January - February
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Kentucky Milk Matters

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Kentucky Dairy Development Council

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President's Corner

Freeman Brundige

I am being reminded this weekend of the three words that always strikes fear in a dairy farmer's heart: WINTER STORM WARNING! And then a footnote of "Icing Possible" adds some more sleepless nights. No matter how well prepared we think we are, something will show up unexpected. We can have everything go well at the farm and then the milk haulers can't get to the dairy!! Maybe this will be a false warning, but no matter we will rise to the occasion, see that our animals are fed and taken care of and product will still get produced and delivered to the processor and the consumers.

Hope everyone had a great holiday season. Celebrating the birth of Jesus with family and friends is always great for mind and soul. KDDC will be busy with lots of meetings and projects. We are continuing to work towards projects for the future and efficient ways to fund them.

As always the staff and officers are eager to hear your thoughts and comments. Every dairy farmer in the state is a member and all of your concerns are important to the total organization.

As always your comments and thoughts are welcomed.

THE

KENTUCKY DAIRY

CONFERENCE

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NC State University

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Dr. Gail Carpenter
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stay tuned for more!

Kentucky Dairy Awards Banquet Luncheon
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Register now on our website or contact a KDDC consultant for more information!

Who Is In Your Dairy Community?

Executive Director Comments

Tori Embry

With this issue of Milk Matters comes a few changes: a new year, new programming for KDDC, and a new KDDC Executive Director as well. My name is Tori Embry and- as most of our readers have likely already heard- I have transitioned from my position as a consultant with KDDC into the Executive Director role. I'm excited to take on this new challenge and all of the opportunities I see for our organization.

When I began with KDDC in September 2022, my top priority as a consultant was visiting the producers in my area and getting to know them. I've enjoyed the time I've spent with those farmers, discussing their goals and challenges, what resources KDDC has to offer them, and what the future looks like. Two years later and I'm still looking forward to having those same conversations, only now in different settings. What goals and challenges are our producers facing? What resources can KDDC offer that support the growth of our dairy businesses and state industry? What does the future look like for KDDC, the Kentucky dairy community, and the national industry?

These questions have been at the forefront of my thoughts as we've worked towards developing new programming for producers for 2025-2026. I've been researching dairy's role in Kentucky agriculture and memorized our state's statistics: we have 340 permitted dairies, 45,000 milking cows, and produce 915 million pounds of milk (USDA, 2023). Kentucky dairy has a $4.4 billion economic impact and we help provide 15,000 jobs (IDFA, 2023). We support local communities, small businesses, and the local and national food supply. More than these numbers though, our dairy community knits people together and ties them into agriculture. It may be the manager at the local farm store who got his first experience in farming by milking cows for a neighbor. Or the stranger you sit beside at an event who you connect with over the few milk cows her family used to keep. I find it so remarkable how dairy has touched so many lives in agriculture.

These are small anecdotes weaving so many people into the fabric of our dairy community in Kentucky. Similar connections are happening nationally. For example- dairy has always been knit into the beef industry and we know recently our role has changed from just providing cull cows and filling orders for the affordable choices of beef, to supporting the need for high-end cuts with beef on dairy calves as the beef herd has declined. That's not the only place dairy has been shining. As the population ages globally and as the use of certain GLP-1 drugs like Ozempic are increasing, high-quality sources of protein are essential to maintain muscle and balance the diet. Dairy products are proving to be exceptional at meeting that need. Looking to the future, we can expect that our industry will find ways to solve other problems with dairy products to drive the demand for milk.

Too often, I hear about how the number of dairy farms are continuing to decline in Kentucky. This leaves the feeling that the industry is declining as a whole, good times are gone, we're saying goodbye to a way of life. But when I visit with producers, that's not what I hear at all. I hear excitement, pride, and plans for the future. It's this unwavering voice that I hope to share as I represent Kentucky dairy producers in my new role as Executive Director. Personally, the support and encouragement I've received on behalf of KDDC since taking this position has given me a sense of excitement and energy that I'm incredibly grateful to take with me. We may appear to be few spread across the state, but I urge you to build that community, find those connections to our industry, and continue to share your support for dairy.

CENTRAL REGION UPDATE

KDDC's Central Region will be seeing a familiar face. Brilee Tucker, KDDC consultant from the Southeast Region, will be moving to the Central Region at the beginning of March. She's a native of Metcalfe County and is looking forward to being back in her home area serving producers in Allen, Barren, Breckinridge, Butler, Edmonson, Grayson, Green, Hardin, Hart, Metcalfe, Monroe, and Warren Counties.

Cold Stress and Newborn Calves

Dr. Michelle Arnold, DVM

A calf's body temperature often falls below normal due to a slow birth (dystocia) followed by delayed standing and nursing. Returning the calf's core body temperature to normal (100 degrees F for newborn calves) is the immediate concern then maintaining that core temperature is of secondary importance. If at all possible, bring close-up cows indoors to calve in a heavily bedded, clean pen. If calving outdoors, make sure there is dry, clean ground available for the cows to calve on without a large amount of manure. If the cow calves outdoors, bring the calf in until warm and dry if the calf is showing signs of hypothermia and/or there are no natural windbreaks available. The two most important factors in calf survival are warmth and colostrum. Before giving colostrum, a chilled calf first needs to be warmed as these newborns are typically too weak to suckle or colostrum may be delivered by an esophageal feeder. Karo syrup (dark is preferred) delivered by mouth to a calf is a quick source of readily available energy and is rapidly absorbed into the bloodstream. Methods to warm a calf include:

1. Floor board heaters of pickup trucks
2. Submersion of wet calves in a warm bath-you must support the calf to prevent drowning. The water should be gradually warmed to 100° F and will need to be changed to keep it at that temperature.
3. Placing calves next to the heater in the house.
4. Placing the calf under a heat lamp-be careful to cover the lamp with a screen so the calf will not get burned as it becomes more active.
5. Warm blankets-These should not be so hot that they can cause skin burns. Change the blankets as needed to maintain a consistent temperature and not allow the calf to cool off.
6. Hot box or warming box-the temperature should not be so high that burns could result. Some type of venting is necessary to prevent buildup of carbon monoxide and moisture. Air movement is also important to ensure thorough warming of the calf and prevent hot spots in a warming box.
7. Warm IV fluids may be administered by a veterinarian.

