

Extension Collaborative on Immunization Teaching & Engagement

EXCITE National Partners







Cooperative Extension: Trusted Community Messengers

- The partnership was formed in spring 2021, early in COVID-19 vaccine rollout.
- Mis- and disinformation about the COVID-19 vaccine was pervasive.
- Trusted messengers at local levels were needed to deliver credible, science-based information about the vaccine to build confidence and demand.



University of Illinois Extension director Jody Johnson (right) exchanges contact information with Lee Wright (left) and son Roman Wright. The extension's office in southern Illinois has launched a vaccination education program that aims to reach this storied city; Johnson knows listening to locals will be key. Cara Anthony/Kaiser Health News



Land-grant Institutions Participating in EXCITE by Project





Western Region North Central Region Southern Region Northeast Region

1890 Region

TYPE OF LAND-GRANT INSTITUTION

1994 Land-grant Tribal Colleges & Universities

- 1890 Land-grant Universities
- 1862 Land-grant Universities

- 1 Activity 1, Vaccinate with Confidence
- 2 Activity 2, Immunization Education Pilot Projects
- 3 Activity 3, Design Phase
- 4 Activity 3, Implementation Phase

EXCITE Impact by the Numbers



194,764 Engagement Activities 1,214
Vaccination
Clinics

52,875 Immunizations

updated June 2025



"

When the COVID vaccine came out, my elderly grandmother was afraid to get it. She thought it might harm her because of things she'd heard. Instead of pushing, I listened, answered her questions, shared facts, and reminded her how much we wanted to keep her safe. Eventually, she agreed. The day she got her shot, she squeezed my hand and said, "Thank you for not giving up on me." Getting her vaccinated was one of the most meaningful moments for our family. It brought us peace and brought us back together safely. Having access to EXCITE resources like hand sanitizer, masks, hand soap, and easy-to-understand information about the importance of vaccines really helped her feel more confident and make an informed decision.





EXCITE: Where we are now and where we are going



New Partners

Immunization Education partnership of National Rural Health Association (NRHA) and Cooperative Extension Service (CES)

Highlights

\$500K Allocated

3 Pilot Projects: Minnesota Virginia Tennessee \$100K ea

Deepen our understanding of successful strategies identified from the field.

Connecting rural healthcare organizations and providers with CES on implementing adult immunization outreach and education strategies.

Through September 2025

Adult Immunization Education Integration & Awareness

Education: Integration of adult vaccine education into existing/promising CES programs across all program areas.

Awareness: Creation of adult vaccine messaging that may be used in any CES programs and events.

Highlights

\$1.5 Million Allocated

10 Education Projects \$125K ea 6 Awareness Projects \$40K ea

2025 NHOC preconference September 2024 -August 2025

Integrating Vaccine Education into Existing Curriculum

Curriculum Focus	Lead LGUs
Increasing Immunization Messaging Supplement for EFNEP	University of Delaware
Diabetes Prevention Program (Immunization supplement)	University of Arizona
Increasing HPV Vaccination	Clemson University
Junior Master Wellness	Mississippi State University
Health Workers Empowering Adult Immunization Educ.	Oregon State University
How to Talk to Your Doctor	University of Arkansas
Poverty Informed Strategies	University of Idaho
Climate Adaptation Roadmap	University of Minnesota, with a subaward to the University of Arizona
Stay Strong, Stay Healthy (Immunization supplement)	University of Missouri
Balanced Living with Diabetes (Immunization Supplement)	Virginia Tech



(IAA) Integrative Model of Sustainable Health Decision Making

Establish a sustainable model for integrating vaccine education across program areas as a core part of Cooperative Extension's ongoing outreach.

Highlights

\$10 Million

4 new positions per ECOP region In collaboration with local partners, will increase the public's confidence in vaccinations for adults.

Integrate vaccine education across program areas as a core part of Cooperative Extension's ongoing outreach.

Design phase October 2024 - March 2025 Funded positions 3 years from hire

20 New Immunization Educator Positions

EXCITE

The National EXCITE team is working with Regions to design their approach for assigning the positions.

