
- USAHERDS
- Individual Animal ID
- Electronic Certificates

Preparedness: Before the Detection

Reporting Avenues

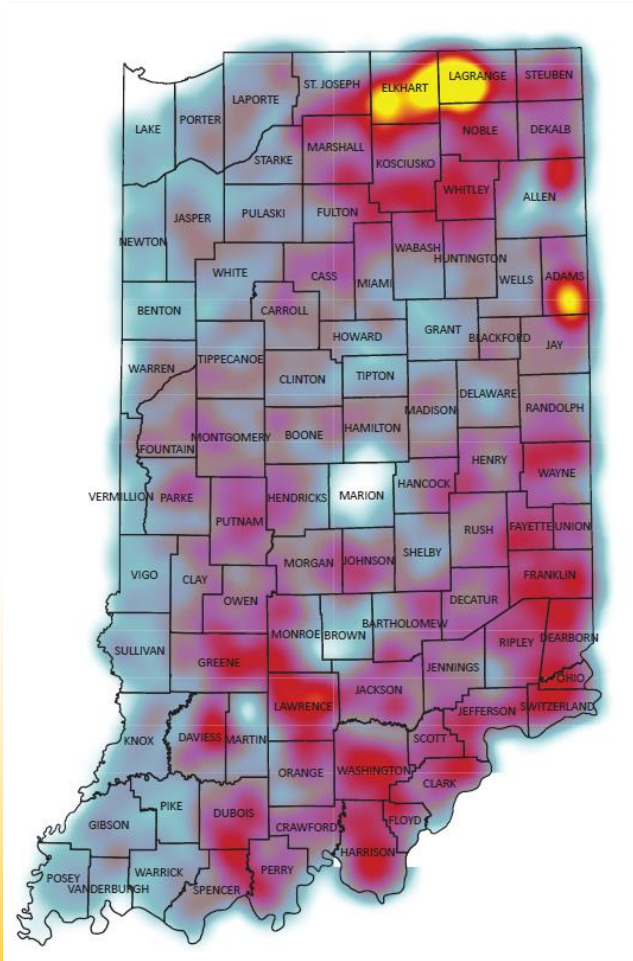
- Producer Reports
- Private Veterinarians
- Laboratory Results
- State, Federal Slaughter Plants
- Epidemiology / Trace Investigations

Surveillance Network

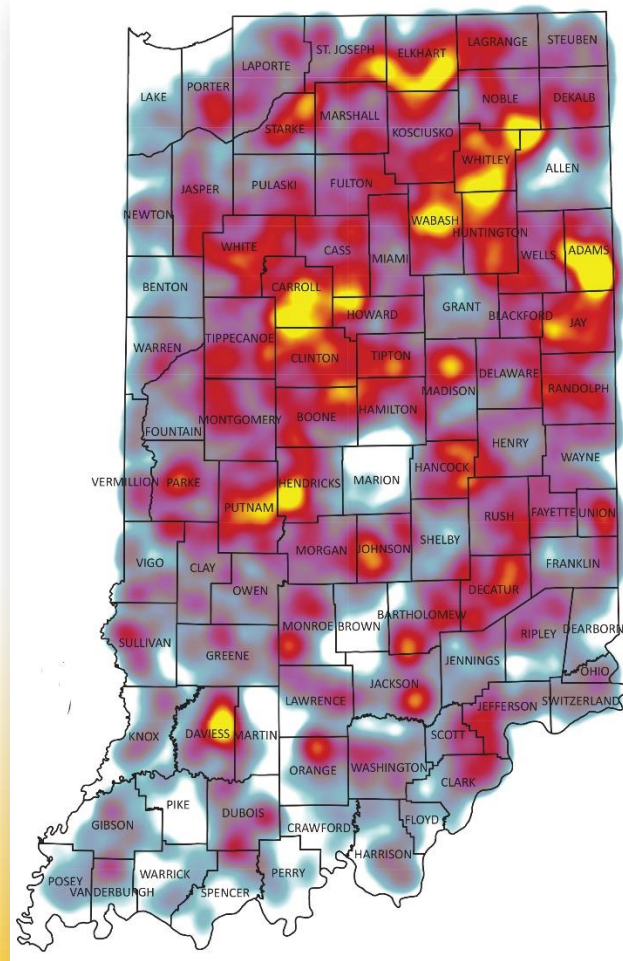
- Foreign Animal Disease Diagnosticians
- Laboratories
 - ADDL@Purdue / NAHLN
 - USDA NVSL