Once the calf has been warmed, provide colostrum and maintain body temperature. Colostrum is a concentrated source of protein, vitamins, minerals and energy and also contains antibodies to diseases or vaccines that the dam has been exposed to. If the calf is unwilling to suck and it is not possible to milk the dam, commercial colostrum replacement products are available. Calves should be fed colostrum as soon as possible after the suckle reflex has returned-generally within the first 6 hours after birth but ideally within 1-2 hours after birth. Once the calf is warm and fed, move it back to its mother.

From the University of Nevada/Reno Cooperative Extension Service:

There are two types of hypothermia: exposure (gradual) and immersion (acute). Exposure hypothermia is the steady loss of body heat in a cold environment through respiration, evaporation and lack of adequate hair coat, body flesh or weather protection. This type of hypothermia affects all classes of livestock but particularly affects young, old and thin animals.

Immersion hypothermia is the rapid loss of body heat due to a wet, saturated hair coat in a cold environment. Immersion hypothermia often occurs after the birthing process because the calf is born saturated with uterine fluids. Other causes of immersion hypothermia of young calves may include being born in deep snow or wet ground, falling into a creek or being saturated from heavy rains followed by chilling winds.

Signs of Hypothermia

Faced with a cold environment, the body tries to defend itself in two ways: shivering, to increase muscle heat production, and blood shunting, to reduce heat loss by diverting blood flow away from the body extremities to the body core. Mild hypothermia occurs as the body's core temperature drops below normal (approximately 100° F. for beef calves). In the early stages, vigorous shivering is usually accompanied by increased pulse and breathing rates. A cold nostril and pale, cold hooves are early signs that blood is being shunted away from the body's extremities. In the case of newborn calves, severe shivering may interfere with its ability to stand and suckle. This increases the chances for severe hypothermia. Erratic behavior, confusion and a clumsy gait, are all signs of mild hypothermia. Producers often refer to these as "dummy" calves. Severe hypothermia results as the body temperature drops below 94° F. Shunting of blood continues, manifesting as cold and pale nostrils and hooves. Paleness is due to poor oxygenation of the tissues near the body surface. Decreased peripheral circulation also results in a buildup of acid metabolites (waste products) in the muscles of extremities. After the shivering stops, it is replaced by muscle rigidity. The pulse and respiration begins to slow as the body core cools to 88° F. Below core temperature of 94° F. , the vital organs are beginning to get cold. As the brain cools, brain cell metabolism slows, resulting in impaired brain function. The level of consciousness deteriorates from confusion to incoherence and eventual unconsciousness. Below 86° F., signs of life are very difficult to detect and the calf may be mistaken for dead. The pupils of the eyes will be dilated and fixed. The pulse may be undetectable. Occasional gasps of respiration at a rate as low as four or five per minute may be the only clue that the calf is still alive. Heart failure may be the actual cause of death.

Avian Influenza Virus Type A (H5N1): What Kentucky Dairy Producers Need to Know

Tori Embry

Information included in this article is current as of the beginning of January. However, this is a rapidly evolving situation, and new information may be available after publication.

In the spring of 2024, avian influenza virus type A (H5N1) was reported for the first time in the United States in Kansas and Texas. Since then, the virus has been confirmed in dairy herds in 16 states and although Kentucky remains free of the disease, producers should be aware of state and federal guidelines in place. Here is what our Kentucky dairy producers need to know.

What is H5N1?

Avian influenza virus type A (H5N1) is the same virus affecting wild birds and commercial poultry flocks. Common clinical signs in dairy cattle include low appetite, reduced milk production, and abnormal appearance of milk (thickened, discolored). Milking cows are primarily affected with less than 10% of cows in a herd showing signs of the virus. Culling and death rates remain low at less than 2% as most affected cattle recover and are not showing the same "highly pathogenic" signs of the illness that is seen in birds.

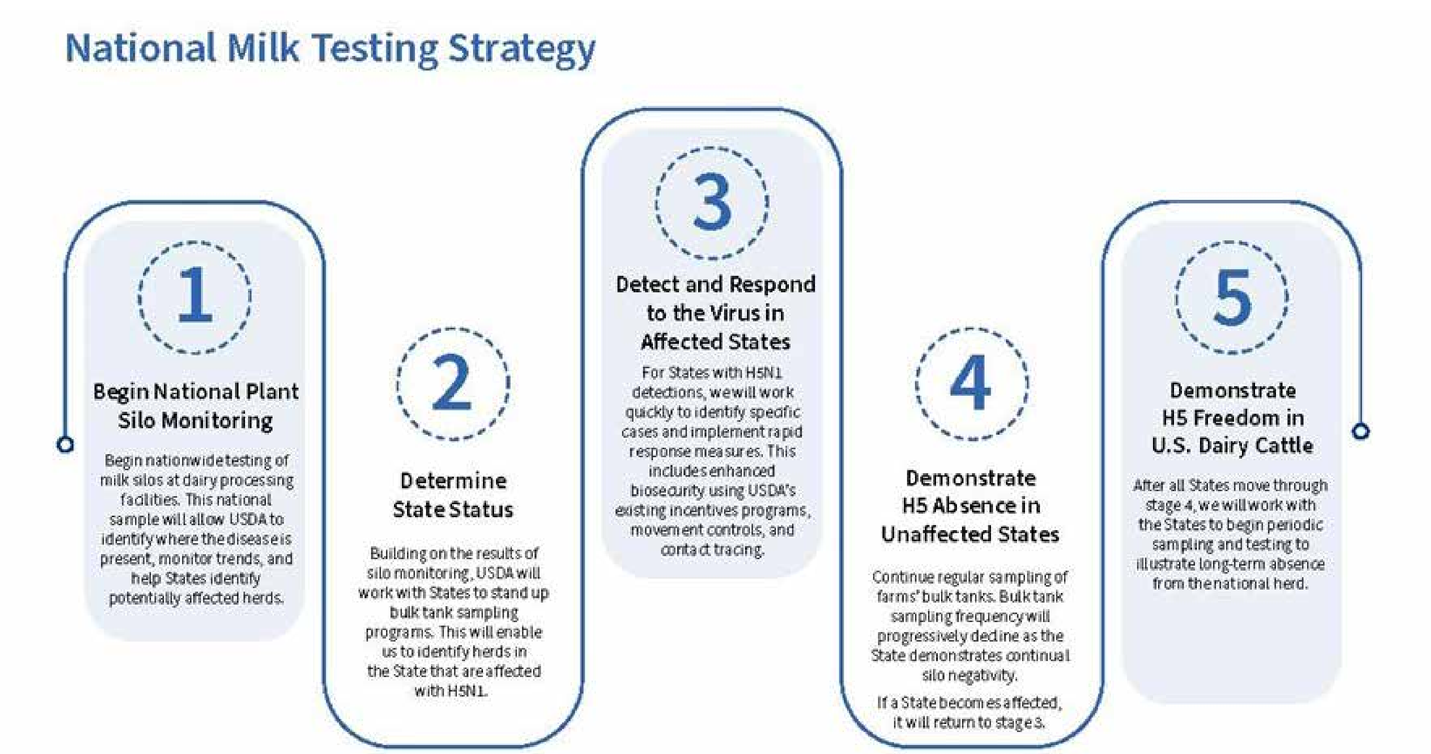
Animal movement is a recognized risk for transmission of H5N1 and spread can occur cow-to-cow, as well as from a dairy farm to a poultry farm. Potential risks include shared personnel between operations; shared, uncleaned vehicles and equipment; and frequent visitors. Good biosecurity measures are important and include monitoring for sick animals; minimizing cattle movements; and isolating and monitoring cattle recently moved onto the farm.

