

# Avian Influenza FAQs

Updated 1/27/23

This is a living document and is regularly updated. CCE educators and specialists can reach out to Amy Barkley, Livestock and Beginning Farm Specialist with the SWNY Dairy, Livestock, and Field Crops Program at ([amb544@cornell.edu](mailto:amb544@cornell.edu)) or (716) 640-0844 for more information and/or to suggest additions to the FAQ.

Flock owners and community members can reach out to their [local Cornell Cooperative Extension office](#) for assistance.

Media inquiries can be directed to Cornell Cooperative Extension Communications at [cce-communications@cornell.edu](mailto:cce-communications@cornell.edu).

**The Highly Pathogenic Avian Influenza response in NYS is being addressed by Cornell Cooperative Extension's NY Extension Disaster Education Network**

## Table of Contents *(ctrl+click on a question to go to the answer in the document)*

What is Avian Influenza, and where does it come from?	3
Is HPAI a concern?	3
How does HPAI spread?	4
Which types of birds are affected?	4
What are the symptoms of HPAI?	4
What species of wild birds can carry and spread HPAI?	4
What species are tested during an outbreak?	5
What happens if I think I have the disease in my flock?	5
Where do I report unusual wild bird deaths?	5
I have poultry inside buildings and outside on pasture/in my yard. Are all birds affected if I have a positive test result?	6
Can indoor pet birds be affected?	6
What is the incubation period for this disease	6
If my birds are depopulated, how long until I can restock?	6
What happens to surrounding flocks if a positive flock is found?	7
What can I do to keep my birds safe?	7
I have my birds inside now. When is it safe to let them back outside?	8
Is there a vaccine available?	8
Disinfectants used	8
Can humans be infected?	9
Are hatchery purchased chicks and waterfowl safe?	9
Will poultry shows or fairs be affected?	9
Are poultry swaps, meets, or auctions affected by the Commissioner's ban?	9
Is hatching eggs in the classroom safe?	10
Should I take down my bird feeders?	10
Can mammals transmit the virus?	10
Can I safely hunt during the outbreak?	11
What is Indemnity?	11
Disaster and Ag Assessments	12
Where can I keep track of outbreak cases?	12
For producers with other questions and concerns:	12

<p>What is Avian Influenza, and where does it come from?</p>	<p>Avian Influenza is a highly contagious poultry virus that has the potential to cause large financial losses to the U.S. poultry industry. A highly pathogenic strain (HPAI), H5N1, last hit the U.S. in 2014-2015, and was considered the nation’s largest animal health emergency. Over 200 cases of the disease were found in commercial flocks, backyard flocks, and wild birds. More than 50 million birds were affected and subsequently died or were euthanized on more than 200 farms in 15 states.</p> <p>Waterfowl, both wild and domestic, act as carriers, which can spread the virus to other wild bird and domestic poultry populations. Since the outbreak of 2014-2015, scientists have been monitoring wild bird populations, and waterfowl hunters send their harvested birds in for testing. Wild waterfowl regularly carry low-pathogenic strains of the virus, but it can easily mutate to a highly pathogenic strain, as we’ve seen this year.</p>
<p>Is HPAI a concern?</p>	<p>Yes.</p> <p>Since the middle of February 2022, we have seen 12 cases of this disease in domestic flocks in NYS. Affected flocks have been located in Dutchess, Fulton, Monroe, Orleans, Queens, Suffolk, Sullivan, Ulster, Wayne, Westchester, Wyoming, Yates Counties. These flocks have been euthanized to help control the spread of the virus.</p> <p>While these are only twelve cases, it is anticipated that there will be many more. In the 2014/2015 outbreak, this disease was cleared from both the wild and domestic bird populations by June. That was not the case with the 2022 outbreak, and the disease has stayed around, resulting in continued infection of wild birds and domestic flocks.</p> <p>As of January 27, 2022, there have been 5,956 cases identified in wild bird populations across the U.S., including 254 New York. The counties with wild bird positives are numerous and cross the state. There have been 743 cases in backyard and commercial poultry flocks, including the New York cases listed above. Cases in commercial and backyard flocks will likely increase when we move into the spring migration season.</p> <p>For more information on current detections on HPAI in wild birds, commercial flocks, and backyard flocks, visit:  <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai</a></p> <p>While the disease is circulating in wild and domestic bird populations, there is no need to panic, but there is need to be on high alert. Poultry owners should be prepared to report any disease in their flock that looks suspicious.</p>

