



**Questions and Answers from  
*Defend the Flock: Healthy Flocks, Healthy Family*  
March 3, 2022**

**Is there any idea how long the H5N1 outbreak will last based on previous outbreaks? Will the risk of Avian Influenza be reduced once the wildfowl migration is reduced, or will this heightened security be long-term?**

Historically, HPAI outbreaks in the United States have subsided in the summer. For example, the final case of HPAI that was diagnosed in the very large 2015 outbreak was detected in June that year. We expect that the risk of wild birds transmitting HPAI to domestic poultry will decline when migratory birds settle down at breeding grounds in the summer.

**How can I find out which towns in my state have had positive outbreaks of HPAI? It would be great if we could sign up to be notified when HPAI is identified in our own location.**

You can view the announcements about HPAI detections in domestic poultry and wild birds at this link: <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai>, and sign up for email or text notifications of stakeholder announcements at this link: <https://public.govdelivery.com/accounts/USDAAPHIS/subscriber/new>.

**It would be helpful to know what the outbreaks of H5N1 in backyard flocks had in common. Can we identify a common link? For example, did the birds have access to a body of water visited by waterfowl? Or did they bring in new birds? Or visit wild waterfowl? In other words, has the cause been identified? This will help the rest of us prioritize our various biosecurity measures.**

So far in this year's HPAI outbreak in the United States, most of the owners of the affected backyard flocks reported that their birds had contact with wild waterfowl or ponds that wild waterfowl frequently visited.

**What are the signs of HPAI in our flock? How do you suggest doing AI surveillance on backyard flocks? What incentive is provided for owners to have their flocks tested?**

Birds infected with the HPAI virus may show one or more of the following signs:

- Sudden death without clinical signs;
- Lack of energy and appetite;
- Decreased egg production or soft-shelled or misshapen eggs;
- Swelling of head, comb, eyelid, wattles, and hocks;
- Purple discoloration of wattles, comb, and legs;
- Nasal discharge, coughing, and sneezing;
- Incoordination; or
- Diarrhea.

Owners should report illness or unexplained death in their flocks, so that we can quickly test the birds, identify the infection, and prevent the spread to other flocks. It is not necessary to test birds for avian influenza in backyard flocks that appear healthy.

**What happens to backyard flocks infected with HPAI? Does the USDA depopulate flocks? Just the infected flocks or also nearby flocks?**

State and Federal animal health officials depopulate infected poultry in the quickest, safest, most humane way possible after detecting HPAI virus in the flock.

In some circumstances, flocks that have had direct contact with an infected flock (for example, birds from an infected flock were introduced into another flock) are also depopulated.

**I love my babies and am always willing to work at keeping them safe and healthy. New Hampshire has a LOT of wild turkey all around our yard. My girls have an electric-fenced yard, but I want to do better at keeping them safe. What do we do to avoid wild turkey from passing virus to my ladies?**

Any bird can be infected with HPAI virus and spread it to other birds. Any measures you can take to prevent exposing your birds to wild birds and things wild birds contaminate will help prevent infection. Covering runs with nets, screening openings to coops, and double fencing are tactics to keep your birds from having beak to beak contact with their wild bird neighbors.

**How do I walk to the coop safely to protect my flock from wild bird feces? Do I need boot covers?**

One of the easiest ways to prevent tracking wild bird droppings into your bird area is to dedicate a pair of shoes to use in that area. Place the shoes at the entrance to your bird

area and change into them before you enter the area. When you are done taking care of your birds, change out of your dedicated footwear before walking away.

Boot covers are another option, but dedicated shoes have advantages: you probably already have a pair of old shoes available, they are reusable, and you do not have to worry about disposing of dirty boot covers safely.

**We notice that backyard poultry are becoming infected with H5 HPAI. With migratory fowl flying overhead, the possibility of dropping infected manure among backyard poultry is real. Can anything be done to require backyard poultry be mandated to bring indoors?**

During this period of heightened risk when migratory birds carrying HPAI virus are moving in North American flyways, USDA APHIS strongly recommends confining birds and other measures to prevent contact between wild birds and domestic poultry. USDA APHIS does not mandate specific housing practices for U.S. poultry producers.

**Do we have any idea about the viral load needed for flocks to become infected by H5N1? Should I be concerned with the mail truck coming into our driveway (inadvertently tracking something in on the tires?)**

Objects like vehicles tires can transport the virus from place to place. To reduce this risk, identify a [perimeter buffer area](#) for your property and a [line of separation](#) for your bird area. Ask visitors to park in a designated spot within the perimeter buffer area and do not allow them to cross your line of separation into your bird area unless necessary and they follow your biosecurity procedures for entry.

**Should we stop using bird feeders in our yard if we have home flocks? Should I ask our neighbors to take their feeders down? If so, for how long would we need to take them down? I read that avian influenza decreases when the temperatures get warmer.**

Eliminating feeders and waterers for wild birds helps reduce the risk that wild birds will mingle with your flock and transmit HPAI virus they can carry. In general, poultry owners should always avoid attracting wild birds to mix with their domestic poultry, since wild birds can introduce numerous diseases (including HPAI) to poultry flocks.

**Do *all* wild birds pose a HPAI risk, or just ducks and similar species? Can hummingbirds and passerines also be infected by and transmit H5N1?**

Any type of bird can be infected with and spread avian influenza virus. Dabbling ducks (like wigeon and teal) are natural hosts for avian influenza virus and are the most common types of migratory wild birds that are found to carry the virus.

