

Protect Your Herds –This is Serious

A note from Anja Raudabaugh, CEO of Western United Dairies

Highly Pathogenic Avian Influenza A (HPAI)/H5N1 virus is for the first time affecting dairy cattle across the United States. Federal and state agencies are moving quickly to conduct additional testing for the virus, including any other multi-factorial components of the disease event in dairy cattle. Viral genomic sequencing is being conducted at present, but the vector for this pathogen is not precisely known although birds are suspected. There are no known cases in California herds at this time. Epidemiologic evidence strongly suggests cow-to-cow transmission at present. **CDQAP offers more information here.**

Beef and dairy products are safe for consumers because pasteurization is effective at killing the virus.

This situation is evolving and changing. Guidance and directives will **LIKELY CHANGE** as more information is learned. USDA and Federal and State partners will continue to share additional updates as soon as information becomes available.

In addition to the **USDA guidance document** (see page 3), the following slides are exceeding helpful from a herd management perspective and are being provided by Select Milk Producers, Quality Control Veterinarian, Dr. Brandon Treichler, DVM.

WUD is requesting that the State of California use it's authority to ban all cattle coming into California from HPIA infected states until further notice.

Inclusion Criteria

- **Drop in rumination/Rumen Hypomotility**
- **Decline in feed intake**
- **Decreased milk yield**
 - More severe cows essentially presenting as dry cows
- **Changes in the milk**
 - Thicker and often yellowish to brown, resembling colostrum
 - +/- Flakes in the milk
 - Many severe cows appear to have all quarters involved, but there are cows that will have only 1-2 quarters involved.
- **Widespread increase in milk conductivity**



(continued on page 2)

Weekly Update Delivery Options

Send change of address or request for delivery to WUD by phone or email at: **(209)527-6453**
info@wudairies.com

Struggling with Depression?

Call 1-800-784-2433 any time, 24x7, for a live, trained person to talk with or to find local resources.

LUC: Lecheros Unidos de California

Western United Dairies is proud to host LUC, a clearinghouse of resources to assist in all aspects of searching for and hiring employees for your dairy.

LUC services are offered in Spanish & English & include:

- Free advertisement of job postings to a wide audience of potential employees
- Phone call interviews with translation services
- Access to a pool of pre-screened employees with dairy experience

For more information, visit: **westernuniteddairies.com/lecheros-unidos**

(continued) Protect Your Herds –This is Serious

Other Associated Symptoms

- **Changes in manure**
 - Most common symptom is drier “tacky” manure
 - Likely secondary to dehydration
 - Some herds do report more diarrhea predominating
- **+/- Respiratory Symptoms**
 - Varies from herd to herd and probably how quickly the cows are identified and how thorough the exam is
 - Most common symptom has been clear nasal discharge
- **+/- Fever**
 - Some herds report many cows presenting with fever, other herds very few
 - Again may be dependent on how quickly animals are identified and the quality of physical exams
 - In the herds that are finding fevers, most are moderately elevated with a few 107F+
 - Potentially environmental factors or secondary infections contributing?



Populations Affected

- **Most of the severe cases come from older, mid-lactation cows**
 - My clinical impression is much of the lactating herd is impacted, however
 - We have seen some severe cases out of LACT 1 and Fresh Cows
 - Few if any out of Dry Cows
- **There are also groups that have not seen any noticeable changes in intakes or morbidity**
 - To my knowledge, no cases are being reported from calves and youngstock
 - We have not had any reports from our beef neighbors and colleagues despite many being in very close geographic proximity
 - Cow Calf Producers or Feedlots



Time Course

- Most herds seem to pull cases for 10-14 days
- The peak pulls seems to be between 3-7 days into the outbreak
- Herds are reporting pulling 10-20% of cows to the hospital for examination and treatment
 - That only represents the most severe cows. My opinion is that much of the herd is impacted in some way (sub-clinical?)
- Most cows start coming back on feed intake within a few days
- Herds seemingly are taking 30-45 days to begin to see BTSCC come down to pre outbreak levels, and per cow milk production to approach pre-outbreak levels.



