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Addressing Safety and Health Risks to Prevent Avian Flu Among Dairy Workers

National Center for Farmworker Health

October 23, 2024



Agenda

1. Brief H5N1 bird flu update
2. Dairy worker labor conditions
3. Safety guidelines
4. NCFH's response to H5N1
5. Available resources



H5N1 in dairy cattle

- Cattle are a new host for H5N1
- Likely spread is cow-to-cow, and possibly humans and machinery/vehicles
- Currently has been detected in 14 U.S. states among 404 herds (*as of 10.31.24*)
- Many dairies may not be testing animals right now
- Cats on dairy farms were also infected

Source/*Fuente*: Centers for Disease Control & Prevention. <https://www.cdc.gov/flu/avianflu/mammals.htm> and <https://publichealth.jhu.edu/2024/whats-happening-with-dairy-cows-and-bird-flu>



H5N1 in humans

- 39 cases of H5N1 in humans in the US (*as of 10.31.24*)
- 38 of them are farmworkers (poultry or dairy)
- 1 case in non-farmworker in Missouri, unknown how this person contracted H5N1 flu
- H5N1 is still a low risk to the general public, but it's high risk for animal production workers

Source/*Fuente*: Centers for Disease Control & Prevention. <https://www.cdc.gov/bird-flu/situation-summary/index.html>



Worker Populations At Risk

- Animal production workers and farmers
- Vets and their staff
- Slaughterhouse workers who perform specific tasks
- First responders (animal health or public health)
 - This can include CHWs doing outreach on impacted farms!

Source/*Fuente*: Centers for Disease Control and Prevention. <https://www.cdc.gov/flu/avianflu/h5/worker-protection-ppe.htm>



Dairy Worker Labor

- Work hours generally 8-12 hours per day
- 6 days on, 1 day off common but can vary
- Need labor 24 hours a day, so shiftwork is common
- Common occupations: Milker, feeder, farm hand, inseminators, managers, inspectors, vets and vet techs,
- Often hire TN visa workers (engineers and veterinarians) from Mexico. H-2A workers also may be present if farm produces feed for cattle



Land & geography

- California and Wisconsin together account for 33% of US milk production
- Idaho, New York, Texas, Michigan, Pennsylvania, Minnesota together account for another 34%
- Western states now account for about half of milk production
- **25% of dairy cows are located in just 17 counties**

Source:

<https://www.ers.usda.gov/webdocs/publications/98901/err-274.pdf>





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Safety Guidelines



H5N1 Transmission

- Being exposed to milk drops/droplets from cows
- Breathing in dust from sick birds or cows (like poultry litter)
- Touching contaminated surfaces
- Any exposure to potentially sick animals or being in buildings or areas with sick animals
- Human-to-human is rare and unlikely but has been documented in Asia, so best to be cautious!

Use Personal Protective Equipment (PPE)

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





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NCFH H5N1 Response



Background + Approach

- FY25 is the fifth year NCFH has held a cooperative agreement with CDC to focus on emerging and re-emerging infectious diseases that impact farmworker communities
 - To date, has included work on COVID, seasonal influenza, H5N1 avian influenza, Mpox, sexually transmitted diseases, and vector-borne diseases
- Follow a simple approach for this work:
 - Think nationally, act locally
 - Data + experience inform action on local, state, and national levels



Core Strategies

- Local farmworker outreach
- Network-building
- Health education
- Training & capacity-building
- Data collection for action
- Evaluation & feedback/input loops



Dairy Worker H5N1 Focus Groups

- NCFH conducted Focus Groups in three H5N1 impacted states with dairy workers to:
 - *To assess dairy worker attitudes, knowledge, and practices about H5N1 avian influenza*
 - *To understand dairy workers' perceptions of barriers in accessing healthcare for infectious respiratory diseases such as H5N1*
- Inclusion criteria:
 - At least 18 years old
 - Must have worked in a dairy farm at least one month since March 2024
- Total participants: 27
- Time frame: June - August



Dairy Worker H5N1 Focus Groups

- **Knowledge about H5N1:**
 - All participants stated they knew about H5N1
 - Had received information from employer and through media, but none from outreach partners
 - However, most mentioned that employers had provided information about the "new virus" on cows, but had not received information about spread to humans or how to prevent spread
- **PPE:**
 - Gloves readily distributed, but other recommended PPE were not
 - Only 3 workers said their employer provided fluid resistant coveralls
 - For all other PPE, workers stated that they bought it themselves due to their roles at work



