Virginia Initial State Response and Containment Plan (ISRCP)

Prevention and Rapid Response for Avian Influenza (H5 and H7)

April 2016
Table of Contents

I. Introduction
   A. Overview
   B. Applicability
   C. Definitions

II. Prevention
   A. Biosecurity
   B. Routine Surveillance
   C. Disposal
   D. Emergency Management Disease Committee (EMDC), also known as the Virginia Poultry Disease Task Force (VPDTF)
   E. Diagnostic Resources

III. Rapid Response
   A. Quarantines
   B. Depopulation and Disposal
   C. Surveillance in an Outbreak
   D. Vaccination
   E. Quarantine Release
   F. Communicating with the Public During an Outbreak

List of Appendices
Appendix 1: Virginia Poultry Disease Task Force Biosecurity Guidelines and Audit Checklist
Appendix 2: VDACS Testing Requirements for Movement of Birds into Virginia
Appendix 3: VDACS Routine, Non-epidemic, In-State AI Surveillance Testing
Appendix 4: VDACS Enhanced AI Surveillance Testing (During Outbreak)
Appendix 5: VDACS Scale-Down AI Surveillance Testing (Post Outbreak)
Appendix 6: Open
Appendix 7: Open
Appendix 8: VPF Company Quarantine Requirements
Appendix 9: VDACS Transport of AI Positive Flocks to Landfill Requirements
Appendix 10: The Requirements for Transport of Infected Materials to Landfills
Appendix 11: VDACS AI Surveillance Testing During an Outbreak
Appendix 12: VDACS AI Vaccination Protocol
Appendix 13: VDACS Quarantine Release Requirements
Appendix 14: Open
Appendix 15: DEQ Requirements for Disposal of Infected Bird Carcasses in Sanitary Landfills
Appendix 16: Guidelines for In-House Composting Poultry Mortality as a Rapid
Response to Avian Influenza

Appendix 17: Information on Landfill Use Agreements with Charles City County and Waste Management Inc.

Appendix 18: Responding to non-H5/H7 Cases

Appendix 19: VDACS Quarantine Notice and Premises Virus Elimination Inspection Report

Appendix 20: Health and Safety Guidance for Avian Influenza Responders

Appendix 21: Protocol for HPAI in Virginia, Immediate Response Procedures

Appendix 22: Poultry Health Contacts

Appendix 23: Controlled Marketing Protocol

Appendix 23a: Controlled Marketing Checklist

Appendix 24: VDACS Diagnostic Resources

Appendix 25: HPAI Zone Movement Permits

Appendix 26: Commercial Flock Plan Template

Appendix 26a: Backyard Flock Plan Template

Appendix 27: VPF - Poultry Company Notification Protocol
I. Introduction

A. Overview
Avian influenza (AI) is a viral infection of birds caused by a group of viruses known as type A influenzas. AI viruses are classified as either highly pathogenic AI (HPAI) or low pathogenic AI (LPAI), based on the genetic features of the virus and the severity of disease in poultry. While most AI viruses are LPAI and usually result in mild or asymptomatic infections, HPAI viruses are associated with very high morbidity and mortality rates in poultry, up to 90 to 100 percent.

This prevention and rapid response plan (officially, termed the Initial State Response and Containment Plan (ISRCP)) was developed immediately following the outbreak of LPAI (H7N2) in the Shenandoah Valley of Virginia during 2002. The Valley outbreak infected 197 poultry flocks and 4.7 million turkeys and chickens. Since 2002, the Emergency Disease Management Committee (EDMC) also known as the Virginia Poultry Disease Task Force (VPDTF), comprised of industry and government representatives, has met at least quarterly to review and update this plan. The plan was designed to prevent and respond to the more likely scenario of another LPAI outbreak rather than an outbreak of HPAI. While the federal government will direct eradication of HPAI, the Virginia LPAI plan contains biosecurity and surveillance measures beneficial against LPAI and HPAI.

Furthermore, numerous mostly harmless strains of mild avian influenza exist throughout the world in wild bird populations, swine, etc, and despite strict biosecurity from time to time a commercial flock will become exposed to non-H5 or H7 subtype LPAI virus. With Virginia’s high level of surveillance for H5 and H7 LPAI, it is possible that routine testing will detect antibodies for a non-H5 or H7 virus. Response to non-H5 and H7 subtypes will be according to Appendix 18.

In 2014-15 HPAI infected numerous flocks in several states in the US, Virginia must be prepared to respond to an outbreak of HPAI in the Commonwealth or nearby states. A positive PCR diagnosis of H5 or H7 virus coupled with classical HPAI clinical symptoms with mortality of 30 percent or greater requires immediate (within 24 hours) depopulation and onsite disposal of the infected flock. Appendix 20 contains guidelines to protect the health and safety of flock depopulation teams responding to an HPAI outbreak. Appendix 21 contains additional protocols pertaining specifically to a HPAI outbreak.
B. Regional Applicability of this Plan

This plan shall apply to poultry producers and related facilities operating within Virginia unless producers are more closely associated with the poultry operations of an adjoining state. Poultry producers and operations on Virginia’s Eastern Shore may be managed in the event of an AI outbreak according to the Maryland and Delaware Initial State Response and Containment Plan (ISRCP), as those operations are routinely more closely associated with the Delmarva poultry industry. Some poultry producers and operations along the Virginia-North Carolina border may be managed in the event of an AI outbreak according to the North Carolina ISRCP, as some of those operations are associated with a poultry complex based in North Carolina.

C. Definitions

“Poultry” means all domesticated birds, including backyard poultry, used for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for the breeding these categories of birds, as well as fighting cocks used for any purpose. Birds that are kept in captivity for any reason other than those reasons referred to in the preceding paragraph, including those that are kept for shows, races, exhibitions, competitions or for breeding or selling these categories of birds as well as pet birds, are not considered to be poultry.

“Region” means a geographic area of the Commonwealth comprising a concentration of poultry reasonably segregated from other concentrations of poultry. Virginia contains five poultry regions: the Shenandoah Valley, Central Virginia, Southeastern Virginia, the Eastern Shore, and Southwestern Virginia.

Virginia Poultry Federation (VPF) – represents all sectors of the poultry industry, from farmers, to processors, to businesses that provide goods and services to the poultry industry. VPF’s mission is to promote a positive business climate for the poultry and egg industry in Virginia through effective government and public relations, youth programs, membership services, and educational activities.

II. Prevention

A. Biosecurity

Biosecurity is a critical component of a poultry company’s poultry health program. Following strict biosecurity guidelines can reduce the chances that
diseases such as avian influenza will come into contact with commercial poultry operations.

Each poultry company will maintain strict biosecurity programs governing all aspects of their operations. VPF will maintain industry-wide recommended biosecurity guidelines (Appendix 1). Poultry companies are encouraged to follow the VPF or equivalent guidelines or more stringent procedures as they deem prudent. Companies will conduct an internal or external audit of their biosecurity procedures on an approximately annually basis. VDACS will provide educational materials to small hobby producers as part of routine surveillance events such as fairs, poultry shows, auctions, swap meets, and other events where poultry is co-mingled. These materials will cover information concerning biosecurity and poultry diseases. Presentations are given to poultry clubs, 4-H clubs, and small hobby farmers throughout the state to increase their awareness of biosecurity practices.

B. Routine Surveillance

Movement into Virginia - Virginia poultry processors will not import into the state nor should VDACS permit poultry to enter the Commonwealth without a state-certified negative virus detection (Antigen capture Immunoassay [ACIA, eg Flu-Detect], PCR, virus isolation or other approved test) and/or antibody test (AGID or other approved test) for Avian Influenza subtypes H5 and H7 pursuant to VDACS animal admissions regulations, proclamations, and requirements issued pursuant to Chapter 60, Article 1, Section 3.2 of the Code of Virginia. The requirements are outlined in Appendix 2.

In State Surveillance – All commercial poultry flocks will be tested according to the VDACS Routine Non-epidemic AI Surveillance Testing (Appendix 3).

C. Emergency Management Disease Committee (EMDC), also known as the Virginia Poultry Disease Task Force (VPDTF)

The VPF has established the VPDTF, which will consist of VDACS, VPF, Virginia Cooperative Extension (VCE), Virginia Maryland Regional College of Veterinary Medicine, USDA APHIS, VDEQ, VDH, local emergency management, WVDA, Virginia Farm Bureau Federation, and at least one representative of each of the poultry companies. The VPDTF will meet at least quarterly to review and update contingency plans related to poultry health emergencies, including but not limited to, prevention, rapid response, and carcass disposal. The VPDTF will conduct exercises at a minimum of at least

1 Excepted from these requirements are poultry imported by poultry companies into Virginia for slaughter, which will fall under the In State Surveillance protocol discussed above and in Appendix 3.
once every five years. A list of participants is included in Appendix 22.

D. Diagnostic Resources

Appendix 24 contains a summary of VDACS diagnostic resources.

III. Rapid Response

As a matter of protocol, VDACS will immediately notify the relevant poultry company veterinarian or live production director of any non-negative test results to obtain additional samples (serum and swabs) for follow-up testing as referenced in Appendix 4. VDACS will also notify the USDA-APHIS Assistant District Director and the VPF, except when initial testing by antibody detection test shows an atypical reactor not clearly positive on at least one sample.

If VDACS notifies a poultry company of non-negative test results, the poultry company will visit the farm to determine the presence of any clinical symptoms and collect additional samples for further testing as needed.

All non-negative samples are sent to National Veterinary Services Laboratory (NVSL) for confirmation. NVSL is the only lab that can confirm H5/H7 test results.

When notified by VDACS of an initial non-negative test result, the VPF will notify the other poultry companies in accordance with Appendix 27. VPF, VDACS, and USDA will consult and coordinate conference calls/meetings as needed. (Note: If the case involves a WVA flock that is part of a VA poultry complex, the WVDA plan will apply and the VA task force will consult with WVDA prior to initiating communications activities in VA.)

Poultry companies will immediately notify VDACS of any non-negative test results not obtained from VDACS labs.

When the first positive AI flock is diagnosed by NVSL or sooner if determined necessary by the state veterinarian in commercial or noncommercial poultry, the poultry companies will, region-wide, cease all routine farm visits and immediately notify all growers in the region within 24 hours. VDACS, with guidance from VPF, will notify its list of vendors, utilities, and government agencies utilizing the VPDTF Biosecurity Notification List within 24 hours via the Virginia Poultry Disease Alert System and request immediate cessation of all non-essential farm visits. The Biosecurity Notification List will be maintained and reviewed by VDACS and VPF. The State Veterinarian, with input from the VPDTF, will consider appropriate restrictions on litter spreading.
A. Quarantines
The relevant poultry company will quarantine suspect AI positive farms per VPF Company Quarantine Requirements (Appendix 8). In addition, the relevant poultry company will quarantine farms with non-negative test results, exempting movement of eggs within the Commonwealth of Virginia pending their disinfection and proper biosecurity, pending test results of any samples sent to NVSL. VDACS will quarantine farms with confirmed positive flocks.

B. Depopulation and Disposal
1. Methods for depopulation and disposal should follow guidance in 9 CFR 56 (a) and (b).

When a flock is depopulated, proper disposal options include the following:

a. Rendering at VDACS-approved rendering facilities according to VDACS Transport of AI Positive Flocks to Rendering Requirements (Appendix 10). All routine grower visits to these facilities must cease immediately.

b. Onsite composting (Appendix 16 contains guidelines)

c. Incineration

d. Disposal at a permitted solid waste landfill in accordance with VDACS Transport of AI Positive Flocks to Landfill Requirements (Appendix 9) and the DEQ Requirements for Disposal of Infected Bird Carcasses in Sanitary Landfills (Appendix 15). All routine grower visits to these facilities must cease immediately. (The VPF has entered into an agreement with Charles City County landfill to receive carcasses from processor members of the VPF through September 30, 2018. Appendix 17 contains information about the agreement.)

e. Burial on the premises if a suitable site is available in accordance with state requirements.

f. Other approved methods

VDACS should work with the Virginia Department of Transportation to ensure the availability of an immediate variance on truck weight requirements for vehicles transporting AI-infected carcasses. VDACS will work with environmental agencies, state police, local law enforcement, municipalities involved in disposal issues.

2. Controlled marketing of LPAI H5 or H7 positive or exposed flocks may be considered as a method of depopulation. It must be approved by the State Veterinarian in consultation with USDA APHIS. Follow guidelines set forth in
9 CFR 56.5 (c). If controlled marketing is authorized, refer to Appendix 23 for management protocol.

