

Biosecurity

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Biosecurity is a term we have come to hear frequently in recent years and can conjure up images of surveillance systems, security fences, complicated sanitizing processes, audits and inspections. However, Biosecurity is really just the protection of livestock and poultry from any type of infectious agent whether viral, bacterial, fungal, or parasitic. People, animals and equipment can spread disease as they move around the farm from one facility to another or can bring diseases with them from off-farm. Some viruses such as Foot and Mouth disease can also be carried in air currents so although most are mechanically spread some are transmitted by other means. Among the many Biosecurity procedures that can prevent these types of disease transmission are some simple measures which have little or no cost associated with them.

There are four stages in the control of disease: preparation, prevention, response or mitigation, and recovery. Biosecurity is part of the prevention stage in the control of disease. However, some of the processes involved in prevention also assist in the containment of a disease, which is part of the response phase. "Biocontainment" is the CFIA term for keeping a known disease on the farm and preventing it from spreading to others.

Another advantage of a good Biosecurity program is that it will also reduce the spread of endemic disease (local diseases) such as Johne's disease in ruminants as well as foreign animal diseases. And, finally, on-farm Biosecurity practices will also help reduce the spread of potential human pathogens such as *Salmonella spp.*, *Listeria spp.*, *E. coli O157:H7* and *Campylobacter spp.*

Listed here are some relatively easy to implement, generic Biosecurity practices for livestock and poultry operations which will reduce the risk of disease entry and transmission on your farm. It is not an exhaustive list by any means but is intended as a starting point. Each small step is an added level of protection against disease and will enhance your disease prevention and Biosecurity risk management system.

There are four primary control areas: visitors (people and vehicles); poultry and livestock; sanitation of equipment and facilities; and, wildlife and pests.

Visitors

Visitor control is a critical component. People can spread disease and contaminated material on footwear, hands and clothing. The first line of defense is to reduce the number of external visitors through your facility but also be able to track those who have been to your barns. Knowing who has been there, where they have been and where they are going will be valuable information in the event of a disease outbreak. This could also help identify the source of infection and possibly determine whether your farm has been infected by an outbreak originating elsewhere.

Below are some practices which will reduce the risk of visitors from bringing pathogens into your operation on their clothes, footwear and hands.

Poultry and Livestock

Disease can spread directly amongst birds/animals within your flock/herd and also be introduced by replacements. There are some simple practices which can reduce the opportunity for diseases to be introduced to your operation and control the spread of disease when one occurs.

Equipment and Facilities

In general, a clean environment will reduce the risk and spread of disease.

Wildlife and Pests

Birds and rodents can carry disease on their feet and fur, and they can destroy thousands of dollars worth of feed, supplies and buildings each year. Even a small population of these rodents may severely contaminate feed supplies. Flies are also a frequent carrier of disease and have been shown to travel up to 1 ½ km from farm to farm.

And, finally, implement a good record keeping system for vaccination dates, footbath changes, disease occurrences, rodent bait changes, etc. This will help you keep track of your Biosecurity practices as well as flag any significant flock/herd health changes. A little time spent adopting some proactive measures now may save a lot of time and money should you experience a disease outbreak on your farm in the future. Every little bit helps. The old saying, “An ounce of prevention is worth a pound of cure”, aptly applies to biosecurity.

The foregoing article was provided by the Ontario Livestock and Poultry Council. Membership on the Council includes all primary production livestock and poultry groups as well as representation from farm service, feed, processing, veterinary associations and government. The Council provides a forum to facilitate the development and coordination of an Ontario strategy to deal with foreign animal disease and other transmissible livestock and poultry diseases.

Please refer to “Biosecurity Checklist for Livestock Operations” under the Resource Library