

Highly Pathogenic Avian Influenza (HPAI) Tactical Response Action Plan

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HPAI Management

The State of Maryland is continually taking steps to prevent, prepare for, respond to, and recover from, HPAI. The potential economic devastation to the Maryland poultry industry as a result of a widespread HPAI outbreak is paramount in planning efforts. Stamping out the virus on an index farm using appropriate biosecurity and biocontainment is considered the highest priority. **This Response Plan is subject to change at any time, as events warrant.**

References:

- Maryland Initial State Response and Containment Plan (4/1/14)
- Maryland HPAI Contingency Plan (8/4/15)
- USDA Foreign Animal Disease (FAD) HPAI Red Book (9/25/15)
- USDA FAD Prep materials and references (9/25/15)
- USDA Animal and Plant Health Inspection Service (APHIS) HPAI Outbreak 2014-2015 Procedures
- CDC recommendations for Human Health Investigation and Response (6/2/15)
- Secure Egg Supply (8/13)
- Secure Broiler Supply (4/15)
- Secure Turkeys Supply (12/14)

Event	Details	Timeline
Incident Report: <i>Maryland Department Of Agriculture (MDA) receives the initial report of a suspected HPAI infection from the flock owner, company veterinarian, or laboratory.</i>	MDA will respond to the premise, conduct an investigation using proper Personnel Protective Equipment (PPE) and biosecurity. <i>Company:</i> If a company veterinarian reports suspicious death or illness, MDA will put staff on standby for possible response and confirms lab has sample on priority schedule. <i>Backyard flock:</i> If a backyard flock owner reports suspicious deaths or illness, MDA will immediately investigate their farm.	Day 1
Initial Field Response: <i>Samples will be taken and delivered rapidly to the Animal Health Diagnostic Lab in Salisbury and/or Frederick for Polymerase Chain Reaction (PCR)-genetic testing.</i>	<i>Company:</i> The company vet may issue a verbal hold order on suspected premise at the time mortalities are observed. <i>Backyard Flock:</i> If indicated, MDA will issue a verbal hold order to the backyard flock owner while results are pending at the lab.	Day 1
Field Sample Collection and Notification:	If mortality case meets HPAI case definition, dual samples will be collected. (Priority 1 and Priority 2, per FAD Red Book-Appendix E) If lab reports high suspicion of HPAI, the State Veterinarian may begin immediate notification and	Day 1

	premise compensation investigation as if sample was positive at the National Veterinary Science Lab (NVSL).	
Rapid Diagnosis:	<p>The Maryland Animal Health Diagnostic Laboratories in Salisbury and/or Frederick or other NAHLN lab will analyze samples immediately.</p> <p>One of the dual samples will be sent immediately to the Animal and Plant Health Inspection Services (APHIS) National Veterinary Services Laboratory (NVSL) lab. (Normally, samples are sent to NVSL after the MDA) lab has a positive test.) Because of HPAI, dual samples will be tested simultaneously.</p> <p>If the NVSL laboratory tests confirm a positive case of avian influenza, rigorous and complete HPAI response will be initiated</p>	Day 1
Ensure Safety of Responder Personnel:	<p>Safety Officer, Site Safety Officers and Supervisors are responsible for the safety and welfare of the responders. Duties include:</p> <ul style="list-style-type: none"> • Oversee operations for proper implementation of safety and health procedures (including respirator use) • Determine on-site hazards • Recommend on-site safety and health procedures to be followed by responders • Determine and enforce proper PPE and safe equipment use and procedures on site • Complete and submit occupational injury forms; conduct accident review and determine corrective actions 	Day 1
Initial Epidemiological Investigation & Tracing Begin Indemnity Documentation Procedures	<p><i>Company:</i> While awaiting lab results from the NVSL - MDA, the company vet, and the grower will conduct a joint epidemiological investigation using the current Epidemiological Questionnaire to identify any immediate epidemiological links that need to be quarantined and/or tested the same day.</p> <p><i>For backyard flocks,</i> the epidemiological investigation will be conducted by MDA and the owner.</p> <p>If the NAHLN lab reports H5/H7 (Highly Pathogenic), MDA will immediately commence emergency procedures.</p> <p>Identify contact premises. Traceback and trace forward from infected premise 21 days.</p>	Day 1