Economics

- **Milk Drop has been a consistent finding!**
 - 4-20+ lbs per cow on a herd level is what I have seen
 - Varies somewhat on the age of the herd and pre-outbreak production
- **Culling occurs in two waves**
 - There is some initial culls that occur from the worst effected cows and those with secondary infections
 - There is a second wave after we stop seeing clinical cases of cows that do not come back into milk
 - Many more cows than we initially expected are coming back into lactation, but some only just barely enough to hold them in the herd till dry off



Economics Continued

- **Treatment and Labor Costs**
 - Many cows that need exams and treatment
 - Most common approach seems to be supportive care, mostly fluid therapy as well as managing symptoms like fever
 - Seem to be a number of secondary health issues we see, and those also require treatment and management
- **Mortality**
 - We see few mortalities coming directly from the initial outbreak
 - But you have to balance that against the fact that some of the worst cases are leaving the dairy as culls
 - And the secondary infections do lead to some indirectly related deaths
- **Reproduction**
 - Many herds are not far enough through the progression to know the true effects
 - We have seen a slightly increased level of abortions
 - Because of the metabolic disruption, future fertility or cyclicity is likely to be impacted



THANK YOU TO OUR CURRENT SPONSORS.

ADVERTISE WITH US



Highly Pathogenic Avian Influenza (HPIA) is NEW Disease in Dairy Cattle

Existing biosecurity plans should be reviewed as they contain baseline preparatory safety information, however HPIA is a new pathogen not previously considered as part of those plans. Please read these important guidelines from USDA in preparing your herds for this new virus and be sure and check out the wudairies.com website for more information.

NOTE: We have highlighted areas of importance. Please take the time to review the highlighted sections.

[DOWNLOAD DOCUMENT](#)

USDA Animal and Plant Health Inspection Service
U.S. DEPARTMENT OF AGRICULTURE

APHIS Recommendations for Highly Pathogenic Avian Influenza (HPAI) H5N1 Virus in Livestock for State Animal Health Officials, Accredited Veterinarians and Producers
April 2, 2024

Highly Pathogenic Avian Influenza A (HPAI) H5N1 virus is an emerging disease in cattle. Federal and state agencies are moving quickly to conduct additional testing for HPAI (H5N1) virus, as well as viral genome sequencing, so that we can better understand the situation, including characterization of the HPAI (H5N1) virus strain or strains associated with these detections as well as any other multi-faceted components of the disease event in dairy cattle. This is a rapidly evolving situation. USDA and Federal and State partners will continue to share additional updates as soon as information becomes available. Our goal is to safeguard the health and protect the industry, keep our milk and beef supply safe, and protect public health and human safety based on the most up-to-date information we have.

Recommendations (subject to be updated as new information is gathered):

Biosecurity

- Heighten biosecurity practices to keep disease off the farm.
- Heighten on-farm biosecurity practices to prevent and control disease spread on the farm,** with particular attention to mammary health to include special attention to good milking practices, such as equipment disinfection and milking sick cattle separately or last prior to parlor cleaning.
- Isolate newly added cattle** when moved onto a premises.
- Avoid housing multiple species of animals together.
- Limit non-production animal access to farm areas and implement measures to exclude **domestic pets (e.g., cats) and wildlife from buildings.**
- The **Secure Milk Supply Plan** offers comprehensive dairy biosecurity practices.*
- Additional Farm Biosecurity Resources are available at:
 - Biosecurity - National Dairy FAMM Program
 - Secure Milk Supply Plan
 - Layout 1 (farmusa.gov)
 - Biosecurity for cattle operations 1 (VMN Extension)
 - Farm Biosecurity - CFSPH (stateat.usda.gov)