Dairy Worker H5N1 Focus Groups

- **Working Conditions:**
 - Participants described how the nature of dairy work makes it very difficult to avoid being exposed to cow fluids
 - Stated that it would be "nearly impossible" to make changes at the worksite that would reduce their exposure to fluids
 - Using PPE such as masks and gloves is difficult due to the amount of heat and humidity
 - Using PPE also affects their efficiency
 - Not everyone has access to hand washing stations as it depends on work
 - Even if access to hand washing stations, soap is not readily available



Key Take Aways

- **Provide more health information and trainings to workers that are culturally and linguistically appropriate through outreach**
- **Provide better access to PPE that can be used given working conditions**
- **Provide access to hand washing stations with soap for all workers**

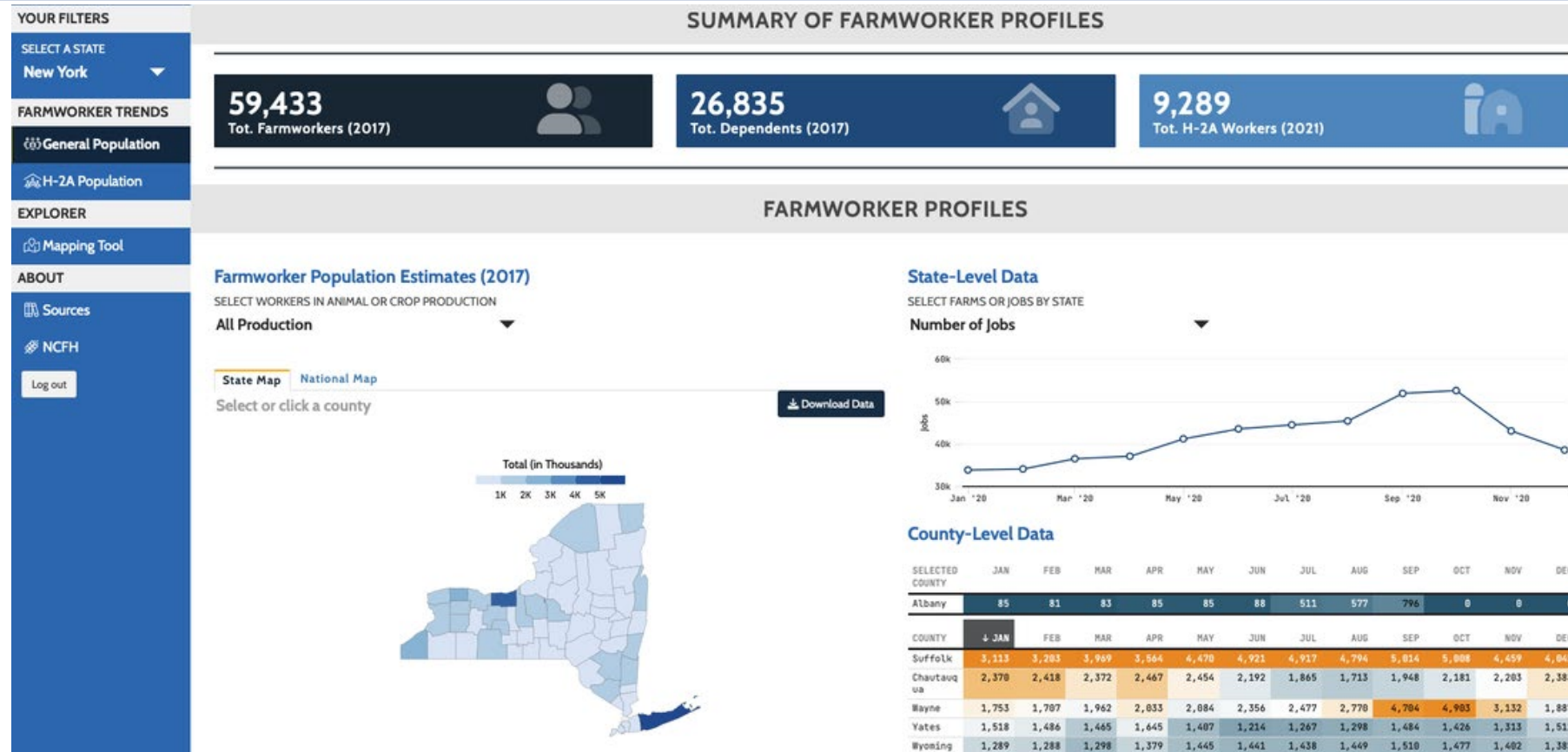


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NCFH Resources

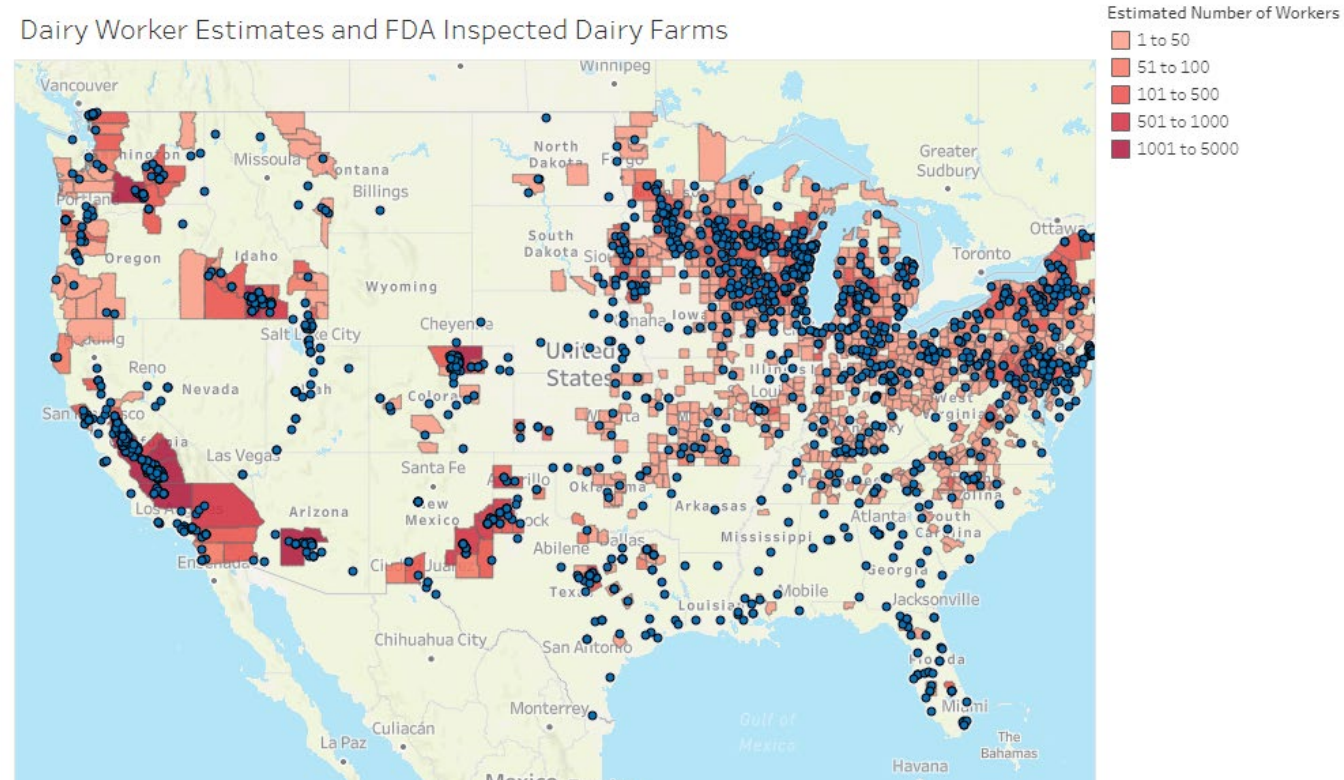


Farm Labor Data Dashboard



Link: <https://www.ncfh.org/dashboard.html>

Pilot Tool: Dairy Worker Estimates

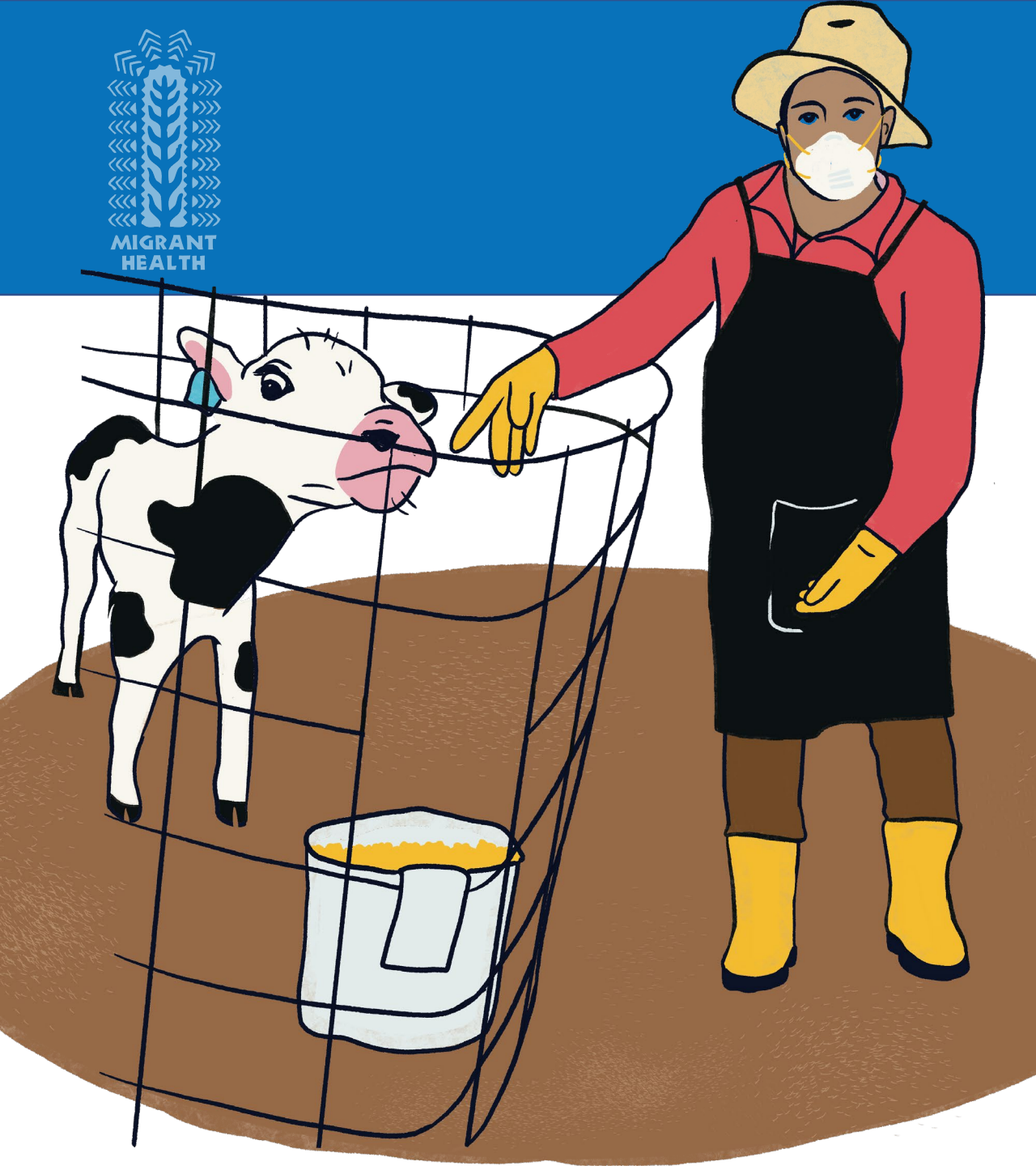


Link:

<https://public.tableau.com/app/profile/national.center.for.farmworker.health/viz/DairyWorkerEstimatesandFarms/Dashboard1>



Infectious Disease Education



- H5N1 materials, along with COVID and influenza materials available at: https://www.ncfh.org/infectious_disease_hub.html
- H5N1: Printable flyer, social media graphic, radio PSA available in English, Spanish, Afrikaans, K'iche', Mam, Mixteco, Nahuatl, Q'anjob'al
- Flipchart/rotafolio + handout for tailgate talks with dairy workers coming soon!



Speakers Contact Information



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Thank you!
Gracias!