3. Indemnity may be requested from USDA for depopulation and disposal of an infected or exposed poultry flock as well as cleaning and disinfection of premises, conveyances, and materials from those flocks. As per 9 CFR 56, a written flock management plan will be developed for all infected or exposed flocks. Sample templates for these required flock plans are found in Appendix 26 and Appendix 26a. Specific guidance on the procedures and documentation required to receive indemnity are found in the USDA Guidance: FY2016 HPAI Response: Overview of Finance & Administration Procedures.

C. Surveillance in an Outbreak
   1. Within 48 hours of any H5 or H7 positive diagnosis in commercial or noncommercial poultry and for a minimum of 21 days after the last diagnosed case, the poultry companies will implement, region wide, VDACS’ Enhanced AI Surveillance Testing (Appendix 4). Virginia regions are defined on page 5 of this plan.
   2. All poultry companies within a minimum of a 10-kilometer (6.2-mile) radius from Infected Premises and on any other high-risk contact farms will conduct Dead Bird Pickup Surveillance (Appendix 11) for 21 days from last positive diagnosis.
   3. Consistent and adequate biosecurity practices must be maintained while conducting surveillance to prevent the spread of the AI virus. It is important to keep all surveillance personnel, equipment, and vehicles clean and to follow the biosecurity protocols described in this response plan. For additional information on biosecurity, refer to USDA Biosecurity for Birds Guidelines.

D. Vaccination
   In the event of an outbreak, the VPDTF will deliberate on the use of vaccine and make recommendations to the State Veterinarian. The State Veterinarian will consider approving the use of vaccine according to VDACS AI Vaccination Protocol (Appendix 12) or another scientifically valid protocol. (Note: APHIS approval would need to be requested as well.) Companies using AI vaccines would be required to use Antigen Detection tests or have means to differentiate infected vaccinated birds such as Differentiating Infected from Vaccinated Animals (DIVA) vaccination strategies.
E. Quarantine Release
Cleaning and disinfecting of premises, litter handling, and releasing premises from state quarantine will be done according to VDACS Quarantine Release Requirements (Appendix 13).

F. Communicating with the Public During an Outbreak
Providing factual information to the public and small poultry producers through news media is an important aspect of responding to an outbreak of avian influenza. VPF will look for guidance to the AI Communications Response Manual developed by the National Chicken Council and the National Turkey Federation. Media inquiries should be directed to industry, state, and federal public information officers as necessary. Virginia Poultry Breeders Association and Virginia Cooperative Extension Service may be utilized to communicate AI events to hobby producers. No press release shall occur prior to communicating the news release with USDA APHIS Public Affairs or prior to confirmation of first H5H7 AI test result from NVSL, Ames, IA.

Public Information Officers:
Virginia Poultry Federation Hobey Bauhan, 540-433-2451
USDA APHIS Legislative and Public Affairs TBD, 301-734-7799
Virginia Department of Agriculture Elaine Lidholm, 804-786-7686
and Consumer Services
APPENDIX 1

VIRGINIA POULTRY DISEASE
TASK FORCE BIOSECURITY
GUIDELINES AND AUDIT
CHECKLIST

Adopted by Virginia Poultry Disease Task Force, November 6, 2015
Virginia Poultry Disease Task Force Biosecurity Guidelines and Audit Checklist

The checklist herein is provided to assist poultry companies in complying with the accompanying Biosecurity Guidelines recommended by the Virginia Poultry Disease Task Force and voluntarily adopted by this company. These biosecurity guidelines are minimum standards, and poultry companies are encouraged to go beyond these basic steps as they determine practical and beneficial for protection of poultry flocks.

(Note to Auditors: Use photography as appropriate to document findings.)

This audit applies to the following company, complex or facility:

Auditor: __________________________________________________________________

Company and Complex: __________________________________________________________________

Address: _________________________________________________________________________

Phone: __________________ Fax: __________________ Date: __________________

Accompanied by: ______________________ (Company Representative)

Title ____________________________________________________________________________
<table>
<thead>
<tr>
<th>Area</th>
<th>Guideline</th>
<th>Y/N</th>
<th>Recommendation</th>
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<tbody>
<tr>
<td><strong>Service Techs and Breeder Servicing</strong></td>
<td>Park a minimum of 50’ from first poultry house you approach.</td>
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<td>Setback for vehicles</td>
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<td>Windows</td>
<td>Keep windows closed on farms.</td>
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<td>Protective Gear</td>
<td>Service techs must put on clean coveralls, hairnets and boots (rubber or disposable) prior to entering poultry houses. Hand sanitation or washing must occur after removal of protective gear.</td>
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<tr>
<td>Foot Sanitation</td>
<td>Thoroughly clean and disinfect footwear at poultry house entrance. A second pair of boots upon house entrance is effective and recommended.</td>
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<tr>
<td>Disinfection</td>
<td>Clean and disinfect all equipment before entering and after exiting houses.</td>
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<tr>
<td>Hand sanitizer</td>
<td>Use hand sanitizer or protective gloves before entering and when exiting houses.</td>
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<td>Upper Respiratory</td>
<td>Blow nose into clean tissue and properly dispose before exiting farm or use N-95 mask.</td>
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<tr>
<td>Vehicle sanitation</td>
<td>Clean and disinfect vehicles inside daily.</td>
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<td><strong>Feed Mill</strong></td>
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<tr>
<td>Truck Washing</td>
<td>Wash trucks to remove mud and debris.</td>
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<td>Operational Onboard Disinfectant Sprayers</td>
<td>Onboard disinfectant sprayers with functioning spray nozzles with complete disinfection of all tires must be utilized on all feed trucks.</td>
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<td>Tire Disinfection</td>
<td>Spray tires with an approved disinfectant before entering and exiting farm.</td>
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<tr>
<td>Clean Cabs</td>
<td>Clean and disinfect the cabs on feed trucks with aerosol product daily. Spray the floors and pedals with approved disinfectant.</td>
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<td>Area</td>
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<tr>
<td>Hatchery</td>
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<tr>
<td>Boots Required</td>
<td>All drivers must wear boots (rubber or disposable).</td>
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<tr>
<td>Tire disinfection</td>
<td>Spray tires with an approved disinfectant before entering and exiting farm.</td>
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<tr>
<td>Egg truck sanitation</td>
<td>Clean and disinfect egg trucks daily.</td>
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<tr>
<td>Chick/poult delivery truck sanitation</td>
<td>Maintain cleanliness inside and outside of chick/poult delivery trucks.</td>
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<tr>
<td>Fly control</td>
<td>Spray insecticide inside trucks as needed to eliminate the transporting of flies from farm to farm.</td>
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<tr>
<td>Egg rack and tray sanitation</td>
<td>Wash and disinfect egg racks and trays before leaving hatchery.</td>
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<tr>
<td>Chick/poult box and delivery cart sanitation</td>
<td>Wash chick/poult boxes and delivery carts at least once a week.</td>
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<tr>
<td>Hatchery Waste Trucks</td>
<td>Clean and disinfect hatchery waste trucks going to rendering before returning to hatchery. (Load should be hauled at the end of the day. If a third party contractor is used, a written biosecurity program must be in place.)</td>
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<tr>
<td>Hatchery Waste Trucks</td>
<td>Sweep out the cab and spray pedals and floorboard with approved disinfectant. Spray insecticide as needed. (If a third party contractor is used, a written biosecurity program must be in place.)</td>
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<tr>
<td>Source Flock Monitoring</td>
<td>Eggs brought to hatcheries should be from source flocks participating in NPIP.</td>
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<tr>
<td><strong>Live Haul</strong></td>
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<tr>
<td>Equipment sanitation</td>
<td>Clean and disinfect all equipment as needed pursuant to company standard operating procedures.</td>
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<td><strong>Dead Bird Disposal</strong></td>
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<tr>
<td>Composting</td>
<td>Composting must be managed properly to ensure carcasses are covered to prevent exposure to wild animals and to maintain adequate temperatures for composting.</td>
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<tr>
<td>Incineration</td>
<td>Carcasses must be protected from exposure to wild animals.</td>
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<tr>
<td>Communal Disposal</td>
<td>Farms must not share disposal facilities.</td>
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<tr>
<td>Rendering</td>
<td>Rendering can be used for catastrophic mortality if approved by company management and requires complete C&amp;D at a commercial truck or car wash before trucks return to farm. In no case may vehicles transporting carcasses travel from farm to farm to pick up carcasses. (Note: If a vendor offers a service for transporting frozen carcasses from daily mortality from on farm freezer units to rendering, that service must prove to be a biosecure operation.)</td>
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<td>Area</td>
<td>Guideline</td>
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<tr>
<td><strong>Growers, Farm Managers, and Hired Help</strong></td>
<td>Establish an identifiable perimeter buffer zone around the poultry houses that maximizes separation between visitor parking and vehicular traffic and poultry houses. Grass must be kept short and tidy. Keep free of debris and stored equipment and manage to prevent nesting of birds or rodents.</td>
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<tr>
<td>Signage</td>
<td>Post “Biosecurity/Disease Control Area” signs at the perimeter buffer area.</td>
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<tr>
<td>Visitors</td>
<td>Restrict visitors from entering your poultry barns and do not enter other poultry facilities. No entry allowed in perimeter or poultry houses unless authorized by grower or poultry company.</td>
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<tr>
<td>Visitor Log and Instructions</td>
<td>Maintain a log of all visitors and provide written instructions on biosecurity procedures.</td>
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<td>Vehicle traffic</td>
<td>Restrict vehicles from entering the perimeter buffer unless they are C&amp;D’d before entering and after exiting.</td>
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<tr>
<td>Vendor/visitor guidelines</td>
<td>Ensure that vendors with an essential need to enter the perimeter buffer area and/or poultry houses follow all applicable biosecurity requirements.</td>
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<td>Restrict animals</td>
<td>Do not allow pets, livestock or wild animals to enter poultry houses. Consider keeping livestock out of at least a 10 foot buffer zone around poultry houses.</td>
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<tr>
<td>Wild birds</td>
<td>Keep wild birds out of poultry houses. Eliminate standing water wherever possible. Implement BMPS to mitigate presence of wild birds in any unavoidable standing water.</td>
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<td>Area</td>
<td>Guideline</td>
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<td>Growers, Farm Managers, and Hired Help (cont.)</td>
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<td>Water supplies</td>
<td>Water must come from deep wells or sources that have been treated to eliminate any potential contamination with live virus.</td>
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<td>Spilled feed</td>
<td>Any spilled feed must be cleaned up and disposed of immediately.</td>
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<td>Rodent and insect control</td>
<td>Practice rodent and insect control consistent with poultry company formal written vector control program.</td>
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<td>Workroom sanitation</td>
<td>Keep workrooms clean and personal sanitizing equipment clean and serviceable with fresh disinfectant.</td>
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<td>Other birds</td>
<td>No birds of any kind will be visited or kept by the grower or hired help.</td>
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<td>Sanitation of equipment</td>
<td>Equipment must be effectively sanitized between uses. Sharing of equipment is discouraged, but when necessary equipment must be cleaned and sanitized between each farm.</td>
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<tr>
<td>Clothing and footwear</td>
<td>Thoroughly clean and disinfect footwear at house entrance. A second pair of boots upon house entrance is effective and recommended. Growers must wear clean protective clothing or clothing dedicated to the farm prior to entering poultry houses.</td>
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<td>Area</td>
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<tr>
<td>General</td>
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<td>Biosecurity Officer</td>
<td>Poultry complexes and independent poultry farms will have a Biosecurity Officer capable of designing and implementing effective biosecurity procedures. The Biosecurity Officer must be an experienced poultry veterinarian or should consult with one. He or she is responsible for developing site-specific biosecurity plans and training all personnel. The Biosecurity Officer should have the authority to ensure compliance with biosecurity protocols and take corrective action as needed. He or she continuously adopts the plan and procedures to address changing risks.</td>
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<td>Training of employees and other personnel</td>
<td>The Biosecurity Officer ensures that farm employees, contract crews, truck drivers and service personnel are trained on site-specific biosecurity SOPs. Training materials should be provided in languages understood by employees. The site-specific biosecurity plans should be distributed to every employee, and training should be reviewed and documented to make sure every employee understands the concepts and procedures that apply to their area of responsibility.</td>
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</table>
Avoid other birds

Poultry company personnel and growers must avoid any contact with live bird markets and noncommercial poultry. Follow company procedures, including adequate sanitation, after hunting, hiking, golfing, or other activities with potential exposure to wild fowl. Companies will perform a documented assessment of service tech contact with other poultry or bird species at hire and annually.