Indiana Registered Premises

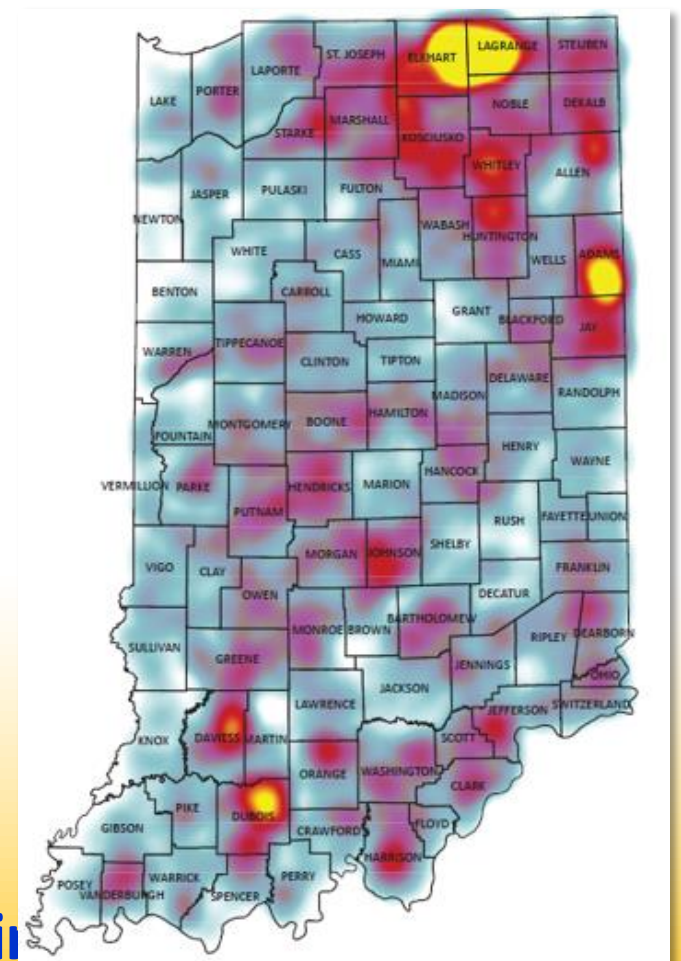
Cattle Premises



Swine Premises

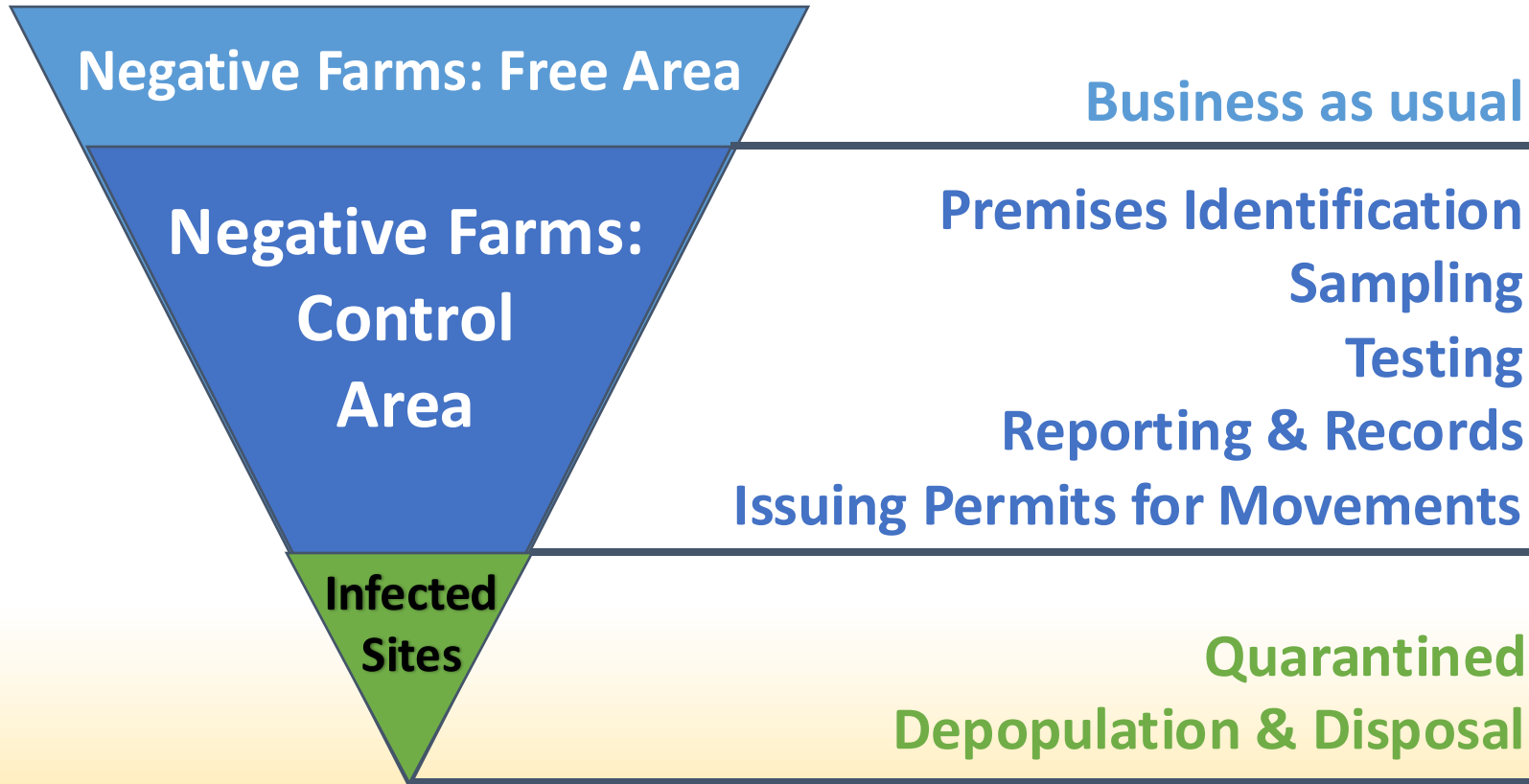


Poultry Premises



of Anii