Emergency Notifications	The State Veterinarian’s Office will make urgent notification to stakeholders based on a confirmed or highly presumptive case of HPAI. Communication will be made electronically and directly by phone.	Day 1
Incident Command System	<p>Upon confirmation by NVSL or based on field findings or other factors, the State Veterinarian, in coordination with the Maryland Agriculture Secretary, will establish an Incident Command Structure (ICS) and staff the required ICS positions. It will include:</p> <ul style="list-style-type: none"> • Emergency Operations Center, Mobile Operations Centers, and Interoperable Communications • An Incident Command Post (ICP) will be established at a designated facility near the affected premise. • USDA will have representation within ICS or be part of Unified Command, depending on the severity and complexity of HPAI. <p>ICS will be set up based on:</p> <ul style="list-style-type: none"> • Single Index Case or Limited Response: Back-Yard Flock(s) or Layers or Pullets • Multiple Incidents or a Complex Event Involving Multiple State Agencies and Jurisdictions 	Day 1
Public Information and Awareness	<p>MDA Public Information Officers (PIOs) within the ICS may provide information to the public and media about HPAI at one farm.</p> <p>For multiple outbreaks involving multiple agencies and jurisdictions, a joint information center (JIC) will be used and comprised of PIOs from state and local agencies, poultry producers, and other interested stakeholders.</p> <p>Regardless of outbreak severity, the MDA PIOs will keep the Governor’s Office apprised of the situation.</p>	Day 1
ICS Structure Expansion. <i>As the incident grows in complexity, the ICS structure will grow.</i>	Initially, the command staff will delegate authority for planning and permitting to the Planning & Intelligence Section and the Permitting Group.	Day 1-2
State of Emergency.	<p>Incident Command may petition the MD Agriculture Secretary to request the Governor issue an Executive Order for a limited activation of the National Guard or to suspend certain regulations.</p> <p>The Maryland Agriculture Secretary may request</p>	Day ?

	<p>that the Governor declare an Agricultural State of Emergency.</p> <p>The Director of the Maryland Emergency Management Agency (MEMA) may request that the Governor declare a State of Emergency.</p>	
<p>Swift Imposition of Effective Hold Order and Movement Controls</p> <p><i>The State Veterinarian issues “stop animal movement” order, requiring state and local law enforcement to bar animal movement across state lines and quarantines infected premises barring the movement of all poultry and products within and outside of the Control Zone</i></p>	<p>Incident Command will establish an Infected Zone (IZ) and a Buffer Zone (BZ) within 12 hours of the identification of an index case.</p> <p>MDA will conduct the mapping of control areas (minimum 10 km radius from infected farms) and create list of flocks within the control area.</p> <p>Time permitting, MDA will initiate mapping of surveillance area (20 km radius from infected premise).</p> <p>MDA will notify Delmarva Poultry Industry (DPI) of the Global Positioning Satellite (GPS) coordinates in latitude and longitude of a HPAI positive non-DPI farm.</p> <p>DPI maintains the geospatial information on commercial flocks and will plot their farms within the 10 km radius. DPI will share their information with Incident Command as necessary.</p> <p>The Incident Commander may designate and assign separate surveillance group leaders for commercial and non-commercial surveillance.</p>	<p>Day 1</p>
<p>Movement Control Orders Issued</p>	<p>Controlled movement orders will be implemented upon confirmation of HPAI in affected or suspect premises and zones.</p> <p>Once a Control Area (IZ plus BZ) is established, quarantine and movement controls are implemented. MDA Incident Command will:</p> <p>Stop movement in and out of the Control Area and issue quarantine orders.</p> <p>Consider a 24-hour freeze of poultry movement upon detection of HPAI.</p> <p>Issue quarantine orders to backyard flocks within the control area.</p> <p>Make inquiries regarding HPAI. Re: clinical signs, promote biosecurity, and consider the collection of surveillance samples during farm visits.</p>	<p>Day 1-2+</p>