<table>
<thead>
<tr>
<th>Area</th>
<th>Guideline</th>
<th>Y/N</th>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>General (cont.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector Control Program</td>
<td>Poultry companies must have a formal, written vector control program for contract growers and company owned farms to follow.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance</td>
<td>Poultry companies will comply with applicable disease surveillance protocols.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biosecurity training</td>
<td>Poultry companies will hold annual training on Biosecurity Program for service techs, hatchery personnel, feed mill personnel, live-haul personnel, and growers. Poultry companies will maintain documentation of training for auditor review.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Biosecurity audits</td>
<td>Poultry company will conduct audits semiannually using criteria herein. One of the audits must be conducted by an approved outside auditor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enhanced biosecurity</td>
<td>If there is an outbreak of a highly contagious disease refer to the prevention and rapid response plan and individual company policies for increased biosecurity measures.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 2
Avian Entry Requirements, as provided in regulation 2VAC5-141-60,

2VAC5-141-60. Avian Entry Requirements: Avian Influenza Requirements:

D. Poultry* shall not be imported into Virginia unless the following conditions are met concerning avian influenza (H5 and H7):

1. Requirements governing hatching eggs and certain day-old birds:

a. Hatching eggs shall originate from a breeder flock that participates in and meets the requirements of the "U.S. Avian Influenza Clean" program for chickens or "U.S. H5/H7 Avian Influenza Clean" program for turkeys of the National Poultry Improvement Plan.

b. Day-old chickens, day-old game birds, and day-old turkeys shall originate from a hatchery that only handles hatching eggs that originate breeding flocks that participate in and meet the requirements of the "U.S. Avian Influenza Clean" or "U.S. H5/H7 Avian Influenza Clean" programs of the National Poultry Improvement Plan.

c. A statement certifying that the breeder flock shipping hatching eggs and all breeder flocks supplying eggs to the hatchery shipping day-old chickens, day-old game birds, or day-old turkeys participates in and meets the requirements of the "U.S. Avian Influenza Clean" or "U.S. H5/H7 Avian Influenza Clean" programs of the National Poultry Improvement Plan shall be provided.

2. Requirements governing all other poultry:

a. The poultry is tested and found negative for avian influenza (H5 and H7) within 14 days prior to entry into Virginia or comes from a flock that has first been tested with negative results within 14 days prior to entry in Virginia as follows:

(1) Breeding chickens and turkeys: 20 birds per house minimum or for flocks of 500 or fewer, 20 birds minimum as long as all houses and pens on the premises are represented.

(2) Grow out turkeys for immediate slaughter at a slaughter establishment: 10 birds per house minimum for multi-stage farms and 10 birds per farm, with at least five birds per house, on single-stage farms.

(3) Broiler chickens less than or equal to 70 days of age for immediate slaughter at a slaughter establishment: 11 birds per premises with at least one per house.

b. The results of the tests for avian influenza are recorded and signed by an accredited veterinarian in the state of origin or are recorded on a report issued by a laboratory approved by any state or federal animal authority. Only agar gel immunodiffusion (AGID), enzyme-linked immunosorbent assay (ELISA), polymerase chain reaction (PCR), virus isolation, or other avian influenza test methods
approved by the state veterinarian and conducted in a laboratory approved by a state or federal animal health authority will be permitted.

E. Exemptions.

1. This chapter shall not apply to birds that are passing directly through Virginia to another state in interstate commerce.

2. This chapter shall not apply to birds other than poultry when the birds are kept properly under control by their owner or custodian when passing through Virginia to another state.

3. This chapter shall not apply to birds other than poultry brought into Virginia by a resident or by a resident of another state who intends to make his residence in Virginia except if brought into Virginia with the intent of offering it for public adoption, transfer, sale, trade, or promotional incentive.

4. This chapter shall not apply to birds other than poultry brought into Virginia for less than 10 days for the purpose of hunting or legal exhibition with no change of ownership.

F. This chapter shall not be construed to (i) permit the entry into Virginia of any avian species otherwise prohibited or restricted by any state or federal law, regulation, or directive; or (ii) contravene additional entry requirements imposed by any state or federal law, regulation, or directive.

"Poultry" means all domestic fowl, ratites, and game birds raised in captivity to include, but not be limited to, chickens, turkeys, ducks, geese, ratites, and game birds such as quail or partridge.

Statutory Authority

§§ 3.2-5902 and 3.2-6002 of the Code of Virginia.

Historical Notes

### APPENDIX 3
VDACS Routine, Non-epidemic, In-State AI Surveillance Testing

<table>
<thead>
<tr>
<th>Breeders</th>
<th>Grow Out</th>
<th>Sick Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacements</td>
<td>Layers</td>
<td>Sick Birds</td>
</tr>
<tr>
<td><strong>Turkeys</strong></td>
<td></td>
<td><strong>AGID on blood/eggs in conjunction with Antigen Detection tests such as RRT-PCR, ACIA, and Virus Isolation on oropharyngeal swabs</strong></td>
</tr>
</tbody>
</table>
| Pre-movement test options:  
  • AGID  
  • ELISA  
  • Antigen Detection tests such as RRT-PCR or ACIA (20 birds/house) | AGID, ELISA, PCR or ACIA Pre-Slaughter  
For single age farms (all in, all out)10 birds/farm with at least 5 birds/house; for multiple age farms 10 birds/house | **AGID on blood/eggs submitted for NPIP testing (minimum of every 90 days).**  
Pre-slaughter test options:  
  • AGID  
  • ELISA  
  • Antigen Detection tests such as RRT-PCR, or ACIA (20 birds/house) |
| **Chickens** | | |
| Pre-movement test options:  
  • AGID  
  • ELISA  
  • Antigen Detection tests such as RRT-PCR or ACIA (20 birds/house, include spiking males) | AGID, ELISA, PCR or ACIA Pre-Slaughter (11 birds/farm with at least one per house) | |
| **Sampling/Timing:** Sampling prior to movement of birds must be done no more than 14 days prior to movement (to slaughter or to another farm). For PCR, 11 oropharyngeal swabs per BHI tube. Any ELISA-serology positive sample must be confirmed by AGID and any ACIA positive sample by PCR. Positive AGID and antigen detection test results must be confirmed in a Federal Reference Laboratory, which will also determine the subgroup, and which will be the sole and final authority for declaring a flock positive for H5 or H7 AI. |
**Passive Surveillance:** Birds, older than 21 days of age, submitted to a VA diagnostic lab for any reason will be screened for AI using an approved antigen detection test. Flocks (older than 21 days of age) showing “elevated mortality”\(^2\) will be tested using an approved antigen detection test.

\(^2\) Elevated Mortality is defined as greater than 5/1000 mortality or greater than 5% drop in the 3 days’ prior average in egg production for two consecutive days. Antigen testing will be accepted per NPIP Program according to the Interim Rule.
## APPENDIX 4
**VDACS Enhanced AI Surveillance Testing**

<table>
<thead>
<tr>
<th>Breeders</th>
<th>Replacements</th>
<th>Producing Flocks</th>
<th>Grow Out</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Turkeys</strong></td>
<td>- <strong>Antigen Detection</strong> or <strong>Antibody Detection</strong> once a month – start at 10 weeks of age</td>
<td>- <strong>Antigen Detection</strong> or <strong>Antibody Detection</strong> every 2 weeks</td>
<td>- <strong>Antibody Detection</strong> on Blood at 10 to 13 weeks of age - <strong>Antibody Detection</strong> on Blood within 14 days prior to movement - <strong>Antigen Test</strong> Pre-Slaughter (within 72 hrs. of movement)</td>
</tr>
<tr>
<td><strong>Chickens</strong></td>
<td>- <strong>Antigen Detection</strong> or <strong>Antibody Detection</strong> once a month – start at 10 weeks of age</td>
<td>- <strong>Antigen Detection</strong> or <strong>Antibody Detection</strong> every 2 weeks</td>
<td>- <strong>Antibody Detection</strong> on Blood within 14 days prior to movement - <strong>Antigen Test</strong> Pre-Slaughter (within 72 hrs. of movement)</td>
</tr>
</tbody>
</table>

**Sample Rate:**
- **AGID Test**, 20 birds or eggs/house
- **Antigen test**, 20 birds/house

**Plus → Pre-movement Surveillance:** A flock must have a 72 hrs. pre-movement Antigen Test before moving birds off the farm for any reason (ie, for purposes of pullet placement, molting, slaughter in another state, etc.)

**Plus → Flocks with Clinical Symptoms**
- Blood Samples (20/house)
- Oropharyngeal Swabs (20/house)

Note: **Approve Antigen Tests** are the following:
- Antigen Capture Immunoassay (ACIA)
- RT-PCR
- Virus isolation

**Sick birds should be tested** at any time they are observed to be sick by collecting both blood samples and oropharyngeal swabs.
APPENDIX 5
VDACS Scale-down AI Surveillance Testing

<table>
<thead>
<tr>
<th>Breeders</th>
<th>Grow Out</th>
<th>Sick Birds</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Replacements</strong></td>
<td><strong>Layers</strong></td>
<td><strong>Antibody Detection</strong></td>
</tr>
<tr>
<td>&gt; Turks &lt;</td>
<td>&gt; &lt;</td>
<td>&gt;</td>
</tr>
<tr>
<td><strong>Antibody Detection</strong> monthly, starting at 10 weeks of age.</td>
<td><strong>Antibody Detection</strong> on Eggs or Blood every 4-6 wks</td>
<td><strong>Antibody Detection</strong> and <strong>Antigen Test Pre-Slaughter</strong> (minimum 20 birds/house)</td>
</tr>
<tr>
<td><strong>Antibody Detection and Antigen Test</strong> prior to movement (20 birds/house)</td>
<td><strong>Antibody Detection and Antigen Test Pre-Slaughter</strong> (minimum 20 birds/house)</td>
<td>&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Chickens</strong></th>
<th><strong>Chickens</strong></th>
<th><strong>Chickens</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antibody Detection</strong> monthly, starting at 10 weeks of age.</td>
<td><strong>Antibody Detection</strong> on Eggs or Blood every 5 weeks</td>
<td><strong>Antibody Detection and Antigen Test Pre-Slaughter</strong> (15 birds per farm, at least one bird per house, pre-slaughter)</td>
</tr>
<tr>
<td><strong>Antibody detection and Antigen Test</strong> prior to movement (20 birds/house, Include spiking males)</td>
<td><strong>Antibody Detection and Antigen Test Pre-Slaughter</strong> (minimum 20 birds/house)</td>
<td>&gt;</td>
</tr>
</tbody>
</table>

**Sampling/Timing:** Sampling prior to movement of birds must be done **no more than 10 days** prior to movement (to slaughter or to another farm). Pool up to 11 oropharyngeal swabs for PCR testing, and up to 6 oropharyngeal swabs for ACIA tests.

At least 11 samples are required per NPIP protocol but 15 pre-slaughter samples are required for the scaled-down surveillance period with at least one bird per house sampled. Each bird sampled must have both AGID and Antigen Test no more than 10 days before movement, concurrently if desired by the company.

**No movement of poultry** will be permitted without proper testing.
APPENDIX 6   Open
APPENDIX 7  Open
APPENDIX 8
VPF Company Quarantine Requirements

1. Poultry companies will place quarantines on any non-negative flocks. All poultry will remain on quarantined farm unless moved under a special permit.
2. Eliminate all service and other visits to that farm except dedicated service technician
3. Service technician cannot visit another farm for 48 hours after leaving quarantined premise
4. Specifically restrict movement of grower and family individuals and employees to essential visits only
5. Notify vendors of quarantined premise and cease nonessential visits
6. Establish Cleaning & Disinfection station at entrance to farm and C & D all vehicles entering and leaving premises
7. Feed deliveries
   7.1. Make delivery last stop
   7.2. Driver must not enter poultry house
   7.3. Driver must wear plastic boots unless climbing feed tanks
   7.4. Driver must use hand sanitizer before leaving farm
   7.5. Driver must bathe and launder clothing after leaving farm
   7.6. Truck must be thoroughly cleaned and disinfected after leaving farm
8. All dead birds should be disposed of on the farm in a biosecure manner
9. Eggs are exempted from quarantine on farm pending their disinfection and proper biosecurity.
Requirements for Transport of Infected Materials to Rendering

The following procedures must be followed to be in compliance with requirements for the transport of infected materials (birds, litter and etc.) to off-site locations. This process must be conducted under the supervision of a representative of the State Veterinarian. Upon completion of the load-out, the Requirements for Transport of Infected Materials to Landfills document Appendix 10 must be signed and retained by VDACS. Only rendering facilities approved by the State Veterinarian may be used for disposal. VDACS will consult with environmental agencies, transportation agencies and other businesses involved in disposal issues.