**I understand that a virus can mutate at any time but are there genetic dissimilarities between types of birds that might be protective?**

Researchers have attempted genetically modify and selectively breed chickens to be resistant to avian influenza infection with limited success, not complete protection from illness. All breeds of chickens and turkeys existing today are highly susceptible to infection and illness caused by avian influenza viruses. Ducks are susceptible to infection and can transmit the virus to other birds but might not show signs of illness.

**With the amount of rain and flooding currently occurring, does this increase the risk of HPAI as it enters the water table?**

Avian influenza viruses require living hosts in order to survive and replicate. Outside of a host, these viruses become inactivated over time depending on factors such as temperature and sunlight. Researchers have discovered avian influenza virus in water samples collected in the field, and under experimental laboratory conditions, these viruses can remain infective in water for several weeks. The effect of rain and flooding on persistence of avian influenza virus in the environment is not well understood.

**How much of a defense does the eggshell provide as it relates to HPAI?**

A hen that is infected with HPAI virus is likely to lay eggs that are contaminated with the virus both internally and externally. For this reason, eggs that are produced by an HPAI infected flock are destroyed and do not enter the food supply.

**Is it best to avoid purchasing from hatcheries in states/areas that now have a HPAI outbreak?**

No, it is safe to purchase baby poultry from hatcheries in areas where HPAI outbreaks are occurring, providing the hatchery is not under quarantine and meets the State Veterinarian's requirements for movement of poultry, which might include health certification or a movement permit. Contact the hatchery and your State Veterinarian for information.

**I am wondering how H5N1 might be having an immediate effect on hatcheries. Is there any kind of assistance program from the USDA to help breeders negatively affected by lower sales (especially cancellations)?**

We are not aware of the availability of that type of assistance program or reports of negative effects of the H5N1 outbreak on hatcheries.

## **What about free ranging even if away from food and water sources?**

Wild birds can carry HPAI virus and spread it to domestic poultry through direct (beak to beak) contact, or through indirect contact with surfaces that wild birds contaminate with feces, secretions from the eyes and nose, feathers, and nests. During this period of heightened risk when large numbers of wild birds carrying HPAI virus are migrating in North American flyways, each bird owner should assess the risk that their birds will come into contact with wild birds or their deposits while roaming. Keeping them inside a coop or covered run is one important way to reduce the risk that poultry will be exposed to the virus.

## **Salmonella**

### **Is there an at-home test to test for salmonella in our chickens and/or eggs?**

There is not an at-home test for *Salmonella* in poultry or in eggs. Poultry can carry *Salmonella* bacteria while looking healthy and clean and shed it from time to time. CDC does not recommend testing poultry or eggs to know if you can stop following *Salmonella* prevention steps. You should always practice prevention steps around poultry to keep yourself safe from *Salmonella*.

### **What is the best way to clean eggs? What is the issue with using cold water to clean eggs, and what is the correct temperature?**

Eggs with dirt and debris can be cleaned carefully with a fine sandpaper, a brush, or a cloth. Do not wash warm, fresh eggs because the colder water can pull germs on the outside of the egg into the egg. Refrigerate eggs after collection to maintain freshness and to slow the growth of germs. For more tips on egg safety visit [www.cdc.gov/backyardpoultry](http://www.cdc.gov/backyardpoultry)

### **Just a clarification, are you recommending that folks not poach or soft boil eggs that have been properly collected, cleaned, and stored?**

Raw and undercooked eggs may contain *Salmonella* bacteria that can make you sick. The safest way to eat eggs is to cook eggs until both the yolk and white are firm. Cook egg dishes (like quiches) to an internal temperature of 160°F (71°C) or hotter to reduce your chance of a *Salmonella* infection. Use a food thermometer to check.

### **Do retail establishments that sell chicks test for Salmonella before they sell them to the public?**

To the best of our knowledge, no retail establishments test chicks for *Salmonella*. By following Best Practices, and Safe Handling procedures you will reduce your chances of exposure to *Salmonella*.

### **Are commercial fertilized eggs safe to buy to teach little kids about embryology?**

Backyard poultry should not be kept in schools, childcare centers, or other facilities with children younger than 5 years of age. Children 5 years of age and older should be supervised when interacting with poultry or eggs and while they wash their hands afterward. Make sure to check your local laws before acquiring eggs and have a plan for where the poultry will be kept after the embryology lessons.

### **Should medicated or non-medicated chick starter be used on new chicks from reputable breeders?**

Feeding medicated chick starter to new chicks reduces the risk of severe infections with coccidia parasites, which commonly cause diarrhea, poor growth, and death in chicks.

### **Shouldn't hemp be the best practice - bedding and feed - to support flock health?**

At this time, no hemp or hemp-derived product has been approved for use in animal feed by the Food and Drug Administration, which is the U.S. agency responsible for assuring the safety of additives to animal feed. Hemp is one of many options for bedding that is available to poultry owners to keep their flock's housing clean and comfortable.

### **The Defend the Flock materials recommend cleaning and sanitizing. What products do you recommend for sanitizing coops? What about boots or other materials that chickens are not exposed to, but which may come into contact with coop materials.**

Use a commercially available EPA-registered disinfectant according to the label on the product container. Choose a disinfectant that indicates on its label that the product can be used in farm premises and related structures and equipment. For example, a list of potential disinfectants to use against avian influenza virus in farm settings can be found here: [https://www.aphis.usda.gov/animal\\_health/emergency\\_management/downloads/ai-virus-table.pdf](https://www.aphis.usda.gov/animal_health/emergency_management/downloads/ai-virus-table.pdf).