	<p>Communicate quarantine orders to DPI, who will communicate the order to commercial poultry producers.</p> <p>Issue and communicate orders for stop movement to allied industry members, including feed trucks, live haul, and chick placement with assistance from DPI and the commercial poultry industry</p> <p>Determine -- in consultation with USDA, industry, and other stakeholders -- when control area movement restrictions can be made</p> <p>Consider shut down of poultry sales</p>	
Continuity of business through movement permits	<p>When minimum biosecurity requirements are met, MDA may issue movement permits for poultry and product movement within and out of Control Area.</p> <p>Issue permits for the movement of poultry and poultry products from non-infected premises when biosecurity requirements are met.</p>	Day 2+
Increased Surveillance in Control Area	<p>MDA and commercial poultry companies will provide surveillance teams for testing non-commercial and commercial poultry premises in Control Area.</p> <p>Surveillance testing will be conducted in consultation with Incident Command.</p> <p>All persons that may be exposed to HPAI during surveillance will follow Health and Safety guidelines and standard operating procedures.</p>	Day 2+
Enhanced Surveillance Statewide	<p>Upon first detection of HPAI, any movement of poultry or poultry products in the state will require negative PCR test results and compliance with other biosecurity requirements as established by the Incident Command.</p>	Day 2+
Mass depopulation and euthanasia, potentially including preemptive culling	<p>The commercial poultry companies will depopulate infected commercial flocks under the supervision and authority of the Incident Command.</p> <p>DPI may also do preemptive culling of commercial flocks to reduce the risk of HPAI spread and must keep Incident Command apprised of commercial depopulation efforts.</p> <p>All persons exposed to HPAI, cleaning and disinfectant (C&D) chemicals, and ammonia will follow Health and Safety guidelines and Standard</p>	Day 1

	Operating Procedures.	
Effective and appropriate disposal of carcasses - procedures	<p>There are multiple options for disposal, including off-site burial, composting, incineration, digestion and rendering.</p> <p>Composting in house is the preferred method, but the circumstances of the outbreak may cause other disposal requirements to be considered.</p> <p>The State Veterinarian will select the appropriate disposal method, considering the facility location, type of housing, premises characteristics, and other situational factors.</p> <p>All persons that dispose of materials potentially infected with HPAI will follow Health and Safety guidelines.</p> <p>If movement of carcasses or other material is required for disposal, Incident Command must be notified to ensure that the movement is reviewed and approved.</p>	Day 2+
Compost Removal	<p>The State incident management system organization will ensure that compost procedures are followed and core temperatures are monitored daily.</p> <p>Incident Command will approve all compost removal and disposition upon information that suggest the compost meets all needed criteria including virus deactivation.</p> <p>Permits may be required based on the nature of the compost and the designation of the compost, therefore a Permitting Group may be formed within the Incident Command Structure.</p>	Day 14+
<p>Cleaning and Disinfection and Environmental Testing</p> <p><i>HPAI's has a high level of survival in both organic and inorganic materials, therefore aggressive cleaning and disinfection practices are required for control and eradication once compost and gross contamination have been removed.</i></p>	<p>All water, feed, nesting and ventilation equipment and house surfaces must be cleaned and disinfected, according to HPAI Cleaning and Disinfection SOP.</p> <p>After cleaning and disinfection is complete, the environment at the infected premises will be tested to ensure no virus is remaining.</p> <p>Once the environment is free of virus, repopulation of poultry houses and farms can be considered.</p> <p>All persons conducting cleaning and disinfection will follow Health and Safety guidelines.</p>	Day 14+

