



H5N1 Focus Groups with Dairy Workers National Center for Farmworker Health June – September 2024

Disclaimer

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Introduction

Since April 2024, 53 human cases of H5N1 have been reported to CDC as of November 18, 2024.¹ To date H5N1 has mainly affected dairy workers with direct exposure to infected cows, or poultry workers when culling chicken flocks infected with H5N1. There is limited information regarding the workers' perspective on this issue, which we worked to address through these focus groups with dairy workers. These focus groups build on the initial listening session NCFH staff facilitated with dairy workers from different states and with CDC staff in June 2024 (see Appendix B for a summary of this listening session).

Objectives

- 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

Methods

Participant Eligibility

Inclusion criteria for focus group participants were that they were 1) at least 18 years of age or older, and 2) they must have worked on a dairy farm for at least one month since March 2024. Participants received a \$40 gift card as compensation for their time.

Recruitment and Data Collection

The National Center for Farmworker Health (NCFH) staff facilitated three focus group discussions with dairy workers about H5N1 bird flu in Colorado (June 29, 2024), Texas (August 1, 2024), and Michigan (September 6, 2024). These specific states were selected due to the high concentration of dairy farms in certain parts of the state, and herd H5N1 infection status.² The Colorado focus group was in collaboration with Project Protect Food System Workers Promotoras, the Texas and Michigan focus groups were conducted in collaboration with local outreach workers. Focus group participants were recruited using snowball sampling, beginning



with referrals from local outreach workers. Participating workers were also allowed to invite workers they knew.

Focus group discussion guides (Appendix A) were developed by NCFH staff and reviewed by CDC personnel. Guides were translated into Spanish by NCFH staff. Each focus group consisted of 9-12 dairy workers who were currently employed on different dairy farms, with different job duties, for a total of 27 participants. Participants did a variety of duties on dairy farms, including milking cows, handling livestock, and supervising other workers. Informed consent was verbally granted before starting recordings. All focus groups were an hour long, conducted in-person in Spanish and recorded by a trained facilitator and notetaker from NCFH staff. Staff took notes and debriefed on key findings after each focus group.

Analysis

Transcripts were created from recordings which were then analyzed along notes and debriefs by two NCFH staff. One staff lead and developed the thematic analysis, and two secondary staff reviewed the analysis. All staff met and discussed any differences in analysis. The key findings were categorized under three main themes: 1) knowledge of H5N1 bird flu, 2) working conditions and personal protective equipment, and 3) healthcare access.

Key Findings

Demographics

Participants ranged in age from 25 to 50 with history of work in dairy farming. The majority of participants were from Mexico with a minority of Guatemalan participants. The majority of participants were male, with a total of three female participants and 24 male participants.

Knowledge of H5N1 Bird Flu

The majority of participants were aware of the spread of H5N1 among cows in U.S. dairy farms, with only two participants not having heard of the virus. Sources of information regarding the outbreak varied between participants. Some were notified by their employers first, whereas others were informed by online platforms such as Facebook and YouTube, official public health channels such as CDC and local clinic websites, and online news sites. One participant in the Michigan focus group reported that they had heard online about the H5N1 outbreak as a means to eradicate cows so as to force people to consume synthetic meat (see detailed quote below). Other participants in the focus group neither agreed nor disagreed with the participant's statement.

“Ese virus iba a venir para eliminar muchos animales, muchos, mucha ranchería y para poder cerrar... Y este, y que en el 2040 la ideología que le van a prometer a los niños ahorita es que, nunca existieron las vacas. Que lo que ahora ellos van a consumir la carne sintética, entonces ellos van a decir ‘¿Oh, que cómo es posible que comíamos esos animales?’” // “This



virus came to eliminate many animals, many, many ranches and to make them close...and, and that in 2040 the ideology that will be instilled in children is that, cows never existed. That what they are going to consume now is synthetic meat, so they will say 'Oh, how is it possible that we ate animals?'" - Michigan focus group participant

All participants were aware that people could be infected with the virus and described symptoms consistent with respiratory infections such as coughing, fever, chills, headaches, and difficulty breathing. Swollen or red eyes were not stated as symptoms of H5N1 infection by any of the participants. In the Michigan focus group, participants stated that they bought and wore goggles to protect their eyes, as coworkers had started to experience redness in their eyes during work. Participants agreed that infections could be severe and stated that people who felt sick should receive medical assistance to prevent severe illness.