<p>How does HPAI spread?</p>	<p>HPAI lives in the respiratory and/or intestinal tract of birds. It can be picked up from contact with infected feces, surfaces, or through the air, though aerial transmission from farm to farm is unlikely. It can be transported on infected feed, clothing, or equipment. It can also be spread through wild bird populations encountering domestic birds and can be transported on other living creatures, such as rodents and insects. Once on the farm, the disease is readily passed from bird to bird, infecting an entire flock quickly.</p>
<p>Which types of birds are affected?</p>	<p>Domestic poultry flocks of any size, from back yard to commercial, and any species can be affected. Waterfowl may be affected and not show symptoms.</p> <p>Affected wild bird populations are mostly waterfowl, which can carry the disease and not show symptoms. However, other wild birds, including songbirds, birds of prey, and game birds can be infected with the virus, too.</p>
<p>What are the symptoms of HPAI?</p>	<p>Any birds can be affected, but birds other than waterfowl react most strongly to the virus. Poultry infected with HPAI may show one or more of the following symptoms:</p> <ul style="list-style-type: none"> <li>• Sudden death without clinical signs</li> <li>• Lack of energy and appetite</li> <li>• Decreased egg production or soft-shelled or misshapen eggs</li> <li>• Swelling of head, comb, eyelid, wattles, and hocks</li> <li>• Purple discoloration of wattles, comb, and legs</li> <li>• Nasal discharge, coughing, and sneezing</li> <li>• Discoordination</li> <li>• Diarrhea</li> </ul> <p>A high level of mortality without any clinical signs is known to be a sure sign of the virus. In some cases, expect 100% of the flock to die within a few days. Regardless of how the disease presents, a large portion of the birds in a flock will be affected. Waterfowl may carry the virus but not show symptoms.</p> <p>With any suspicious disease, rule out obvious causes such as predation and weather issues. Deaths that are in the realm of “normal” don’t need to be reported.</p>
<p>What species of wild birds can carry and spread HPAI?</p>	<p>Most of the wild birds that harbor the virus are waterfowl, but birds of prey and some songbirds can be carriers as well.</p> <p>Rodents, insects, and other creatures living in close proximity to affected birds have the capacity to transmit disease on their bodies, but do not usually become infected. The Eurasian strain of H5N1 that we’re currently experiencing does not easily infect mammals.</p>

<p>What species are tested during an outbreak?</p>	<p>The species tested during an outbreak include the Gallinaceous species (chickens, turkeys, quail, etc.); game birds (chucker, partridge, pheasant, peafowl, guinea, etc.); waterfowl (ducks, geese); and red meat birds (ostrich, emu).</p> <p>While raptors are susceptible to the disease, Ag and Markets will test them, but positive individuals will be allowed to recover with strict biosecurity measures in place, rather than them being candidates for depopulation.</p>
<p>What happens if I think I have the disease in my flock?</p>	<p>Report it! If a large number of your birds are sick or dying, it's important to report it immediately so that we can stop the spread to any other flocks. This helps protect the welfare of other flocks, the livelihoods of farmers, and the pleasure that backyard flock owners get from their poultry. You can call:</p> <ul style="list-style-type: none"> <li>- NYS Department of Agriculture &amp; Markets: 518-457-3502</li> <li>- USDA (United States Department of Agriculture): 866-536-7593</li> <li>- Your local Cornell Cooperative Extension Office <ul style="list-style-type: none"> <li>o <a href="https://cals.cornell.edu/cornell-cooperative-extension/local-offices">https://cals.cornell.edu/cornell-cooperative-extension/local-offices</a></li> </ul> </li> </ul> <p>The first step in reporting is to answer a few questions about what's going on with your birds. If your flock is suspected of having the virus, a field veterinarian from NYS Ag and Markets will come out and evaluate your flock. They will take samples from live birds, dead birds, and your birds' housing. These samples will be sent to a testing laboratory with results expected in 24 hours. Until then, the veterinarian working on your case will help you put measures in place to make sure that if the disease is on your property, it doesn't spread further. Usually, that means that only people who are authorized to work with your poultry are allowed in and out of your property, and the movement of live poultry, poultry products (meat, eggs, feathers, etc.) is not allowed.</p> <p>While the testing is occurring, you'll work with the USDA to inventory your poultry in the case of a positive test result, which will result in the euthanasia of your flock to stop the spread of the disease. The inventory will help determine the indemnity (payment) for your flock. <b>This information will not be shared with other producers, the municipality, county, or town.</b></p> <p>The goal of the USDA is to depopulate your flock within 24 hours of first detecting HPAI. This 24-hour window is critical to keep the virus from building in the environment, potentially spreading to other flocks. The veterinarian working on your case will work with you to be sure that your birds are euthanized quickly and humanely.</p>
<p>Where do I report unusual</p>	<p>Unusual illness and deaths of wild birds can be reported to the New York Department of Environmental Conservation (DEC). The link to this map shares the office contact information by region: <a href="https://www.dec.ny.gov/about/558.html">https://www.dec.ny.gov/about/558.html</a></p>