Plan For the Biggest Job



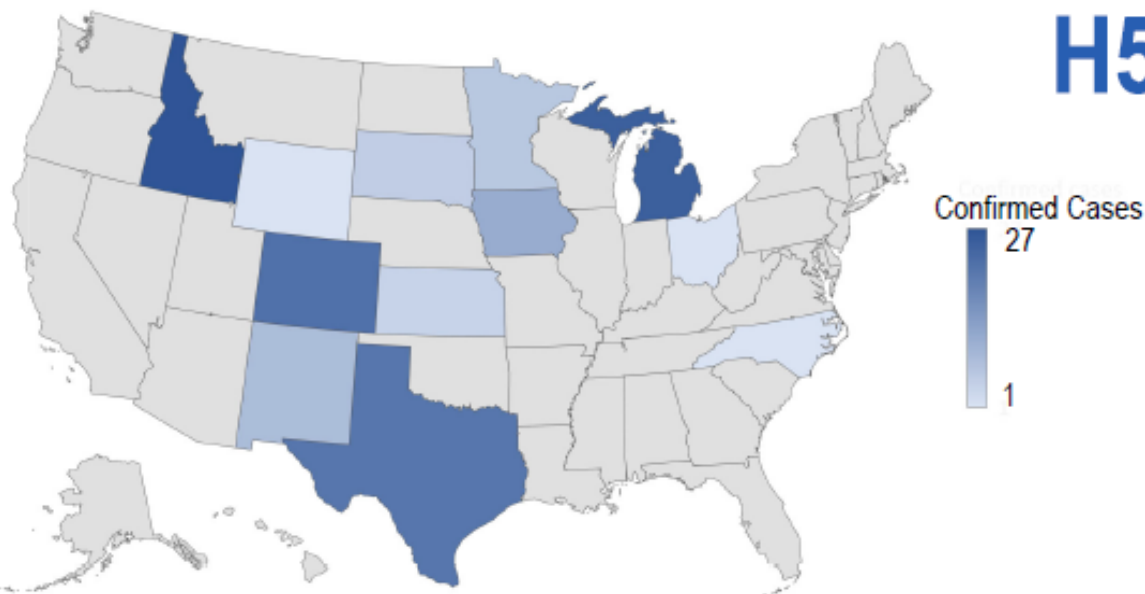
IN Response Plan: HPAI in Dairy Herd

- Restricted Movement Order
- Epidemiological Investigation
- Enhanced Biosecurity
