

Biosecurity

Protecting Your Birds from Disease

Introduction

Biosecurity means protecting your birds by preventing disease from entering your farm, and protecting your neighbors by preventing disease from leaving your farm. Some diseases are unapparent, and others can kill all of your birds. Developing a good biosecurity plan and adhering to it is the best way to limit the introduction of infectious diseases and parasites into your flock.

Decrease Your Risks of Disease Spread

- Never introduce adult birds into an established flock unless they pass quarantine (3 to 4 weeks of isolation) or are tested clean of disease.
- Never mix different species in the same flock. Mixing species (e.g., chickens and turkeys or with waterfowl) on the same premises can be a deadly combination.
- Limit visitors from accessing your pens. Do not visit other poultry facilities.
- Confine birds to a fenced area and limit contact with wild birds, mammals, and insects as much as possible.
- Do not share equipment, supplies, or vehicles with other bird owners.
- Clean and disinfect all coops, equipment, shoes, clothes, and vehicles properly, every time, before entering poultry areas.
- Practice “all in, all out” when changing flocks. Get rid of all birds and disinfect the coop before getting any new birds.
- Keep rodents, flies, dogs, and cats out of the chicken coop and feed.
- Check for parasites monthly and treat if necessary. Use a dusting area to prevent external parasites.

Best Practices on the Farm

- Make sure everyone that cares for your birds understands and abides by all biosecurity plans for your flock.
- Wear separate dedicated clothing and shoes when working with your birds.
- Clean up any spilled feed and discourage wild birds from accessing feed and your bird pens.



- Watch for signs of infectious disease in your birds.
- **Never** access your birds after hunting, fishing, or coming in contact with any other birds or areas that wild birds frequent.
- **Never** buy birds from unknown sources like auctions or other live bird markets.
- Care for and visit birds in the order of bird age— youngest first to oldest last.
- Always care for sick pens last or, better yet, have a separate person care for sick birds.

Signs of Sick Poultry

If birds:

- Stop eating and drinking
- Show signs of droopiness or lack of energy
- Have watery eyes or nostrils, and make rattling or wheezing sounds when they breathe
- Die suddenly without clinical signs
- Have poor balance and/or abnormal head and neck positions
- Have diarrhea
- Have decreased egg production or produce soft-shelled or misshapen eggs
- Exhibit swelling or purple discoloration of shanks, head, eyelids, or comb





What to Do If You Have Sick Birds

- Place your premises under voluntary quarantine from all visitors.
- Do not buy, sell, trade, or move any of the birds off your premises.
- As soon as possible, double-bag and refrigerate (do not freeze) dead bird(s) and contact the veterinary diagnostic laboratory for further directions on submission. You may be directed to take live birds with symptoms and/or take or ship recently deceased birds to the lab.
- Do not visit farms or businesses that are frequented by people that have birds.

Where to Get Help

The Pennsylvania Animal Diagnostic Laboratory System has several university-based veterinarians with advanced training and expertise in poultry diseases. They deal with all types of avian health problems, from the common to the unusual, and can help sort out individual bird problems from those that may cause sickness in the entire flock. Diseases that may spread to other animals and people can also be identified. Conditions that may impact food safety of poultry meat and eggs can be detected or ruled out. Please contact either of the labs below for consultation, preferably the one nearer your location:

Penn State Animal Diagnostic Laboratory

University Park, PA (Centre County)

Phone: 814-863-0837

vbs.psu.edu/adl

New Bolton Center Laboratory of Avian Medicine and Pathology, University of Pennsylvania

Kennett Square, PA (Chester County)

Phone: 610-444-4282

www.vet.upenn.edu/research/academic-departments/pathobiology/avian-medicine-and-pathology

Regional PDA Veterinarians

1. Northwest (Meadville): 814-332-6890
2. North Central (Montoursville): 570-433-2640 ext. 2
3. Northeast (Tunkhannock): 570-836-2181
4. Southwest (Greensburg) 724-832-1073
5. Central (Martinsburg): 814-793-1849 ext. 218
6. South Central (Harrisburg): 717-836-3237
7. Southeast (Collegeville): 610-489-1003

Contact Penn State Extension

The Penn State Extension Poultry Team has experts in many other areas of keeping poultry, including breeding, incubation, genetics, judging, nutrition, housing, ventilation, etc. Many health problems are related to these factors rather than infectious disease agents alone. Specific contact information and numerous resources can be found at extension.psu.edu/animals/poultry.

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Prepared by Phillip Clauer, Mike Hulet, and Gregory Martin, Poultry Specialists, Penn State Extension and Department of Animal Science, and Patricia Dunn, Avian Pathologist and Field Investigator, Animal Diagnostic Lab.

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