SHOTS - HEALTH NEWS

On the frontline against bird flu, egg farmers fear they're losing the battle

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By
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A worker moves crates of eggs on Jan. 11, 2024 at the Sunrise Farms processing plant in Petaluma, Calif., which has seen outbreaks of avian flu.
Terry Chea/AP

Greg Herbruck knew 6.5 million of his birds needed to die, and fast.

But the CEO of Herbruck's Poultry Ranch wasn't sure how the third-generation family egg producer (one of the largest in the US) was going to get through this round of avian flu, financially or emotionally. One staffer broke down in Herbruck's office in tears.

"The mental toll on our team of dealing with that many dead chickens is just, I mean, you can't imagine it," Herbruck said. "I didn't sleep. Our team didn't sleep."

KFF Health News

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The stress of watching tens of thousands of sick birds die of avian flu each day, while millions of others wait to be euthanized, kept everyone awake.

In April 2024, as his first hens tested positive for Highly Pathogenic Avian Influenza (HPAI) H5N1, Herbruck turned to the tried and true USDA playbook, the "stamping out" strategy that helped end the 2014-2015 bird flu outbreak, which was the largest in the US until now.

Within 24-48 hours of the first detection of the virus, state and federal animal health officials work with farms to cull infected flocks to reduce the risk of transmission. That's followed by extensive disinfection and months of surveillance and testing to make sure the virus isn't still lurking somewhere on site.

Since then, egg farms have had to invest millions of dollars into biosecurity. Employees shower in and shower out, before they start working and after their shifts ends to prevent spreading the virus.

A sign outside Herbruck's Poultry Ranch in Saranac, Michigan, one of the largest egg producers in the US. Since the last bird flu outbreak in 2015, farms have invested millions of dollars into biosecurity.
Herbruck's Poultry Ranch

But none of that has been enough to contain the outbreak that started three years ago.

This time, the risk to human health is only growing, experts say. Sixty-six of the 68 total human cases in the United States have been just since March, including the first human death in this country earlier this month.

"The last six months have accelerated my concern, which was already high," said Dr. Nahid Bhadelia, an infectious diseases physician and the founding director of Boston University's Center on Emerging Infectious Diseases.

Controlling this virus has become more challenging, precisely because it's so entrenched in the global environment, spilling into mammals such as dairy cows, and affecting 147 million birds in commercial and backyard flocks in the US.

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Because laying hens are so susceptible to the H5N1 virus, which can wipe out entire flocks within days of the first infection, egg producers have been on the frontline in the fight against various bird flu strains for years now.

But this moment feels different. Egg producers and the American Egg Board are begging for a new approach.

Many infectious disease experts agree that the risks to human health of continuing current protocols is unsustainable, because of the strain of bird flu driving this outbreak.

"The one we're battling today is unique," said David Swayne, the former lab director of the US Department of Agriculture (USDA) Agricultural Research Service (ARS) Southeast Poultry Research Laboratory (SEPRL) and a leading national expert in avian influenza.

"It's not saying for sure there's gonna be a pandemic" of H5N1, Swayne said, "but it's saying the more human infections, the spreading into multiple mammal species is concerning."

Red Star chickens feed in their coop at Historic Wagner Farm in Glenview, Ill. on Jan. 10, 2023.
Erin Hooley/AP

For Herbruck, it feels like war. Ten months after Herbruck's Poultry Ranch was hit, the company is still rebuilding its flocks, and rehired most of the 400 workers they had

to lay off.

Still, he and his counterparts in the industry live in fear, watching other farms get hit two, even three times in the last few years.

"I call this virus a terrorist," he said. "And we are in a battle and losing, at the moment."

When biosecurity isn't working — or just isn't happening

So far, none of the 23 people who contracted the disease from commercial poultry have experienced severe cases, but the risks are still very real. The first human death was a Louisiana patient who had contact with both wild birds and backyard poultry. The person was over the age of 65 and reportedly had underlying medical conditions.

And the official message to both backyard farm enthusiasts and mega farms has been broadly the same: biosecurity is your best weapon against the spread of disease.

But there's a range of opinions among backyard flock owners about how seriously to take bird flu, said Katie Ockert, a Michigan State University Extension educator who specializes in biosecurity communications.

Skeptics think "we're making a mountain out of a molehill," Ockert said, or "the media is maybe blowing it out of proportion." Which means there are two types of backyard poultry enthusiasts, Ockert said: those doing great biosecurity, and those who aren't even trying.

"I see both," she said, "I don't feel like there's really any middle ground there for people."

And the challenges of biosecurity are completely different for backyard coops than massive commercial barns: how are hobbyists with limited time and budgets supposed to create impenetrable fortresses for their flocks, when any standing water or trees on the property could draw wild birds carrying the virus?

