



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 help protect your flock from contracting a disease that can infect poultry. It also provides a measure of protection to you and your neighbors with poultry because you are not spreading disease.

Four key steps of a biosecurity program are **isolation**, **traffic control**, **sanitation**, and **recognition of warning signs**. Realistically, it is difficult to perform all of these steps, but the more you do, the more protected your birds will be.

Isolation

- Keep the area around housed poultry clean. Keep the grass cut and remove possible shelter and food sources to discourage animals and insects from coming near your poultry.
- Prevent wild birds and waterfowl from coming in contact with your poultry. Do this by preventing accumulation of freestanding water near poultry pens or by limiting poultry access to freestanding water, such as ponds.
- Minimize contact with other poultry, such as at swap meets. If contact with poultry is unavoidable, proper sanitation (see 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 quickly. After disposal, wash your hands and sanitize the area where the bird was found.

Traffic Control

- Minimize traffic. This includes visits to other poultry pens/livestock sales/farms/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 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, use clean protective foot and head coverings and overalls and ask others to do so as well. 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.
- Mortality disposal should be done in a timely manner. Make sure that animals can't gain access to the carcasses. Minimize traffic to and from the dead bird disposal area.

Sanitation

- For general cleaning and disinfection, remember that most micro-organisms are susceptible to sanitizers and can be killed by heating or drying. Many types of sanitizers are available ranging from quaternary ammonia to bleach and everything between. An important consideration when using a sanitizer is that you switch between types a couple of times a

year. Sanitation should be done on all 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 is a reservoir of most diseases and should be handled with care. Heating of a facility to 100 degrees F for 100 hours is an effective method of sanitation. If heating of the facility is impractical, spray it with a sanitizer and remove the manure. After the manure has been removed, apply a second application of the sanitizer and allow it to dry in the sun. The facility should then be left vacant for two weeks.

Warning Signs

- Know your chickens! Try to spend time with them so you can learn their personalities. You can then easily identify sick ones.
- Recognize unusual behavior to help you treat and prevent the spread of disease within the flock. Unusual behavior includes a lack of energy, poor appetite, watery/green diarrhea, sneezing, gasping for air, coughing, nasal discharge, discoloration of the wattle/comb/hocks, swelling of the neck/head/eyes, drooping wings, tremors, and twisting of the neck or head. If you suspect that the chickens are sick, contact your veterinarian, the state diagnostic lab, or a qualified expert. Get a diagnosis, if possible, before going to the store to buy a treatment that may or may not be effective.

It doesn't matter if you are raising five or fifty-thousand-plus chickens, preparing and following a good biosecurity program is important for maintaining the health and well being of a poultry flock. Then, if there is a disease outbreak, your flock has a good chance of not being affected.



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