wild bird deaths?	
-------------------	--

I have poultry inside buildings and outside on pasture/in my yard. Are all birds affected if I have a positive test result?	Yes. A positive test result in one flock on a premise means that the entire premise is considered infected, and all birds would be humanely euthanized.
Can indoor pet birds be affected?	It is very rare for caged parrots or other indoor pet birds to be affected. Parrots are not tested during an outbreak.  If you have poultry (chickens, ducks, quail, etc.) living inside your house, they are susceptible, and can be tested in the event of an outbreak.
What is the incubation period for this disease	The incubation period for this disease is 7-14 days.
If my birds are depopulated, how long until I can restock?	If your birds are kept in a tight building that can be easily cleaned and disinfected, it will take about a month as well as a negative environmental test before birds can be restocked. If birds are kept on pasture or are not kept indoors exclusively, restocking cannot occur until 150 days following depopulation in combination with a negative environmental test. 150 days is generally accepted as the time it takes for the virus to be deactivated naturally in the environment.

<p>What happens to surrounding flocks if a positive flock is found?</p>	<p>When a positive flock is found, a control and buffer zone are established around the infected premise. While flock census data will be collected from flocks in the control and buffer zones, the only flocks that will be tested are those which report illness. These birds are tested to ensure that they are free of the virus. Please note that this is the protocol for our current outbreak scenario. Protocols may change if there is a dramatic change in the number of infected flocks detected.</p> <p>If flock census data is collected, <b>this information will not be shared with other producers, the municipality, county, or town.</b> It is important that this data is collected because it helps the USDA understand the risk potential in a given area. Once this data is collected, the USDA will alert those producers and flock owners who've participated in the census about any impending threat of HPAI.</p>
<p>What can I do to keep my birds safe?</p>	<p>Because there is not a vaccine currently available in the U.S. for this disease, keeping it out through biosecurity is going to be the best course of action. The easy-to-follow biosecurity principles below are for all bird species, and can go a long way to keeping your birds safe from disease:</p> <ul style="list-style-type: none"> <li>• Establishing an "all-in, all-out" flock-management policy, where only one age of birds is kept on your premise at one time.</li> <li>• Protecting against exposure to wild birds or water or ground contaminated by wild birds. For many flock owners, this means keeping their flocks indoors until the threat has passed.</li> <li>• Closing bird areas to nonessential personnel or vehicles</li> <li>• Providing poultry caretakers with clean clothing and disinfection facilities and directions for their use</li> <li>• Thoroughly cleaning and disinfecting equipment and vehicles (including tires and undercarriage) when entering or leaving the farm</li> <li>• Banning the borrowing or lending of equipment or vehicles</li> <li>• Banning visits to other poultry farms, exhibitions, fairs, and sales or swap meets (if visits must occur, direct workers to change footwear and clothing on their return)</li> <li>• Banning bringing birds in slaughter channels back to the farm</li> </ul> <p>If you are a poultry hobbyist or small flock owner, we encourage you to look through the biosecurity resources developed by USDA-APHIS's Defend the Flock Program: <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/defend-the-flock-program">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/defend-the-flock-program</a></p>

