H5N1 Dairy Workers Rapid Community Assessment – Washington Survey Results
National Center for Farmworker Health
October 2025

Introduction

This project builds on the National Center for Farmworker Health's (NCFH) Rapid Community Assessments (RCAs) methods to assess attitudes, beliefs, and practices around key infectious disease threats, such as H5N1 avian influenza. Beginning in March 2024, the U.S. dairy industry began experiencing H5N1, highly pathogenic avian influenza, in dairy cattle. As of October 7, 2025, 1,080 herds had been detected in dairy cattle in 18 different states.[1] Evidence shows that the continued spread of the virus among cattle is likely due to local and interstate movement of cattle, products, equipment, and people that have been in contact with infected cows.[2] While the risk to the general public is low, as of October 7, 2025, a total of 70 human cases have been identified in 13 states, primarily among dairy and poultry workers, with three of these cases in people who were not exposed to livestock or poultry at the time of infection.[3]

This project utilizes a convergent mixed methods design to assess H5N1 knowledge, attitude, and behaviors among dairy workers. Data collection is taking place from March – September 2025. The quantitative methods are in-person intercept surveys with dairy workers in 12 counties in six states. The qualitative methods include in-depth interviews with dairy workers, employers, dairy sector experts, and staff from worker-serving organizations. This summary report is a preliminary, rapid analysis of the quantitative methods only for two counties in Washington.

Objectives

1. To determine dairy workers' attitudes, knowledge, and practices related to H5N1.
2. To describe dairy workers' access to and use of recommended PPE and relevant training about H5N1.
3. To determine dairy workers' potential H5N1 cases and barriers to testing for H5N1
4. To determine dairy workers' access to healthcare services and barriers.
5. To determine dairy workers' vaccination rates of key adult vaccines, including updated COVID-19 vaccines and seasonal influenza vaccines.
6. To identify dairy workers' key demographics such as age, sex, country of origin, and other characteristics.

Methods

Participant Eligibility Criteria

- 18 years of age or older at the time of the intercept survey
- Worked in the dairy industry (NAICS code 112120) for at least 30 days since January 1, 2024
- Works or resides in Whatcom or Yakima counties, WA, at the time of the survey
- Speaks English, Spanish, or other languages spoken by dairy workers in selected county based on stakeholder feedback

Recruitment and Data Collection

Washington was the sixth of six states in this rapid assessment. To select states and counties, NCFH staff used the US Department of Agriculture data on the number of dairy cattle in each county and state in the U.S.[4] We then selected states that had at least 100,000 dairy cattle in four different regions: Northeast region - New York and Vermont; Midwest/Rocky Mountain region – Minnesota; West region – California and Washington; Rocky Mountain region – Colorado. Two counties per state were randomly selected through a weighted random sample based on the number of dairy cattle in each county. The sampling universe in each state consisted only of counties with at least 30,000 dairy cattle, or, in case the state did not have more than one county with this criterion, approximately 30,000. Whatcom and Yakima Counties were the two selected counties for Washington.

Dairy workers were recruited at selected sites as well as prior to data collection dates by locally hired data collectors. Data collectors informed the potential participant about the purpose of the intercept survey and verbally shared the informed consent found at the beginning of the survey instrument. Participants received a $30 gift card to a local grocery store in the area. Data collection occurred between August 15-29, 2025, in Yakima and August 22 to September 2, 2025, in Whatcom.

Analysis

Rapid descriptive analysis of the intercept surveys was conducted using R version 4.2.2

Only select key data are presented below. For questions regarding these results or other data questions, please contact Nicandro Mandujano Acevedo at nmandujano@ncfh.org.

Key Findings

A total of 113 surveys were conducted with dairy workers in Whatcom and Yakima counties, Washington, on a total of approximately 41 different sites.