Close monitoring for sick animals

- Producers should **isolate herds, classes, or** cattle with clinical signs of the disease (decreased milk production, reduced appetite, thickened, discolored milk; lethargy; fever; and/or dehydration).
- Milk samples from lactating cattle and nasal swabs from non-lactating cattle should be submitted to a National Animal Health Laboratory Network (NAHLN) laboratory for testing any suspect animals. See specific guidance on the [NAHLN website](#).
- Although the HPAI (H5N1) virus itself is a foreign animal disease (FAD), we are considering this as an emerging disease in cattle. APHIS encourages States and industry to use the established FAD/Emerging Disease Investigation process to investigate credible reports of HPAI (H5N1) virus in dairy cattle (and beef cattle or other domestic livestock species):
 - VS Guidance Document 12001.4 - Policy for the Investigation of Potential Foreign Animal Disease/Emerging Disease Incidents (FAD/EDI) (2020)
 - VS Guidance 12001.4 Ready Reference Guide (2021)

- Recommended PPE** includes properly fitted unvented or indirectly vented safety goggles or a face shield (if there is risk of liquid splash onto the respirator), disposable gloves, boots or boot covers, a NIOSH Approved* particulate respirator (e.g., N95* filtering facepiece respirator*), disposable fluid-resistant coveralls, and disposable head cover or hair cover. Perform thorough hand washing before putting on and taking off PPE.
- For younger children, it is important to remember that respirators are designed primarily to be used by adults in workplaces. The risks and benefits of children using them are not yet fully known. Additionally, for a respirator to be most effective, it must form a seal to the face to keep particles from leaking around the edges. Some respirators may be too big for younger children's faces.
- Persons working with or around cattle, even if not in close contact, should avoid eating, drinking, smoking, chewing gum, and other such activities in potentially contaminated areas; avoid rubbing or touching the eyes, as it can result in conjunctivitis (pink eye); and perform thorough handwashing regularly, especially before eating, smoking, touching your face, and leaving work (including breaks), and before and after wearing PPE or going to the bathroom.
- People exposed to HPAI (H5N1) virus-infected cattle (including people wearing recommended PPE) should be monitored for signs and symptoms of acute respiratory illness beginning after their first exposure and for 10 days after their last exposure. Signs and symptoms in people can include:
 - Mild illness (e.g., cough, sore throat, eye redness or eye discharge such as conjunctivitis, fever or feeling feverish, rhinorrhea, fatigue, myalgia, arthralgia, headache)
 - Moderate to severe illness (e.g., shortness of breath or difficulty breathing, altered mental status, seizures)
 - Complications: pneumonia, respiratory failure, acute respiratory distress syndrome, multi-organ failure (respiratory and kidney failure), sepsis, meningococci
- If any person exposed to HPAI (H5N1) virus infected cattle develops acute respiratory illness symptoms (see above) during the monitoring period, the State health department (including the State Public Health Veterinarian or equivalent) should be notified, the sick person should be isolated, and respiratory tract specimens should be collected for influenza A and A (H5) testing at a state health department laboratory. Empiric antiviral treatment with oseltamivir (twice daily x 5 days) should be prescribed and administered as soon as possible to any person with suspected H5N1 virus infection.
- When relevant, animal health and public health officials should use a One Health collaborative approach to conduct epidemiological investigations into animal and human infections of HPAI (H5N1).
- Additional guidance and details are available on the CDC webpages at:
 - <https://www.cdc.gov/media/releases/2024/s0402-h5n1-recommendations.html>
 - <https://www.cdc.gov/flu/avianflu/index.html>

Safety of Unpasteurized Milk and Dairy Products for Human Consumption from Exposed, Asymptomatic Cows (Contributed by FDA)

FDA recognizes this is an evolving situation and we still have limited data on asymptomatic or symptomatic shedding in cattle. FDA's current best recommendations are as follows:

- Raw milk, raw milk cheese, and other raw dairy products should not be manufactured from asymptomatic cattle that have been exposed.

- APHIS will reimburse for initial testing of suspect animals at NAHLN laboratories; accredited veterinarians can collect samples and should work with State Animal Health Officials (SAHO) and/or APHIS Veterinary Services' Area Veterinarian in Charge (AVIC) to obtain an FAD number.
- At this time, APHIS is not recommending depopulation of cattle; in most cattle, this appears to be a self-limiting disease with resolution with palliative care.