Testing Requirements

The virus has been confirmed in dairy cattle in California, Colorado, Idaho, Michigan, Texas, Iowa, Utah, Minnesota, New Mexico, South Dakota, Kansas, Oklahoma, Nevada, North Carolina, Ohio, and Wyoming with a total of 917 herds affected. Per the Office of the State Veterinarian, permits are required for all movements for all classes of dairy cattle from affected states moving into Kentucky. Those permitted cattle are then required to undergo a 28-day post-entry isolation at the receiving facility.

Interstate movement of lactating dairy cattle (not to include calves, pregnant heifers, or dry cows) have specific requirements under a federal order from the USDA. Lactating dairy cattle moving to any facility (other than a slaughter facility) will require a negative HPAI test result within 7 days of movement and a Certificate of Veterinary Inspection (CVI) from an authorized veterinarian. Lactating dairy cattle moving directly to a slaughter facility from a livestock market or farm will require a CVI or alternative movement document.

Testing for H5N1 can be done through UK Veterinary Diagnostic Lab (phone: 859-257-8283) or Murray State Breathitt Vet Center (phone: 270-886-3959). If you require a permit for cattle moving from affected states or assistance with any of the other animal testing requirements, please contact the Office of the State Vet (phone: 502-573-0282).



Recent changes to the federal order include required testing of raw milk under a National Milk Testing Strategy. This is a five-stage plan to monitor and eradicate the disease beginning at the state level. Testing will begin in rounds, with 15 states currently on board and others, including Kentucky, coming on board soon.

The USDA has announced financial assistance for producers whose herds have been affected by H5N1 to improve biosecurity and compensate for lost milk production. For producers currently unaffected, there is financial assistance available for biosecurity planning and implementation, reimbursement for veterinary costs associated with sample collection for H5N1 testing, and to offset shipping costs for testing. Interested producers in Kentucky should contact the Kentucky APHIS Area Veterinarian in Charge (phone: 502-395-2368) to enroll.

Other Impacts of H5N1

To date, 40 cases of H5N1 have been reported in dairy farm workers who have been exposed to affected animals, but current testing does not indicate any changes in the virus that would make it more transmissible to humans. There is no indication of person-to-person transmission. Those exposed to affected animals should be monitored and tested if experiencing any flu-like symptoms.

So far, H5N1 has been reported in several big cats, alpacas, and one pig. The alpacas and pig were from "backyard" herds that were comingled with affected poultry. The USDA reports risk is relatively low for other species and reinforces the importance of good biosecurity.

The USDA, FDA, and CDC state that they have no concerns about the safety of the commercial milk supply because milk from impacted animals is being diverted or destroyed so it does not enter the human food supply. Although fragments of the H5N1 virus have been found in some samples of dairy products, additional tests have shown the absence of live, infectious virus in those samples. Overall, the results indicate that pasteurization is effective in inactivating the virus and reaffirm the FDA's assessment that pasteurized milk is safe for human consumption. Raw milk or milk products from infected herds should not be consumed by humans or animals. The FDA recommends heat treating milk before feeding to calves. The Food Safety and Inspection Service began testing dairy cow carcasses for H5N1 in September and this testing reaffirms the safety of the meat supply.

Notably, California has declared a state of emergency in response to the H5N1 virus, where 75% of the nation's affected herds are reported. This is in an effort to organize regional efforts into a statewide push to control the disease. A USDA NASS survey reported a decrease in milk production of 9.2% in California- a state that makes up around 20% of the US milk supply. However, the role of H5N1 on this sudden change is unclear.

While there seems to be more and more talk of avian influenza in the news, dairy producers should rest assured that the increased activity around H5N1 is in an effort to control and eradicate the disease, while ensuring our milk supply is safe for consumers. With adequate biosecurity measures in place, we hope Kentucky producers can remain relatively unaffected by this disease.

Helpful Links for Timely Updates

Office of State Vet www.kyagr.com/statevet/

Updates from AVMA https://www.avma.org/resources-tools/animal-health-and-welfare/animal-health/avian-influenza/avian-influenza-virus-type-h5n1-us-dairy-cattle

USDA Site https://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-livestock

EKU Agriculture Department Competes at the Southern Regional Dairy Challenge

Barbara Jones

The fall 2024 Eastern Kentucky University Dairy Challenge team participated in the Southern Regional Dairy Challenge in Radford, Virginia November 17-19, 2024. Dairy Challenge is the premier collegiate dairy experience where students combine theory and real-world application to a dairy farm while working in a team setting. This year's team members were Jared Patterson, Morgan Dobson, Kara Phillips, and Jasmine Azevedo.

