

# Biosecurity for Small Poultry Flocks

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**Written by:** *Dr. Jacquie Jacob, University of Kentucky*

The term **biosecurity** refers to the measures taken to prevent the introduction and/or spread of disease in a poultry flock. It is important for every poultry operation to develop, and implement, a biosecurity plan.

## Elements of an Effective Biosecurity Plan

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### Isolation

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It is important to protect your flocks from contact with other poultry flocks and, when possible, from wild birds. Take the following actions to isolate your flock(s):

- **Maintain a perimeter:** One of the best ways to keep your birds from coming into contact with other birds is to install a perimeter fence. The fence does not have to be expensive to be functional, but it does need to completely surround the birds. It should have gates that are kept closed when not in use. If there are other poultry on neighboring properties, it is highly recommended that a buffer zone be established between the two flocks to prevent mixing of the birds and transmission of any disease that may affect one flock or another. Screens should be placed on poultry-house windows and ventilation holes to keep out wild birds.
- **Avoid introducing new birds into a flock:** It is recommended that new birds not be introduced into an existing flock. New birds can carry disease into a flock even if they show no outward signs of being sick. The new birds may have recovered from a disease, and they could continue to be carriers. If new birds must be introduced into a flock, the new birds should be quarantined for at least two weeks prior to introduction to see whether they develop any signs of disease. Any birds that show signs of disease during this quarantined period should not be incorporated in the flock. If clinical signs appear in a member of your flock, then it is best to submit the sick (or dead) birds to a poultry diagnostic facility for examination and diagnosis. Depending on what the disease is, you may not want to introduce any of the new birds, with or without clinical signs, into your flock. Workers should move from the existing flock to the new birds and never the reverse unless they change clothing and shower.
- **Avoid contact with other birds:** Anyone working with your poultry flock, as well as anyone visiting your flock, should not have had contact with other birds for at least 24 hours before interacting with the flock. Contact with other birds includes hunting and visiting live bird markets, swap meets where birds are present, and pet stores.
- **Prepare a plan for self-quarantine:** If your birds get sick, stop anyone from visiting your flock. It is recommended that the birds be submitted to a diagnostic lab. During the time that you are waiting for a diagnosis, keep movement between the infected flock and other flocks to a minimum. Human and equipment movement can easily spread disease.

### Traffic Control

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Traffic control includes both the traffic on your farm as well as the traffic patterns within the farm. Take the following actions to maintain control of the traffic on your farm:

- **Establish a visitor policy:** Visitors should be kept to a minimum. Be selective about who you allow onto your farm. It is important to inquire about where they have been in the last 24 to 48 hours. If visitors might have been near other birds—poultry as well as pets (canaries, parrots, cockatiels, and so on)—they should not be allowed to interact with the flock. It is recommended that you provide any visitors with protective clothing, especially clean boots or disposable booties.
- **Separate clean and dirty functions:** Identify and distinguish tasks with the flock as dirty and clean. Clean functions include bird handling, egg pickup, and feed handling. Dirty functions include manure pickup and handling of dead birds. It is important to do the clean functions early. Workers should not go from dirty functions to clean functions without showering and changing their clothes completely. Those routinely working with the poultry flock should have specific clothes and shoes or boots that never leave the clean areas (except to be washed).
- **Isolate dead birds and manure management areas:** Areas for dealing with dead birds and litter should be separate from the area occupied by the poultry flock.

## Sanitation

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It is important to clean materials and equipment that come onto the farm. Those working with the poultry flock should also follow good sanitation practices. Note that raising a small flock under organic conditions does not preclude the use of disinfectants. There are a variety of cleaning and disinfecting materials available for use on organic poultry farms.

Be sure to disinfect vehicles and equipment and to disinfect between flocks:

- **Vehicle disinfection:** All vehicles entering a farm must be cleaned and disinfected to prevent the introduction of disease-causing organisms that can be carried on the vehicles. High-pressure sprayers can effectively remove organic material. It is important to remove the organic material before using disinfectants because such material can make the disinfectants ineffective. Vehicle wheel walls and undercarriages must be fully cleaned and disinfected before the vehicles enter the farm, and they should be cleaned before leaving as well. It is recommended that a separate area for cleaning vehicles be established at a distance from the flock. If this is not an option, then provide vehicles with a parking area that is as far as possible from the flock.
- **Equipment disinfection:** Equipment coming onto the farm must also be cleaned and disinfected. Equipment that has been used for dirty functions must be thoroughly cleaned and disinfected before being used for clean functions.
- **Cleaning and disinfection between flocks:** A downtime of two weeks between flocks is recommended. This should give sufficient time for sweeping, cleaning, disinfection, and drying of the entire coop. Use downtime to your advantage as many disease agents do not persist very long in the environment without a host to colonize.

## Pest Control

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Several common poultry pests are capable of introducing and spreading disease on a farm. It is important to control rodents and insects. Be concerned about both flying and crawling insects as they can serve as intermediate hosts for some internal parasites and are capable of transmitting disease agents to your flock.

Rodents will feed on spilled feed, so clean feed spills immediately. Rodents can leave behind feces containing agents of disease that can infect both humans and poultry. Keeping a clean coop and feed room will ensure that you can identify potential pest problems quickly and respond with control measures in a timely manner.

**Webinar on biosecurity** - [https://learn.extension.org/events/1995#.VUjR-pN\\_CdB](https://learn.extension.org/events/1995#.VUjR-pN_CdB)