

TIMELY INFORMATION

Agriculture & Natural Resources

Biosecurity for Backyard Poultry Flocks

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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. Additionally it provides a measure of protection to yourself and neighbors that have poultry, in that you are not spreading a disease. With this in mind, below are four key 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 perform all of these steps; however the more that you do, the more protected your birds are.

The four key principles to biosecurity are:

- **Isolation**
- **Traffic Control**
- **Sanitation**
- **Recognizing Warning Signs.**

Isolation

- Keep the area around housed poultry clean.
 - Do this by keeping the grass cut, removing any possible shelter and food sources. This is to discourage animals and insects from coming near your poultry.
- Prevent wild birds and water fowl from coming into contact with your poultry.
 - This can be accomplished 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 can be found at swap meets. If contact with poultry is unavoidable, then proper sanitation (see proper sanitation below) is crucial to minimize the chance of accidental transmission.
- Avoid dead wild birds. Any found should be treated as if they are highly infectious and disposed of quickly. After disposal, washing hands and sanitizing the area where the bird was found is important.

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 prior to 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 and if they have, do not let them near your poultry.
- If possible, supply clean protective foot and 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 older birds.
- Mortality disposal should be done in a timely manner.
 - Make sure that wherever the carcasses are disposed, animals cannot gain access to them.
 - Minimize traffic to and from the dead bird disposal area

Sanitation

- General cleaning and disinfection
 - Most microorganisms are susceptible to sanitizers and can be killed by heating or drying. There are many types of sanitizers available ranging from quaternary ammonia to bleach and everything in 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.
 - It is important that all organic material be removed from surfaces prior to 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 and should be handled with care.
- Facility
 - Heating of a facility to 100°F for 100 hours is an effective method of sanitation.
 - If heating of the facility is impractical then spraying the facility with a sanitizer followed by removal of the manure should be performed. After the manure has been removed a second application of the sanitizer should be applied and allowed to dry in the sun. The facility should then be left vacant for 2 weeks.

Recognizing Warning Signs

- Know your chickens!
 - Try to spend some time with your chickens so that you learn their personalities. That way you can easily identify sick ones.
- Recognizing unusual behavior will assist in treating and preventing 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, 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 going to the store to buy a treatment that may or may not be effective.

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