



College of Veterinary Medicine

Biosecurity for Poultry

Edited by

Teresa Y. Morishita, DVM, PhD, Dipl ACPV

Poultry Veterinarian and Professor of Poultry Medicine & Food Safety

Initiating and maintaining a biosecurity program is an important aspect of a poultry health maintenance program. It is important to institute some aspect of a biosecurity program in order to ensure a healthy flock of birds. Whether you have a small flock or a large flock, a biosecurity program is an important part of keeping your flock healthy.

What is a Biosecurity Program?

If we look at the word “biosecurity,” we can begin to understand its meaning. “Bio” refers to “life” and “security” implies some sort of protection. Hence, “biosecurity” refers to a type of program that is designed to protect life. In its simplest meaning, it means keeping the germs away from the poultry and keeping the poultry away from the germs

What Type of Germs Are We Concerned About?

There are several different types of germs that are often referred to as disease agents or pathogens. They include viruses, bacteria, and fungi. In addition, parasites, found internally (inside the body) and externally (outside the body), can also cause disease. The control of these parasites is considered an important part of a biosecurity program.

How Do We Keep the Germs Away from the Poultry?

Many procedures can be instituted to keep the germs away from the poultry. If you consider your flock as a “clean” flock (i.e., free of disease), then there are many ways to prevent disease from entering your farm. Here are a few steps to consider:

1. Limit visitors on your farm and restrict their direct contact with the flock.
2. Obtain your birds from a disease-free source. Know the history of the flock by inquiring about past diseases in the parent flock and also the vaccination history of both the parents and newly hatched birds.
3. If you are adding new birds to your flock, have them quarantined in a separate area from your main flock for at least 3-4 weeks.
4. Keep free-living birds and mammals away from your flock as they may transmit disease agents to your flock.
5. Obtain feed from a clean, reliable source. Store feed so that it is bird-proof; insect-proof; and rodent-proof. In addition, keep it moisture-free and out of direct sunlight and heat.

6. Obtain water from a clean source so it is free from potential contamination.
7. Ideally, it would be best to keep your pets away from the flock to prevent possible disease transmission.

How Do We Keep the Poultry Away from the Germs?

1. Prior to the arrival of new birds, clean and disinfect their housing to ensure that there is no build-up of potential disease pathogens from previous flocks.
2. If birds are housed on a dirt flooring, turn over the top layer (3 inches) of soil. This can help reduce potential exposure to pathogens and parasites that may be present in the soil.
3. Clean and disinfect all equipment

- and supplies on a regular basis and definitely between flocks.
4. After disinfection of the housing, it is best to keep the house empty of birds for at least two weeks.
 5. Do not mix different ages or species of birds. Older birds can pass on diseases to younger, more susceptible birds. In addition, some diseases like histomoniasis (blackhead) can be transferred from chickens to turkeys.

By following these biosecurity recommendations, you can ensure that exposure to disease-causing agents can be minimized. By reducing the exposure to disease agents, you can prevent diseases from occurring in your flock.

Revised in 2019 from Original Source: Morishita, T.Y. Biosecurity for Poultry. Extension Factsheet, Veterinary Preventive Medicine. The Ohio State University, Columbus, Ohio, #VME-9-01, 2001.