When asked if their employer had given participants information regarding the H5N1 virus, almost all participants stated that they had received information that there was a new virus, and it was affecting the cows. However, there was no information regarding how to prevent the spread of the virus, that the virus could infect workers, or about protections for workers. Texas participants stated that they believed employers were not well aware of how the virus spreads. Michigan participants believed that employers do not inform workers so as not to scare workers away.

"Y pues tras los detalles de eso no dijeron que eran, que yo no tenía que cubrirme. En mi caso no. Y me imagino que la razón es que no le dan importancia a eso. el segundo es si avisan a los compañeros, mira hasta esta enfermedad y te puedes contagiar. Y te va a pasar esto y esto. No, entonces no quieren, no quieren que el trabajador de que deje."// "And so, going over the details they didn't say that, that I didn't have to cover myself. And I imagine the reason is because they don't care about that. The second is that if they notify the workers, look there's this sickness and you can catch it and this and this will happen to you. No, then they don't want to, they don't want the worker to leave." - Michigan focus group participant

"Yo me he informado un poquito sobre esta enfermedad, es una de muchas variantes, un virus que afecta tanto a seres humanos como a muchos animales, particularmente a las aves, que son las principales portadoras y que es muy contagioso, entonces sus síntomas son muy similares a un resfriado común."// "I have informed myself a little bit about this disease, it is one of many variants, a virus that affects both humans and many animals, particularly birds, which are the main carriers, and it is very contagious, so its symptoms are very similar to a common cold." - Colorado focus group participant

Working Conditions & Personal Protective Equipment

Participants were asked if they received gloves, masks, goggles, face shields, head coverings, rubber boots, and fluid-resistant overalls or aprons from their employer. Participants discussed how gloves are regularly distributed for certain roles for their day to day work. Other types of Personal Protective Equipment (PPE) to protect workers from the virus were not distributed. In Colorado, four participants out of ten had regular access to gloves at their workplace. In Texas and Michigan, gloves were provided to all workers. Only in Michigan did three participants state that the employer provided them with fluid-resistant aprons due to their role at work. For all other PPE, workers stated that they bought it themselves due to their roles at work. In Texas participants stated that they bought boots, coveralls, and head coverings. In Michigan participants stated that they bought themselves boots and goggles. A participant in Michigan summarized the sentiment of their coworkers regarding OSHA, stating that workplace safety and worker health recommendations are never enforced.

“¿Por ejemplo, ahí tenemos toda esa información, tenemos información de derechos humanos y que muchas cosas, pero yo nunca he visto un representante de derechos humanos que esté velando los derechos de los trabajadores, ¿no? Nunca he visto un representante de la OSHA o un representante de ustedes que esté ahí velando que las cosas se cumplan.” // “For example, we have all this information, we have information on human rights and many other things, but I have never seen a human rights representative who is watching over the workers' rights, no? I have never seen a representative of OSHA or a representative of yours who is there ensuring that things are complied with.” - Michigan focus group participant

Overall, workers described how the nature of dairy work makes it very difficult for a worker to avoid being exposed to cow fluids and other biological material. Workers in all focus groups felt that it would be nearly impossible to make changes at the worksite that would reduce their exposure to fluids and biological material from cattle. One worker in Colorado explained that they had been exposed to all types of bodily fluids from cows such as blood, feces, and vomit and that using PPE such as masks and gloves in the corral is difficult due to the amount of heat and humidity. Workers in Michigan echoed this sentiment stating that working with a face covering, even goggles, can be difficult due to the environment of the worksite and the need to be efficient with milk collection. In Colorado, participants stated how they believed hand sanitizer could be provided alongside industrial gloves. When asked about access to handwashing stations, Colorado participants discussed that access was dependent on the role at work, as it determined their location on the farm. They also noted that soap was not regularly available at handwashing stations.