Repopulation	USDA-APHIS urges appropriate caution restocking premises and has issued criteria for restocking. Indemnification from USDA provides monies essential to the recovery of the State's poultry industry.	Day 22+
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Other agencies with responsibilities	
<p>USDA Animal and Plant Health Inspections Services, Veterinary Services (USDA):</p> <p>Preparedness Activities –</p>	<ul style="list-style-type: none"> • Provides guidance and standard operating procedures in Foreign Animal Disease (FAD) Prep documents. • Maintains the National Veterinary Stockpile. • Administers the National Poultry Improvement Program. • Conducts poultry surveillance and diagnostics. • Deploys Incident Management Team (IMT). • Maintains and develops scenarios using the North American Animal Disease Spread Model. • Conducts preparedness seminars, conference calls, and exercises. • Addresses trade restrictions.
<p>Maryland Emergency Management Agency and Local Emergency Management</p>	<p><u>Preparedness Activities</u></p> <ul style="list-style-type: none"> • Assist MDA in HPAI planning, resource and capability development, and exercises. • Incorporate the HPAI Response Plan into the State Emergency Operations Plan. • Facilitate the use of local and State Emergency Operations Centers (EOC) and the communications and situational awareness capabilities such as WebEOC and specially equipped response vehicles. • Within the Delmarva Emergency Task Force, work with state and local emergency managers in adjoining states to help coordinate HPAI preparedness and response. <p><u>Response Activities</u></p> <ul style="list-style-type: none"> • Conduct bridge calls with MDA and representatives from the relevant local jurisdictions affected for preparedness and response situational awareness. • Work with appropriate state and local agencies to recommend a course of action for the general public, affected businesses, etc. • Issue appropriate guidance and recommendations as necessary and prepare and disseminate appropriate public information.

Maryland Department of Health & Mental Hygiene (and local health departments)

Preparedness Activities

- Assist MDA in HPAI planning, resource and capability development, and exercises.
- Participate in the Delmarva Public Health Task Force meetings.
- Develop the plans, procedures, and resources for HPAI preparedness and response to include:
 - Disease prevention and exposure mitigation recommendations;
 - Public information and the means for distribution;
 - Health screening and surveillance of persons that will or have been exposed to HPAI.

Response Activities

- Conduct responder and poultry producer health screening pre- and post-exposure.
- Maintain situational awareness of the HPAI threat, including monitoring the number and severity of cases.
- Adopt and promote Center for Disease Control (CDC) and other federal recommendations.
- Issue recommendations on appropriate prophylaxis and personal protective equipment for responders.
- Conduct surveillance of the public and human medical health providers, including identification of trigger points and monitoring protocol based on trigger points identified.
- Notify human medical health providers.
- Conduct diseases identification for the public and human medical health providers.
- Implement monitoring plans.
- Conduct contact tracing for backyard flock owners, the public, veterinarians, and human health providers.
- Communicate and provide preparedness and response information regarding human disease to backyard flock owners, the public and human medical health providers.
- Provide technical assistance for fit testing.
- Coordinate partner and stakeholder involvement for human disease with backyard flock owners, the public and human health providers.
- Coordinate federal response and assets for human disease prevention and control.
- Conduct public health lab testing as needed.
- Issue guidance for prophylaxis and treatment, including anti-virals, vaccination, PPE, medical treatment protocols, isolation and quarantine, and access control for backyard flocks, the public, veterinarians, and human health providers.
- Open Strategic Health Operations Center (SHOC) Call Center if necessary to answer public calls.
- Coordinate any required mental health services through Department of Public Health, (SHOC), if activated, or Division

	<p>of Substance Abuse and Mental Health Crisis Risk.</p>
<p>State Police and Local Law Enforcement</p>	<p>Maintain situational awareness to maintain response capability. For instance, conduct short-term traffic control, escort surveillance teams onto premises within the control area, establish and maintain perimeter control to enforce the quarantine of infected premises and other premises as needed, etc.</p>
<p>Attorney General's Office</p>	<p>Maintain situational awareness to sustain response capability.</p> <p>Provide legal assistance regarding entry, taking of birds/property, surveillance and destruction.</p> <p>Provide legal consultation to state agencies as needed.</p> <p>Draft through completion Governor and Secretary of Agriculture Emergency Order.</p>
<p>Delmarva Poultry Industry</p>	<ul style="list-style-type: none"> • Assist MDA and other stakeholders in statewide HPAI planning,

