

Biosecurity for Backyard Poultry Flocks

► The effects of disease outbreaks in poultry should increase every poultry owner's awareness of developing and maintaining a good biosecurity program.

Having a good biosecurity program will protect your flock from contracting a disease that can infect poultry. It also provides a measure of protection for you and your neighbors who have poultry because you are not spreading disease. With this in mind, below are four principles of a biosecurity program that will help minimize the likelihood of your poultry being exposed to an infectious disease. Realistically, it is difficult to implement all of these steps; however, the more you do, the more protected your birds will be.

The four key principles of biosecurity are **isolation**, **traffic control**, **sanitation**, and **recognition of warning signs**.

Isolation

- Keep the area around housed poultry clean. Do this by keeping the grass cut to remove any possible shelter and food sources. This discourages animals and insects from coming near your poultry.
- Prevent wild birds and waterfowl from coming in contact with your poultry. Do this by preventing the accumulation of free-standing water near poultry pens or by limiting poultry access to free-standing water, such as ponds.
- Minimize contact with other poultry, such as at swap meets. If contact with other poultry is unavoidable, proper sanitation (see the proper sanitation recommendations below) is crucial to minimize the chance of accidental transmission.
- Avoid dead wild birds. Treat any that you find as if they were highly infectious, and dispose of them quickly. After disposal, wash your hands and sanitize the area where the birds were found.



Traffic Control

- Minimize traffic. This includes visits to other poultry pens, livestock sales, farms, and swap meets. Avoid transporting equipment from location to location. If this is unavoidable, thoroughly sanitize the equipment before use.
- Keep curious people away from the chickens. Latch and lock gates. Hang No Trespassing or other (Keep Out) signs.
- Ask visitors if they have had recent contact with poultry. If they have, do not let them near your poultry.
- If possible, supply clean protective footwear, head coverings, and overalls. Clothing and shoes are excellent methods for transporting disease to your premises.
- Sanitize your shoes or change shoes before entering your chicken pen. If possible, have a pair of shoes just for the farm.
- If dealing with poultry of various ages, always try to handle younger birds before you handle older birds.
- Take care of mortality disposal quickly. Make sure that animals cannot gain access to the disposed carcasses. Minimize traffic to and from the dead bird disposal area.

Sanitation

General Cleaning and Disinfecting

- Most microorganisms are susceptible to sanitizers and can be killed by heating or drying. Many types of sanitizer are available, ranging from quaternary ammonia to bleach to everything between. An important consideration when using a sanitizer is to switch between types a couple of times a year.
- Sanitize equipment and surfaces between flocks or once a year.
- Remove all organic material from surfaces before sanitation. This will ensure that the sanitizer has proper contact time with the surface, which should maximize its effectiveness.

Manure

- Manure is a reservoir of most diseases.
- Handle it with care.

Facility

- Spray the coop with sanitizer and remove the manure. Then apply a second application of sanitizer and allow the coop to dry in the sun. Ideally, the coop should be left vacant for 2 weeks.
- Compost the removed manure or store it for 2 or more weeks before using it as fertilizer.

Warning Signs

- Know your chickens. Try to spend time with them so you can learn their personalities. This can help you easily identify sick ones.
- Recognize unusual behavior to help you treat and prevent the spread of disease within the flock. Unusual behavior includes the following:
 - Lack of energy
 - Poor appetite
 - Watery/green diarrhea
 - Sneezing
 - Gasping for air
 - Coughing
 - Nasal discharge
 - Discoloration of the wattle, comb, or hocks
 - Swelling of the neck, head, or eyes
 - Drooping wings
 - Tremors
 - Twisting of the neck or head
- If you suspect that the chickens are sick, contact your veterinarian, state diagnostic lab, or a qualified expert. Get a diagnosis, if possible, before buying a treatment that may or may not be effective.

It doesn't matter if you are raising 5, 50, 500, or 50,000-plus chickens, preparing and following a good biosecurity program is important for maintaining the health and well-being of a poultry flock. If there is a disease outbreak, flocks with a good biosecurity program have a good chance of not being affected.



Ken Macklin, *Extension Poultry Specialist*, Professor, Poultry Science; **Joe Hess**, former *Extension Poultry Scientist*; and **John P. Blake**, former *Extension Poultry Scientist*, all with Auburn University

For more information, contact your county Extension office. Visit www.aces.edu/directory.

Trade and brand names used in this publication are given for information purposes only. No guarantee, endorsement, or discrimination among comparable products is intended or implied by the Alabama Cooperative Extension System.

The Alabama Cooperative Extension System (Alabama A&M University and Auburn University) is an equal opportunity educator and employer. Everyone is welcome! Please let us know if you have accessibility needs.

Revised January 2022, ANR-2391 © 2022 by the Alabama Cooperative Extension System. All rights reserved.