“Sí, hay cambios. El detalle va a ser que el patrón no lo va a aceptar porque, por ejemplo, para no exponerse uno de las heces, si uno ve que una vaca está haciendo su necesidad, esperar y lavar podría ser una opción. ¿Pero eso lleva más tiempo, entonces? El patrón no lo va a aceptar.” // “Yes, there are changes. The issue is going to be that the employer won't accept it because, for example, in order not to expose oneself to feces, if one sees that a cow is doing its



business, waiting and washing could be an option. But that takes more time, then? The employer is not going to accept it.” - Michigan focus group participant

“Las vacas empiezan a lamer y ahí dejan hasta mocos. He visto con sangre, babas, no sé cómo se llame y forzosamente tienes que tomarlas, manipularlas y si hacemos contacto [con las vacas]. La pregunta es difícil, si es bastante difícil andar en una máquina con una mascarilla o andar con guantes, te empiezan a sudar. Y andamos 9 horas y media.” // “The cows start to lick and they even leave snot there [where they lick]. I've seen blood, drool, I don't know what it's called, and you have to take them, handle them, and yes, we make contact [with the cows]. The question is difficult, yes, it is quite difficult to work with a machine with a mask or work with gloves, you start sweating. And we work 9.5 hours.” - Colorado focus group participant

Healthcare Access

Participants were asked which sources of health information they prioritized when searching for information regarding H5N1. Participants from Colorado responded that they preferred to read or view information from clinics and health organizations, as well as government organizations (such as the CDC). Texas and Michigan participants stated that they googled information first and checked social media with the caveat that they did not always believe in health information on social media. One participant in Michigan stated that they checked the CDC website specifically, while participants in Texas mentioned a YouTube social media influencer named Dr. Mike.

When asked what information regarding the H5N1 outbreak participants needed, the consensus in Colorado was that they had been given so little information regarding the outbreak that they needed all the information available. In Michigan, multiple participants stated that they did not need PPE or more information but rather more access to healthcare to feel safer while working during an outbreak such as H5N1. Texas participants stated that while they had received some information about H5N1 from their employer, they didn't provide adequate information or in a matter that made it easy to understand by them. It was not clear whether this information was provided to workers directly from their employer, or if there was an intermediary person providing the information.

“Cuando uno tiene certeza de que no debe faltar la atención médica no puede estar tranquilo, uno no se siente seguro.” // “When one is certain that medical care should not be lacking, one cannot be at ease, one does not feel safe.” - Michigan focus group participant



“Aunque uno no quisiera, se llega uno a contagiar, pero sí es más seguro que tuviéramos acceso a las clínicas o a los hospitales.” // “Even if you don't want to, you can become infected, but it would be safer if we had access to clinics or hospitals.” -Michigan focus group participant

Participants were asked if they were to have an illness such as H5N1 what would prompt them to seek help. All participants responded that they would seek medical care if an illness affected their ability to work or do normal daily activities, with participants from all states noting barriers to care such as the cost of medical care, lack of transportation, language access issues, fear of medical personnel sharing information with immigration or law enforcement, and lack of insurance. On the topic of language access, a Michigan participant noted how people who have not been to the hospital are not aware of what translation services are offered at their location. Participants' ability to find free time for medical care varied by state, with Colorado participants stating they had adequate free time for medical care, Texas participants stated a lack of free time as a constraint, and Michigan participants stated that finding someone to cover their shift was a difficulty.