- If possible, the driver of the vehicle should remain in the vehicle with the windows closed. If the driver exits the vehicle they must meet the biosecurity standards for clothing and shoes.
- Birds must be depopulated prior to transport.
- Only leak proof trucks may be used to transport carcasses.
- The truck/container used for transport must be first lined with tough (minimum 6-mil thickness) disposable polyethylene plastic sheeting large enough to cover the carcasses and be sealed at the top. If leak-proof trucks with good seals are used, only one layer of plastic is required. If, in the judgment of the VDACS or USDA inspector on site, there is any reason to doubt the quality of the seals or ability to prevent leaks, two layers of plastic will be required. Rather than a full double-lining of plastic, an extra layer of plastic on the floor is adequate. The sheets may be secured to the sides of the container with double-sided tape to facilitate loading.

  The first layer inside the plastic sheet(s) should be at least one (1) foot of absorbent material (sawdust, straw, hay or litter) to absorb fluids.

  The extra layer of plastic sheeting on the floor is not to prevent leaks but to provide a slip surface to facilitate the offloading of the carcasses. It should always be used even if the containers are leak proof.

- Bio-Bags may be available from the USDA National Veterinary Stockpile and are an alternative method to transport HPAI carcasses to landfills.
- Material should be loaded into the container carefully to avoid spilling.
- At least one (1) foot of headspace should be left at the top of the container to allow for expansion of materials during transport.
- The top of the truck/container must be covered in such a way as to prevent material from blowing out at highway speeds. The material used to cover the top must be capable of being cleaned and disinfected.
All personnel involved in the load-out must observe strict biosecurity including disinfection of all clothing, footwear, vehicles and equipment that leave the farm.

After loading is complete, vehicles and equipment must be first cleaned to remove organic material then thoroughly sprayed with disinfectant, including tires, wheel wells and undercarriages of vehicles.

Trucks transporting this material must drive from the farm to the landfill/rendering plant without making stops in between.

Upon reaching the landfill/rendering facility to off-load, drivers should remain in the vehicle with the windows closed.

In the event that a driver must leave the vehicle, proper biosecurity procedures must be followed.

All vehicles and containers that transport infected materials to landfill/rendering facilities must be thoroughly cleaned and disinfected at the facility after unloading.

Receiving equipment and unloading areas at the landfill/rendering facility must be thoroughly cleaned and disinfected after unloading.

Any problems or breaks in these biosecurity procedures are to be reported immediately to the Office of the State Veterinarian or his representative (804-786-2483). Any deviations from this protocol require the approval of the State Veterinarian or his representative.
APPENDIX 10
Requirements for Transport of Infected Materials to Landfills document

VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF ANIMAL AND FOOD INDUSTRY SERVICES
OFFICE OF THE STATE VETERINARIAN

____________________________________ (Date)

Requirements for Transport of Infected Materials to Landfills

The following procedures must be followed to be in compliance with requirements for the transport of infected materials (birds, litter and etc.) to off-site locations. If litter is not sent to the landfill it must be composted in the house according to the previously published protocol. This process must be conducted under the supervision of a representative of the State Veterinarian. Upon completion of the load-out, this document must be signed and retained by VDACS. Only sanitary landfills approved by the State Veterinarian may be used for disposal.

☐ If possible, the driver of the vehicle should remain in the vehicle with the windows closed. If the driver exits the vehicle they must meet the biosecurity standards for clothing, shoes, etc. as outlined below.

☐ Birds must be euthanized prior to transport and sprayed with disinfectant.

☐ A disposable plastic sheet must be placed at the door of the barn that will be the pathway for loading out birds/litter. At the end of the load out this sheet should be folded up and deposited in the last landfill container.

☐ The truck/container used for transport must be first lined with tough (minimum 6-mil thickness) disposable polyethylene plastic sheeting large enough to cover the carcasses and be sealed at the top. If leak-proof trucks with good seals are used, only one layer of plastic is required. If, in the judgment of the VDACS or USDA inspector on site, there is any reason to doubt the quality of the seals or ability to prevent leaks, two layers of plastic will be required. The sheets may be secured to the sides of the container with double-sided tape to facilitate loading.

☐ Bio-Bags may be available from the USDA National Veterinary Stockpile and are an alternative method to transport HPAI carcasses to landfills.

☐ The first layer inside the plastic sheet(s) should be at least one (1) foot of absorbent material (sawdust, straw, hay or litter) to absorb fluids.

☐ Materials should be loaded into the container carefully to avoid tearing the plastic liner. The handling of carcasses should be kept to a minimum.

☐ At least one (1) foot of headspace should be left at the top of the container to allow for expansion of materials during transport.

☐ When the container is properly filled, the plastic liner should be closed over the top and sealed (taped), then sprayed with disinfectant.

☐ The top of the truck/container must be covered in such a way as to prevent material from blowing out at highway speeds. The material used to cover the top must be capable of being cleaned / disinfected.
All personnel involved in the load-out observe strict biosecurity including disinfection of all clothing, footwear, vehicles and equipment that leave the farm.

Vehicles and equipment must be first cleaned to remove organic material then thoroughly sprayed with disinfectant, including tires, wheel wells and undercarriages of vehicles.

Trucks transporting this material are required to travel via a route approved by the State Veterinarian and must drive from the farm to the landfill without making stops in between.

Upon reaching the landfill to off-load, drivers should remain in the vehicle with the windows closed.

All vehicles and containers that transport infected materials to landfills must be thoroughly cleaned and disinfected at the landfill after dumping the materials.

Any problems or breaks in these biosecurity procedures are to be reported immediately to the Office of the State Veterinarian or his representative (804-692-0601). Any deviations from this protocol require the approval of the State Veterinarian or his representative.

Farm or Owner Name: ___________________________  Company ___________________________

Premise ID (EMRS2) Number ______________________

VDACS Date  Owner/Poultry Co. Rep Date

Name of Trucking Company ___________________________ Truck Lic. Plate # ___________________________

Landfill Destination: ___________________________ Trailer Plate # ___________________________

Time(s) of departure of Truck(s):

Comments:
APPENDIX 11
AI Surveillance Testing During an Outbreak

**Dead Bird Pickup Surveillance** from flocks every week, Antigen Test on Oropharyngeal Swabs.

1. **Routine Sampling:** Once a week (or more often if so designated by the Incident Management Team) each farm within the control zone (minimum of 10 kilometer/6.2 mile radius from infected premises) should test birds from their daily mortality at a level of 11birds per house. For multiple house farms, all houses must be represented. If the mortality for a particular day does not meet the 11 bird per house minimum, this can be supplemented using dead birds from prior days or sacrificed birds.

   *Follow-up on non-tested premises:* Names of premises that have not provided a minimum of 11birds per house in a week will be provided to the companies. The companies will then obtain swab samples from these farms (11 birds per house) by Saturday of that week.

2. **Alternative Protocol:** For any flock, in lieu of the dead bird pickup surveillance (#1), the grower may collect 11swabs per house per week and leave the samples in the dedicated biosecurity mailbox for the facility. This must be a combination of any dead birds available that day plus swabs from enough live birds to come up to the target of 11 birds/house. These samples must be kept cool and submitted to the lab by the company or task force representative ASAP. The company must provide the names and the weekly sampling day of the flocks for which they are utilizing this alternative surveillance protocol to the Disease Surveillance Branch of the Incident Management Team. If the alternative option is not utilized then the dead bird surveillance protocol as listed above will apply at the discretion of the state veterinarian or the incident commander. The company or task force will deliver testing supplies to the grower in their dedicated biosecurity mailbox for the facility.

For both items #1 and #2 samples must be collected by company or “NPIP” trained task force approved representatives.
APPENDIX 12
AI Vaccination Protocol

Several different types of Avian Influenza vaccines may be available for use during an AI outbreak. Inactivated AI vaccines may be used, but these vaccines typically cause vaccinated birds to serologically react to antibody testing for AI. A more recently developed vaccine is the recombinant vaccine, which provides immunological protection to the poultry but does not result in a serologically positive antibody test. If this product is used, it will be used according to manufacturer and USDA directions.

Inactivated Avian Influenza vaccine is an oil-emulsion product that requires subcutaneous injection of individual birds. Since it is a killed product, the vaccine can be safely administered at any age and will not spread from bird to bird or from parent to offspring. However, maternal antibodies can be passed to progeny resulting in seropositive test results in progeny for a period of time.

1. A pre-vaccination AI test is required. Only flocks that are negative (based on thirty (30) randomly selected birds per house) by antibody detection on serum and PCR on tracheal swabs within the previous four days are eligible for vaccination.

2. The recommended age for initial vaccination is 6-10 weeks of age. Booster vaccination may be applied 4-6 weeks later. The withdrawal time prior to slaughter is 42 days (6 weeks).

3. The recommended dosage is 0.5 ml per bird. The vaccine should be warmed to room temperature before using. It is injected subcutaneously in the neck.

4. Homologous vaccination program
   a. One hundred (100) non-vaccinated birds (or 10% of flock, whichever is less) should be permanently identified with leg bands or wing bands and placed randomly throughout each poultry house to serve as non-vaccinated sentinel birds. All remaining birds will be vaccinated.
   b. The vaccination crews will follow strict biosecurity procedures.
   c. Vaccinated flocks will be monitored in the following manner:
      i. An entrance logbook must be maintained at each poultry house containing the date, time, name, company, purpose, and estimated duration of all visitors to the poultry house.
      ii. Any medication or vaccinations given to birds must be recorded.
      iii. All sentinel birds must be accounted for during the lifetime of the flock. Any morbidity or mortality in sentinel birds must be reported and samples submitted to the VDACS lab for follow-up diagnosis.
      iv. Thirty (30) serum samples from non-vaccinated sentinel birds will be tested for AI using AGID every two weeks.

5. Heterologous vaccination program
   a. All birds will be vaccinated with inactivated vaccine containing an N type different from the challenge virus.
   b. The vaccination crews will follow strict biosecurity procedures.
   c. Vaccinated flocks will be monitored in the following manner:
      i. An entrance logbook must be maintained at each poultry house containing the date, time, name, company, purpose, and estimated duration of all visitors to the poultry house.
      ii. Any medication or vaccinations given to birds must be recorded.
iii. Morbidity and mortality consistent with Avian Influenza must be reported and samples submitted to the VDACS lab for follow-up diagnosis.
iv. Thirty (30) serum samples from randomly selected birds will be tested for AI using a differential subtype specific test every two weeks.

6. Eggs may be moved from vaccinated flocks as long as the flock continues to test negative for AI according to the above protocol.
7. All birds on vaccinated premises are under quarantine for the life of the flock and may only be moved to slaughter under permit issued by the State Veterinarian.
8. If any non-vaccinated sentinel birds or heterologously vaccinated birds test positive for AI or have clinical signs consistent with AI:
   a. Tracheal swabs and serum will be collected from 30 sentinel birds (if present) and 30 vaccinated birds per poultry house.
   b. Any vaccinated flock determined to be infected with Avian Influenza will be depopulated immediately.
Litter Management

- After depopulation and unless outside decomposting has been approved, litter must remain in house for at least 14 days with curtains drawn and doors closed. Task Force personnel will apply USDA tape or seals on doors and windows at depopulation.
- Only permitted litter will be allowed to move. Litter meeting the criteria to be safely moved will be designated as permitted by IMT subject matter experts, according to Appendix 16.
- The current laws and regulations of the Commonwealth pertaining to poultry litter management should be followed.
- Prior to movement of litter off the farm of origin by truck, tarps must be tightly fastened over the edges of the truck bed so that litter cannot blow out. The exterior of the trucks must be swept clean and the undercarriage, wheels and wheel wells sprayed with disinfectant. This can be done with a hand sprayer.
- After delivering litter at the point of destination truck beds will be swept clean and disinfected. Disinfection can be done with a hand sprayer.

Cleaning and Disinfection of Houses

GENERAL GUIDANCE

- All previously highly pathogenic avian influenza (HPAI) Infected Premises must be both CLEANED and DISINFECTED. Cleaning and disinfection practices during an outbreak should focus on virus elimination in a cost effective manner.
- While traditionally wet cleaning and disinfection has been performed in many incidents, dry cleaning and heating of houses may be a preferred approach during a widespread HPAI outbreak. Any method(s) selected should consider the characteristics of the premises/houses and other factors which may impact the effectiveness of the virus elimination activities.

DEFINITIONS

- Cleaning: The removal of gross contamination, organic material, and debris from the premises, via mechanical means like sweeping (dry cleaning) and/or the use of water and soap or detergent (wet cleaning).
- Disinfection: Methods used on surfaces to destroy or eliminate HPAI through physical (e.g., heat) or chemical (e.g., disinfectant) means. A combination of methods may be required.
- Virus Elimination: Cleaning and disinfection measures conducted with the primary purpose to inactivate all avian influenza virus on the premises as cost effectively as possible.