Demographics

Table 1: Key Demographics of Dairy Workers in Whatcom and Yakima Counties, WA (n=113)

Characteristic	**n = 113**[1]
Sex	
Male	100 (89%)
Female	8 (7%)
Age Group	
18-25	21 (19%)
26-54	73 (65%)
55+	16 (14%)
Race	
Hispanic or Latino	90 (80%)
American Indian/Alaskan Native/Indigenous	9 (8%)
White	4 (4%)
Don't know/No answer	10 (9%)
Country of Birth	
Mexico	82 (73%)
Guatemala	23 (20%)
United States	6 (5%)
Marital Status	
Married	67 (59%)
Single	26 (23%)
Civil union/Domestic partnership	13 (12%)
Divorced	4 (4%)

[1]*If "No answer" or "Don't know" were less than 5%, they were omitted from the table.*

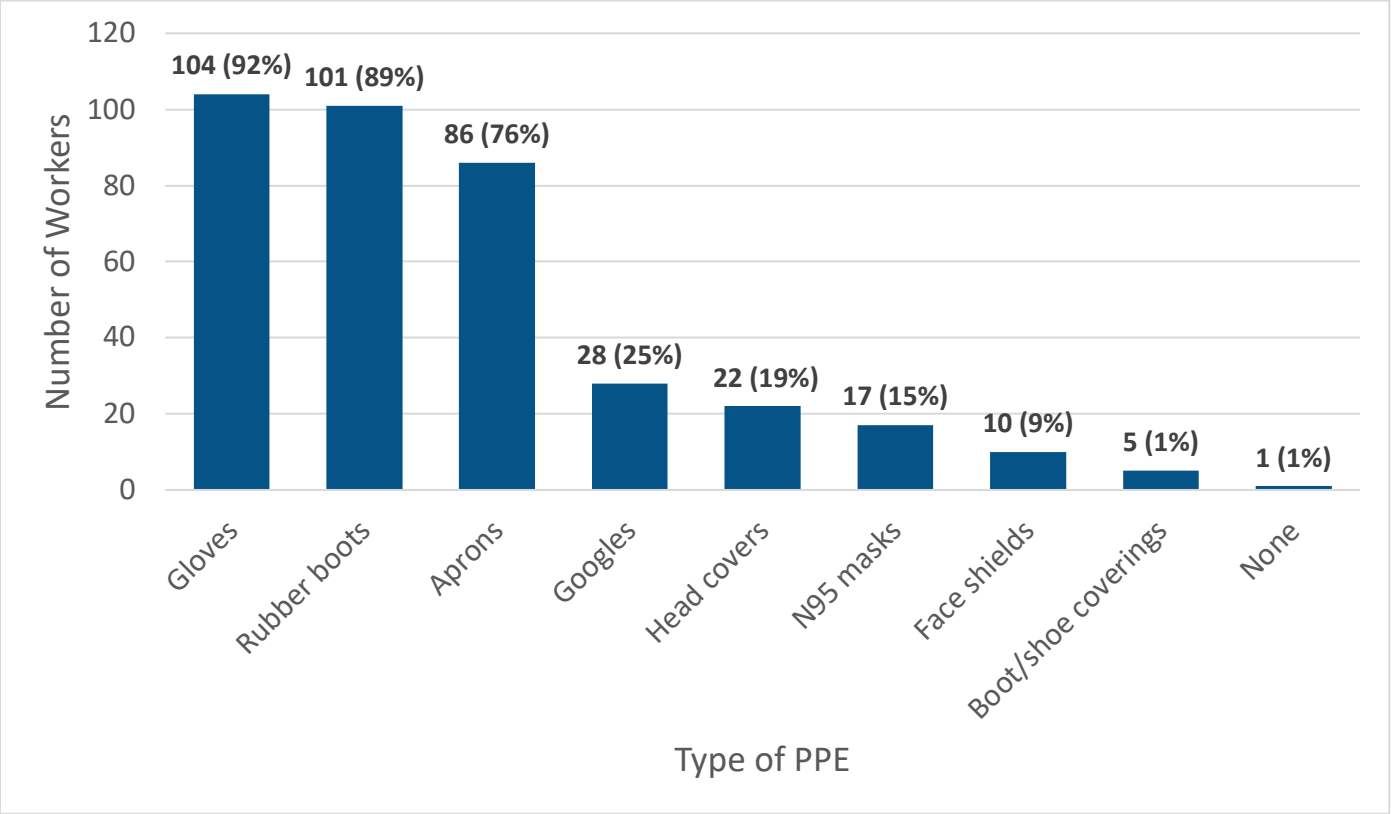
H5N1 (Bird Flu) Related Findings

Table 2: H5N1 Knowledge among Dairy Workers in Whatcom and Yakima Counties, WA (n=113)