“Muchas personas que yo conozco tienen miedo de dar información [a personal de hospital/clínica] porque piensan que lo va a compartir.” // “Many people I know are afraid to give information [to hospital/clinic workers] because they think it will be shared.” - Michigan focus group participant

“Sí, en una tableta, si casi ahorita la mayoría de ellos usan, usan ese traductor, pero mientras uno no va, pues no sabe.” // “Yes, on a tablet, yes almost all of them use one, they use that translator, but as long as you don't go, you don't know.” -Michigan focus group participant

“Son obstáculos en nuestra verdad. ¿Yo no digo esto para perjudicar a los trabajadores, a los patrones, porque también estoy agradecido, ¿verdad? Con ellos nos dan trabajo de alguna manera. Ellos nos están ayudando, pero se les olvida también que nosotros tenemos las necesidades. Mayormente la mayor de las veces se les olvida la necesidad del trabajador, ellos solo les interesa producción.” // “They are obstacles in our truth. I am not saying this to persecute the workers, the employers, because I am also grateful, right? With them they give us work in some way. They are helping us, but they also forget that we have needs. Most of the time they forget the worker's needs, they are only interested in production.” - Michigan focus group participant

Participants were asked what information they would want about an H5N1 vaccine, if it were to become available. Participants from all states wanted more information regarding efficacy of the potential vaccine and its side effects, including both short-term and long-term side effects, like possible effects on fertility and reproductive health.

Discussion & Recommendations



The focus groups provide key insights into how health officials, healthcare workers, employers, and farmworker-serving organizations can best support farmworkers impacted by H5N1. One of the key take-aways from these discussions was the lack of comprehensive information about H5N1 available to dairy workers. While workers had heard about H5N1, there were informational gaps about signs and symptoms of illness, prevention measures, and about how the virus spreads from cows to workers. Employers may also need more information about H5N1, or more information and tools to effectively train their employees. Information campaigns should utilize trusted messengers, who may be different for workers and for employers. Workers prioritized information from local clinics or health care providers, and from trusted government health agencies. Information campaigns to reach workers should include both in-person outreach and digital outreach through social media, radio, or other platforms used in the community.

The use of PPE is one of the main ways for workers to prevent infection yet workers expressed numerous barriers to being able to use PPE at work. Access to all recommended PPE was limited for workers, with most workers reporting that the only PPE they were provided was gloves. Other forms of PPE had to be purchased by workers out of their own funds. They also expressed doubt about being able to fully utilize the recommended PPE due to several different factors, such as needing to work quickly and the high heat and humidity of their workplace. Providing and distributing PPE to workers can be a key strategy to prevent infections. This can be done by providing them directly to workers or in partnerships with employers or other community-based partners. Similarly, while workers said they had access to hand-washing stations some did not have soap or clean water for proper hand washing practices. Providing soap and ensuring the availability of clean water for these stations would further provide adequate prevention measures of H5N1 infections.

Workers were also asked about their access to health care if they were to become infected or sick. Many barriers to access were identified. The lack of free time to seek care was due to the labor conditions in the dairy industry due to the long working hours and a lack of paid sick leave. Workers mentioned that a lack of transportation to clinics posed another challenge to seeking care. Even when workers are able to get to a health care provider, they identified language barriers as being a concern if interpretation services are not provided. Some workers were uninsured, and the high cost of care prevents them from seeking services. Health officials, providers and organizations should work together to provide low-cost, point of care access for workers. These can include extended evening or weekend hours, as well as partnerships with employers and other community-based partners to provide mobile health clinics on farms, near workers' residences, or in community sites frequently visited by workers, such as grocery stores.



References

1. Centers for Disease Control and Prevention. H5: Current Situation. Accessed October 11, 2024. <https://www.cdc.gov/bird-flu/situation-summary/index.html>
2. U.S. Department of Agriculture. HPAI Confirmed Cases in Livestock. Accessed October 8, 2024. <https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/hpai-confirmed-cases-livestock>



Appendix A: Focus Group Discussion Consent and Guide

Informed Consent

Timeframe and context

This focus group discussion will last approximately 1 hour. Today we are discussing your thoughts, feelings, and concerns regarding the H5N1 (Avian Flu) outbreak in dairy farms in the United States.

Risks

There is very little risk to you in answering the discussion questions. If a question causes discomfort, you are free to not answer it. If you are called upon, please respond with a No answer or pass.