Jared Patterson's team placed first!

At the regional competition, university team members are split-up and students form aggregate teams to allow for a better learning experience. During the competition, students have access to the farm data in the form of PC Dart and financial records. After combing through the data, the students are given access to the farm to conduct a boots-on-the-ground-assessment. After the on-farm portion, students work with their team to complete a presentation of recommendations on how the farm can improve and how the suggested improvements will impact the farm financially. Presentations are made to a panel of experts in the dairy industry. Jared Patterson's team, from Lone Cedar Dairy in Nancy, KY, placed first in this year's Southern Regional competition.

This fast-paced competition is so important for students' development. We look forward to competing at the National Dairy Challenge in April. We are so thankful to KDDC for supporting our team!

Left to right: Jared Patterson, Morgan Dobson, Kara Phillips, and Jasmine Azevedo

From Proposed to Final: Unpacking USDA's FMMO Decision

Daniel Munch Economist, American Farm Bureau

USDA- Agricultural Marketing Service's (AMS) final decision on proposed amendments to the pricing formulas governing all 11 Federal Milk Marketing Orders (FMMOs), released Nov. 12, largely mirrors the recommended decision issued in July 2024 but includes adjustments driven by USDA's assessment that new comments and evidence justified changes — many of which appear to come at the expense of dairy farmers.

As the industry awaits the results of the USDA referendum, stakeholders are evaluating how these changes could impact milk pricing, market dynamics and profitability. This Market Intel breaks down the differences between the recommended and final decisions, estimates their pricing implications and highlights key considerations for dairy farmers.

Change from July Recommended Decision?	Amendment in USDA's Final Decision
No	Increase Milk Composition Factors
Yes	Delayed Implementation of Composition Factors
No	Elimination of Barrel Cheese from Price Survey
Yes	Increase Make Allowances
No	Update Butterfat Recovery Factor
No	Switch back to the Higher-Of Class I Mover
No	Extended Shelf Life Milk Adjustor
Yes - Marginal Changes	Increase Class I Differentials

Background

USDA's final FMMO decision stems from a years-long effort to modernize milk pricing formulas and address issues that have emerged since the last major overhaul went into effect in 2000. Following testimony presented during a 49-day national hearing in Carmel, Indiana, from August 2023 to January 2024, and subsequent post-hearing briefs, USDA released its recommended decision in July 2024. This recommendation proposed changes to pricing formulas, including updates to milk composition factors, surveyed commodity products, make allowances, the Class I base price formula, and Class I differentials. These amendments aimed to address inefficiencies and better align pricing structures with market realities, though the proposals drew mixed reactions from stakeholders due to their varied regional and operational impacts. For a deep dive into the recommended decision please refer to Decoding USDA's FMMO Recommendations – Extended Edition.

The final decision introduces changes to three amendments presented in the July recommended decision involving implementation of increased composition factors, increased make allowances and adjusted Class I differentials. The remaining amendments were presented unchanged in the final decision.

1. Delayed Implementation of Composition Factors

In its recommended decision USDA increased the protein, other solids and total (nonfat solids) composition factors but proposed a 12-month delay in their implementation. This meant that while all other adjustments would take effect when the new order regulations are implemented, the increases in composition values would be postponed for a year. USDA claimed this delay would have allowed producers who use risk management tools, such as CME futures and Dairy Revenue Protection insurance, to adjust their positions and mitigate potential financial harm from regulatory changes.

In their final decision, USDA shrunk the 12-month delay in composition factor implementation by half, to six months. USDA argued the change was made to balance the needs of producers using risk management tools with the urgency of aligning prices with market conditions.

AFBF opposed the original delay, arguing that it unnecessarily prolongs the period during which producers are undercompensated for the higher-value milk they are already delivering. A static analysis of class price formulas from 2020 to 2023 indicates that updating composition factors would have generated an average

Final Make Allowance Impact to Class Prices (Inc. Yield and Recovery Change)

	Class I	Class II	Class III	Class IV
2019	-$0.90	-$0.85	-$0.95	-$0.85
2020	-$0.85	-$0.85	-$0.88	-$0.85
2021	-$0.86	-$0.85	-$0.86	-$0.85
2022	-$0.87	-$0.85	-$0.92	-$0.85
2023	-$0.89	-$0.85	-$0.90	-$0.85
5yr- Average	-$0.87	-$0.85	-$0.90	-$0.85
Difference from Recommended to Final Decision	-$0.06	-$0.11	-$0.02	-$0.11

USDA Current, Recommended and Final Class III & IV Formula Factors

Component	Current	Recommended	Final	Difference (Final - Recommended)	Total Difference (Final - Current)
Cheese ($/ per pound)	$0.2003	$0.2504	$0.2519	+$0.0015	+$0.0516
Butter ($/ per pound)	$0.1715	$0.2257	$0.2272	+$0.0015	+$0.0557
NFDM ($/ per pound)	$0.1678	$0.2268	$0.2393	+$0.0125	+$0.0715
Dry Whey ($/ per pound)	$0.1991	$0.2653	$0.2668	+$0.0015	+$0.0677
Butterfat Recovery Factor	1.572	1.589	1.589	+0	+$0.017
Butterfat Yield Factor in Cheese	90%	91%	91%	+0.00%	+$0.010

cumulative annual benefit of $220 million for producers, meaning this delay could cost dairy farmers more than $100 million during the first six months alone. While the reduction from 12 months to six months is an improvement, it still deprives farmers of revenue during a time when fair compensation should be prioritized.

2. Increases to Make Allowances

USDA's final decision introduced additional increases to all four make allowances beyond those in the recommended decision, exacerbating large negative impacts to dairy farmers' milk checks. Make allowances provide for the costs incurred by processors to convert raw milk into finished products, such as cheese, butter, nonfat dry milk (NFDM) and dry whey. These allowances are deducted from the value of raw milk before calculating the prices paid to farmers. Higher make allowances generally result in a lower pay price to dairy farmers, all else being equal.

