

# Biosecurity

**A. Isolation** refers to the confinement of animals within a controlled environment. A fence keeps your birds in, but it also keeps other animals out.

**1. Perimeter control.** One of the best ways to do this is to install perimeter fencing. Perimeter fencing does not have to be expensive to work, but it does have to completely surround the birds and must include gates that are kept closed when not in use. If there are other birds on properties immediately adjacent to your flock, maintain a buffer zone between the two populations and prevent them from mixing.

**2. Introduction of new birds to your flock.** New birds can carry disease into your flock even if they are not showing clinical signs of disease. We recommend that all birds be tested for Newcastle disease, avian influenza and other disease agents important in that species before that bird is brought onto your property. A place to segregate new birds for at least 10 days from the established flock should be developed. Birds that develop any clinical signs of disease during this quarantine period should not be introduced. Traffic flow should always be from your flock to the new birds and never in reverse without a change of clothing and a shower.

**3. Avoid contact with other birds.** Anyone working with your birds or visiting your flock should not have had contact with other birds for at least 24 hours before they visit. Activities that should be avoided are hunting, visiting live bird markets or swap meets with birds, pet stores, and handling dead birds.

**4. Prepare a plan for self-quarantine.** If your birds get sick, stop all visits immediately; get birds into the laboratory or to your veterinarian for a diagnosis. During the time that you are waiting for a diagnosis, keep movement to a minimum. Human and equipment movement can easily spread disease.

**B. Traffic control** includes both the traffic onto your farm and the traffic patterns within the farm.

**1. Visitor policy.** Visitors should be strictly limited. Be selective about who you let onto your farm. Ask questions about where they have been and provide them with protective clothing. All visitors should sign a logbook so you can keep track of who has been on your farm. Put up signs to prevent people from wandering onto your facility.

**2. Separate clean and dirty functions.** Clean functions include bird handling, egg pickup, and feed handling. Dirty functions include manure pickup, and dead bird handling. One should not go from dirty functions to clean functions on the farm without a shower and a complete change of clothes. Usually, it's just easier to plan your day so that you can avoid going from dirty to clean. Employees and owners should wear specific clothes to work in clean areas. These clothes and shoes should not leave the clean areas.

**3. Isolation of dead bird pickup, manure hauling functions.** Trucks that pick up dead birds and manure are usually doing the same thing at other farms. Because they are, they can easily spread disease agents. It is important to separate these activities completely from your birds. It is best if pickup can be in an area that is outside the perimeter of the farm or at least away from the flock.

**C. Sanitation** addresses the disinfection of materials, people and equipment entering the farm and the cleanliness of the personnel on the farm.

**1. Vehicle disinfection.** All vehicles entering a farm must be cleaned and disinfected. High pressure sprayers that can effectively remove organic material are critical to effectively remove and inactivate disease agents. Vehicle wheel wells and undercarriage must be fully cleaned and disinfected before entry to the farm and also upon exit. Usually, it is just easier to establish a place where vehicles can be parked outside of clean areas on the farm.

**2. Equipment disinfection.** Equipment coming onto or leaving the farm must be cleaned and disinfected. Equipment moving from dirty to clean functions must be thoroughly cleaned and disinfected.

**3. Cleaning and disinfection between flocks.** A minimum of 2 weeks downtime is suggested between flocks. Complete removal of bedding, feed, complete cleaning and disinfection of the housing area and inspection is critical to preventing diseases.

## Biosecurity Resources

**Francine Bradley, poultry extension specialist**  
(530) 752-6316

**Carol Cardona, poultry extension veterinarian**  
(530) 754-5041  
[cjcardona@ucdavis.edu](mailto:cjcardona@ucdavis.edu)

**Ralph Ernst, poultry extension specialist**  
(530) 752-3513  
[raernst@ucdavis.edu](mailto:raernst@ucdavis.edu)

**Doug Kuney, poultry farm advisor**  
(909) 787-2099  
[drkuney@ucdavis.edu](mailto:drkuney@ucdavis.edu)

### Websites

[http://www.vetmed.ucdavis.edu/vetext/INF-PO\\_Forum/default.htm](http://www.vetmed.ucdavis.edu/vetext/INF-PO_Forum/default.htm)

<http://www.biosecuritycenter.org/>

<http://www.ext.vt.edu/pubs/poultry/408-310/408-310.html>

### Biosecurity publications

[http://www.vetmed.ucdavis.edu/vetext/INF-PO\\_Biosecurity.html](http://www.vetmed.ucdavis.edu/vetext/INF-PO_Biosecurity.html)

Biosecurity for Poultry Flocks by Dr. Joan S. Jeffrey

[http://www.vetmed.ucdavis.edu/vetext/INF-PO\\_AI-Recommendations.pdf](http://www.vetmed.ucdavis.edu/vetext/INF-PO_AI-Recommendations.pdf)

Recommendations to prevent the spread and/or introduction of Avian Influenza by Dr. Carol Cardona

[http://www.vetmed.ucdavis.edu/vetext/INF-PO\\_AI-Recomendaciones.html](http://www.vetmed.ucdavis.edu/vetext/INF-PO_AI-Recomendaciones.html)

Recomendaciones para prevenir la dispersión y/o introducción del virus de la influenza de aves de Dra. Carol Cardona

# Biosecurity Checklist

## Isolation—120 possible points

Complete perimeter fencing—40 points

Gates that remain closed—10 points

Buffer zone between your flocks and other birds—20 points

Employee education about avoiding contact with other birds—20 points

Employees and owners have dedicated clothing and shoes worn in clean areas of farm—20 points

Have a plan in place for self-quarantine in case of disease—10 points

## Traffic flow—160 possible points

Dead bird pickup and manure pickup are strictly isolated from other farm traffic—15 points

Visitors are limited to essential people only—30 points

Visitors sign a logbook—5 points

Visitors that have been around birds in the past 24 hours are not allowed—15 points

Visitors are required to wear protective clothing—15 points

Signs are posted that prevent inadvertent visitors—10 points

Biosecurity plan for farm that separates clean and dirty functions and establishes traffic flow—15 points

Communication of biosecurity plan to all employees—10 points

Segregation plan for new birds—15 points

Pre-purchase testing policy—25 points

## Sanitation—110 possible points

Vehicle disinfection stations at every entry and exit—25 points

Hi pressure spray at vehicle disinfection stations—10 points

Policy to keep all vehicles out of clean areas on the farm—30 points

Equipment disinfection policy for visitors and on the farm—10 points

At least 2 weeks downtime between flocks—10 points

Complete cleaning and disinfection between flocks—25 points

## Score

**390-351** You're doing great! Disease prevention is the name of the game on your farm. But like every good grower, you are always looking to improve, so take this opportunity and take a critical look around and improve your already excellent

biosecurity.

**350-291** There's room for improvement. Diseases may get in to your flocks and can be spread once they enter. Its time to make some improvements or devastating disease may be just around the corner.

**290-0** Disease agents enter when they are in the area and are easily spread from your facility. You may need some help in learning about biosecurity and how to prevent disease. Its not hard or expensive, it's a state of mind.