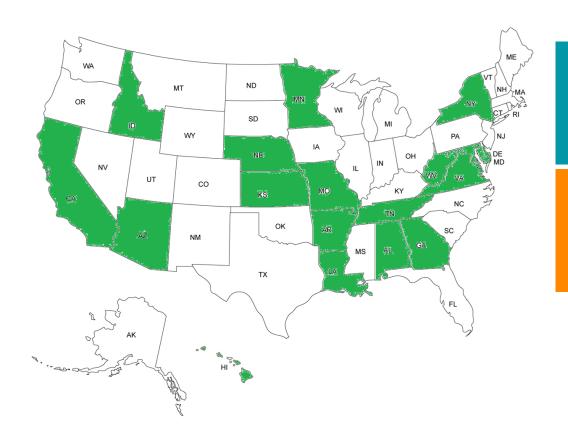
The national team will continue to support both the regions and the educators.

Northeast Each region will choose three states to host immunization South educators. They can choose to hire a fourth **North Central** educator or use those funds to support efforts to integrate vaccine education into West other programs. **HBCUs**

Educators will support immunization efforts both in their states and across their regions



Health Agents Located Across the U.S.



Health Agents will be located across the country. While they are housed at specific LGUs, they will be supporting their entire region in implementing immunization education.

Additionally, EFNEP educators in the Northeast and in Louisiana will continue to improve upon vaccine education modules in the curriculum.



EXCITE Staffing Project Objectives

- 1. At the community level, EXCITE Immunization Educators, in collaboration with local partners, will increase the public's confidence in vaccinations for adults.
- 1. Extension professionals across program areas will increase their knowledge of and ability to educate communities using a model for making sustainable health decisions.

- 3. EXCITE Immunization Educators will expand and strengthen community partnerships with health departments, healthcare providers, and community-based organizations depending on the needs of their communities.
- 4. EXCITE will integrate vaccine education across program areas with their Extension colleagues, community health workers, and volunteers as a core part of Cooperative Extension's ongoing outreach.

The Primary Audience will be:

Rural and Medically Underserved Individuals



H5N1

Education program focused on Cooperative Extension Dairy Agents and Dairy producers to understand and manage the health risk of H5N1.

Highlights

\$500K Allocated

14 Priority States (where H5N1 has been identified) Cooperative Extension Dairy Agents will increase their knowledge and understanding of H5N1 and gain knowledge and enhance skills in behavior change communication as it relates to human health.

Dairy producers will have an increased knowledge and understanding of H5N1 and the potential transference and impact on human health.

Dairy producers will adopt prevention practices on farm to reduce health risk of H5N1.



Merging Animal and Human Health Efforts

Objective #1 Objective #2 Objective #3 Cooperative Extension Dairy Agents will increase their Dairy producers will have knowledge and an increased knowledge Dairy producers will adopt understanding of H5N1 and and understanding of H5N1 prevention practices on farm to reduce human and animal gain knowledge and enhance and the potential transference health risk of H5N1. skills in behavior change and impact on human health communication as it relates and animal health. to human health.



Provide One-Stop-Shop for Science-based Info





https://h5n1.extension.org/



- Print and Media Resources
- Food Safety
- Upcoming Events and Opportunities
- Supporting Websites for General Information

- USDA Actions and Regulations
- On-Farm Biosecurity Recommendations and Training
- Youth Livestock Events and Shows
- Poultry Resources

Worker Protection



H5N1 in the Workplace. Resources for protecting yourself and your employees.

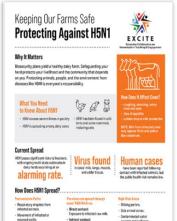
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How is it spreading?



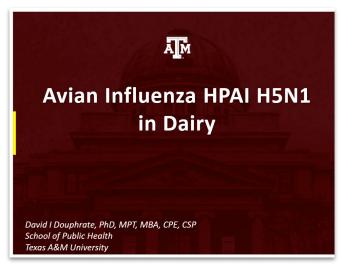
While the current public health risk is low, CDC is watching the situation carefully and working with states to monitor people with animal exposures.