In addition to the increases outlined in the recommended decision, USDA added a $0.0015 per pound marketing cost factor into the make allowances for all four commodities. This addition reflects USDA's determination that post-packaging expenses — such as warehousing, transportation, and maintaining sales staff — are integral to the manufacturing process and had been inadvertently excluded from the recommended decision.

In addition to the $0.0015 increase in make allowances across all commodities, USDA revised the methodology for calculating the NFDM make allowance. The recommended decision initially relied on an average of Dr. Mark Stephenson's 2021 cost of processing survey and 2016 data from the California Department of Food and Agriculture, reflecting California's significant role in NFDM production. However, stakeholders raised concerns about the outdated 2016 data and methodological issues with the 2021 survey. In response, USDA substituted the 2016 data with Dr. Stephenson's updated 2023 low-cost processing survey results. This change increased the NFDM make allowance by 1.1 cents, even before the addition of the marketing cost factor.

If the final increases in make allowances, butterfat recovery factor and butterfat yield factor in cheese had all been implemented between 2019 and 2023, they would have reduced Class I prices by an average of 87 cents/cwt; Class II prices by an average of 85 cents/cwt; Class III prices by 90 cents/cwt; and Class IV prices by 85 cents/cwt. These final adjustments represent additional reductions compared to USDA's recommended decision of 6 cents less for Class I, 11 cents less for Class II, 2 cents less for Class III and 11 cents less for Class IV.

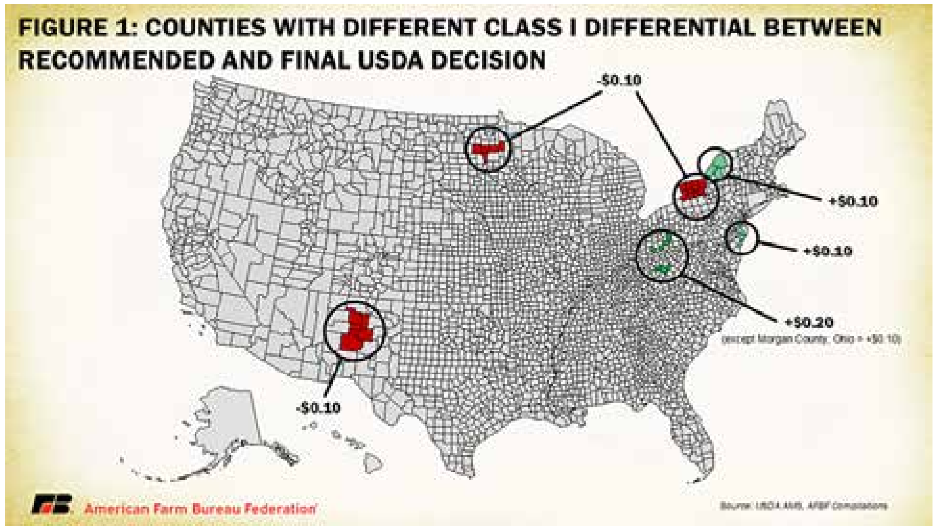


FIGURE 1: COUNTIES WITH DIFFERENT CLASS I DIFFERENTIAL BETWEEN RECOMMENDED AND FINAL USDA DECISION

Across all 11 FMMOs, these additional allowances for manufacturers would have led to an average annual pool value loss of over $91 million—on top of the already substantial $1.26 billion decline projected from the recommended decision's initial increases. These adjustments underscore the significant financial impacts on dairy farmers in all markets.

AFBF continues to oppose both the initial and final make allowance increases, arguing that adjustments must be grounded in comprehensive, mandatory and independently audited surveys. Without such data, there is some likelihood that USDA's changes will unfairly penalize dairy farmers by overstating processing costs. The topic of unfair survey bias was explored more in-depth here and is accessible in AFBF's final comments to USDA's recommended decision.

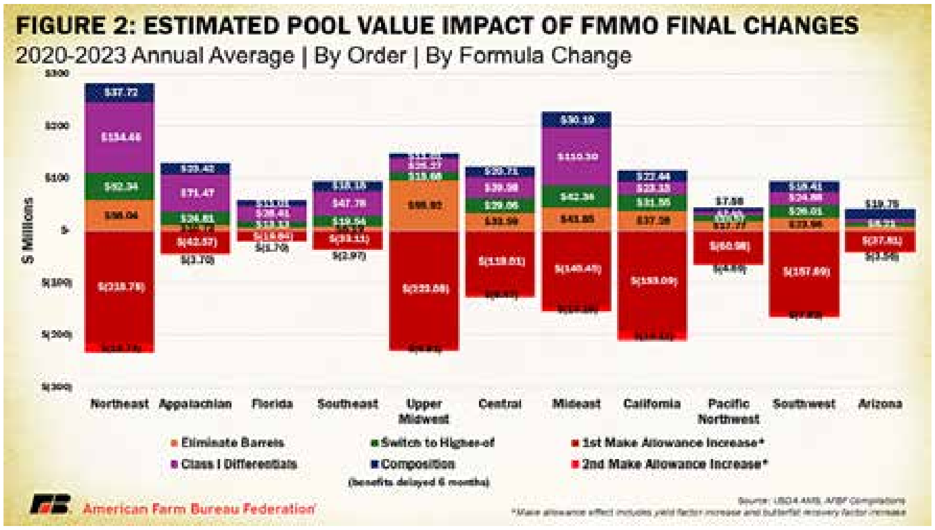
3. Class I Differentials

USDA's recommended decision proposed increases to all Class I differentials, except for two counties in southwest Oklahoma. After digesting additional comments from stakeholders, USDA made changes in the final decision to Class I differentials in 37 counties across seven states. The adjustments ranged from a reduction of 10 cents across 22 counties, to an increase in 10 cents across seven counties and an increase of 20 cents in eight counties (Figure 1).

