



Poultry Biosecurity Guidelines



Factors Influencing Biosecurity

Infection can be harbored and spread in a variety of ways. Virus may be transmitted by infected poultry or other animals or may be spread in facilities through contaminated feed, water, humans, equipment, vehicles and, in some cases, air. These factors all influence the planning of a biosecurity program.

In an ideal world, poultry facilities should be located away from other poultry. Though this is not always easily addressed.

Disease avoidance measures are worthwhile and can be undertaken at various stages. For example, in the building stage, avoid locating poultry facilities near waterways, ponds or lakes utilized by migratory water fowl, and choose well drained areas to avoid standing water. Wherever possible, poultry houses should also be located away from major roads that handle high volumes of vehicles, including those that move poultry.

Effective waste disposal and removal of used litter from the site is essential. Areas around houses should be constructed of materials and surfaces that can be cleansed and disinfected, to reduce transmission of organic material on vehicles, tires, boots etc.

People are the most important animate factor - including employees, contractors, vaccination crews and veterinarians. Staff movements should be as limited as possible. Additional preventive measures may be required during a disease outbreak.

Control site traffic. Keep it to a minimum and exclude all unauthorized persons. Wherever possible, vehicles should be excluded from the site. Vehicles that must enter should be subject at the site entrance to spray disinfection of wheels and wheel arches. All visitors should observe standard operating procedures on vehicle cleansing and disinfection, and protective, farm-only clothing and footwear should be provided to and used by drivers.

All visitors should enter on foot. Use regularly changed foot dips, filled with a suitable disinfectant.

Establish a visitor log. Require visitors to provide contact information and details about their visit including time in, time out. Also establish a standard minimum time requirement since the visitor last was in contact with poultry at another facility.

A shower-in/shower-out facility would provide the highest level biosecurity. However, when that is not possible, All site visitors should be provided with adequate protective clothing and footwear. They should wash their hands prior to visiting birds or use an effective hand sanitizer.

The birds themselves can also be a cause of disease spread. Incoming poultry should come from approved sources, and there should be a well-defined health monitoring and audit procedure for breeder supply flocks.

Effective cleaning and disinfection reduces pathogen numbers and the weight of disease challenge, and enhances any biosecurity program. An all-in/all-out operation can achieve this with sufficient turnaround/down time to allow removal of all litter, and to satisfy required contact times for the disinfection products used prior to restocking. Cleaning and disinfection should include houses, equipment and surroundings.

Use potable drinking water. Maintain a closed water system with regularly scheduled cleaning and disinfecting of the water system with a suitable product.

Maintain an effective, audited rodent and wild bird control program, to prevent entry into poultry houses, feed bins and feed delivery systems.

Check biosecurity procedures regularly.

BIOSECURITY CHECKLIST

- Properly implemented biosecurity measures will limit the spread of disease-causing organisms.
- When these are combined with cleaning and disinfection, vaccination and strategic treatments, many pathogens can be reduced to non-infectious levels.
- Remember - different infectious agents spread by different methods, so use appropriate measures against each type.
- Site location and design, and density of poultry in a given geographical area, are vital. When planning a new site, there is the opportunity for very effective biosecurity to be implemented at the design stage. However, biosecurity practices must concern themselves with practicalities, rather than a theoretically ideal set-up.
- All sites have traffic - personnel, feed, stock, and equipment - but this should be kept to an absolute minimum.
- Only essential vehicles should have access to a site, and these should be disinfected on arrival.
- Use protective, farm-only clothing and footwear to prevent pathogen introduction and spread.
- Biosecurity at the breeding and hatchery levels is equally important to the overall health of the poultry in the facility.
- Site decontamination, turnaround times and an enforced cleaning and disinfection procedure should be in place for all sites and reviewed regularly.
- Effective wild bird and rodent control must be maintained.

If you have further questions, please contact
the Division of Animal Health at

800-572-8981

or visit our website at datcp.wi.gov.

MAJOR ROUTES FOR DISEASE AND PATHOGEN TRANSMISSION

POULTRY

- transfer of birds from production area to production area
- dead bird disposal

OTHER ANIMALS

- wild birds
- feral and domestic animals, including other livestock and pets
- insects
- rodents—i.e. rats/mice
- domestic birds

PEOPLE

- farm personnel and family members on site
- contractors, maintenance personnel, neighbors, delivery trucks/drivers, visitors
- disease can be transmitted by, for example contaminated hands, footwear, clothing, hair
- farm personnel that own their own birds

EQUIPMENT

VEHICLES

AIR

- transmission as an aerosol or dust

WATER SUPPLY

- water supplies may become contaminated with feces from contact with avian or other animal species

FEED

- feed may be contaminated by the raw materials used, post-production, during transport, or by exposure to rodents and wild birds on the property