Movement of cattle

- At this time, **USDA will not be issuing Federal quarantine orders**, nor is APHIS recommending any State regulatory quarantines or official hold orders on cattle.
- HOWEVER, we strongly recommend **limiting movement of cattle** as much as possible, with special attention to evaluating risk and factors that risk area movement decisions.
- Do not move sick or exposed animals.
- If cattle must be moved, we strongly encourage extreme diligence by producers, veterinarians, and animal health officials to ensure only healthy cattle are moving and to ensure the validity of interstate health certificates. APHIS stands ready to assist SAHOs with developing language for interstate certificates of veterinary inspection, as needed.
- If cattle must be moved, **APHIS recommends premovement testing of milk samples** from lactating cows and nasal swabs for non-lactating cattle, by PCR for Influenza A and H5 virus, at a NAHLN laboratory for individual animals (statistical sample of lots). Premovement testing will not be funded by APHIS. It should be noted that how the virus is infecting dairy cattle, the duration, and route of HPAI (H5N1) virus shedding is yet unknown; a negative result does not guarantee disease freedom. Additional recommendations for testing can be found [here](#).
- APHIS scientists are working to establish testing protocols, rapidly assessing currently available tests and test performance including sample type to better understand the characteristics; based on this analysis, we may recommend surveillance other than testing sick cows in the future.

Other important points

- APHIS, States, and industry will continue to respond to HPAI in domestic poultry with a stamping out policy. The emergence of HPAI (H5N1) virus in dairy cattle provides additional incentives for domestic poultry producers to practice good biosecurity and conduct vigilant surveillance.
- We continue to work diligently to understand the risk factors associated with this virus, transmission routes, and pathogenicity in cattle.
- Our goal is to safeguard the health of the herd and protect the industry, keep our milk and beef supply safe, and protect public health and human safety based on the most up-to-date information we have.

Worker Safety (contributed by CDC)

CDC's current recommendations are as follows:

- Persons working with or around cattle, including those working with or disposing of milk waste, that are suspected or confirmed with HPAI (H5N1) virus infection should wear personal protective equipment (PPE) when in direct or close contact (within about 6 feet) with sick or dead animals, animal feces, litter, milk, or materials known to be or potentially contaminated with HPAI (H5N1) viruses.

- Exposed cattle generally means cattle located on a premises with cattle that suspected or confirmed H5N1. Given the variety of premises sizes and the potential for state requirements, FDA recommends producers consult with State regulatory officials and their veterinarian for further guidance.
- Test for HPAI in pooled milk prior to resuming commerce in unpasteurized dairy products following apparent resolution of illnesses on the premises.
- As guidance and recommendations on milk safety and HPAI may change as more is learned, please visit FDA's question and answer page here for the latest: <https://www.fda.gov/food/milk-guidance-documents/regulatory-information/questions-and-answers-regarding-milk-safety-during-highly-pathogenic-avian-influenza-hpai-outbreak>

Safety of Feeding Waste or Discarded Milk to Animals (Contributed by FDA)

FDA's current best recommendations are as follows:

- Young calves are **vulnerable to disease and disease-causing pathogens that can be transmitted through raw milk.**
- FDA recommends that on a farm with exposed cattle, **all milk intended to be fed to calves and other animals** (i.e., cats fed on the farm), including milk from cattle which are asymptomatic, **should be pasteurized or heat treated** similar to times and temperatures commonly found in commercial milk pasteurization processing.
- Any other dairy products, such as raw milk cheeses or byproducts from exposed cattle, intended to be fed on the farm should be heat treated or pasteurized, as well.
- Any raw milk or raw milk products from exposed cattle that cannot be heat treated or pasteurized should be discarded.
- Many state Cooperative Extension Service programs have published detailed information on how to pasteurize or otherwise effectively treat waste milk before using it to feed calves (Penn State - [Pasteurization of Non-Saleable Milk](#)).
- Producers should also consult with their State regulatory authorities for state-specific recommendations or requirements.
- As guidance and recommendations on milk safety and HPAI may change as more is learned, please visit FDA's question and answer page here for the latest: <https://www.fda.gov/food/milk-guidance-documents/regulatory-information/questions-and-answers-regarding-milk-safety-during-highly-pathogenic-avian-influenza-hpai-outbreak>