<p>I have my birds inside now. When is it safe to let them back outside?</p>	<p>This disease moves most with the wild bird migration seasons but can move any time of the year. As wild birds settle in an area, they will be spreading the virus around their environment, potentially concentrating the disease. The cold, cloudy months of winter/early spring are the best environment for HPAI to survive a long time, up to 150 days. However, the drier, warmer environments of late spring, summer, and early fall are more effective in killing the virus.</p> <p>Generally, it's a good idea to wait until the warmer weather is here and there are no recent cases in your state or surrounding states before letting your flock outside again. However, we ask that poultry owners be on alert at all times because although caseloads may decline in the late spring and summer, the migration of wild birds will bring more cases with them until the virus is eliminated from both wild and domestic bird populations.</p> <p>Virus detections in domestic fowl and wild birds can be found on the USDA-APHIS website at <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai</a></p>
<p>Is there a vaccine available?</p>	<p>Unfortunately, there is not an approved Avian Influenza vaccine available in the U.S.. The best way to keep your flock safe is by implementing biosecurity measures.</p> <p>The USDA-APHIS Defend the Flock initiative has a great series of resources that outline easy-to-follow biosecurity protocols:  <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/defend-the-flock-program">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program/defend-the-flock-program</a></p>
<p>Disinfectants used</p>	<p>There are over 200 disinfectants can be used against HPAI on hard, non-porous surfaces.</p> <ul style="list-style-type: none"> <li>- More information about using disinfectants against HPAI can be found here: <ul style="list-style-type: none"> <li>o <a href="https://www.epa.gov/pesticide-registration/antimicrobial-products-registered-disinfection-use-against-avian-influenza">https://www.epa.gov/pesticide-registration/antimicrobial-products-registered-disinfection-use-against-avian-influenza</a></li> </ul> </li> <li>- The list of registered products can be found here: <ul style="list-style-type: none"> <li>o <a href="https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza">https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza</a></li> </ul> </li> </ul>



<p>Can humans be infected?</p>	<p>It is rare for humans and other animals outside of birds to be infected with this disease. Most reported cases result from direct contact with infected birds' respiratory secretions or feces. Only one case of bird to human infection has been identified in the U.S., and that person had direct, prolonged contact with infected poultry. Research indicates that the Eurasian strain of H5N1 is not easily transmissible to humans, and the CDCs public health risk assessment remains low.</p> <p>Any commercial flocks in which HPAI has been confirmed are euthanized and will not move into the human food chain. As a reminder, the proper handling and cooking of poultry to an internal temperature of 165°F will kill bacteria and viruses.</p>
<p>Are hatchery purchased chicks and waterfowl safe?</p>	<p>The short answer is that ordering from a hatchery is safe. Wild birds and exposure to infected domestic flocks present the greatest risks to introducing the disease to domestic flocks.</p> <p>HPAI can be vertically transmitted, meaning that an infected hen will lay an infected egg that will hatch into an infected chick, but it isn't likely. Most infected flocks will die within a week, and any possibly infected eggs that are in incubation would be destroyed as part of the depopulation process.</p> <p>The National Poultry Improvement Plan lists out hatcheries that are certified free of diseases like Pullorum, SE, and Avian Influenza. The map found on this page is clickable, allowing you to pull up a list of certified hatcheries by state.</p> <p><a href="http://www.poultryimprovement.org/statesContent.cfm">http://www.poultryimprovement.org/statesContent.cfm</a></p>
<p>Will poultry shows or fairs be affected?</p>	<p>At this time, we don't know how the disease will affect the 2023 fair/show season.</p>
<p>Are poultry swaps, meets, or auctions affected?</p>	<p>At this time, we don't know how the disease will affect poultry swaps, meets, or auctions in 2023.</p>