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Monthly Spotlight Sessions with Industry Experts

Featuring top researchers, partners, and practitioners





Impactful Outreach

Diego Manriquez, Ph.D., D.V.M., Colorado State University Nicole O'Donnell, Ph.D., Murrow Center for Media and Health Promotion, Washington State University







How to Deal with Misinformation

Dr. Paul Bolls Co-Director, Murrow Media Mind Lab Murrow College of Communication Washington State University







Fairs and Livestock Exhibitions

Resources and One-Page Checklists for those organizing or exhibiting at livestock shows for multiple species

Distributed to Extension livestock and 4-H agents, to state and local contacts (e.g., fair managers and show boards), and via Extension Foundation lists.

A Checklist for Swine Exhibition Organizers Minimizing the Risk of Influenza Transmission at Swine Shows and Exhibitions

EXCITE Extension Collaborative on

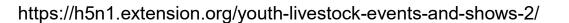
During the Event

After the Event

an outbreak occurs

Isolate and test plas in question









Recommendations for organizers of dairy shows and events to Reduce the risk of H5N1 virus transmission

The Biosecurity plan

The signs of HSN1 illness

Food and houseasse in the harn are prohibite Contact with animals is prohibited

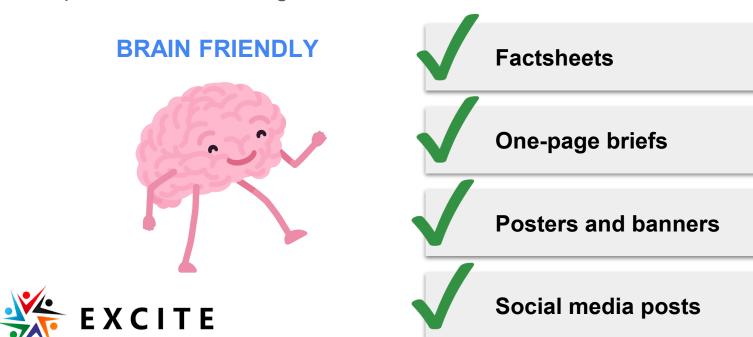
Wash their hon-is after leaving the primal area





Using Brain Science for More Effective Materials

Brain Science helps us more powerfully **engage**, **educate**, and **empower** dairy farm professionals to mitigate risks of H5N1



Factsheet Examples

Keeping Our Farms Safe **Protecting Against H5N1**

Why It Matters

Biosecurity plans yield a healthy dairy farm. Safeguarding your herd protects your livelihood and the community that depends on you. Protecting animals, people, and the environment from diseases like H5N1 is everyone's responsibility.

What You Need to Know About H5N1

- H5N1 causes severe illness in poultry
- H5N1 is spreading among dairy cows



 H5N1 has been found in wild including cats

- How Does It Affect Cows?
- loss of appetite
- sudden drop in milk production

Current Spread

H5N1 poses significant risks to livestock, with ongoing multi-state outbreaks in dairy herds escalating at an

in cows' milk, lungs, muscle. and udder tissue.

have been reported following contact with infected animals, but the public health risk remains low.

How Does H5N1 Spread?.

Transmission Paths

- · Respiratory droplets from infected animals.
- Movement of infected or exposed cattle
- · Contact with raw milk or contaminated equipment clothes, and vehicles.

The virus can spread through cows' RAW MILK via

- · Direct contact:
- Exposure to infected raw milk
- Indirect contact: Contamination through clothes animals, vehicles, or equipment.

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High-Risk Areas

- Milking parlors.
- Sick animal zones.
- Contaminated water sources and surfaces.

Bulk Milk Testing

Why Bulk Milk Testing Matters

- · Provides early detection to minimize herd loss. Current testing suggest virus present in milk 14-16 days before clinical symptoms.
- · Ensures safe animal movement between farms.
- Helps maintain the safety and sustainability of the dairy industry.