Disposal of Discarded Milk (Contributed by FDA)

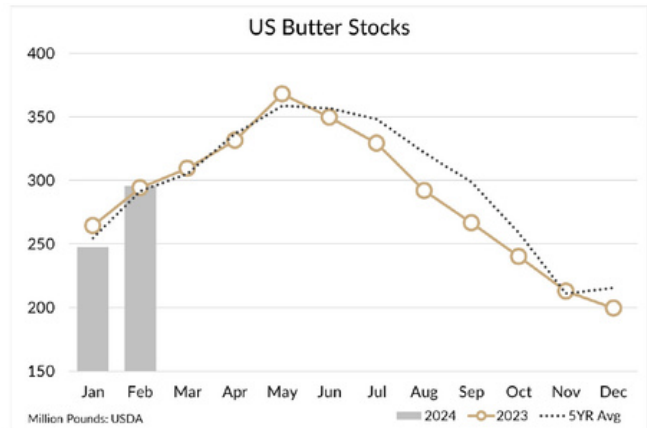
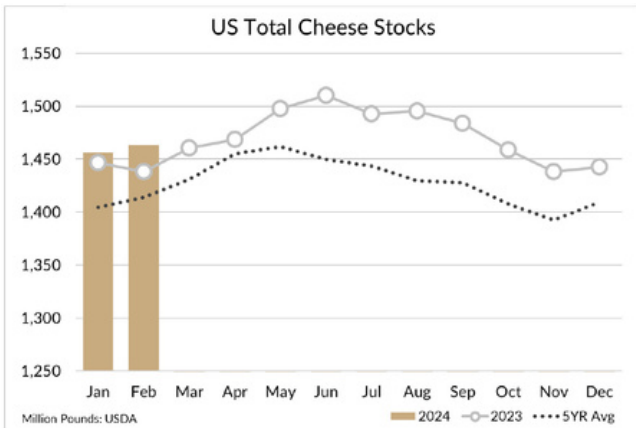
- FDA recommends that producers take precautions when discarding milk from affected cows so that the discarded milk does not become a source of further spread.
- Such precautions include considering heat treatment or pasteurization of discarded milk prior to dumping in lagoons or application of waste solids and ensuring biosecurity around lagoons (e.g., ensuring the animals and birds do not have access to lagoons).
- FDA also recommends producers consult their State regulatory officials on any state requirements.

*** Attribution Statement**
NFS and NIOSH Approved are certification marks of the U.S. Department of Health and Human Services registered in the United States and several international jurisdictions.

WEEKLY MARKET UPDATE


USDA's *Cold Storage* report put US February butter stocks at 295.8 million pounds, up 48.2 million pounds versus January and well above expectations. Cheese stocks reached 1.463 billion pounds, up 6.8 million pounds on the month and just below the historical average increase.

- While bulk stocks are ample, spot butter prices remained elevated ahead of the Easter holiday weekend. The big question now: With spring holidays in the rearview, will markets drop?
- Amid more reports of healthy inventories and tepid demand, spot cheddar markets remain lethargic. Blocks and barrels were relatively unchanged last week.
- New Zealand milk powder prices dropped at last week's GDT Pulse event. SMP settled at \$1.12 per pound, down 5.4% from the previous Pulse. WMP finished at \$1.40 per pound, down 3.3%. CME spot NDM, however, pressed higher, settling up roughly a penny on the week.
- The latest USDA report pointed to ample grain stocks. Corn inventories were pegged at 8.35 billion bushels, up 13% year-over-year. Soybean stocks were estimated at 1.85 billion bushels, 9% higher on the year.
- Farmers are planning to put less corn in the ground. USDA estimated this year's corn plantings at 90.0 million acres, below forecasts for 91.77 million acres. Soybean acreage was estimated at 86.51 million acres, roughly in line with estimates for 86.53 million acres.
- USDA identified an illness impacting cattle in the Southwest as Highly Pathogenic Avian Influenza. Questions remain around HPAI, but USDA says it doesn't pose any threats to commercial milk supply or consumer health.
- USDA's 2024 Dairy Margin Coverage enrollment is open through April 29. The February payment rate is \$0.06 per hundredweight.