Recording

We will record our discussion today for our notes and analysis of the project. We will ask for your consent to start the recording. All identifiable information (for example your name) if discussed, it will be removed from the transcript of the recording to protect your privacy.

Privacy

We have asked for your name and phone number to help us schedule and conduct the interview and to compensate you for your time, they will not be used during discussion. We will be using codenames for the discussion today to protect your identity. so please reference others with the codename cards present at discussion. We will delete your name and phone number from our records when we no longer need to communicate with you. We will never share your name or phone number with anyone outside of the National Center for Farmworker Health. We will use your answers to the questions today in combination with other people's answers to better understand your thoughts, feelings, and concerns about H5N1 (Avian Flu) and these responses will be used to write a report and develop strategies to protect the health of dairy workers. We will share a summary of the report with you once it is completed.

VOLUNTARY PARTICIPATION & COMPENSATION

Participating in this discussion is your choice and you can refuse to answer any of the questions or end your participation at any time. You will be given \$40 by gift card. This money is for the time you are spending in this discussion, the time you needed to prepare for the discussion, and to answer follow-up questions after the discussion.

WHO TO CALL WITH QUESTIONS

You may call Jocelyn Suarez at the National Center for Farmworker Health at 737-234-6917 if you have questions later about the project.



Consent

Do I have everybody's consent to start the discussion? Please raise your hand if yes.

Focus Group Guide

H5N1

1. Have you previously heard of H5N1 (Bird Flu)? If so, what have you heard and from who?
 - a. Do you trust or believe what you have heard? Why?
 - b. Can people get Bird Flu? If yes, what are the symptoms?
 - c. Do you believe it is or can be serious?
 - d. When should you receive healthcare if the infection becomes serious?

2. Have you been advised of protective measures against H5N1 (Bird flu) at work?
 - a. If so, what measures have you been advised to take?
 - b. Who gave you those recommendations?
 - c. What did you do after learning about those recommendations?
 - i. Did anything keep you from putting the recommendations into practice? If so, what?

3. NIOSH (National Institute for Occupational Health, a government workplace health and safety research agency) recommends the use of Personal Protective Equipment (PPE) including N95 masks, goggles, or face shields, gloves, head covers, rubber boots, and fluid resistant coveralls to prevent workers from getting sick from H5N1. Are you currently using any of this equipment at work? Please raise your hands as I list each piece of equipment. *List off: N95 masks, goggles, face shields, gloves, head covers, rubber boots, fluid resistant coveralls and tally each hand raised. No need to note who raised their hand.*
 - a. Have these been made available to you by your employer?
 - b. Are there certain types of jobs or places on the farm where it's harder to use any of this PPE? If so, which one? why?
 - c. For jobs or places on the farm where it's harder to use any of the PPE, what changes in the workplace could be made so that you aren't exposed to the cows' milk, feces, or other body fluids?

4. If you wanted to learn more about H5N1 (Bird Flu) where would you seek information? *Have participants specify groups, websites, content creators if internet sources are mentioned*



5. What other information regarding H5N1 (Bird Flu) or PPE do you need to feel safe at work?
6. If a vaccine for H5N1 (Bird Flu) were available, what information would you need to make a decision to get it or not?

Health care access

7. What are your concerns, if any, when receiving healthcare?
8. If you were worried you caught an illness such as H5N1 (Bird Flu), what would prompt you to seek help?
 - a. When seeking healthcare, what, if any, obstacles do you face? *Prompts: time off from work, cost of medical care. Remember to follow up on details such as regulations for time off, usual cost of care.*
 - b. *If transportation is mentioned: (What is the transportation cost or rate? Does it fluctuate?)*

Final Question

Is there anything else you'd like to add about H5N1, barriers to accessing healthcare, or occupational respiratory concerns?

Appendix B: June Listening Session with Dairy Workers

View the listening session summary with dairy workers from Colorado, Texas, Vermont, and Washington at: <https://ncfh.box.com/s/t5vc10db4dc2selp6j0n38abx5zlgsg>