National Milk Testing Strategy

On December 6, 2024, the USDA announced its National Milk Testing Strategy (NMTS), introducing a new Federal Order to combat the spread of H5N1 Avian Influenza in dairy herds. These new rules introduce mandatory measures aimed at detecting and preventing H5N1 in dairy cattle. Key Changes Under the Federal Order: Raw Milk Testing Requirements:

- Dairy farms, transporters, transfer stations, and processors must participate in mandatory raw (unpasteurized) milk testing.
- · Any positive test results will be reported to the USDA for follow-up.

Personal Protective Equipment (PPE): **Essential for Safety**

Protect Yourself and Your Farm

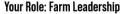
Farm tasks determine exposure levels

- High Exposure: Work in milking parlors or with sick animals.
- Medium Exposure: Work near infected farms.
- · Low Exposure: Work with no direct animal contact.

Recommended PPE for High Exposure Areas

- · Wash your hands before and after contact.
- · Wear disposable gloves for every task.
- Wear safety goggles and a face shield if needed. Use coveralls or work clothing only for the farm.
- Put on a sleeved waterproof apron.
- Use an N95 or surgical mask.
- Wear rubber boots.
- Use footbaths at entry points





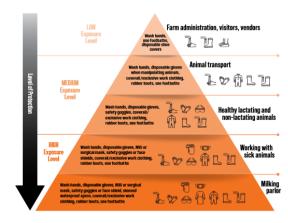
Taking these steps demonstrates commitment to protecting your herd, employees, and community. Proactive biosecurity ensures the sustainability of your farm and strengthens the dairy industry for generations to come.

What PPE should be made available depending on the work tasks in the dairy?

Think of the protection pyramid:

To ensure safety at all exposure levels, encourage workers to follow these basic hygiene measures

- · Do not take work clothing home or to other dairy, cattle, or poultry operations.
- · Wash hands regularly.
- · Use footbaths or disposable shoe covers when moving to different locations within
- · Allow boots to dry after using footbaths.
- · Report any signs of illness.









One-Page Brief Examples

Just the Facts! Farm Workers and H5N1

H5N1 is a serious health risk in birds, cows, and other animals and can also spread to humans.



- · H5N1 risk if greatest for those who work with or around infected animals (poultry, dairy cows, wildlife) or handle raw (unpasteurized) dairy products infected with the virus
- · Human infection from H5N1 occurs when a high enough concentration of the virus is inhaled or gathers into your eyes, nose, or mouth.
- Be aware of your H5N1 risk by being mindful of your potential to - Breath in tiny particles containing the virus
- · Transferring the virus by touching contaminated surfaces and then touching your eyes, nose, or mouth

H5N1 Virus ... The Symptoms!

Symptoms are like the flu

- · Cough, stuffy or runny nose · Eve redness or discharge

preventative measures · Headaches, body or muscle aches can make a difference.

H5N1 Virus ... Farmworkers protect vourselves!

- · Change out of clothing that might be contaminated BEFORE going home · Use safe work practices and keep down the dust
- · Only consume pasteurized dairy products

- · Report symptoms to your employer and get regular medical check-ups
- Use appropriate and effective PPE: Coveralls, Apron, Gloves, Head Covering, Eye Protection. Shoe Covers





EXCITE

The H5N1 virus spreads ability to evolve rapidly

quickly, but simple

The constant evolution measures to safeguard livestock and human health. By doing so, we reduce the chances of it evolving into

iSOLO LOS HECHOS! Trabajadores Agrícolas Y Gripe Aviar H5N1

El virus H5N1 es un riesgo grave para la salud de las aves, vacas y otros animales. H5N1 también

puede propagarse a los humanos.

Virus H5N1 ... ¡El Riesgo!

- · El riesgo de contraer el virus H5N1 es mayor para aquellos que trabajan con o alrededor de animales infectados (aves de corral, vacas lecheras, vida silvestre) o quienes manejan productos lácteos crudos (no pasteurizados) infectados con el virus.
- La infección humana por H5N1 ocurre cuando se inhala una concentración suficientemente alta del virus o cuando el virus entra en los ejes la nariz o la beca
- Sea consciente de su propio riesgo de contraer H5N1 teniendo en cuenta el riesgo que

El virus H5N1 se propaga

marcar la diferencia.

rápidamente, pero simples

medidas preventivas pueden

- · Inhalar pequeñas particulas que contienen el virus (desde leche cruda o
- Transferir el virus al tocar superficies contaminadas y luego tocarse los olos.