OPTIONS-for premises that can be cleaned and disinfected (most premises):

**Step 1 CLEANSING OPTIONS**

- Dry Cleaning-Timing & method of dry cleaning must not aerosolize virus.

and/or
• Wet Cleaning

**Step 2 DISINFECION OPTIONS**
• Wet Disinfection with EPA Approved Pesticide **and/or as needed**
• Drying & Heating (100-120°F for 7 days). At least three days must be consecutive days drying and heating at specified temperature of the seven days total. **and/or as needed**

Fumigation or Alternative Science-Based Methods. If APHIS is paying for service, then APHIS must approve prior to application.

NOTE: A premises may require a combination of methods, but at least one choice must be selected from Step 1 and Step 2. The cleaning and disinfection options selected and implemented must be included as part of the approved cleaning and disinfection plan and approved by State Animal Health Officials and APHIS for reimbursement.

For premises that can’t be cleaned and disinfected:
In the unusual circumstance in which premises cannot be cleaned and disinfected, fallowing for 120-days—or a period recommended by the Incident Command—is prescribed. The length of this period will vary depending on ambient temperature and season. Fallowing should be reserved for premises that would need to be completely repaired or destroyed in order to be effectively cleaned and disinfected.

**Repopulation and monitoring after repopulation**

Birds will be allowed back on premise once quarantine is released. Flocks will be monitored for clinical signs and unusual mortality.
The following procedures will be followed to ensure safe receipt and disposal of Avian Flu infected materials (birds, litter, and etc.).

- All poultry carcass transport trucks arriving at the landfill will be directed away from the active working face to a specified area for poultry carcass disposal.
- A single trench, or multiple trenches, will be excavated into existing waste for carcass disposal. Excavated solid waste will be staged adjacent to trench for application to deposited carcasses.
- Trucks will back up to the excavated trench and deposit their load. Any carcasses that do not fall directly into the trench will be immediately placed into the excavation.
- Drivers and passengers must remain in truck while within the disposal area and until disinfection of the truck is completed.
- Deposited carcasses will be covered immediately with at least two feet of the excavated solid waste.
- Multiple trucks may off-load into the same excavated trench provided off-loading is performed immediately upon arrival at the landfill. Carcasses must be covered progressively when multiple trucks are off-loading in the same excavation.
- Once emptied, trucks will pull forward for disinfection. All vehicles will be pressure washed with a disinfectant approved by VDACS. The entire vehicle (excluding the interior of the vehicle cab) will be disinfected, including tires, wheel wells, undercarriages, and both the internal and external surfaces of truck/trailer beds, sidewalls, tailgates, and tarps.
- All disinfection spray and overspray will be directed to flow back into the excavated trench. No runoff from the disinfection will occur.
- Any equipment or personal protective equipment used to manage the carcasses or other contaminated material must be disinfected or disposed of at the end of the day or as appropriate. No material used to manage carcasses shall leave the disposal area without disinfection.
- The landfill must maintain an active bird management program at all times to eliminate the potential for wild bird exposure to poultry carcasses.

VDACS will consult with environmental agencies, transportation agencies and other businesses involved in disposal issues.
Summary of the Method

Composting is a biological heating process that results in the natural degradation of organic resources (such as poultry carcasses) by microorganisms. Composting has been successfully used throughout the United States for nearly two decades to control outbreaks of avian influenza. Composting can be effective with most bird types and poultry house designs. In 2007, composting was used to dispose of more than 2,000,000 pounds of carcasses on 2 turkey farms exposed to Low Pathogenic Avian Influenza (LPAI) in Virginia and West Virginia.

Microbial activity within a well-constructed compost windrow can generate and maintain temperatures sufficient to inactivate the avian influenza virus. Lu et al. (2003) reported the avian influenza virus (AIV) is sensitive to heat and can be inactivated in 10 minutes at 140°F (60°C) or 90 minutes at 133°F (56°C). The effectiveness of this virus inactivation process can be assessed by evaluating compost temperatures, the shape of the time and temperature curve, visual observation of carcass decomposition and the homogeneity of the compost mix.

Advantages of In-House Composting

- Contains the disease and limits off-farm disease transmission
- Limits the risks of groundwater and air pollution
- Inactivates pathogens in carcasses and litter
- Limits public concerns over disease exposure
- Composting equipment and supplies are readily available
Minimizes delays, environmental impacts and process disruptions due to severe weather (precipitation, temperature fluctuation, etc)

**Key Elements for Successful Composting**

- Windrows (6 to 8 feet high and 12 to 15 feet wide) are constructed on an adequate and uniform base layer (10 to 15 inches thick) of sufficiently porous carbon material;
- The base layer and windrow are not compacted with equipment;
- Ensure good carcass to carbon contact, by creating a core with a minimum 1:1 mix by volume of carcasses, carbon and other infected material (manure, egg shells, feed, etc.). With good carcass to carbon, the carcasses will break down during composting. **There is no need to grind, crush, or macerate the carcasses during the construction process!**
- Windrows should be constructed to ensure adequate distribution of moisture throughout; and
- The windrows are capped with carbon material (8 to 12 inches thick) to ensure that no carcasses are exposed and odors are minimized.

**Labor, Equipment and Supplies**

- Skilled equipment operators and general laborers
- Skid loader(s), pay loaders, dump trucks, rakes and scoops
- Carbon material such as sawdust, litter, wood shavings, active compost, seed & nut hulls, woodchips, or other carbonaceous materials
- Compost thermometers (36” or 48” stem length)

**Protocols**

**Prior to Windrow Construction**

- Ensure all personnel have appropriate personal protective equipment and training.
- Minimize ventilation in the poultry house.
- Raise poultry feeders and waterers to the ceiling so they are out of the way.
- Effective in-house composting must have a minimum of 1 and 1/2 pounds of carbon material per 1 pound of bird (based on a bulk density (mass per volume) of 30 lbs/cubic foot of carbon material).
- During the mixing process, use 1 pound of carbon per pound of bird in the mix. Use the remaining carbon material for a base layer and to cap the windrow.
- Determine total pounds (lbs.) of birds in the poultry house (Equation 1)

“Research indicates that Avian Influenza Virus (AIV) can be inactivated in 10 minutes at 140°F (60°C) or 90 minutes at 133°F (56°C) (Lu et al., 2003).”
Total lbs. of birds = Number of birds in house \( \times \) average weight of one bird in pounds (lbs.)

- Determine total pounds (lbs.) carbon needed (Equation 2)
  - Total pounds (lbs.) of carbon = Total lbs. of birds in house (from Equation 1) \( \times \) 1.5 lbs. of carbon per pound of bird

- Determine cubic feet of poultry litter in house (Equation 3)
  - Cubic feet of litter = Length of house (ft.) \( \times \) Width of house (ft.) \( \times \) Depth of litter (in feet)

- Determine pounds of poultry litter in house (Equation 4)
  - Pounds (lbs.) of poultry litter in house = Cubic feet (ft\(^3\)) of poultry litter \( \times \) Weight of a cubic foot of poultry litter (Average weight = 30 lbs; Range = 25 to 35 lbs.)

- Determine amount of additional carbon needed in cubic yards (Equation 5)
  - Cubic yards of additional carbon needed = \( \frac{(\text{Total lbs. carbon needed} - \text{Total lbs. of poultry litter in house})}{\text{weight per cubic foot of carbon material}} \) and then divided by (27) (Note: 27 cubic feet equals one cubic yard)
  - Average bulk density of woodchips, litter or wet sawdust = 30 lbs./cubic foot, while the average bulk density of dry sawdust = 15 lbs./cubic foot

- Mobilize depopulation, composting, and sanitation crews.

**Windrow Base Construction**

- Before in-house composting, clear carcasses and poultry litter from the middle of the poultry house down to the floor to create a 12 to 15 foot wide work area for construction of the windrow base(s). Distribute the carcasses and poultry litter material on either side of the middle pathway toward the sidewalls.

![Typical Free-Span House—Windrow Construction](image)

- Using the largest skid or pay loader possible, begin building the windrow base in the middle of the house.
• The windrow base should be constructed 12 to 15 feet wide to a depth of 10 to 15 inches.
  o Carbon material for the base should be porous and bulky enough to allow adequate air flow into and through the windrow. Ideal materials for the base include bark mulch or coarse wood chips. Other acceptable carbon materials include: straw, wood shavings, active compost, small grain hulls, and corn stover. Coarse woody material in excess of 2 inches in size should be avoided to ensure the resulting compost can be land applied as a soil amendment.
  o If these materials are not available, poultry litter may be used for the windrow base if it is sufficiently dry, porous and bulky.
  o To maintain the base’s porosity and to avoid compaction, do not drive equipment on the base.

![Cross Section of Compost Windrow](image)

**Construction of the Core of the Windrow**

• The windrow core should consist of a uniform mix of carcasses and poultry litter. The easiest way to get a uniform mix throughout the windrow is to scoop litter and birds together in each bucket load and add it to the windrow in a manner that thoroughly mixes the contents of the bucket. If additional carbon material is needed, the material should support air flow, microbial
activity and heat generation (i.e., composting). Suitable carbon-based materials include fresh wood shavings, active compost, poultry litter, straw, corn stover, and small grain hulls. In many instances, this carbon material may need to be blended with the existing litter and carcasses to be suitable.

- Any remaining feed -- that may be in feed lines or bins -- should be blended and mixed with the carcasses and poultry litter before windrow construction. Be sure to move infected material as little as possible.
- The mix of carcasses and litter should be added from both sides of the windrow. This allows the operators to reach the center of the windrow and to not compact the base with the tires or tracks of the loader.
- The windrow core should be constructed and added to the top of the base. A 1 foot buffer area and edge of base material should be maintained on each side of the windrow.
- The core should be dome or mound-shaped and of sufficient height to include the litter and carcass mix from the areas adjacent to the windrow. At this stage, the height of the windrow should not exceed 6 feet.
- Continue building the core until all of the litter and carcasses have been placed on the base. Most well-constructed windrows will run the full length of the poultry house, while also maintaining enough room for operating skid loaders and other equipment.

Capping the Windrow

- Prior to capping the windrow, move any carcasses that are near the edge of the windrow base and include them in the core of the windrow.
- Cap the windrow with 8 to 12 inches of a suitable carbon material. Carbon material for the cap should prevent flies from contacting carcasses; serve as an insulating blanket; and allow air exchange in and out of the windrows. This material may be finer in texture than the base. Suitable materials include poultry litter, small grain hulls, sawdust, new poultry house bedding and wood chips.
- Ensure the entire core is uniformly covered with cap material and no carcasses are exposed.
- Do not compact the windrow when adding cap material. Do not operate the loader’s tires or tracks onto the sides of the windrow while capping.
Temperature Monitoring

- Temperatures of the windrows should be monitored daily at 18” and 36” depths at 50 foot intervals the length of the windrow and charted. (See next page.)
- The temperatures of the windrows should reach and maintain average daily thermometer readings of between 120º F and 150º F for an extended period of time. These temperatures indicate thermophilic microbial activity within the windrow. The longer time these temperatures are sustained during the first 14 days of the composting process the quicker the carcasses will decompose and the virus be inactivated.
# COMPOSTING TEMPERATURE LOG

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Use the cells below to record the temperatures each day at 18 inches and at 36 inches.
Troubleshooting

Table below describes the most common composting problems and solutions.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Issue</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Excessive flies or odor</td>
<td>Exposed Carcasses</td>
<td>Add additional cap material</td>
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<tr>
<td>Leachate from windrow</td>
<td>Mixture too wet</td>
<td>Add additional carbon material, mix and cap</td>
</tr>
<tr>
<td>Temperature does not reach 131°F</td>
<td>Mixture too dry (&lt; 40% moisture)</td>
<td>Add water to pile, mix if necessary</td>
</tr>
<tr>
<td>Temperature does not reach 131°F</td>
<td>Mixture too wet (&gt; 60% moisture)</td>
<td>Add additional carbon material, mix if necessary</td>
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<tr>
<td>Temperature drops early</td>
<td>Not enough oxygen</td>
<td>Aerate or mix pile</td>
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</tbody>
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List of References


Additional Contact Information

1 Agricultural and Stormwater Program Manager, Virginia Department of Environmental Quality, Valley Regional Office, P.O. Box 3000, Harrisonburg, Virginia 22801 Phone: (540) 574-7840 Email: gary.flory@deq.virginia.gov
2 Agricultural Program Coordinator, Virginia Department of Environmental Quality, Valley Regional Office, P.O. Box 3000, Harrisonburg, Virginia 22801 Phone: (540) 574-7866 Email: robert.peer@deq.virginia.gov
3 Malone Poultry Consulting, 13713 Allen Road, Princess Anne, Maryland 21853 Phone (443) 944-6910 Email: malonepoultryconsulting@gmail.com
4 Extension Specialist, Community Viability, Department of Crop and Soil Environmental Sciences, Virginia Tech/Virginia Cooperative Extension, 2322 Blue Stone Hills Dr., Ste. 140, Harrisonburg, VA 22801 Phone: (540) 432-6029 Ext. 106. Email: ebendfel@vt.edu
5 Extension Agent, Agriculture and Natural Resources, Virginia Tech/Virginia Cooperative Extension, 600 North Main St., Ste. 100, Woodstock, VA 22664 Phone: (540) 459-6140 Email: raclark@vt.edu
APPENDIX 17
Information on Landfill Use Agreement

- The Virginia Poultry Federation (VPF) has entered into a five-year Agreement with Charles City County and Waste Management of Virginia, Inc., which sets terms under which processor members of the VPF may dispose at the landfill (owned by the County and operated by Waste Management) poultry carcasses lost to Low Pathogenic Avian Influenza, other diseases of poultry and natural disasters, including, but not limited to, excessive heat and flooding.
- The Disposal Agreement expires on September 30, 2018.
- Processor members of the VPF may obtain a copy of the Disposal Agreement from the VPF by calling 540-433-2451.
- The Disposal Agreement contains provisions concerning fees for disposal, compliance with laws, operating rules, indemnification insurance to be maintained by processors, and other terms and conditions.