Trucks are washed before entering Herbruck's Poultry Ranch, one of the biosecurity measures farms have taken to try to reduce the spread of bird flu.
Ryan Smith/Herbruck's Poultry Ranch

Rosemary Reams, an 82-year-old retired educator in Ionia, Michigan, grew up farming and has been helping the local 4-H poultry program for years, teaching kids how to raise poultry. Now, with the bird flu outbreak, "I just don't let people go out to my barn," she said.

Reams even swapped real birds with fake ones for kids to use while being assessed by judges at recent 4-H competitions, she said.

"We made changes to the fair last year, which I got questioned about a lot. And I said 'No, I gotta think about the safety of the kids.' "

Reams was shocked by the news of the death of the Louisiania backyard flock owner. She's even questioned whether she should continue to keep her own flock of 20 to 30 chickens and a pair of turkeys.

"But I love 'em. At my age, I need to be doing it. I need to be outside," Reams said. "That's what life is about." She said she'll do her best to protect herself and her 4-H kids from bird flu.

But even "the best biosecurity in the world" hasn't been enough to save large commercial farms from infection, said Emily Metz, president and CEO of the American Egg Board, an industry group.

The egg industry thought it learned how to outsmart this virus after the last outbreak in 2014-2015.

That time, "we were spreading it amongst ourselves between egg farms, with people, with trucks," Metz said. So egg producers went into lockdown, she said, developing intensive biosecurity measures to try to block the routes of transmission from wild birds or other farms.

Metz said the measures egg producers are taking now are extensive.

"They have invested hundreds of millions of dollars in improvements, everything from truck washing stations, which is washing every truck from the Fedex man to the feed truck and everything in between. Busing in workers so that there's less foot traffic. Laser light systems to prevent waterfowl from landing."

Lateral spread, when the virus is transmitted from farm to farm, has dropped dramatically, down from 70% of cases in the last outbreak to just 15% now, according to the USDA.

And yet, Metz said, "all the measures we're doing are still getting beat by this virus."

The fight over vaccinating birds

Perhaps the most contentious debate about bird flu in the poultry industry right now is whether to vaccinate.

Given the mounting death toll for animals and the increasing risk to humans, there's a growing push to vaccinate certain poultry against avian influenza, which countries like China, Egypt, and France are already doing.

Last year, the World Organization on Animal Health urged nations to consider vaccination "as part of a broader disease prevention and control strategy."

Swayne, the avian influenza expert and poultry veterinarian, works with WOAH and says most of his colleagues in the animal and public health world "see vaccination of poultry as a positive tool in controlling this panzootic in animals," but also a tool that reduces chances for human infection, and chances for additional mutations of the virus to become more human-adapted.

But vaccination could put poultry meat exporters (whose birds are genetically less susceptible to H5N1 than laying hens) at risk of losing billions of dollars in international trade deals.

That's because of concerns that vaccination, which lowers the severity of disease in poultry, could potentially mask infections and bring the virus across borders, according to John Clifford, former Chief Veterinary Officer for the USDA and an advisor for the USA Poultry and Egg Export Council.

"If we vaccinate, we not only lose $6 billion potentially in exports a year," Clifford said. "If they shut us off, that product comes back on the US market. Our economists looked at this and said we would lose $18 billion domestically."

Clifford added that would also mean the loss of "over 200,000 agricultural jobs."

Even if those trade rules changed to allow meat and eggs from vaccinated birds, there would still be logistical hurdles.

"Vaccination possibly could be on the horizon in the future, but it's not going to be tomorrow or the next day, next year or whatever," Clifford said.

To take just one obstacle, none of the current HPAI vaccines are a perfect match for the current strain, according to the USDA. But if the virus evolves to be able to transmit from human to human, he said, "that would be a game changer for everybody, which would probably force vaccination."

Earlier this month, the USDA announced it would "pursue a stockpile that matches current outbreak strains" in poultry. "While deploying a vaccine for poultry would be difficult in practice and may have trade implications, in addition to uncertainty about its effectiveness, USDA has continued to support research and development in avian vaccines," the agency said.

At this point, Metz argued, the industry can't afford not to try vaccination, which has helped eradicate diseases in poultry before.

"We're desperate, and we need every possible tool," she said. "And right now, we're fighting this virus with at least one, if not two, arms tied behind our back. And the vaccine can be a huge hammer in our toolbox."

But unless the federal government acts, that tool won't be used.

And industry concerns aside, infectious disease physician Bhadelia said there's an urgent need to focus on reducing the risk to humans of getting infected in the first place. And that means reducing "chances of infections in animals that are around humans, which include cows and chickens. Which is why I think vaccination to me sounds like a great plan."

The lesson "that we keep learning every single time, is that if we'd acted earlier, it would have been a smaller problem," she said.

This story comes from NPR's health reporting partnership with Michigan Public *and* KFF Health News.

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