- Surveillance
 - Dairy Cattle Premises
 - Poultry Premises
 - Epidemiological Traces

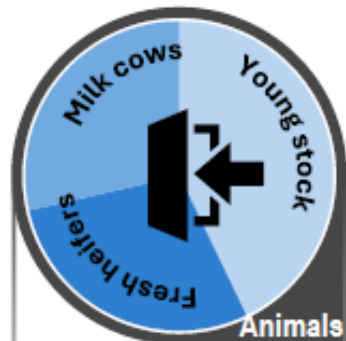
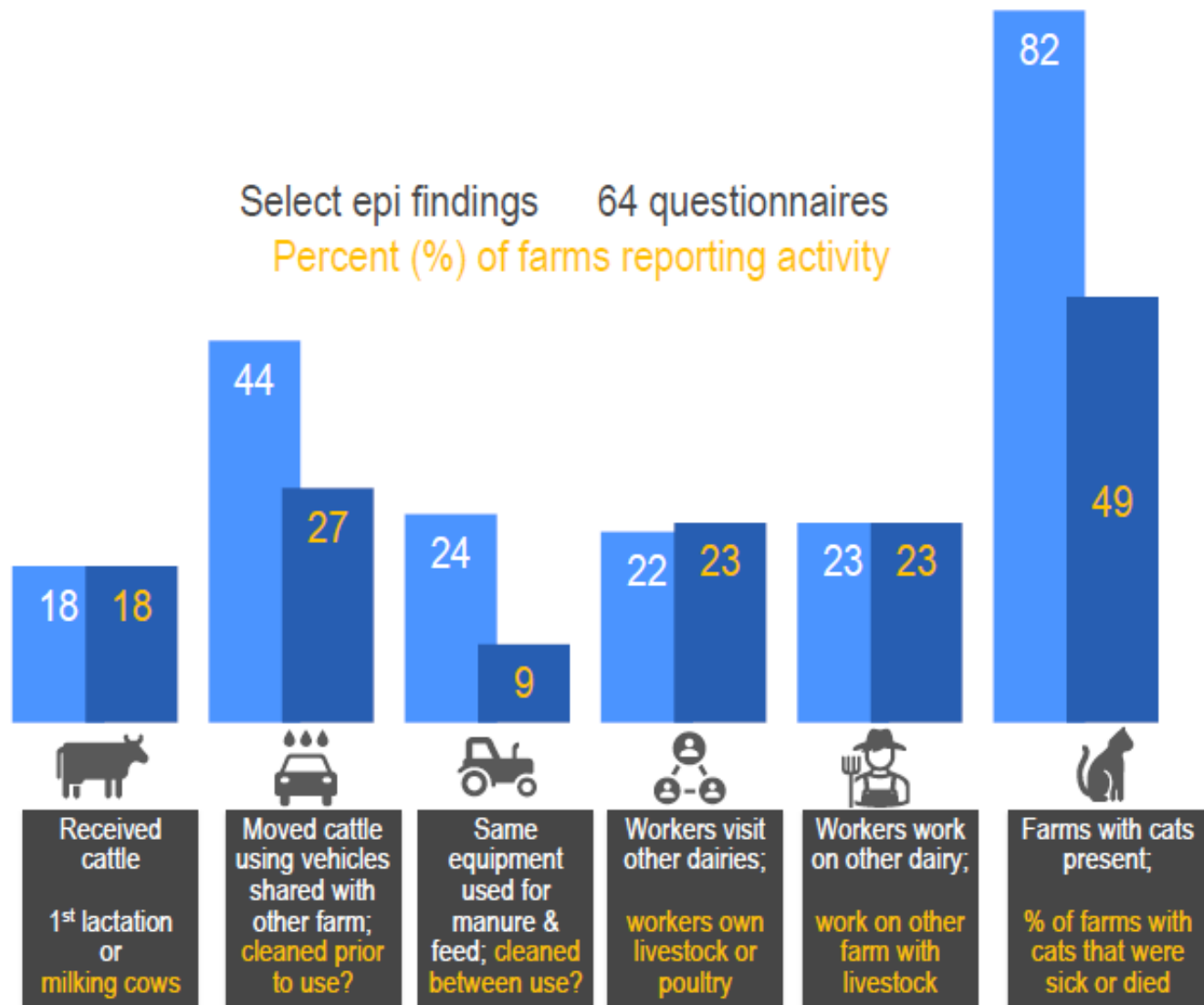