3 This document is only a summary of key provisions contained in the Landfill Agreement. Processors should refer to the actual Landfill Agreement to determine all of its terms and conditions.
APPENDIX 18
Responding to Non-H5/H7 AI Cases

Numerous mostly harmless strains of mild avian influenza exist throughout the world in wild bird populations, swine, etc., and despite strict biosecurity from time to time a commercial flock will become exposed to non-H5 or H7 subtype LPAI virus. With Virginia’s high level of surveillance for H5 and H7 LPAI, it is possible that routine testing will detect antibodies for a non-H5 or H7 virus.

VDACS will immediately notify the relevant poultry company veterinarian or live production director of any non-negative test results and obtain additional samples (serum and swabs) for follow-up testing. VDACS will also notify the USDA-APHIS Assistant District Director and the VPF, except when initial testing shows an atypical reactor not clearly positive on at least one sample.

If VDACS notifies a poultry company of non-negative test results, the poultry company will visit the farm to determine the presence of any clinical symptoms and collect additional samples for further testing as needed.

When notified by VDACS of an initial non-negative test result, the VPF will notify the other poultry companies in accordance with Appendix 27. VPF, VDACS, and USDA will consult and coordinate conference calls/meetings as needed. (Note: If the case involves a WVA flock that is part of a VA poultry complex, the WVDA plan will apply and the VA task force will consult with WVADA prior to initiating communications activities in VA.)

Poultry companies will immediately notify VDACS of any non-negative test results not obtained from VDACS labs.

If a Non-H5H7 strain of AI is diagnosed the VPF will coordinate discussion among poultry companies, VDACS, and USDA officials to determine what, if any, additional surveillance should occur within close proximity to the index flock and what heightened biosecurity measures, including their duration, should be taken with regard to farm visits within close proximity and when transporting the flock to the processing plant.

Quarantines
The relevant poultry company will quarantine suspect AI positive farms per VPF Company Quarantine Requirements (Appendix 8). In addition, the relevant poultry company will quarantine farms with test results that are not clearly negative, exempting movement of eggs within the Commonwealth of Virginia pending their disinfection and proper biosecurity, pending test results of any samples sent to NVSL.
APPENDIX 19
VDACS Quarantine Notice and Premises Virus Elimination Inspection Report

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF ANIMAL AND FOOD INDUSTRY SERVICES

Notice of QUARANTINE

By virtue of the authority vested in the STATE VETERINARIAN OF VIRGINIA by §§ 3.2-6001, 3.2-6002, 3.2-6003, and 3.2-6005 of the Code of Virginia (1950), the following quarantine is hereby established this _____ day of ________________________, 20__, and is to remain in effect until withdrawn in writing by the State Veterinarian or his authorized representative.

Location of Premise or Area and Description of Animals
______________________________________________________________________________________

Basis for Quarantine _______________________________________________________________________________

Census of Animals on Premise _______________________________________________________________________

No ____________________________________ may enter or leave the premises or area herein quarantined during the effective period of this quarantine except by written permission of the State Veterinarian or his representative.

Other Specific Requirements of this Quarantine Order (§§ 3.2-6004, 6006, 6007, 6008 of the Code of Virginia (1950))
______________________________________________________________________________________

Any person who violates this quarantine or assists another to violate this quarantine may be convicted of a Class I misdemeanor, which carries a penalty of up to twelve months in jail or a fine of up to $2,500, or both (§ 3.2-6018 of the Code of Virginia (1950)).

Given under my hand this_____________________                 By Order of the State Veterinarian

day of_______________________________, 20__ Signed:_______________________________________

Copy and attachment acknowledged by: Title_________________________________________________

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF ANIMAL AND FOOD INDUSTRY SERVICES

This quarantine has fully accomplished its purpose and is hereby withdrawn.

By Order of the State Veterinarian

Given under my hand this_____________________ Signed:_______________________________________

day of_______________________________,20__ Title:_______________________________________

VDACS-03021                            AFIS (05/10)

COMMONWEALTH OF VIRGINIA
Premises Virus Elimination Inspection Report

Quarantine # _____________ Date: _______________

Premise ID# ____________________

Owner’s Name___________________________________________________________

Farm Name (if different)___________________________________________________

Address________________________________________________________________

City_____________________________________________ Zip ___________________

County _________________________________________________________________

Number of houses on premises ___________ Number of houses inspected ____________

_______ PASSED

_______ FAILED (See Remarks for reason or needed corrections)

Remarks:

- Keep litter in house for 2 weeks with curtains drawn and doors closed, no admittance.
- Only spread litter “on the farm” or at a VDACS approved site.
- If litter leaves the farm, it must be covered and travel by a route approved by VDACS.
- Litter should be spread no closer than 100 yards from the nearest poultry house.
- Removal of gross contamination, organic material, and debris from the premises or respective structures, via mechanical means like sweeping (dry cleaning) and/or the use of water and soap or detergent (wet cleaning). The goal is to minimize the remaining organic material so disinfection can be effective.
- Disinfection of surfaces to destroy or eliminate HPAI through physical (e.g., heat) or chemical (e.g., disinfectant) means. A combination of methods may be required with the primary purpose to destroy or eliminate all avian influenza viruses on the premises as cost effectively as possible.
- Houses must be cleaned and disinfected then inspected by VDACS prior to adding new shavings.
- All feeders and other equipment must be thoroughly washed to remove all organic residues before disinfection.
- Houses must remain open a minimum of 3 weeks between flocks.
- HPAI Post C&D Environmental Samples have been collected on premises and sent to NVSL.
- Final approval of the satisfactory completion of virus elimination is at the discretion of the VDACS or USDA inspector.

Disclaimer: The above listed poultry house(s) were inspected on this day. The approval of virus elimination procedures in no way guarantees that the virus no longer exists in these houses or precludes the likelihood of a replacement flock becoming infected or any future outbreaks of avian influenza on this premises. Please do not repopulate until you receive environmental sample tests results and receive approval from VDACS or the company.

________________________________     _____________________________
Inspectors Signature (Disposal Group)     Owner (or representative) Signature

___________________________________________
Authorized Verification Officer Signature (Case Manager)
APPENDIX 20
Health and Safety Guidance for Avian Influenza Responders

*This guidance is advisory in nature and informational in content. It is not a standard or a regulation, and it neither creates new legal obligations nor alters existing obligations.

This guidance may be implemented by the Incident Commander in the event of a suspected or confirmed avian influenza incident at a poultry facility.

The Occupational Safety and Health Act require employers to provide their employees with a workplace free from recognized hazards likely to cause death or serious physical harm.

Introduction:

A subcommittee of representatives from the Shenandoah Valley commercial poultry industry, the Virginia Department of Health (VDH), the Virginia Department of Agriculture and Consumer Services (VDACS) and local emergency management services convened in November of 2007 to develop guidelines for worker health and safety during an Avian Influenza (AI) response. This subcommittee was established because there were inconsistencies, concerning worker health and safety, amongst the agencies and companies that were involved in an incident of AI in turkeys in Virginia in the summer of 2007. The guidelines created by this subcommittee are based upon recommendations from the US Centers for Disease Control and Prevention (CDC) and Occupational Health and Safety Administration (OSHA), the United States Department of Agriculture (USDA) and the European Centre for Disease Prevention and Control (ECDC).

The following document provides practical guidance related to human AI infection prevention and control, including guidance related to training of workers, basic infection control, use of personal protective equipment, decontamination measures, vaccine and antiviral use, surveillance for illness, and appropriate evaluation of persons who become ill. This document will be updated as new information and guidance becomes available.

Background:

Avian influenza viruses are influenza viruses that infect birds. Although AI viruses do not usually infect humans, rare cases of human illness caused by AI have been documented. It is believed that “low path” H5/H7 AI viruses may rarely cause conjunctivitis or mild-respiratory symptoms in exposed humans, while certain strains of “high-path” AI may cause more serious illness and even death.

It is believed that most of the humans infected with an AI virus have contracted the virus after having direct or intimate contact with infected poultry or with contaminated surfaces. Person-to-person transmission of AI viruses is may be possible; however this route of transmissions appears to be extremely uncommon. A pressing concern is that humans can be infected with an AI virus and a seasonal, human influenza virus could act as a “mixing vessel” that allows genetic material to be exchanged between the viruses. This exchange could result in a novel virus that is spread easily from person-to-person. If a novel virus that is easily transmissible to human were to happen, a severe worldwide epidemic of influenza (pandemic) could ensue\(^{3, 4}\).
In order to protect individuals from being infected with an AI virus, and to guard against the subsequent risk of viral reassortment, the Virginia Poultry Disease Task Force has developed the following health and safety guidelines for AI responders.

**Targeted Human Populations:**
Any responder that has contact with infected birds, the products or specimens from infected birds or enters the hot zone of a premise contaminated with the AI virus. This can include:
- Poultry companies’ responders / field technicians
- Depopulation and disposal contract employees
- Government responders (including laboratory personnel)
- Contract growers and their families

**Procedures:**
The Safety Officer or his/her designee will be identified on site to assure compliance with the following procedures.

I. **Consent**
All responders who may be exposed to AI virus infected poultry or a premise contaminated with an AI virus will sign the “Responder Consent Form” (Attachment 1).

II. **Training**
A. All responders who may be exposed to AI virus infected live poultry or a premise contaminated with the AI virus, will receive safety training from their employer, with assistance from the Local or State Health Department as needed
B. All responders involved in the operation will be briefed on-site about the designated hot, warm and cold zones of the infected premise. These zones will dictate the jobs and procedures that can occur in these areas.
C. All responders will be provided with a worker fact sheet about low path or high path AI (Attachment 7, 8).

III. **Basic Infection Control**
A. By this document, and via team leaders, workers will be educated about the importance of strict adherence to, and proper use of, hand hygiene after contact with infected or exposed poultry, contact with contaminated surfaces, or after removing gloves. This includes all breaks (especially when smoking or snacking will occur), at lunch/bathroom breaks, and prior to leaving the affected farm.
   - Hand hygiene should consist of washing with soap and water for 10-15 seconds or the use of other standard hand-disinfection procedures as specified site safety supervisor.

IV. **Personal Protective Equipment (PPE)**
PPE will be worn in the hot zone. The level of PPE will be decided upon by the Incident Commander (Attachment 9). Disposable PPE will be incinerated on site or by a licensed medical waste provider. Non-disposable PPE, such as rubber boots and powered air purifying respirators, should be cleaned and disinfected appropriately after use.
A. **GLOVES:** Nitrile or latex disposable gloves shall be worn within the hot zone. Two pairs of gloves should be worn. Heavy-duty rubber work gloves may be worn over the nitrile gloves. These outer gloves must be able to be disinfected if they are going to be reused. These gloves will be removed in the warm zone. All gloves must be changed when they are torn or otherwise...
damaged. Gloves should be removed promptly after use and before touching non-contaminated items and environmental surfaces.

B. CLOTHING: Responders should wear disposable outer garments that are impermeable. Inexpensive clothing may be worn under this outer garment, because this clothing may be discarded. Clean clothes may be brought on-site and changed into after decontamination procedures are completed leaving the hot zone. Decontamination procedures are outlined in next section.

C. SHOES: Disposable shoes, protective shoe covers, or rubber or polyurethane boots that can be cleaned and disinfected must be worn to prevent the virus from being transported out of the hot zone.