USDA claims the adjustments within the final decision reflect updated economic realities and aim to ensure equity among producers and handlers. The changes account for increased transportation costs, the perishability of milk, and market consolidation, which has resulted in fewer plants and greater distances between supply and demand. Localized factors, such as urban service costs and historical price relationships, also informed USDA's adjustments. For a deep dive into Class I differentials please refer to: Milk Price Differentials Long Overdue for an Update.

In comments on the recommended decision, some regional producer groups raised concerns about the overall adjustments to Class I differentials and the additional location-based adjustments that directly affect producer payments in all markets.

Class I differentials are added to a base Class I price to determine the minimum Class I milk price for each location. In addition, when milk is priced at a specific plant, an adjustment for plant location is also applied to producer milk. This producer location differential reflects the difference between the Class I differential at the location where a producer delivers their milk and a reference (or base) zone assigned to a federal order, such as Jackson County (Kansas City, Missouri) in the Central order. The uniform price of milk represents the weighted average price of all producer milk across all classes, but the producer location differential adjusts this price based on where the milk is delivered. This adjustment, whether negative or positive relative to the base zone, increases or decreases the uniform price a dairy farmer ultimately receives. In addition to raising Class I differentials in



most locations, USDA's recommended and final decisions also alter producer location differentials in many areas. In some cases, the changes flip the producer location differential from positive to negative, leading to potential comparative — and in some cases absolute — losses for farmers delivering milk in those counties.

For example, the current base Class I differential in Jackson County, Missouri, is $2 per hundredweight, and the proposed change increases it to $3.20. Under the updated decision, if a plant in another part of the order (such as El Paso County, Colorado) now has a differential 50 cents lower than Jackson County, the adjusted Class I differential for that location would be $2.70. While this represents an increase from the current $2.55 differential in El Paso County, Colorado, and an increase in the Class I price that a bottling plant must pay, it also marks a comparative loss relative to Jackson County under the new pricing structure. Historically, plants in Colorado had differentials 35–55 cents higher than Jackson County, providing producers a price bump from the base uniform price. The proposed changes flip this dynamic, with Colorado differentials now 50–70 cents lower, creating a net comparative loss of $1.15 per hundredweight on all milk in those locations, outweighing any uniform price gains from the increased Class I differentials. Simply put, while USDA projects an increased uniform price for Kansas City in Federal Order 32, the overall uniform price across the market is expected to decrease. For Colorado, in particular, the new rules make it highly likely that the uniform price will be lower than before.

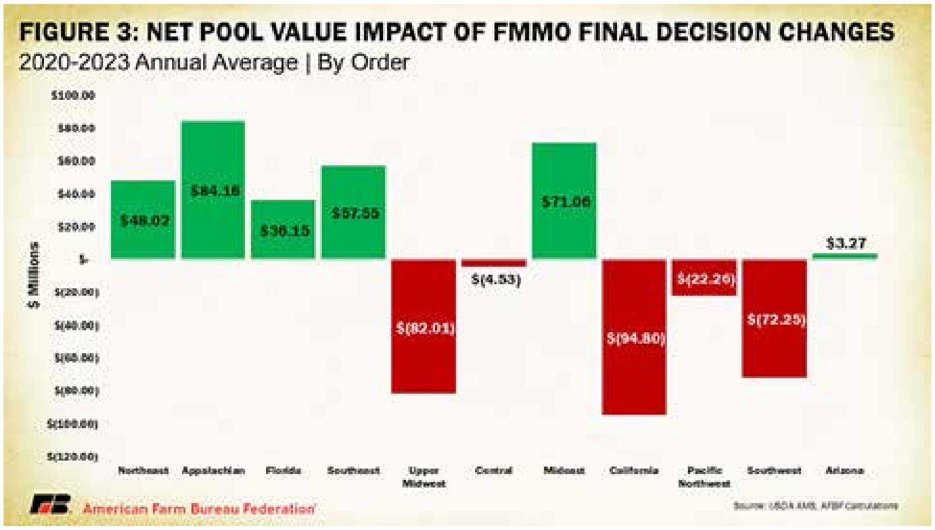
Putting it All Together

One of the key elements of the FMMO system is its pooling mechanism, which ensures that farmers receive a uniform price for their milk, regardless of what it is used for. The intention is to ensure handlers in a similar location and who produce similar products pay the same minimum classified price for raw milk and that farmers producing milk in the same area receive the same price (i.e., uniform pricing). Each month, the total class values of milk within an order are aggregated, and an average uniform price is calculated. The contributions of different class prices to the pool can vary significantly depending on the supply and demand conditions within an order. Consequently, the effects of adjustments to class price formulas on individual orders are best understood once differences in class utilization and production volumes are accounted for.

Figure 2 illustrates the annual impact of each of USDA's final amendments on the total pool value for each order (using an average across 2020-2023 pricing data). In this analysis, each adjustment was made separately and then layered to isolate the effect of each recommendation. However, it's important to note that interactions between different formula factors within the Class price equations were not considered, so the combined effects of these adjustments in real-world scenarios might differ.

Most important in this analysis, the proposed further increases in make allowances (labeled "2nd make allowance increase") have additional negative impacts to order pool values, ranging from a pool value impact of -$1.7 million in the Florida Order to -$18.7 million in the Northeast Order. All other adjustments positively impact pool values. Composition factor updates contributed to a half-year increase of $110 million across all orders, a benefit that would be inaccessible for the first six months due to the final six-month implementation delay. The proposed extended shelf life adjustment for the base Class I price was not included as the overall impact on pool values was too minor to visualize.

Figure 3 combines the effects of USDA's FMMO recommendations and shows the net impact on each order. The proposed increases in make allowances would significantly reduce the total pool value in several orders, with losses of $94 million in the California order, $82 million in the Upper Midwest order, $72 million in the Southwest order, and $22 million in the Pacific Northwest order. Notably, the



Central order would flip from a $3.9 million gain to a $4.5 million loss, underscoring the significant impact of even minor formula changes. Had these adjustments been in place from 2020 to 2023, dairy farmers in these five orders — characterized by higher Class III and IV utilization — would have received lower prices compared to the current system. In contrast, orders with higher Class I utilization, such as the Appalachian and Mideast orders, would see increased pool values, while Arizona would experience a small positive gain. These proposed changes create new regional disparities among dairy farmers, undermining the FMMO system's goal of equitable treatment across locations.