<p>Is hatching eggs in the classroom safe?</p>	<p>Eggs that are hatched in a classroom are typically not exposed to the direct contamination sources that spread HPAI. However, if a student has poultry at home, there is a risk that they can spread the virus if their home flock becomes infected. It's recommended that students that have poultry at home not come in direct contact with the incubator, eggs, or chicks unless they have washed their hands and are wearing clothes that haven't been around poultry.</p> <p>It's recommended that eggs sourced for hatching in classrooms come from an NPIP certified hatchery or farm. The full list of NPIP participant hatcheries and farms by state can be found at <a href="http://www.poultryimprovement.org/statesContent.cfm">http://www.poultryimprovement.org/statesContent.cfm</a> New York specific farms and hatcheries can be found at <a href="http://www.poultryimprovement.org/documents/ny.pdf">http://www.poultryimprovement.org/documents/ny.pdf</a></p> <p>There is little risk of eggs bringing HPAI into the classroom. Many breeder flocks are regularly tested for HPAI and any that test positive would have their eggs destroyed as part of the disease containment process.</p>
<p>Should I take down my bird feeders?</p>	<p>The risk of HPAI transmission to domestic flocks from wild birds that aren't waterfowl is very low, but there is potential for it to spread through this route. If you own or work with poultry, taking down birdfeeders during this time of increased surveillance and cases can help mitigate potential risk. If you don't, then feel free to keep them up.</p> <p>More information about this topic can be found on Cornell's Lab of Ornithology web page at: <a href="https://www.allaboutbirds.org/news/avian-influenza-outbreak-should-you-take-down-your-bird-feeders/">https://www.allaboutbirds.org/news/avian-influenza-outbreak-should-you-take-down-your-bird-feeders/</a></p>
<p>Can mammals transmit the virus?</p>	<p>The risk of mammals carrying and shedding the virus in their respiratory and digestive tracts is very low. To date, the Eurasian strain of H5N1 shows little evidence of being transmissible to mammals. However, we know that mustelids (mink, ferret, otters, etc.) are susceptible as well as some predators that eat infected wild birds. Any animal can transmit viral particles by walking through a place that has virus and carrying it into poultry housing. We therefore recommend that poultry housing should be sealed to prevent rodent entry, and that other animals should be kept separate from your poultry if those animals participate in "risky" activities (ie swimming in a pond or running through a field that wild birds frequent, or if they have a tendency to visit a neighbor's poultry).</p>

<p>Can I safely hunt during the outbreak?</p>	<p>With nearly 6,000 detections of HPAI in wild bird populations to date across the US, there is a real possibility of coming in direct contact with the virus from infected fowl. If you hunt, don't harvest or handle obviously sick birds, wash your hands with soap and hot water upon returning home, and clean/sanitize/wash all clothing, equipment, and boots worn in the field. Do not wear your hunting clothes or bring potentially contaminated equipment near your birds. If you need to dress your harvested birds at home, do so in an area away from your poultry, preferably in an area that can be cleaned and disinfected.</p> <p>If you do not have poultry at home or work with poultry, hunting followed by subsequent field dressing does not result in a substantial risk of bringing the disease into the domestic poultry population and does not present a significant risk to human health.</p> <p>More information can be found in this article:  <a href="https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf">https://www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf</a></p>
<p>What is Indemnity?</p>	<p>Indemnity is a payment through the USDA to reimburse you for the value of birds that needed to be depopulated as part of an HPAI outbreak. The payment schedule and requirements to receive indemnity vary by flock size. Flock owners are compensated for the number of live birds on their premise on the day the disease is reported.</p> <p>Regardless of your flock size, know that the pool of money for indemnity is limited, especially if the country experiences a high number of outbreaks. There is no indemnity for reinfections.</p>

<p>Disaster and Ag Assessments</p>	<p>As reminder for the 2023 ag assessment: for those who may have trouble grossing the \$10,000 in farm income for Agricultural Assessment due to an HPAI outbreak on their farm, there is an exemption form that farmers can fill out with the assistance of their local Cornell Cooperative Extension Educator so that they may qualify.</p>
<p>Where can I keep track of outbreak cases?</p>	<p>Virus detections in domestic fowl and wild birds can be found on the USDA-APHIS website at <a href="https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai">https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai</a></p> <p>HPAI Alerts are shared through the NY Ag and Markets web page, found here: <a href="https://agriculture.ny.gov/animals/poultry">https://agriculture.ny.gov/animals/poultry</a></p>
<p>For producers with other questions and concerns:</p>	<p>Please contact the NYS Department of Ag and Markets at 518-457-3502. This number is for the Albany office.</p>