D. EYE PROTECTION: Eye protection shall be worn to protect the mucous membranes of the responder’s eyes (eg. nonvented goggles, respirator with full face helmet). If goggles are to be worn during the response then goggles should be worn when the person is being fit tested with that particular respirator.

E. RESPIRATORS: Disposable particulate respirators (N-95 or higher) or powered air purifying respirators (PAPRs) or ½ face or full-face respirators with approved cartridges must be worn. A responder must pass a fit test initially and then annually in order to wear respirator. A pulmonary function test may be required by some employers. The appropriate respirators must be worn when using decontamination and sanitizing chemicals.

F. HAIR COVERS: Disposable head or hair covers should be worn in order to keep the workers hair clean.

V. Decontamination

A. Contaminated responders should remove and discard their protective clothing (except for the inner pair of gloves) before removing their respirators and goggles. After removing the goggles and the respirator, the inner layer of gloves can be removed and discarded. (If only one pair of gloves is worn, then the gloves should be removed after removing the coveralls, boots, and hairnet, but before removing the goggles and then the respirator). Hand hygiene should be promptly performed after removal of PPE.

B. All contaminated responders will shower at the end of the work shift, either on site at a decontamination trailer or via arrangements with local hotels (utilizing a dirty room for clothing removal and showering and a clean room for dressing in clean clothing to be worn home).

C. Clothing worn in the poultry house cannot be worn home; this includes shoes, undergarments, etc. Shoes do not have to be discarded if they are inside boots that are disinfected or covered by disposable shoe covers that remain intact. The Incident Commander and Safety Officer will decide if and when clothing must be discarded on site, or can be removed from the premises.

D. Contaminated responders should properly remove and discard, or disinfect, their PPE and wash their hands prior to eating, drinking, smoking or using the bathroom.

E. See Attachment 11 for Personnel and Equipment Decon Station layout, supply list, and procedures.

VI. Vaccine and Antiviral Drugs:

A. Responders that may have an exposure to AI contaminated materials should receive the seasonal human flu vaccine from their respective companies / physicians / local health departments in order to limit the opportunity for the AI virus to recombine with a human influenza virus.

If a responder refuses to receive the seasonal flu vaccine, he /she will not be allowed into the hot or warm zone. (Attachment 2).
B. Although there is no data on outcomes from prophylactic use of antiviral drugs, every precaution should be taken in keeping with current CDC guidelines for their use. Responders that have direct contact with infected poultry or surfaces contaminated with respiratory secretions or feces from infected birds may receive a prophylactic dose of oseltamivir daily for the entire time that they are in direct contact with infected poultry or contaminated surfaces, as well as for five to seven days following their last exposure (2,5). This guidance may vary depending upon the type of AI virus that is identified on the premise.

C. Antiviral drug treatment will be arranged by each company with their respective medical professionals. Individuals not affiliated with a company should consult with their primary care provider or their local health department (Attachment 3).

D. A declination form must be signed, and presented to the safety officer, if the responder refuses to take a recommended course of anti-viral medication (Attachment 2A). This person may not be allowed into the hot or warm zones.

E. There is evidence for and experience with prophylactic use of oseltamivir for as long as six weeks, but experience beyond that is limited. If the course of medication is going to extend beyond six weeks, the state health department and the CDC should be consulted. Canadian guidelines recommend that persons who have been on six weeks continuous oseltamivir prophylaxis discontinue use for a two week period prior to restarting the medication. During this period, persons should not work in an environment where they may be exposed to AI (8).

F. Influenza post exposure prophylaxis (PEP), when deemed necessary, should be instituted within 48 hours of the exposure and continue for a minimum of 7 days (8).

G. Post exposure prophylaxis will be arranged by each company with their respective medical professionals. Individuals not affiliated with a company should consult with their primary care provider or their local health department (Attachment 4).

H. Responders that did not receive prophylactic oseltamivir and present with symptoms suggestive of AI, may be treated with oseltamivir at 75mg twice per day for five days (8).

I. Responders under antiviral prophylaxis must adhere to general protective measures when they are working in a contaminated environment.

VII. Monitoring of Responders

A. The Center for Disease Control (CDC) and Animal and Plant Health Service (APHIS) places the utmost priority on employee health and safety. They recommend that all persons exposed to infected birds be monitored for illness during their exposure and for 10 days after their last exposure. When responding to and arriving at an infected site, all responders (private, contract and government) will need to check in and be monitored by the Safety Officer, State and Local Public Health Departments (S/LPHDs) working for the Incident Command. CDC and APHIS developed Public Health Monitoring Procedures for all Avian Influenza Responders (Attachment 5). All responders shall be aware of and compliant with the procedures outlined in this monitoring plan during and after their mobilization.

B. The monitoring plan consists of the following sections:
   1. Background and rationale for monitoring exposed responders
   2. Outline of the monitoring plan
   3. Monitoring mobilized and demobilized responders
   4. Prophylaxis and antiviral treatment for responders
   5. Introduction to responder monitoring via text messaging
   6. Criteria for implementing, suspending, and reinstating monitoring

C. The monitoring plan consists of the following attachments:
   1. Mobilization Instructions (to be given to responders upon beginning response activities)
2. Instructions to APHIS and Contractor Safety Officers (to be given to all Safety Officers involved in HPAI H5 response activities)
3. Demobilization Instructions (to be given to responders upon completion of response activities)
4. Process for Identifying Demobilizing Responders
5. Guidance For Evaluating Exposed Responders (for state and local health departments)

VIII. Demobilizing of Responders
A. Upon completion of response activities, responders shall check-out through their chain of command (Group Supervisor, Branch Director, Section Chief, Incident Commander) and Resource Unit Leader. All documents shall be turned into the Documentation Unit Leader at the Planning Section in the Incident Command Post. The Public Health Monitoring Procedures for USDA/APHIS Avian Influenza Responders (Attachment 5) also identifies the process and instructions for responders to demobilize while still being monitored. All responders shall be aware of and compliant with the procedures outlined in this monitoring plan throughout their demobilization period (10 days after the end of their mobilization).

IX. Post Exposure Survey
A. The state health department may request that the responders complete a voluntary post exposure survey after the incident (Attachment 6).

Control Zones:
Control Zones are established around dangerous situations in an attempt to lend order to the situation, prevent unauthorized access to the hazard, contain the agent, and provide functional boundaries for responders (Attachment 10).

- **Cold Zone**
  - This is a support zone. No contamination is present.
  - No PPE is necessary in this area.
  - Field administrative offices and clean equipment will be housed in this area.
  - Emergency equipment will be stored, if physically possible, at the interface of this area and the warm zone.

- **Warm Zone**
  - This is a contamination reduction zone. No contamination should be present in this area.
  - A moderate level of PPE is required in this area. PPE from the hot zone is removed in this zone.
  - Equipment and responders are decontaminated in this zone.

- **Hot Zone**
  - This is an exclusion zone. The contaminant is present in this zone.
  - The highest level of PPE that is necessary will be worn in this zone.
  - Responders who leave the hot zone must do so through the warm zone where they will be decontaminated.

Surveillance Zones:
With 48 hours of any H5 or H7 positive diagnosis in poultry, the poultry companies, the Virginia Department of Agriculture and the USDA will implement enhanced surveillance testing of commercial poultry flocks, as well as testing of backyard poultry flocks.
A. The personnel involved in this testing, should follow level D or C personal protective equipment requirements. The level will be decided upon by the Incident Commander, Safety Officer or the responsible poultry companies. If the responder is to wear a respirator, he/she may need to pass a fit test initially and then annually in order to wear an N95 or higher respirator. A pulmonary function test may be required by some employers.

B. The Bio-security measures listed in Appendix 1 of the “Prevention and Rapid Response for Avian Influenza (H5 and H7) in Virginia” document should be followed when entering / exiting a facility.

C. Personnel that may have exposure to AI contaminated materials should receive the seasonal human flu vaccine from their respective companies / physicians / local health departments in order to limit the opportunity for the AI virus to recombine with human influenza virus (6).

Literature Cited:

1. CDC. "Interim Guidance for Protection of Persons Involved in U.S. Avian Influenza Outbreak Disease Control and Eradication Activities" January 14, 2006. Downloaded from http://www.cdc.gov/flu/avian/professional/protect-guid.htm

2. OSHA. Protecting Employees from Avian Flu (Avian Influenza) Viruses. OSHA 3323-10N 2006 Downloaded from http://www.osha.gov


4. CDC. "Key Facts About Avian Influenza (Bird Flu) and Avian Influenza A (H5N1) Virus" June 30, 2006. Downloaded from http://www.cdc.gov/flu/avian/gen-info/facts.htm


References:

CDC. “Prevention and Control of Influenza, Recommendations of the Advisory Committee on Immunization Practices” July 2005. Downloaded from http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5408a1.htm
ATTACHMENT 1: Avian Influenza Responder Consent Form

Please read, circle appropriate response, and initial each item below. Sign form at bottom when completed.

________ 1. I understand/do not understand (circle one) that these guidelines provided by my employer are based on the recommendations of the Centers for Disease Control and Prevention (CDC) for maximum protection for workers exposed to AI virus and that these precautions are being taken for my personal protection against the extremely low risk of human infection with AI virus.

________ 2. I have/have not (circle one) completed and passed the “Avian Influenza Exposure Symptom Questionnaire” prior to being exposed to AI infected poultry or premises contaminated with AI virus.

________ 3. I have/have not (circle one) received the seasonal human flu vaccine within the past 12 months. I have or have not (circle one) received this vaccine at least two weeks prior to today/today. If I refuse vaccination I agree/not agree (circle one) to sign the declination form. I understand/do not understand (circle one) that this vaccination will not prevent human infection by AI viruses but is intended to minimize the likelihood of an AI virus from recombining with human influenza viruses.

________ 4. I have/have not (circle one) been offered antiviral medications and agree/do not agree (circle one) to take them as directed by medical professionals.

________ 5. I agree/do not agree (circle one) to wear the Personal Protective Equipment (PPE) recommended by the safety officer at all times during possible exposure to AI virus. This PPE includes but is not limited to: nitrile or latex disposable gloves (replace gloves immediately if torn or otherwise damaged), disposable clothing and foot wear or washable boots that can be cleaned and disinfected on site, eye protection, disposable particulate N-95 (or higher) type respirator, and a hair bonnet. I have/have not (circle one) been instructed on how to properly remove contaminated PPE to prevent cross contamination.

________ 6. I have/have not (circle one) been fit tested, pulmonary function tested and approved to wear an N-95 equivalent or higher respirator during the completion of physically strenuous activities.**Fit tests and PFT may not be required for certain respirators.**

________ 7. I have/have not (circle one) been instructed about the importance of strict adherence to and proper use of hand hygiene after contact with AI infected poultry or AI virus contaminated surfaces. After removing protective gloves I agree/do not agree (circle one) to thoroughly wash my hands with
soap and water for at least 10-15 seconds or to use other hand disinfection procedures as specified by the Safety Officer.

________ 8. I agree/do not agree (circle one) to shower at the end of the work shift in a decontamination unit on site or via arrangements with local hotels using a dirty room for clothing removal and showering and a clean room for dressing in clean clothing to be worn home. Under no circumstances will I wear clothing worn in an AI contaminated environment home: this includes shoes, underwear, etc.

________ 9. I agree/do not agree (circle one) to complete the attached health questionnaire on or about day 7 and again on day 14 after possible exposure to AI virus. If I answer “yes” to any question I agree/do not agree (circle one) to be referred to a healthcare provider and to follow their instructions for further examination and specimen collection as needed. I understand that my personal health information may be shared with appropriate county and state health departments and agree/do not agree (circle one) to follow additional directions from these agencies if requested to do so.

________ 10. I understand/do not understand (circle one) that a safety officer will be on site to answer any questions that I may have concerning these guidelines.

Printed Name: ______________________________ Date: _________________
Signature: ____________________________________________________________________
ATTACHMENT 2: Declination of Human Influenza Vaccine

Declination of Human Influenza Vaccine

I understand that due to my potential occupational exposure to avian influenza, I am being offered the seasonal human influenza vaccine. This vaccination may help to prevent the seasonal human influenza virus from recombining with the avian influenza virus potentially causing a new strain of influenza virus. I understand that by declining this vaccine I continue to be at risk of acquiring seasonal human influenza virus. If in the future I want to be vaccinated with seasonal flu vaccine, I can request the vaccination.