What Happens Next

Votes are currently being counted by USDA's AMS to determine whether or not dairy farmers and cooperatives have voted to approve or reject the amendments in each of the 11 orders. USDA will continue to count ballots that were postmarked by Dec. 31 and received by Jan. 15. If the ballots indicate approval by at least two-thirds of the producers or two-thirds of the milk volume within an order, USDA will issue a final rule in the Federal Register specifying which amended orders have been approved or rejected in their entirety. (USDA chooses to automatically terminate orders if their amendments are not approved, something AFBF generally opposes.)

Implementation of the approved amendments is expected to occur no earlier than late second quarter, allowing for at least 30 days' notice before the changes take effect. All changes will apply to milk marketed on or after the first of the month following the implementation date (aside from the delayed composition factor updates). However, the implementation timeline could be delayed if lawsuits are filed. Historically, lawsuits can result in a stay of the new orders, keeping the current provisions in place until the litigation process is resolved. For more information on how the referendum process works, please read Understanding the FMMO Referendum Process and watch USDA's webinar.

TWO GRANTS FROM THE SOUTHEAST DAIRY BUSINESS INNOVATION INITIATIVE ARE OPEN

FARM INFRASTRUCTURE IMPROVEMENT GRANT

Applications open January 1st and close March 5th. The Farm Infrastructure Improvement Grant will provide funds for projects that increase milking parlor throughput to reduce labor costs, improve animal comfort to increase production, and facilitate milk marketing efficiencies by expanding storage and ease of transportation of raw milk. Applicants may apply for up to $100,000 in funding and must provide a cash match of 25% of the requested amount in eligible expenses.

https://sdbii.tennessee.edu/farm-infrastructure-improvement-grant/

PRECISION TECHNOLOGY AND MANAGEMENT GRANT

Applications open January 1st and close March 5th. The Precision Technology & Management Grant will support the utilization of new and existing technologies that help farmers track and manage key farm metrics to maximize the impact of inputs like labor, feed, and fertilizer and improve farm efficiency. Applicants may apply for up to $150,000 in funding and must provide a cash match of 25% on this grant as well of the requested amount in eligible expenses.

https://sdbii.tennessee.edu/precision-technology-and-management-grant/

Both grants are open to eligible applicants in Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, and Puerto Rico.

Compatible Components

Take time to assess your project. If your project contains more than one component be sure that they are compatible with each other to have a higher chance of application success.

Examples:

Project one is applying for an estrus detection system and an automatic feed pusher. **INCOMPATIBLE**

Project two is applying for an estrus detection system and genomic testing. **COMPATIBLE**

Project one is applying for curtains and a sprinkler system for their free stalls. **COMPATIBLE**

Project two is applying for a manure spreader and a plate cooler. **INCOMPATIBLE**

Remember :

Your project should have compatible components that flow together for a common purpose.

Your project does not have to utilize the maximum amount. Don't add components in just to reach the max level of funding unless they are compatible with your whole grant project.

University of Kentucky

Wildcat Wisdom

Donna Amaral-Phillips
Retired UK Dairy Specialist

Practice the 5 C's of Dairy Calf Management

Colostrum: Calves should be fed 4 quarts of high-quality (>22 as measured with brix refractometer) colostrum (Jerseys- 3 quarts) within 4 to 6 hours of birth and an additional 2 quarts within 6 to 8 hours of the first feeding. Calves fed 4 versus 2 quarts of colostrum give 2500+ lbs more milk that first lactation!! Calves are born with an immature immune system and have to acquire immunity to disease from the antibodies found in this first milk. The absorption of antibodies by the newborn calf decreases with time and is non-existent by 24 hours of age. Thus, the recommendation to feed newborn calves quickly after birth. Besides antibodies, colostrum also contains various growth and nutritional factors which increase growth of tissues in the intestines and their ability to absorb nutrients throughout their life.

Calories: Energy or calories come from both the intake of milk and starter grain mix. Both are important in raising healthy, productive calves. Recommendations are to feed daily at least 6 quarts of milk or reconstituted milk replacer to Holstein calves. Starter should be available along with free-choice water starting at 3 days of age. Small amounts (a handful in a clean bucket) of starter are provided early in life—day 3 of age-- and needs to be changed out daily so that fresh starter is always available. The amount of starter consumed increases with age, especially as calves are being weaned from milk. Free-choice water is necessary to provide moisture in the rumen for rumen development. Remember that milk goes directly into the abomasum or true stomach, not into the rumen. For the best rumen development, free-choice water is needed. To prevent pens from getting wet when calves spill their water buckets, consider placing water bucket directly outside the pen in a container that minimizes the calf's ability to easily spill the bucket.

Cleanliness: Limiting exposure to disease-causing organisms helps get calves off to a good start. Cleanliness in both the calving pen and housing after calving are important. Leaving a cleaned calf pen vacant for 10 to 14 days can help break potential disease cycles. Feeding equipment (bottles, pails, tube feeder) needs to be cleaned identical to procedures used when cleaning milking equipment—warm water rinse, washed with hot water and soap with a brush, and acid rinse).

Automatic feeders need to be cleaned daily (if automatically cleaned, checked that they are cleaning properly) and milk hoses replaced routinely. Calves that are sick should be cared for and fed last to decrease spread of disease.

Consistency: Just like their mature cohorts, calves require consistency in feeding and handling routines (i.e. fed same time each day) as well as consistency in the composition of feeds they consume. Milk replacer, if source of milk, needs to be reconstituted according to the label's directions and an identical amount of powder and water fed at each feeding. To accomplish this, weighing out the powder and water decreases the inconsistencies between feeders and from day to day.

