BIOSECURITY MUST BE AT FOREFRONT

BY RAFAEL RIVERA, USPOULTRY FOOD SAFETY AND PRODUCTION PROGRAMS MANAGER

These last few months have seen highly pathogenic avian influenza, or HPAI, outbreaks throughout Europe and several Asian countries. The strains that are being identified are related to the HPAI virus strains that ravaged the poultry industry in the Midwestern and Western United States in 2014-2015.

The U.S. Department of Agriculture Animal and Plant Health Inspection Service, or USDA APHIS, reported that migrating birds passing by during the migration period in the spring have a high probability to encounter birds that could carry the virus up to the northernmost regions between Asia and North America.

Since the 2015 outbreak, several changes have been implemented as part of the USDA HPAI indemnification process. Today, commercial poultry farms must have a biosecurity program in place that follows the National Poultry Improvement Program's, or NPIP, Biosecurity Principles, and they must be audited every two years. The regulation became effective September 2020.

Biosecurity is the first line of defense against disease, and biosecurity plans contain a set of established practices designed to prevent the introduction of diseases on farms. The recent cases of HPAI are highly concerning, and it is necessary to ramp up prevention efforts throughout the industry. We should be taking the necessary precautions to prevent the introduction of any disease into our farms. We all have to elevate our awareness during the migration seasons, keeping in mind that a solid biosecurity program will keep you protected year-round.

USPOULTRY has developed materials to help companies and their growers establish effective biosecurity pro-

grams. USPOULTRY and USDA APHIS collaboratively developed and provided access to a biosecurity self-assessment tool that helps determine the level of biosecurity preparation an operation needs, guiding the user through a list of biosecurity principles developed to emphasize the elements for improving biosecurity. The materials include three concepts that may be new to existing biosecurity plans: a biosecurity officer, a line of separation for each building and a perimeter buffer area. In conjunction with these three concepts, biosecurity plans should establish and maintain the following.

I. Biosecurity Officer

Each production site (or integrated system) should have a biosecurity officer capable of designing and implementing effective biosecurity procedures. The biosecurity officer should review the biosecurity program at least once during each calendar year and make revisions as necessary.

2. Training of Employees/Other Personnel

The biosecurity officer ensures that farm employees, contract crews, truck drivers and service personnel are trained on site-specific biosecurity standard operating procedures.

3. Line of Separation

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

The perimeter buffer area concept is aimed at reducing the virus entering and contaminating the production site. The perimeter buffer area should be

clearly delineated and located so 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 offsite. 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 and Vehicles

Equipment and vehicles should be effectively sanitized between uses. Sharing of equipment should be minimized. Define equipment and vehicle storage, access and traffic patterns to minimize contamination at the farm.

8. Dead Bird Disposal

Dead birds 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

Replacement poultry should come from sources with documented biosecurity practices. The introduction of replacement poultry needs to be handled properly. While birds may come from a facility with well-documented biosecurity practices, the risk of disease introduction increases if they are transported in improperly cleaned and sanitized vehicles. It is important to monitor the maintenance of the biosecurity chain every step of the way.

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, 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 it cannot be contaminated.

13. Reporting of Elevated Morbidity and Mortality

Elevation in morbidity and/or mortality above expected levels, as defined by the biosecurity plan, should be reported as required in the site-specific biosecurity plan. Unusual increases in mortality could be a sign of disease, and reporting allows one to take the appropriate actions to rule out reportable disease agents.

14. Auditing

Audits should be conducted at least once every two years or a sufficient number of times during that period by the official state agency to ensure the participant is in compliance. Each audit should require the biosecurity plan's

training materials, documentation of implementation of the NPIP Biosecurity Principles, corrective actions taken and the biosecurity coordinator's annual review to be audited for completeness and compliance with the NPIP Biosecurity Principles.

USPOULTRY's "Infectious Disease Risk Management: Practical Biosecurity Resources for Commercial Poultry Producers" DVD describes the elements that address biosecurity principles. In addition to the DVD, USPOULTRY has a NPIP Biosecurity Principles Template created as a 'fill-in-the-blanks' document to guide producers in the design and monitoring of their program. USPOULTRY's animal husbandry webpage also provides key elements in the areas of cleaning and disinfection, traffic control, pest control, depopulation and disposal.

For information on these resources, visit: www.uspoultry.org/animal_husbandry/.