

Operational Biosecurity – Continued Improvement

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When we consider what has happened this past year, many poultry producers including those in Indiana beefed up their farm biosecurity. But even with all that preparation, disease still hit their locations. So, in light of that, all poultry producers should consider biosecurity both during normal operations and then increased measures during an outbreak. This is especially true of the farms that find themselves in a disease outbreak control zone (10km), yet not positive for the disease surrounding them. Some farms found themselves in that predicament, and those that ramped up their biosecurity measures were able to weather the storm. By examining current practices and making improvements to harden their farms to diseases, farms may survive an outbreak.

In emergency management the three phases of action are *planning – response – recovery*. With proper planning, including a strong biosecurity program, farms will know what to do when diseases should hit and then progress smoothly to a recovery program to minimize loss and provide for business continuity. A stepwise approach in each of these phases is required so as to not miss a step in the fight against a large threat to the farm. Having checklists (USDA) and other aids will ensure that all phases of planning and execution are covered. Sacrifice may be necessary in order to protect the farm and flocks.

A good biosecurity program will entail one or more of three protocols / methods of preventing disease:

- **Physical:** Barriers to disease from being carried on the farm or house are placed. Most common method deployed. This would include pest (IPM) controls.
- **Chemical:** Agents used to help break down or destroy disease agents. Soaps, heat treatments (including steam), disinfectants, and other similar methods are part of this group.
- **Logical:** Controls that by action help reduce the chance of diseases. Staying home from the duck pond would be a simple example of this type of method.

Biosecurity is more of an *attitude* than that of a *practice*. Anyone who is not fully vested in a good farm biosecurity plan may cut corners and expose the farm to undue risk of infection. All involved must do their part to keep the level of biosecurity high. Also, a good review of movement of all people on the farm is very important to stopping the spread of disease agents through normal farm activities.

One of the first moves a farm can make is creating Hot and Cold zones on the farm. These logical demarcations tell all that by passing this zone requires a special action

from you. An in farm lane disinfection station within an insulated box at this line means all who pass should be hosed down to prevent any agents from coming onto the farm. As things escalate all normal traffic must stop, allowing only for essential traffic in planned routes on the farm to minimize contact with poultry housing. Placing a lockable drop box for UPS/FedEx/USPS deliveries keeping them off the farm may help. During AI control zone activity farms should negotiate an embargo of auditors, inspectors, meter readers, and salesmen from coming onto the farm. If need be a heavy cable across the farm lane with a sign with a cell number for access to the farm may be in order. Combo / pushbutton locks could be used so that feed trucks and other trusted sources may gain access. Each house on the farm should be compartmentalized so that contact by anyone is minimal during an outbreak. Multiple animal species enterprises on the farm should divide labor as much as possible to help prevent cross-contamination.

People and equipment movements should be reviewed and evaluated as to if this is a necessary practice. Workers who wear the same footwear everywhere are the most suspect. The practice of the Danish System of workwear donning/doffing with some modifications should help. Meeting outsiders to the farm should be done at neutral locations. A change of clothing or disinfection protocol should take place to prevent fomite transfer of disease agents following a trip off the farm. Vehicles should be washable and have washable floor mats installed for protection. Sanitation during travel should be conducted to help reduce agent loads in the car. Washing is considered an important part of disease control. This includes cell phones and computers. Footwear should be washable, and a two-step wet system will be needed to C&D feet and hands during an outbreak. Washing to remove soils on the entire surface is needed to help reduce fomites. These systems require a higher level of maintenance to be effective.

Equipment, including shared equipment such as animal transport and manure handling should receive close attention. Inspect all trucks before they enter the farm. Re-route trucks in need of further cleaning. Be prepared to disinfect trucks and equipment before they enter poultry housing. Proportioners dispensing disinfectant and hose end foamers can help with proper disinfection of equipment. Log all visitors and equipment not part of the farm that enters the farm. This would include service workers and others not part of the normal daily activity of the farm. Manure hauling should be done between as few locations as possible with wash down of equipment as it re-enters the farm. Composting and other heat treatments can help condition manure and help prevent disease spread.

By taking time to review, revamp and retrain if needed all should know and understand the farm biosecurity plan. If done correctly a farm may be able to continue operation regardless of what is taking place around them.