

Biosecurity – Let's Review

Author: Rafael E. Rivera, Manager Food Safety and Production Programs U.S. Poultry and Egg Association



Any type of poultry production runs into the risk of acquiring diseases that disrupt production, damages your investment, and has a negative impact to your livelihood. We continue to see AI outbreaks worldwide and locally, we've had several low path outbreaks and an ongoing Exotic Newcastle outbreak in California that is enough cause of concern. To protect your investment and livelihood, biosecurity practices have been regarded as the first and best line of defense against disease. Biosecurity is the set of established practices designed to prevent the introduction of diseases to farms. Disease outbreaks cause economic loss and they are always a big hit to the family farmers, the companies, and the entire community regardless of the magnitude. We should be taking the necessary precautions to prevent the introduction of any disease into our farms. We all have to keep an elevated awareness of what risks are present and work with neighbors, businesses, and local officials to have a solid biosecurity program that keeps you protected year round.

NIIP published a set of guidelines using the lessons learned from the 2015 Highly Pathogenic Avian Influenza outbreak. The guidelines introduce three concepts that technically are not new, but describe specific procedures better. Its implementation is encouraged in all commercial operations especially for indemnification purposes. These new concepts are: a Biosecurity Coordinator, a Line of Separation for each building, and a Perimeter Buffer Area.

- The Biosecurity Officer is responsible for the development, implementation, maintenance and ongoing effectiveness of the biosecurity program. He or she has to be knowledgeable in the principles of biosecurity and should review the program at least once during each calendar year and make revisions as necessary.
- The Perimeter Buffer Area (PBA) is the area around poultry production buildings which functions to reduce the infectious load around the buildings.

- The Line of Separation (LOS) is represented by the outside walls of the poultry house and functions to prevent poultry inside the building from becoming exposed to sources of the virus on the outside.

In conjunction with these three concepts, biosecurity plans should establish and maintain the following:

1. Biosecurity Coordinator – Each production site (or integrated system) should have a Biosecurity Coordinator capable of designing and implementing effective biosecurity procedures. The Biosecurity Coordinator should be an experienced poultry veterinarian or should consult with one.
2. Training of Employees and Other Personnel – the Biosecurity Officer ensures that farm employees, contract crews, truck drivers and service personnel are trained on site specific biosecurity SOPs.
3. Line of Separation – An essential component for improved biosecurity is to implement a line of separation for each building. The line of separation is a critical control point for preventing disease exposure of poultry. A plan must address how this line will be defined and defended for each poultry house or set of connected houses.
4. Perimeter Buffer Area – Biosecurity plans should incorporate the perimeter buffer area concept, which is aimed at reducing virus entering and contaminating the production site. The perimeter buffer area should be clearly delineated and located so that personnel do not leave the buffer area in the course of their daily tasks or if they do, they use a specified entrance.
5. Personnel – Personnel and their clothing/footwear may become contaminated through a variety of activities and contacts when they are off site. Showering and changing into clean clothes immediately prior to arriving at a poultry

site, or upon arrival, will greatly reduce disease introduction. This would apply to anyone who will enter the perimeter buffer area or cross the line of separation at a minimum.

6. Wild Birds, Rodents and Insects – Poultry operations should have control measures to protect poultry from wild birds, their feces and their feathers. Rodent and insect control programs should be in place.

7. Equipment – Equipment should be effectively sanitized between uses. Sharing of equipment should be minimized.

8. Mortality Disposal – Mortality should be disposed of in a manner that prevents the attraction of wild birds, rodents and other animals and avoids the potential for cross contamination with dead birds from other facilities.

9. Manure and Litter Management – Manure and spent litter should be removed in a manner to prevent exposure of susceptible poultry (either on or off the farm of origin) to disease agents.

10. Replacement Poultry – It is not possible to prove that a bird or flock is free of disease; it is only possible to demonstrate lack of evidence of infection. Replacement poultry should come from sources with documented biosecurity practices.

11. Water Supplies – Water should come from deep wells or sources that have been treated to eliminate any potential contamination with live virus. If water comes from a surface water source, experts in water treatment should be consulted on how to continuously treat the water to eliminate viable virus.

12. Feed and Replacement Litter – Feed, feed ingredients and fresh litter can be contaminated if they have been exposed to the outside environment, wildlife like wild waterfowl or other birds or if they contain insects or rodents that might be carrying disease vectors. Grain, feed, and fresh litter should be stored and handled so that it cannot be contaminated.

The U.S. Poultry and Egg Association (USPOULTRY) has developed materials to help companies and their growers establish effective biosecurity programs. USPOULTRY and APHIS have collaborated by developing and providing access to a biosecurity self-assessment tool that helps determine at what level of preparation your operation is in. The self-assessment tool guides you through a list of biosecurity principles developed to emphasize the elements for improving biosecurity. APHIS recently updated their biosecurity educational website and documents. USPOULTRY also provides a series of educational materials including a technical reference that serves as a template for producers to use in conjunction with the NPIP guidelines. The template helps producers keep up with the implementation of the plan and keep any relevant documentation that serves as evidence that the plan is in place and properly maintained. This template along with the Infectious Disease Risk Management: Practical Biosecurity Resources for Commercial Poultry Producers DVD offers a comprehensive resource that can help develop effective biosecurity programs. Our animal husbandry website provides key elements in the areas of cleaning and disinfection, traffic control, pest control, depopulation and disposal. For information on the USDA-APHIS self-assessment and for additional educational and training material please visit: www.uspoultry.org/animal_husbandry.

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