

# Department of Animal Science

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## AVIAN INFLUENZA LIKELY TO SEND HIGH EGG PRICES EVEN HIGHER THROUGHOUT 2025

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**Tom Tabler**, *Professor and Extension Poultry Specialist, Department of Animal Science, University of Tennessee Institute of Agriculture*

**Jonathan Moon**, *Extension Instructor, Department of Poultry Science, Mississippi State University*

**Tannah Christensen**, *Extension Instructor, Department of Poultry Science, Mississippi State University*

**Pramir Maharjan**, *Assistant Professor and Extension Poultry Specialist, Department of Food and Animal Sciences, Tennessee State University*

**Tanner Thornton**, *Graduate Research Assistant, Department of Animal Science, University of Tennessee Institute of Agriculture*

Anyone who has been grocery shopping recently knows that eggs are expensive. During 2024, the average price of a dozen Grade A large eggs increased by 37 percent. Contrast that to the trajectory of overall food prices, which rose 2.5 percent in the past year. In addition, eggs increased \$1.28/dozen (an increase of more than 22 percent) during January 2025, according to trading on a contract for difference basis that tracks the benchmark market for eggs.

Historically, eggs in the U.S. reached an all-time high of \$7.09/dozen in January 2025 (Trading Economics, 2025). The United States Department of Agriculture's (USDA) price outlook expects egg prices to increase an additional 20.3 percent in 2025, compared to about 2.2 percent for overall food prices (USDA, 2025).

According to Trading Economics global macro models and analysts' expectations, eggs in the U.S. are expected to trade at \$7.66/dozen by the end of the current quarter and, looking forward, eggs are expected to trade at \$9.67/dozen in 12 months' time.

Multiple factors are in play when it comes to the current high price of eggs. One factor is inflation. Since 2023, the cost of practically everything has been going up for the American consumer, including eggs. Another is the continuing supply chain issues plaguing the egg industry that are partially a holdover from the COVID-19 pandemic. The table egg industry continues to struggle to find workers and suffers from a labor shortage, which somewhat hampers production. However, the main factor driving egg prices higher is the **ongoing highly pathogenic avian influenza (HPAI) H5N1 outbreak** that has led to the loss of millions of table egg laying hens that we rely on for our egg supply from both conventional caged and cage-free systems.

The weekly USDA Egg Markets Overview for the week of January 31, 2025, indicated that the wholesale price on the New York market for large cartoned shell eggs delivered to retailers was \$7.63/dozen.

In the major Midwest egg production region, the wholesale price for large, white shell eggs delivered to warehouses was \$7.03/dozen. The California benchmark for large shell eggs was \$8.97/dozen. Proposition 12, passed by California voters in 2018, requires that all eggs sold in California come from cage-free hens, which increases the price for eggs in the state because of additional labor and added space requirements for hens associated with cage-free production systems.

## HPAI outbreak

As of February 6, 2025, since the start of the current HPAI outbreak on February 8, 2022, 156.25 million birds have been affected. HPAI has been detected in a total of 1,531 flocks in all 50 states. Of those, 722 have been commercial flocks, and 809 have been backyard flocks (USDA-APHIS, 2025). During December 2024, 18.25 million birds were lost. The losses were even worse in January 2025, when 23.3 million birds were lost. Many of these lost birds were table egg layers during the holiday baking season, which added to the strain on the egg supply. Table egg operations are often large 1 to 5 million-bird complexes. Currently, if one bird on the complex tests positive for HPAI, **USDA policy requires every bird on the complex be euthanized** to prevent the disease from spreading. In recent months, numerous HPAI outbreaks on large table egg complexes have seriously reduced the number of table egg layers in production, creating a shortage of eggs and driving up egg prices.

Lost hens can be replaced, and farmers and egg companies that provide table eggs to the grocery stores are working to do that as quickly as possible, but it can't be done overnight. It takes three weeks for a fertile hen egg to hatch into a baby chick. It then takes roughly 20-22 weeks for that chick to grow up into an adult hen and become sexually mature and start laying eggs. In addition, she doesn't start laying Grade A large eggs when she first starts laying. Her first eggs are small, and over the next few weeks, she gradually works up to laying large eggs. So, it takes roughly **six months to raise table egg layers** (Figure 1) and bring them into production. Therefore, table egg layers lost in January 2025 can't be replaced before July or August 2025 at the earliest. As a result, expect higher egg prices throughout the remainder of 2025 and perhaps longer. Keep in mind that there is no end in sight to the current HPAI outbreak and losses of table egg layers, turkeys, broilers and backyard poultry flocks will likely continue.