Characteristic	**n = 113**[1]
Has heard of H5N1 (Bird Flu)	
No	77 (68%)
Yes	35 (31%)

[1]*If "No answer" or "Don't know" were less than 5%, they were omitted from the table.*

Figure 1: Regular Use of NIOSH-Recommended Personal Protective Equipment to Prevent H5N1 Exposure Among Dairy Workers in Whatcom and Yakima Counties, WA (n=113)



Dairy workers were asked to describe the risk of a worker contracting the H5N1 virus from an infected cow during various tasks. We have included workers' perception of risk from milking cows, as this is likely the highest risk task for workers inside a dairy if dairy cows are infected.

Table 3: H5N1 Risk Perception from Milking Cows Among Dairy Workers in Whatcom and Yakima Counties, WA (n=113)

Characteristics	**n = 113**
Perception of H5N1 risk from milking cows	
High	54 (48%)
Medium	27 (24%)
Low	9 (8%)
No risk	12 (11%)
No answer	11 (10%)

Vaccines

Figure 2: H5N1 Vaccine Acceptability Among Dairy Workers in Whatcom and Yakima Counties, WA (n=113)

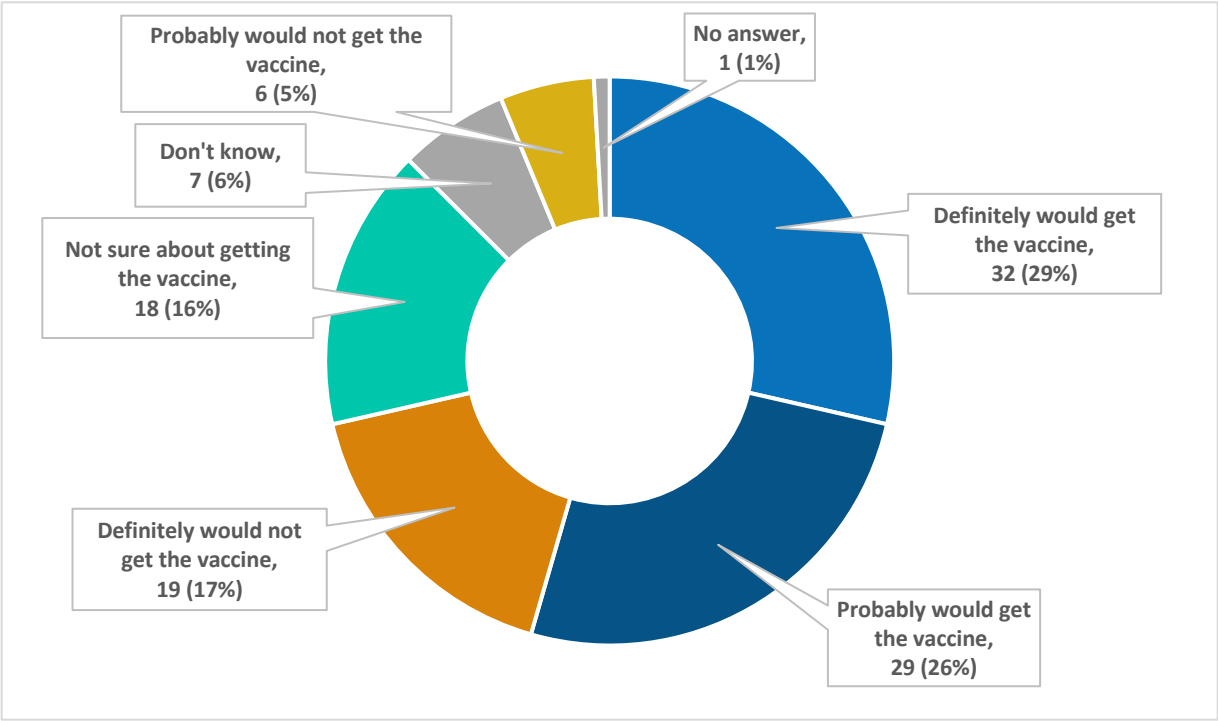
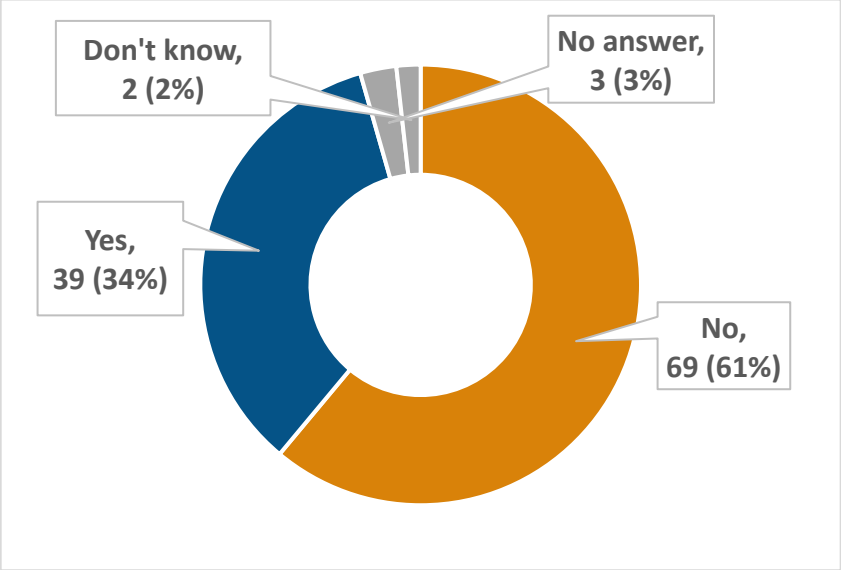
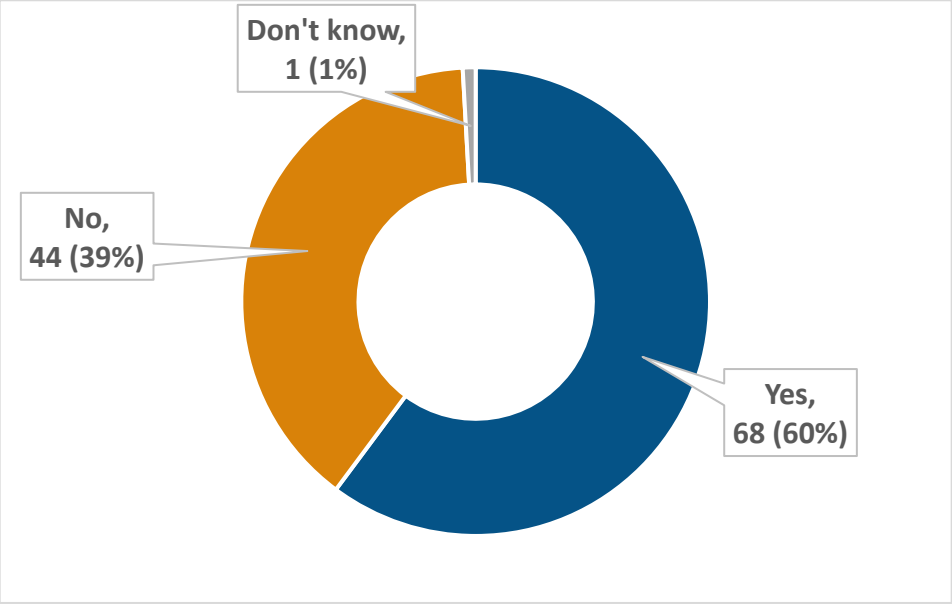


Figure 3: Seasonal Influenza Vaccine Uptake in the Last 12 Months Among Dairy Workers in Whatcom and Yakima Counties, WA (n=113)



Paid Sick Leave

Figure 4: Dairy Workers Who Have Paid Sick Leave in Whatcom and Yakima Counties, WA (n=113)



Disclaimer

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