H5N1 IN DAIRY CATTLE - 2024

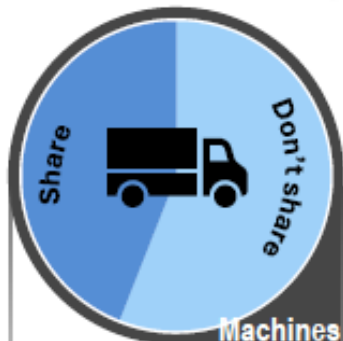
132 herds in 12 states



Select epi findings 64 questionnaires
Percent (%) of farms reporting activity



18%
Received cattle within 30 days of clinical signs



44%
Moved cattle using trucks or trailers shared with other farms



50-87%
Had frequent visitors who had contact with cattle

Dairy Farm Biosecurity

Farm Workers & Families



All family members—including children, as well as full- and part-time workers

Visitors



Anyone in contact with cattle, milk or milking equipment, such as nutritionist, veterinarian, feed delivery

Milk Haulers



Are essential to reducing risk of farm-to-farm spread



Hands

Wash or sanitize regularly before and after contact with animals, milk or milking equipment.

Avoid unnecessary touching/contact with animals, milk or milking equipment. Wash or sanitize before and after contacts.

Wash or sanitize before and after each farm visit or put on clean, disinfectable or disposable gloves.



Shoes

Keep dedicated barn shoes or boots on the farm—not to be worn elsewhere, even the house. Clean, then disinfect.

Wear disposable shoe covers or clean, then disinfect, footwear.

Wear disposable shoe covers or clean, then disinfect, footwear between farms and before entering the truck cab.



Clothing

Wear freshly laundered, dedicated clothing to the barns daily—not to be worn elsewhere.

Wear freshly laundered, clean clothing and wash regularly.

Keep truck clean—spray outerwear with disinfectant (such as Lysol) before entering. Wear clean clothing and wash daily.



Vehicle Traffic

Park in a designated space away from animal areas.
Clean the wheelwells with a liquid disinfectant and floorboards with an aerosolized or liquid disinfectant (such as Lysol).



Other

Keep pets out of animal areas. Be extra cautious when farm workers or family members work on another farm or with poultry.

Use a visitor's log to record who comes on the farm and when. Designate a drop-off away from barns for deliveries and packages.

Avoid spilling/dumping milk—especially from other farms. Soak up outdoor spills with pine shavings.



Be Healthy & Aware

Be aware of signs of influenza-like illness, especially eye and respiratory issues.
Avoid touching your face, especially eyes, nose, mouth.
Protect eyes, nose and mouth when near raw milk and sick-pen cows.

More Information

Online: www.in.gov/boah

Phone: 317-544-2400

Email: animalhealth@boah.in.gov