*Figure 1. Inspection of table egg laying hens in a conventional cage housing system. Source: P. Maharjan.*

HPAI had a severely disproportionate impact on the cage-free layer population in 2024. In 2025, eight states – Arizona, California, Colorado, Massachusetts, Michigan, Nevada, Oregon, and Washington – now have laws on the books that ban the production and sale of conventional cage eggs for animal welfare reasons. The USDA reported that about 17.2 million egg-laying hens were lost in November and December of 2024, accounting for nearly half of all birds lost to the H5N1 virus in 2024. Many of these were cage-free laying hens. As of January 1, 2025, the estimated U.S. non-organic commercial cage-free table egg flock stood at 101 million, 33 percent of the total current U.S. table egg flock. However, consider the loss of 22 million non-organic cage-free layers to HPAI – equal to 21.5 percent of the flock on January 1, 2024. USDA-Agricultural Marketing Service reports that outbreaks of HPAI in commercial table egg flocks have continued into early 2025. During January 2025, 16 USDA-confirmed outbreaks in seven states (Arizona, California, North Carolina, Ohio, Missouri, Indiana and Washington) resulted in the **loss of 14 million table egg laying birds** – 11.9 million (85 percent) in conventional caged systems, 2.1 million (15 percent) in cage-free systems, and 26,000 organic (0.2 percent).

## New HPAI wrinkles

A new HPAI wrinkle emerged when H5N9 was recently identified at a commercial duck farm in California. Currently, H5N1 is what the U.S. has primarily been dealing with. H5N9 has been seen before in U.S. birds, but often it results in less severe symptoms and is classified as low pathogenic avian influenza. H5N9 viruses have been detected in North American wild birds in 2023 and 2024, and even before the current outbreak. Some of the earliest records of H5N9 around the world date back to turkey flocks in Wisconsin infected in the 1960s. However, this is the first case of HPAI H5N9 in combination with commercial poultry affected by the current H5N1 outbreak in the U.S. The **finding was not unexpected**, as it is not uncommon to see viruses reassort, especially in ducks which are natural reservoir hosts for influenza A viruses. Tests conducted by the U.S. Department of Agriculture National Veterinary Services Laboratory confirmed the presence of both H5N9 and H5N1 at the duck farm. In response, California state officials quarantined the premises and depopulated almost 119,000 birds on the farm in late November and early December.

This **finding of H5N9 likely indicates a reassortment** between the circulating H5N1 strain that we have been dealing with since early 2022 and another avian flu virus with the N9 neuraminidase. Currently, there are 16 possible “H” variations and 9 possible “N” variations known to be associated with avian influenza viruses. While this is an isolated case now, it is cause for concern and re-emphasizes the importance of good biosecurity to keep our flocks safe. This finding **follows the spillover of H5N1 into dairy cattle**, which was first detected in March 2024, and, as of February 4, 2025, has now spread to 957 herds in 16 states, with 736 of these herds in California alone. Another new wrinkle occurred when six dairy herds in Nevada recently tested positive for a newer variant (H5N1 D1.1) of avian influenza. The strain is not the same one that has been circulating in other dairy herds throughout the country. This is the first time that this strain has been found in dairy cattle, indicating that these cows caught it from wild birds, instead of another infected herd. This is the second known instance (after the first occurrence in dairy cattle in Texas in March 2024) of a type of avian influenza being introduced into cattle herds by birds and could suggest that the **virus may be seeding itself into herds** through introductions from wild birds, which are ubiquitous. While biosecurity is not a 100

percent guarantee that avian influenza will not strike a flock, it currently remains the strongest weapon we have to protect our flocks.

Work on a vaccine for HPAI continues, but **currently no vaccine is available in the U.S.** While export questions would have to be resolved before vaccine use could become a reality, should vaccination become a possibility, this would be more of an issue for broiler meat export than for export of table eggs. In addition, table egg layers and turkeys have been much more affected by HPAI than broiler chickens. Roughly 33 million birds were affected in December and January alone, with a number of positive detections on large table egg complexes in January reducing the conventional egg-laying flock by 3.7 percent, putting increased pressure on egg prices.

The staggering laying flock losses in recent months have prompted grocery stores in some parts of the country to begin to limit consumer egg purchases in order to preserve supply and prevent panic-buying. In addition, grocery stores often use eggs as promotional items to pull shoppers into the stores. However, many stores are now pricing eggs at record or near record highs to limit demand and avoid empty egg cases. In addition, egg prices have forced the Georgia-based Waffle House restaurant chain to temporarily **add a 50-cent surcharge per egg** to customer orders. According to its website, Waffle House serves 272 million eggs per year, making eggs the chain's most-ordered item, surpassing hash browns (153 million) and even waffles (124 million).

## Summary

Expect **egg prices to remain high throughout 2025 and possibly longer**. While several factors are in play, by far, the greatest one is the ongoing avian influenza outbreak that continues to decimate poultry flocks across the country. Farmers and table egg companies are working to replace lost flocks as quickly as possible, but it is a process that takes time. Replacement birds must be hatched and raised for up to six months before they can begin laying eggs. As long as we continue to lose flocks to HPAI, we will continue to be playing catch up with replacement flocks and egg prices will remain high. Biosecurity **remains our best defense** against avian influenza.

## References and Online Resources

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USDA-APHIS. 2025. HPAI detections. [www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/commercial-backyard-flocks](http://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/commercial-backyard-flocks). Accessed: February 6, 2025.

Track HPAI detections in poultry flocks and dairy cattle at:  
[www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/commercial-backyard-flocks](http://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/commercial-backyard-flocks)

[www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/hpai-confirmed-cases-livestock](http://www.aphis.usda.gov/livestock-poultry-disease/avian/avian-influenza/hpai-detections/hpai-confirmed-cases-livestock)



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