

BIOSECURITY FOR BACKYARD FLOCKS

Donna K. Carver, DVM, PhD, ACPV

Biosecurity is protecting your investment, your birds, from infectious organisms such as viruses and bacteria. Just as you secure your home from theft and fire so should you protect your birds from disease causing organisms. Infectious agents which can infect you flock include parasites, viruses, bacteria, and mycoplasmas. For the most part, these agents require help from you or someone else to gain access to your farm. Because these organisms cannot walk or fly, they attach themselves to boots, clothes and tires in order to move from one place to another. While most diseases are transmitted by people, equipment, wild birds, rodents and insects can aid disease organisms in gaining entry to your farm. Preventing the introduction of disease agents carries a cost but is much more cost effective than ridding a farm of disease agents once they gain access.

Because routine husbandry practices such as bringing feed onto your farm and the events which many non-commercial or hobbyist poultry people attend, there is considerable movement of poultry and individuals associated with poultry across state lines and around the countryside. Whether your poultry interests are large or small, everyone needs to exercise caution when coming in contact with another poultry person or their birds. Diseases are most often transmitted from one infected flock to another flock by infected birds, people or equipment. Moving infected birds can naturally result in transferring the infectious agent to the new location. If infected birds are moved through an auction, or “swap meet”, then the infectious agents can be transferred to multiple new locations. People most often spread viruses via contaminated clothing and/or boots. Equipment used on multiple farms that is contaminated with infective feces or nasal secretions can spread disease agents to multiple new locations. Apparently healthy birds can be infected and transmitting infectious agents to other birds before exhibiting any clinical signs or symptoms themselves. This is why one of the best ways to prevent disease is to avoid contact with other poultry.

Prevention is the Key

Preventing the introduction of infectious agents onto your farm should be the goal of all producers. Disease prevention is not difficult if you follow some “common sense” guidelines:

1. Try to avoid taking birds to (or bringing birds home from) all shows and exhibits. If new birds are introduced onto your farm, keep the new birds separate from your flock for one month and look for any signs of disease. Always feed and care for your flock first, then care for the new birds. Do not go back to your flock after working with the new birds unless you put on clean coverall and boots. Wash your hands between the two groups.

2. All avian species can carry diseases such as avian influenza. All flocks should be fenced or confined, in order to avoid contact with any wild birds, especially waterfowl. Do not let wild waterfowl over-winter on your farm ponds.
3. Introduce new stock only from sources you know and trust to be disease free, watch the new birds closely for signs of disease before putting them with your flock
4. Trips to the feed store mean driving your vehicle and walking around in areas where other bird growers have been. Upon returning, wash your vehicle well with soap before driving it into the bird production area. Launder all clothes that you have worn to the feed store before wearing them to care for your birds.
5. If you must borrow equipment from a neighbor follow the same guidelines as those for feed store visits.

Additionally, Dr. Bob Hillman, Executive Director of the Texas Animal Health Commission recommends simple biosecurity measures that can be taken to help protect flocks:

1. "Keep a spare pair." Buy a pair of inexpensive rubber boots, and wear them only on your own premises, to avoid 'tracking in' disease.
2. "Give germs the brush off!" Use a long-handled brush to scrape off manure, mud or debris from tires, equipment or boots, then disinfect.
3. "Disinfection prevents infection!" Mix a solution of three parts bleach to two parts water, and use it liberally to clean rubber boots and equipment brought onto your farm. If visitors don't want their vehicle tires sprayed with disinfectant, ask them to park outside your gate. Other disinfectants that work against AI virus and should be mixed according to package labels include, detergents, hypochlorites, alkalis, phenols, Virkon S and gluteraldehyde. **Remember, most disinfectants are inactivated by dirt and feces, so clean surfaces with soap and water, rinsing well, before applying disinfectant.**
4. "Make visitors take cover." Don't be shy about asking visitors or customers to disinfect their footwear -- or better yet, provide guests with disposable shoe covers, or footwear worn only on your place.

The Bottom Line

The measures that you take to protect your birds from disease are relatively easy to implement and will be cost effective. Commercial poultry operations have found that the additional precautions and sanitation measures

which they are using have helped them reduce or prevent disease problems and helped them increase the health and productivity of their flocks. You may find the same benefits. Whether you are involved with poultry on a large scale or small scale, loss of your birds and expense of cleaning your premises due to a disease outbreak will affect **YOUR BOTTOM LINE**.