Avian Influenza Findings Emphasize the Need for Good Biosecurity

As part of its safeguarding mission, the U.S. Department of Agriculture’s (USDA) Animal and Plant Health Inspection Service (APHIS) protects the health of our Nation's livestock and poultry. We respond to major animal disease events, helping to keep dangerous diseases from spreading. We also work to reduce the economic impact of disease events.

Avian influenza is a viral disease that can infect wild birds (such as ducks, gulls, and shorebirds) and domestic poultry (such as chickens, turkeys, ducks, and geese). There is a flu for birds just as there is for people—and, as with people, some forms of the flu are worse than others. Highly pathogenic avian influenza (HPAI) can spread fast and quickly kill chickens and turkeys. Wild birds, however, can carry HPAI viruses without appearing sick.

The United States experienced a significant outbreak of HPAI in 2014–2015, affecting 21 States and leading to the destruction of almost 50 million birds. Response costs alone were almost $1 billion, and that does not include the economic impact on industry. We must do everything we can to prevent future outbreaks.

Biosecurity Is Key

Anyone who owns or works with poultry—whether on a commercial farm, in the wild, or at a hobby/backyard farm—should take proper steps to keep HPAI from entering their flocks. The best way to protect your birds is to follow good biosecurity. Even if you are already familiar with biosecurity, it is always good to double-check your practices. You are the best protection your birds have!

Commercial producers should complete this self-assessment of biosecurity practices: www.uspoultry.org/animal_husbandry/assessment.cfm. USDA partnered with States and industry to develop this assessment as an aid for all commercial poultry owners in understanding and putting in place enhanced biosecurity measures. Your industry organization can also point you to further resources.

If you hunt or handle wild birds, see APHIS’ factsheet for hunters at www.aphis.usda.gov/publications/animal_health/2015/fsc_hpai_hunters.pdf.

Backyard poultry owners can follow six simple steps for biosecurity. Make them part of your routine to lower the risk that disease will enter your flock and spread via soil, droppings, and debris.

1. Keep Your Distance.

Restrict access to your property and your birds. Consider fencing off the area where your birds are to form a barrier between “clean” and “dirty” areas. The clean area is the immediate area completely surrounding your birds. The dirty (or “buffer”) area is the immediate adjacent area—consider this area to be infected with bacteria and viruses, even if your birds appear healthy and disease-free.

Create distance and use barriers to prevent contact between your birds and wild birds. Wild birds, especially ducks and geese, should not have contact with your flock because they can carry disease-causing viruses and bacteria. If your birds are outdoors, try to keep them in a screened coop. Also, protect your birds’ food and water from wild birds or any other wild animals that could bring disease to them.

Allow only people who take care of your birds to come into contact with them. Your caretakers should not attend bird shows or other events and places where birds are present. If visitors want to see your birds, be sure they wash up first and clean their shoes. Better yet, keep clean boots or shoe covers for them to wear. If your visitors have birds of their own, do not let them enter your bird area or have access to your birds at all.
2. Keep It Clean.

Bacteria and viruses can be picked up on shoes and clothing and moved from one place to another. Since this can make your birds sick, you need to protect their home by keeping it clean.

To keep your birds "disease-free," have a pair of shoes and a set of clothes to wear only around your birds. Many people store these clean clothes in a covered pail at the entrance to their bird area. Or, clean and disinfect your shoes and launder your clothes before you check on or work with your birds.

Scrubbing your shoes with a long-handled scrub brush and disinfectant will remove droppings, mud, or debris. Wash your clothes with laundry detergent. Wash your hands thoroughly with soap and water before entering your bird area.

Keep cages clean and change food and water daily. Clean and disinfect equipment that comes in contact with your birds or their droppings. That includes tools such as feed scoops, shovels, rakes, and brooms. All manure must be removed before disinfectant can work, so clean surfaces with soap and water first.

Properly dispose of dead birds by burial or incineration or take them to a landfill. Check on local ordinances for acceptable disposal methods.

3. Don’t Haul Disease Home.

Car and truck tires, poultry cages, and equipment can all harbor organisms that cause disease. If you travel to a place where other birds are present, or even to the feed store, be sure to clean and disinfect these items before you return to your property.

Taking some of your birds to a fair or exhibition? Keep those birds separated from the rest of your flock and watch them for at least 3 weeks after the event to make sure they did not pick up a disease. New birds should be kept separate from your flock for at least 30 days before putting them with the rest of your birds. To prevent disease, it is best not to mix young and old birds or birds from different species or different sources.

4. Don’t Borrow Disease From Your Neighbor.

Do not share birds, lawn and garden equipment, tools, or poultry supplies with your neighbors or other bird owners. If you do bring equipment or other items home, clean and disinfect them before they reach your property. Also, remember to clean and disinfect borrowed items before returning them.

Never share items such as wooden pallets or cardboard egg cartons because they are porous and cannot be adequately cleaned and disinfected.

5. Know the Warning Signs of Infectious Bird Diseases.

Early detection is very important to prevent the spread of disease. Here’s what to look for:

- Sudden death without any signs
- Lack of energy and appetite
- Decreased egg production
- Soft-shelled or misshapen eggs
- Swelling of the eyelids, comb, wattles, and shanks
- Purple discoloration of the wattles, comb, and legs
- Gasping for air (difficulty breathing)
- Nasal discharge (runny nose)
- Coughing, sneezing
- Twisting of the head and neck (torticollis)
- Stumbling or falling down
- Diarrhea


Don’t wait. If your birds are sick or dying, contact your local cooperative extension office/agent, your veterinarian, the State veterinarian, or your State animal/poultry diagnostic laboratory.

Or, call USDA toll free at 1-866-536-7593, and we’ll put you in touch with a local contact. There is no charge for a disease investigation, if one is needed. Early reporting is important to protect the health of your birds.

To learn more, go to:

http://healthybirds.aphis.usda.gov
www.aphis.usda.gov/publications (filter view by “Avian Influenza” and “Bird Biosecurity”)