Virus H5N1 ... ¡Los Síntomas! Los síntemas de Infección per H5N1 sen similares a los de la gripe:

- Tos, pariz tapada o que moques
- Enrojecimiento o secreción ocular Bolores de cabeza, corporales o musculares

Virus H5N1 ... ¡Trabajadores agrícolas, protéjanse!

- Lávese las manos con frecuencia. Cámbioso do rona muo nuoda ostar contaminada ANTES do ir a casa.
- Use prácticas de trabajo seguras y mantenga el polyo bajo control.
- Consuma solo productos lácteos pasteurizados, no crudos.
- Péngaso la vacuna contra la gripo estacional. Informe los sintomas a su empleador y realice chequeos médicos regulares
- Use EPP (Equipo de Protección Personal, PPE en Ingles) adecuado y efectivo: Overol o ropa exclusiva para su trabaio. Delantal impermeable y/o lavable. Guantes

desechables, Cobertura para la cabeza, Protección ocular, Cubre zapatos

Bolls, P., Hartschuh, J., Horn, T., Manriquez D., 6 O'Donnell, N. (2024). Keeping our Farms Safe Protecting Against HSN1 (Factsheet). Extension Foundation, EXCITE.

EXCITE

Debido a que el virus

rápidamente. Esto hace

que sea crucial utilizar

medidas de protección

nara salvaquardar la

salud del rebaño y de

los humanos. Esto

ayuda a prevenir la

Recommendations for organizers of dairy shows and events to Reduce the risk of H5N1 virus transmission

Before the Event

Work with State Animal Health Officials and State Public Health

Stay up to date on Federal and State requirements for animal

https://www.aphis.usda.gov/sites/default/files/dairy-federal-order.pdf animal movement to potential exhibitors prior to the event Develop a plan with these officials for the disposal or removal of raw

milk in a way that no other humans or animals have access to it Establish a plan in case an animal develops clinical signs tact information for state animal health officials and

> et information from all exhibitors to be able rmation prior to, during, and after

share the event biosecurity plan with exhibitor

ng the co-mingling of cattle from different herds when nose to nose contact

er stalling to allow space between exhibitors sit shared water troughs between farms ity has a milking parlor, schedule milking times and

n for the disposal or removal of raw milk should rs be present

lesignated disposal area for milk and prohibit the any area other products at this location imal show signs of H5N1 virus infection n isolation area away from other animals and

otocols and PPE recommendations for those caring //h5n1.extension.org/youth-livestock-events-and

During the Event

- Communicate with all exhibitors at the start of the event The Biosecurity plan
- The signs of H5N1 illness

- Specific actions to take should an animal become sick Clean and disinfect equipment frequently and remind exhibitors to do the same

- Post signs near the entry and exit of the exhib
- · Food and beverages in the barn are prohibited Contact with animals is prohibited
- Wash their hands after leaving the animal area Consider closing areas of the barn during high animal traffic times (during shows and milking times) and allowing spectator

After the Event



ttps://www.aphis.usda.gov/sites/default/files/guidance-d ie-livestock-exhibition.pdf

artschuh, J., Horn, T., Manniquez, D., G O'Donnell, N. (2025). the Risk of HEWI Transmission (Factsheet), Extension Founda The information was adapted from USDA APHIS Guidance (Ma

EXCITE Extension Collaborative on Immunitration Teaching & Engagement

Recommendations for Dairy Show and Event Exhibitors to Reduce the Risk Transmission of H5N1

Before the Event

Signs of HSN1 in cattle

dehydration

Signs of H5N1 in human

Use an approved disinfectant

Leave sick animals at home

Stay home if you or a family me

Do not share a trailer with animals from a

What to know Animal movement requirements for interstate movement it you will be showing outside the state your cattle are housed in

Decreased milk production, reduced appetite, thickened, discolored milk, lethargy, fever, and/or