Comfort: Calves need a dry and draft-free area to rest. During the first week of life calves spend 80% of their time lying down and this decreases to only 75% by week 2 of life. Ventilation is also critical! Air movement, not down on but just above calves, is needed to move bacterial laden air away from calves. In the winter, air should turn over 4 times per hour and increase during the summer (up to 60 times/hour). Calves are born with very little body fat, thus environmental temperatures influence their comfort and ability to stay warm. Calves in the first 3 weeks of life are most comfortable when temperatures are between 60 to 75ºF and when temperatures drop below 60ºF, need to use energy they could have used for growth to stay warm. Calves over 3 weeks of age have a wider comfort zone with the lower end at 40ºF. Heat stress on calves decreases their immunity and their ability to fight off disease. Calf hutches can be well over 100ºF in the summer if they are not shaded from the sun. Placing hutches under shade cloth or trees help reduce the temperatures inside hutches and can help improve the immunity of calves. Remember that calves will drink more water when environmental temperatures increase.

Southland Dairy Farmers would like to introduce to you our new Mobile Dairy Instructor, Israel Mullins, serving the Commonwealth of Kentucky. Israel began as an instructor in October of 2024. He was active in the FFA before attending the University of Kentucky, graduating with his Bachelor of Science in Agriculture. After graduation he took over managing the beef cattle herd at Western Kentucky University before managing a fertilizer business in his hometown, in Lincoln County. In his free time, he enjoys hiking, hunting, working on the farm, and watching sports, particularly the Cincinnati Bengals, San Antonio Spurs, and the Greatest Tradition in College Basketball the Kentucky Wildcats. If you want to see Israel with the Mobile Dairy Classroom at your school or event in 2025, visit our website at, southlanddairyfarmers.com, or email him at, imullins@southlanddairyfarmers.com.

Milk Prices

FMMO 5	FMMO 7
www.malouisville.com	www.fmmatlanta.com
December 2024	December 2024
Class 1 Advanced Price (@3.5%BF)	Class 1 Advanced Price (@3.5%BF)
$24.83	$25.23
January 2025	January 2025
Class 1 Advanced Price (@3.5%BF)	Class 1 Advanced Price (@3.5%BF)
$23.78	$24.18

KDDC IS HIRING FOR SOUTHEAST REGION DAIRY CONSULTANT

Applications due March 6, 2025. Find more information at www.kydairy.org/openpositions or call KDDC President Freeman Brundige at 731-446-6248 with inquiries.

The primary role of the Dairy Consultant (DC) will be to assist KDDC in developing and implementing programs such as but not limited to the Dairy Impact Program, Producer Outreach Program, collaborative programs, conferences, and tours. These programs are designed to meet KDDC's mission to educate, promote, and represent dairy producers and foster an environment for growth of the Kentucky dairy industry. Each program specifically requires the DC to work directly with dairy producers at the farm level one on one in collaboration with other entities when necessary. The DC should make regular farm visits to producers in the Southeast Region.

This role will also have an additional focus on producer education and support. The DC in this role will lead KDDC educational initiatives related to active programming and collaborations and will work with the team to provide resources and events that address areas of need.

The DC in this position should expect to spend approximately 75% of their time on consultant activities and 25% leading producer education and support, with overlap expected between these areas. This is a remote, home-office-based job and travel within the region is expected at 60-80% and occasional statewide and out-of-state travel. The candidate is expected to live within the region, which includes: Adair, Anderson, Casey, Garrad, Laurel, Lincoln, Marion, Mercer, Pulaski, Rockcastle, Russell, Taylor, and Washington.

Kentucky Science Teachers Explore Dairy Farming Through The Dairy Alliance Virtual Farm Tour

In November 2024, the Kentucky Science Teachers Association (KSTA) hosted its annual conference in Bowling Green, Kentucky, bringing together science educators from across the state. As part of its mission to enhance science education, the KSTA provided teachers with valuable resources and tools to strengthen STEM learning. A standout feature of this year's event was a live, virtual farm tour organized by The Dairy Alliance, offering an immersive educational experience at the nearby Chaney's Dairy Farm to nearly 200 attendees.

Led by dairy farmer Carl Chaney, the tour introduced teachers to practical STEM concepts that are essential to modern farming. Teachers learned about sustainable agricultural practices, the journey of dairy products from farm to fridge, and the industry's commitment to environmental responsibility, including its low greenhouse gas footprint. They also explored STEM-related careers in agriculture and were provided with ready-to-use lesson plans to bring these concepts into their classrooms. The experience culminated in a sweet treat—teachers enjoyed Chaney's homemade ice cream, tying together the tour's on-farm practices with the everyday products students can relate to.

Post-tour feedback was overwhelmingly positive, with teachers giving the virtual farm tour an average score of 9.6 out of 10. This innovative approach not only expanded teachers' knowledge but also gave them a fresh, engaging way to connect STEM education to the real world.

Though dairy farms can be found throughout the region, many interested in learning about agriculture-- including teachers and students--face barriers like time constraints or large group sizes that make in-person farm visits difficult. The Dairy Alliance's virtual farm tours overcome these obstacles by offering interactive, guided tours accessible via video call. Educators from across The Dairy Alliance's 8-state coverage area are featured, allowing participants to "visit" their local farms and engage with experts in real-time. The tours, which are tailored to different age groups covering a variety of topics, provide an interactive experience that can be incorporated into the classroom. Recordings of many of our past tours are also available to watch at thedairyalliance.com/virtual-farm-tours.

This collaboration between The Dairy Alliance and KSTA highlights the impact of accessible learning tools in teaching the next generation about real-world scientific concepts and the important issues that influence their food choices, both now and in the future. Due to the tour's success, more STEM educators across The Dairy Alliance region will experience this special virtual farm tour offering in the near future.

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KDDC
Kentucky Dairy Development Council

176 Pasadena Drive
Lexington, KY 40503
859.516.1129 ph
www.kydairy.org

Calendar of Events

FEB 9	Call for KDDC Nominations for Milk Haulers, Milk Quality, and Young Producer Awards Deadline
FEB 12-15	National Farm Machinery Show | Louisville, KY
FEB 25-26	Kentucky Dairy Conference | Sloan Convention Center, Bowling Green, KY
MAR 5	Deadline to apply for SDBII grants | sdbii.tennessee.edu
MAR 17-21	Agriculture Literacy Week
APR 4	Kentucky National Show and Sale | Louisville, KY