Dairy Revenue Protection Program		
Futures	Milk Price (Floor) Guarantee @ 95%	Premium Per CWT (CA)
July - September 2024		
Class III	\$17.94	\$17.05
Class IV	\$20.67	\$19.64
October - December 2024		
Class III	\$18.35	\$17.44
Class IV	\$20.87	\$19.82
January - March 2025		
Class III	\$18.06	\$17.16
Class IV	\$19.62	\$18.64
April - June 2025		
Class III	\$18.12	\$17.21
Class IV	\$18.87	\$17.92
July - September 2025		
Class III	\$18.10	\$17.20
Class IV	\$17.77	\$16.88
		N/A

*As of 3/28/2024 for 95% coverage, 1.0 Protection Factor



Tiffany LaMendola
209.768.6313

CME Commodity Prices					
	Blocks	Barrels	Butter	NDM	Dry Whey
Mar-25	\$1.4275	\$1.4300	\$2.8625	\$1.1225	\$0.3950
Mar-26	\$1.4250	\$1.4375	\$2.8300	\$1.1225	\$0.4000
Mar-27	\$1.4075	\$1.4200	\$2.8400	\$1.1200	\$0.4025
Mar-28	\$1.4175	\$1.4275	\$2.8425	\$1.1200	\$0.4025
Mar-29					
Average	\$1.1355	\$1.1430	\$2.2750	\$0.8970	\$0.3200
Weekly Change	0.0250	0.0025	0.0350	0.0125	0.0075
Order 51: Latest Prices					
	Dec	Jan	Feb	Mar	Apr
Class I LA	\$22.06	\$20.78	\$20.29	\$21.10	\$21.48
Class II	\$19.88	\$20.04	\$20.53		
Class III	\$16.04	\$15.17	\$16.08		
Class IV	\$19.23	\$19.39	\$19.85		
PPD	\$1.51	\$1.64	\$1.33		
Blend: LA*	\$17.55	\$16.81	\$17.41		
Blend: Tulare*	\$17.05	\$16.31	\$16.91		

*Does not include Quota Deduction

USDA Dairy Margin Coverage (per CWT)					
	Month	All Milk	Feed	Margin Estimate	Indemnity Estimate @ 9.50 Margin
2024 Program	Jan-24	\$ 20.10	\$ 11.62	\$ 8.48	\$ 1.02
	Feb-24	\$ 20.60	\$ 11.16	\$ 9.44	\$ 0.06
	Mar-24	\$ 20.37	\$ 10.61	\$ 9.76	\$ -
	Apr-24	\$ 19.66	\$ 10.66	\$ 8.99	\$ 0.51
	May-24	\$ 19.49	\$ 10.65	\$ 8.84	\$ 0.66
	Jun-24	\$ 19.73	\$ 10.73	\$ 9.00	\$ 0.50
	Jul-24	\$ 20.22	\$ 10.81	\$ 9.41	\$ 0.09
	Aug-24	\$ 20.99	\$ 10.87	\$ 10.12	\$ -
	Sep-24	\$ 21.62	\$ 10.93	\$ 10.69	\$ -
	Oct-24	\$ 22.02	\$ 10.98	\$ 11.04	\$ -
	Nov-24	\$ 22.29	\$ 11.04	\$ 11.25	\$ -
	Dec-24	\$ 22.03	\$ 11.10	\$ 10.93	\$ -

Estimates only. As of 3/28/2024 and based on futures markets which can change daily.