Influenza-like symptoms (e.g., fever, chills, cough, sore

State or event specific exhibition requirements

The risks-discuss with your herd veterinarian

Obtain a certificate of veterinary inspection

APHIS strongly recommends minimizing movement of

Clean and disinfect any equipment you will be bringing

https://www.epa.gov/pesticide-registration

epas-registered-antimicrobial-products-effective-against-avian-influenza#for

If you have sick animals in the herd, test animals for

- Do not share equipment, tools, or supplies with other Currently, lactating cows require a negative test for H5N1 no more than 7 days prior to show Most current requirements can be found at https:// Keep you animals at a safe distance from other aniwww.aphis.usda.gov/sites/default/files/dairy-fede
 - Avoid nose to nose contact between animals from differ-

Observe cattle regularly for signs of H5N1

Follow event guidance for handling of raw milk

During the Event

- If an animal becomes sick at the event
- Report sick animals to show organizers Follow event protocols and biospecurity plan should an
- animal become sick Follow biosecurity protocols should an animal become sick
- Interactions with animals should be limited to those caring for the anima
- Those caring for the animals should limit exposure to
- Use proper personal protective equipment Gloves, boot covers or wash boots, safety glasses
- https://h5n1.extension.org/wp-content/up-
- loads/2025/01/Level-of-Protection-stand-alone.pdf Wash hands frequently
- Do not share equipment and supplies between sick and healthy animals

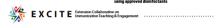
After the Event

Isolate and observe animals after returning home 30 day duration

Do not share equipment, tools, or water sources with ani-mals that stayed home

Consider testing for H5N1

Clean and disinfect all equipment you took to the show





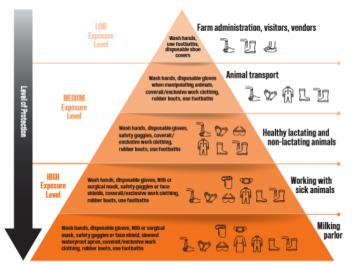
Posters and Banners

50 banners
distributed for use at producer meetings, fairs, trade shows

EXCITE

Personal Protective Equipment Recommendations for H5N1

Use this protection pyramid to better understand what PPE is recommended on the dairy based on the work task.



Following these guidelines is essential for the health of our animals and everyone on the farm.

Let's work together to maintain a safe and secure environment.



Social Media Post Examples

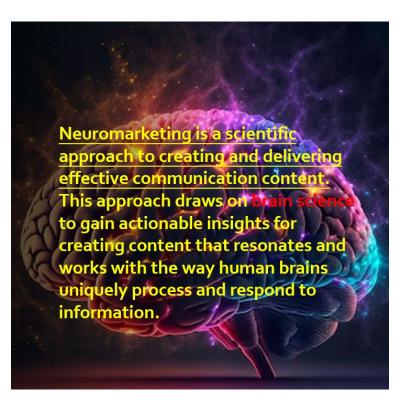






EXCITE H5N1 Response

Applied Neuromarketing Content Testing

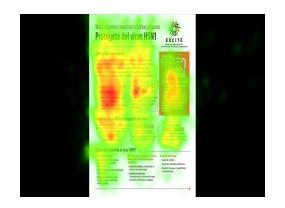


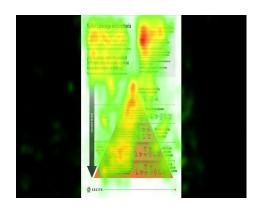
METHODOLOGY:

- Participants (N = 37) were dairy professionals recruited from three Colorado dairies and CSU
- H5N1 Extension team content was tested (English and Spanish language versions)
- Measures:

Eye Tracking - Visual Attention
Heart Rate - Cognitive Effort (Attention)
Skin Conductance - Intensity of Emotions
Facial Muscle Activity - Negative Emotion
Self-report Questions - Attitudes

Applied Neuromarketing Preliminary Insights







- Educational print content
 - Visual icons/Information graphics are effective
 - "Real photos" are less effective
 - Blocked Column, sectioned layout is effective
- H5N1 Educational content for farmworkers
 - Text about milk testing and how H5N1 impacts animals is engaging
 - Text about PPE is less engaging

