

What Happens if Highly Pathogenic Avian Influenza Hits Poultry in Your County?

Dr. A. Bruce Webster
Extension Poultry Specialist
Department of Poultry Science
The University of Georgia

Highly pathogenic avian influenza (HPAI) is a contagious disease that causes high mortality in poultry such as chickens, turkeys, quail, etc. The virus is carried by wild waterfowl, which may contaminate the surroundings of poultry premises with their droppings. If commercial or backyard birds get infected, sick birds act as virus factories, producing and shedding vast numbers of virus particles that can spread easily by various means to infect other poultry. HPAI has such great potential to devastate poultry farming that it is considered internationally to be a reportable disease. The Georgia Department of Agriculture and the US Department of Agriculture are mandated to contain and eradicate HPAI. State and federal surveillance programs monitor for the occurrence of avian influenza in domestic poultry and wild birds on an on-going basis.

What will happen if a commercial or backyard poultry flock is reported to have symptoms consistent with avian influenza in your county? The Georgia Poultry Lab Network will immediately send a representative to take sample swabs from the flock showing symptoms. These will be tested within 24 hours at the Georgia Poultry Lab in Gainesville, GA. Depending on initial observations and lab results, the premises of the suspect flock will be quarantined (no movement of animals onto or from the farm) to contain the infection. If the samples are found positive for highly pathogenic avian influenza, the flock will be designated as presumptive positive for HPAI. The flock owner will be notified and the premise treated as an infected premise. Samples from the flock will be sent to the National Veterinary Services Lab in Ames, IA, for confirmation.

Incident Command Response Activation

Upon identification of a confirmed positive case of HPAI in poultry, the state incident commander will activate an incident command response centered on the infected premise. This will include notification of state and county agencies (local County Commission office, local and state law enforcement agencies, Georgia Emergency Management Agency, Georgia Environmental Protection Division, Georgia Forestry Commission, Georgia Division of Public Health), the University of Georgia Cooperative Extension Service and other allied groups, and private poultry companies as needed to support the necessary response actions and mobilize response teams to carry out essential tasks.

Discovery of HPAI in a wild bird will not trigger an incident command response.

Control Area and Movement Control

A control area having at least a 6-mile radius from the perimeter of the infected premise will be established. The actual size and shape of the control area will be determined by incident command. Within the control area, it is intended for the first 24-48 hours that all movement of poultry, livestock, and vehicles and equipment used for animal transport and husbandry stops. This is to prevent spread of the virus while incident responders focus efforts on dealing with the infected premise and on identification of additional premises, if any, which could have been exposed to avian influenza virus by direct or indirect contact with the infected premise.

The control area will be divided into two zones. The inner zone, extending in a 2-mile radius from the infected premise, is designated the infected zone. Census of backyard poultry flocks will be focused initially in the infected zone. As resources allow, census will extend into the outer buffer zone, which will extend 2-6+ miles from the infected premise.

After 24-48 hours, movement of poultry, livestock, and vehicles and equipment used for animal transport and husbandry in the control area will be allowed according to permit issued by the incident commander. Movement permits will be based on samples of animals and equipment being negative for avian influenza virus and on the discretion of the incident commander regarding the risk of movement.

Movement of animals, vehicles and equipment outside the control area will not be restricted, although those involved in such movement will be alerted to the need for heightened biosecurity.

Discovery of additional presumptive positive premises will trigger the establishment of additional control areas centered on each premise and, if confirmed positive, an expansion of the incident response.

Quarantine, Depopulation, Disposal, Cleaning and Disinfection

The presumptive positive premise will be quarantined. If HPAI is confirmed by the National Veterinary Services Lab, the flock will be euthanized within 24 hours according to procedures determined by the incident commander. Other premises that have a direct or indirect epidemiological link with the infected premise may also be quarantined and depopulated.

The Georgia Department of Agriculture issues quarantines as needed to restrict movement of potentially infected animals. The United States Department of Agriculture also may issue quarantines as deemed appropriate under emergency authorities. State issued quarantines remain in effect until an official quarantine release has been issued by the Georgia Department of Agriculture.

The depopulated flock will be disposed of according to Georgia rules for dead animal disposal to ensure that the virus is contained and destroyed.

Cleaning and disinfection will be conducted according to methods approved and monitored by incident command. Disinfection methods may involve chemical disinfectant application, drying and heating, or fumigation. Disinfected premises will be tested for the presence of viable virus. Subject to the discretion of incident command, a premise may be eligible to be repopulated 21 days after cleaning and disinfection.

Backyard Flock Census and Surveillance

Upon establishment of a control area around an infected premise, an important objective of the incident response would be to find at-risk flocks in the control area and provide owners information about HPAI and who to contact should their birds show signs of the disease. An at-risk flock is one that is susceptible to the avian influenza virus. At the discretion of Incident Command, teams may go door to door to census the poultry premises in the control area and alert flock owners to the situation. These teams would not be directed to enter backyard flock premises. Commercial poultry farms and backyard flocks that have been registered with the Georgia Department of Agriculture will already be recognized and served appropriately under the incident response. If a flock with clinical signs or unusual mortality is reported (a sick bird call), a trained follow-up team will visit the affected flock as soon as possible and take sample swabs from birds. Any premise in the control area seeking a permit to move birds or equipment must be sampled to be determined free of the virus.

After the infected premise is cleaned and disinfected, active surveillance will be conducted in the control area over a time period determined by USDA AHPIS or State officials to provide evidence that HPAI is not present. Based on USDA criteria, a selected number of backyard premises may be contacted.

When will it be over?

The goal of the Georgia avian influenza response plan is to return those affected to a normal state of operation as quickly as possible. The effort to contain and eradicate highly pathogenic avian influenza is a coordinated venture by state and federal agencies. For the first few days of an outbreak, the Georgia Department of Agriculture is authorized to command and coordinate the initial response. If the outbreak is not contained in the first few days, the United States Department of Agriculture must assume authority.

If the initial response succeeds in stamping out the virus with no transmission to other locations, the quarantine may be released and the control area lifted in a few weeks. If the virus spreads ahead of the incident response, the control area will be expanded and additional quarantines, with flock depopulation, will be imposed. Monitoring and movement control will continue in the expanded area until eradication of the virus is verified.