<p>(DPI) and Commercial Poultry Companies</p>	<p>resource and capability development, and exercises.</p> <ul style="list-style-type: none"> • Conduct industry-wide planning, training, and exercising to ensure response capabilities. • Maintain the geospatial information on commercial flocks and promote use of map during a response. • Develop industry-wide personnel, equipment, and supply resources for HPAI response. • Advise integrated growers and suppliers of biosecurity best practices that may prevent, control or mitigate HPAI outbreaks. • Communicate and coordinate with other neighboring State Departments of Agriculture and all integrated poultry producers. • Assist in the distribution of DDA quarantine orders through proprietary communication channels. • Assist with implementation of behavior modification chart. • Report mortalities as per passive surveillance agreement with State Veterinarian (i.e., three deaths per thousand birds over three weeks of age for one day or longer). • Assist with development of flock plans and permitting for negative flocks that wish to move out of the Control Area. • Prioritize movement among premises on list of susceptible flocks based on age of flocks. • Plan for movement and permitting of test-negative flocks in and out of Control Area. • Staff surveillance teams for commercial flocks, to include epidemiological questionnaire for premises requesting to move in or out of control area, sampling birds for AI testing, and visual observation. • Within the ICS, assist with incident command and general staff leadership and functions including operations, planning, and logistics. • Depopulate infected flocks in accordance with the plan at the order of the State Veterinarian. • Compost depopulated flocks in accordance with the plan as directed by incident command. • Clean and disinfect houses in accordance with the plan as directed by incident command. • Comply with all legal orders of the State Veterinarian and USDA. • Comply with a stop movement or testing order issued by the State Veterinarian, USDA, or U.S. FDA as required by federal and state law. • Comply with the terms and conditions for a movement permit issued by the State Veterinarian.
<p>Department of Natural Resources (Planning and Operations)</p>	<p><i>Wild Bird Surveillance & Response</i></p> <ul style="list-style-type: none"> • Ongoing HPAI surveillance of waterfowl • Control of waterfowl on affected sites • Guidance on waterfowl control on farms, handling of hunter carcasses, sick wild bird calls

<p>Department of the Environment / Soil Conservation Districts / Maryland Environmental Service / Local Environmental Health / MDA Resource Conservation</p> <p>(Planning)</p>	<p><i>Poultry Carcass & Contaminated Material Disposal</i></p> <ul style="list-style-type: none"> • Consult on disposal alternatives/site evaluations <ul style="list-style-type: none"> ○ Burial ○ Compost ○ Landfill ○ Incineration • Approve disposal options – Waive regulations as appropriate under Emergency Declaration • Identify and recommend remediation methods and monitoring needs
<p>Department of Transportation (Planning & Operations)</p>	<p><i>Road Control</i></p> <ul style="list-style-type: none"> • Assist local public works with highway and local road control such as detours, signage • Provide process to waive truck requirements • Participate in state border checks if needed
<p>Department of General Services (Logistics)</p>	<p><i>Procurement</i></p> <ul style="list-style-type: none"> • Purchase of capital equipment needed (2nd Kifco Foamer for Depopulation) • Leasing of facilities if or as needed: <ul style="list-style-type: none"> ○ Incident command posts ○ Staging sites ○ Warehouses
<p>Department of Information Technology (Logistics)</p>	<p><i>Technical Support</i></p> <ul style="list-style-type: none"> • Assist MDA IT with IT resources if and as needed. • Assist with setting up facilities with wiring, e.g. for USDA or MDA line as needed. • Assist with mapping if and as needed.