Name (Print): __________________________________________
Signature: ____________________________________________
Agency: ______________________________________________
Social Security Number (optional):________________________
Date: ________________________________________________

Reason for Declination:
☐ Medically contraindicated_______________________________
☐ Other:________________________________________________
ATTACHMENT 2A: Declination of Anti-Viral Medication

Declination of Prophylactic Anti-Viral medication

I understand that due to my potential occupational exposure to avian influenza, I am being offered prophylactic anti-viral medication. When taken as prescribed, this medication may prevent infection with, or illness from, an avian influenza virus. If in the future I want to receive anti-viral medication, I can request to speak with a health care professional.

Name (Print): __________________________________________
Signature: ____________________________________________
Agency: _____________________________________________
Social Security Number (optional): _______________________
Date: _________________________________________________

Reason for Declination:
☐ Medically contraindicated_____________________________
☐ Other:______________________________________________
ATTACHMENT 3: Anticipated Exposure Letter Template

MEMO
To: (Medical Provider)
From: County Health Department
Date:
Re: (patient name)

The person identified above is referred to you for consideration of prophylaxis therapy for potential exposure to laboratory confirmed Avian Influenza. The duties leading to this potential exposure will include:

________________________________________________________________

The duties stated will be performed on (mm/dd/yyyy-mm/dd/yyyy). This patient ( ) has ( ) has not been vaccinated with the current season’s influenza vaccine.

Please consider this patient for prophylaxis treatment with antiviral therapy.

If you have questions or need additional information, please contact the Communicable Disease staff at (phone number).
ATTACHMENT 4: Request for Post Exposure Prophylactic Treatment Template

MEMO
To: Medical Provider
From: County Health Department
Date: 
Re: (patient name)

The person identified above is referred to you for evaluation and follow-up due to their exposure to laboratory confirmed Avian Influenza. The exposure occurred on (date). The duties leading to this exposure included: ___________________

This patient ( ) has ( ) has not been vaccinated with the current season’s influenza vaccine.

Please consider this patient for post exposure prophylaxis treatment with antiviral therapy.

If you have questions or need additional information, please contact the Communicable Disease staff at (phone number).
Attachment 5: Public Health Monitoring Procedures for USDA/APHIS Avian Influenza Responders

This document provides guidance to local, state, and federal public health authorities on monitoring of persons exposed to highly pathogenic avian influenza (HPAI) H5 viruses during official United States Department of Agriculture Animal and Plant Health Inspection Service (USDA/APHIS) response activities in the United States. Response activities may include depopulation, disposal, and decontamination activities related to HPAI-affected birds, or other activities deemed by the Centers for Disease Control and Prevention (CDC) or USDA/APHIS to be HPAI response-related.

The purpose of this monitoring plan is to facilitate timely identification of possible human infections with HPAI H5 viruses in order to ensure that exposed responders receive prompt medical evaluation and treatment, if needed and to prevent potential secondary spread.

**Although this monitoring plan is directed toward HPAI outbreak responders, the guidance it contains may also be used to monitor persons who are not USDA or Contractor responders but have had exposure to birds infected with H5 viruses (e.g., workers or residents of farms where avian influenza H5 viruses have been identified in birds). State and local public health departments should identify exposed persons who fall outside of the “responder” category and monitor them according to the guidance contained in this plan.**

CDC recommends that all persons exposed to infected birds or virus-contaminated environments be monitored for illness for 10 days after their last exposure. State health departments should notify CDC immediately when testing any patient under investigation for HPAI H5 virus infection.

Table of Contents
Section 1: Background and rationale for monitoring exposed responders
Section 2: Outline of the monitoring plan
Section 3: Monitoring mobilized and demobilized responders
Section 4: Prophylaxis and antiviral treatment for responders
Section 5: Introduction to responder monitoring via text messaging
Section 6: Criteria for implementing, suspending, and reinstating monitoring
  Attachment 5-1: Mobilization Instructions (to be given to responders upon beginning response activities)
  Attachment 5-2: Instructions to APHIS and Contractor Safety Officers (to be given to all Safety Officers involved in HPAI H5 response activities)
  Attachment 5-3: Demobilization Instructions (to be given to responders upon completion of response activities)
  Attachment 5-4: Process for Identifying Demobilizing Responders
  Attachment 5-5: Guidance For Evaluating Exposed Responders (for state and local health departments)
Section 1: Background and rationale for monitoring responders

During HPAI H5 influenza outbreaks among birds in the United States in the spring of 2015, USDA/APHIS asked all responders involved in flock depopulation activities to self-observe for influenza-like illness (ILI) during their deployment and for 10 days following demobilization. If responders developed ILI, they were asked to contact a healthcare provider in their state of residence.

While self-observation for ILI is an important component of keeping responders and the public healthy, active monitoring of a broader set of signs and symptoms consistent with influenza (beyond traditional ILI symptoms) with early assistance of state and local public health departments may help ensure that exposed responders who may have HPAI infection are identified promptly and receive prompt medical evaluation and treatment. Active monitoring may also help prevent potential secondary spread of avian influenza viruses and should be implemented as resources permit.

During the spring of 2015, state and local public health departments (S/LPHDs) reported challenges with monitoring for illness in returning responders and some expressed a desire to be more involved in (or at least aware of) monitoring for illness in responders. S/LPHDs are responsible for monitoring the health of their residents and may wish to implement HPAI H5 monitoring protocols that are different from what APHIS implemented in the spring of 2015 (e.g., they may desire more frequent contact or more active monitoring).

For the above reasons, CDC and APHIS developed a monitoring plan for all responders (this includes USDA employees and persons contracted by USDA to assist with the response) involved in future outbreaks of HPAI H5 avian influenza in the United States. USDA/APHIS is responsible for ensuring that all responders are aware of and compliant with the procedures outlined in this monitoring plan during their mobilization. This plan supports increased engagement of S/LPHDs in the monitoring of responders for illness consistent with influenza. The objectives of this plan include:

- Effectively identifying illness in responders

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<sup>4</sup> Guidance on monitoring terminology

Active monitoring means that the state or local public health authority assumes responsibility for establishing regular communication with potentially exposed people, including checking to assess for the presence of signs or symptoms consistent with influenza, rather than relying solely on people to self-monitor.

Direct active monitoring means the public health authority conducts direct observation. The purpose of active (and direct active) monitoring is to ensure that, if people with epidemiologic risk factors become symptomatic, they are identified as soon as possible after symptom onset so that they can be rapidly isolated and evaluated. Direct active monitoring of persons exposed to HPAI H5 viruses may be employed if resources permit and the State Health Department desires this level of monitoring.

Self-observation means that people check themselves for signs and symptoms consistent with influenza. People who develop signs or symptoms while under self-observation should immediately self-isolate (separate themselves from others) and notify public health authorities.
• Ensuring prompt medical evaluation of ill responders and treatment with influenza antiviral medication as appropriate. To facilitate this, S/LPHDs should be made aware prior to a health care visit.
• Facilitating rapid RT-PCR testing of ill responders for influenza at a qualified public health laboratory with the capability to test for influenza A/H5.
• Ensuring that infection control precautions\(^5\) appropriate for novel influenza virus infections are implemented should a responder become ill and require healthcare. To facilitate this, S/LPHDs should be made aware prior to a health care visit.

Section 2: Outline of the monitoring plan
1. Upon activation, USDA/APHIS will provide all APHIS responders with mobilization instructions, including a description of the monitoring plan, a list of signs and symptoms consistent with influenza, and instructions to report symptoms to APHIS Safety Officers. Similarly, Contract companies will provide all contracted responders with mobilization instructions, including a description of the monitoring plan, a list of signs and symptoms consistent with influenza, and instructions to report symptoms to their Contract Safety Officers.
2. USDA/APHIS and CDC will train all APHIS Safety Officers on the procedures specified in the monitoring plan. USDA/APHIS and CDC will train all Contract Safety Officers on the procedures specified in the monitoring plan.
3. USDA/APHIS will provide all APHIS responders, at demobilization, with instructions for reporting illness to the state/local public health office of their state of destination (typically, the state of residence). Contract companies will provide all contractor responders, at demobilization, with instructions for reporting illness to the state/local public health office of their state of destination (typically, the state of residence). CDC Influenza Division will provide points of contact to be used.
4. USDA/APHIS will generate a daily report of demobilizing responders and give it to the CDC Influenza Division. Contract companies will also generate a daily report of demobilizing responders and give it to the CDC Influenza Division. CDC Influenza Division then distributes to appropriate State Public Health points of contact via Epi-X notification.
5. CDC Influenza Division will provide additional guidance to state and local health departments on how to follow up with any demobilized APHIS responder in their state as needed.

Section 3: Monitoring mobilized and demobilized responders
Many state and local health departments have extensive recent experience monitoring people for signs and symptoms of infectious diseases. CDC recognizes that states may have established protocols or preferred methods for monitoring persons exposed to HPAI H5

\(^5\) Note that standard, contact, and airborne isolation precautions are recommended for all persons under investigation for possible novel influenza A virus infection (including infection with HPAI H5 viruses) according to CDC guidance found at: http://www.cdc.gov/flu/avianflu/novel-flu-infection-control.htm.
infected birds or virus contaminated environments. Different monitoring protocols may be employed but all should include some component of active monitoring for a broad set of signs and symptoms that are consistent with influenza (beyond traditional ILI symptoms), if possible.

CDC recommends that all persons exposed to infected birds be monitored for illness during their exposure and for 10 days after their last exposure. State health departments, USDA/APHIS Safety Officers, and Contractor Safety Officers should share responsibility for evaluation, monitoring and subsequent management of persons who develop illness during their deployment. State public health departments are responsible for monitoring respondents after their deployment (i.e., “demobilized” during their 10-day post-exposure period). For responders who become ill during their deployment or during their 10-day post-exposure period, state health departments should assist with evaluation and facilitate prompt patient isolation (home isolation is acceptable for patients who do not require hospitalization for illness) and RT-PCR testing for influenza at a state public health laboratory as appropriate. States also should notify CDC immediately when testing any patient under investigation for HPAI H5 virus infection. During a responder’s deployment, the state in which the response activity is taking place should notify CDC if they are testing a patient under investigation for HPAI H5 virus infection; after a responder’s deployment (during their 10-day post-exposure monitoring period), the responder’s state of residence should notify CDC if testing a patient under investigation for HPAI H5 virus infection. Additional guidance on testing persons for avian influenza virus infections, infection control recommendations, and treatment and prophylaxis of persons who may be infected with avian influenza viruses can be found at [http://www.cdc.gov/flu/avianflu/healthprofessionals.htm](http://www.cdc.gov/flu/avianflu/healthprofessionals.htm).

For mobilized responders, USDA/APHIS Safety Officers or Contractor Safety Officers will monitor responders for illness and report to state or local health departments (see [Attachment 2a](#)).

For demobilized responders, CDC recommends that state and local health departments implement a monitoring protocol that includes at least telephone contact during the 10-day post-exposure period as follows. More frequent or in-person monitoring may be employed as resources permit. The following is a guideline for the minimum level of monitoring recommended for demobilized responders.

- **Day 1 of post-exposure period (or upon return to state of residence):** Establish phone contact to evaluate for illness consistent with influenza, describe parameters of monitoring plan, provide additional instructions to follow if illness manifests (as needed), and verify and exchange contact information.

  Determine and record during first phone conversation the nature of the highest level of exposure during the most recent mobilization. Exposures may be categorized into (at least) the following three levels:

  i. No exposure to infected birds or their environment (e.g., administrative duties in an Incident Command post).

  ii. Exposure to infected birds and/or their environment while wearing recommended personal protective equipment (PPE).
iii. Exposure to infected birds and/or their environment when not wearing recommended PPE (e.g., exposure prior to donning PPE or a breach in PPE during response activities).

- **Day 2 through Day 9 of post-exposure period:** Instruct responders to observe themselves daily for signs and symptoms consistent with influenza, and to contact state/local health department if signs or symptoms of influenza develop.
- **Day 10 of post-exposure period:** Establish phone contact to verify health status and inform responder that their monitoring period has concluded.

While monitoring of HPAI outbreak responders is ongoing, CDC is requesting the following information from state health departments:

- **Immediate** (telephone) notification of any respiratory specimen that tests positive for influenza A/H5 or is influenza A positive but unsubtypeable at the State Public Health Laboratory.
- A daily line list (emailed to aimonitoring@cdc.gov) with information describing all cases under investigation (CUIs) for HPAI H5 virus infection. CUIs would include all mobilized or demobilized responders, and all other persons exposed to infected birds or contaminated environments. CDC will provide the line-list format.
- **Weekly** aggregate counts (emailed to aimonitoring@cdc.gov) of mobilized responders and other persons in the health department’s jurisdiction who have been exposed to birds infected with HPAI H5 viruses or their environment. Demobilized responders should not be included in this count, as they will have been reported by the jurisdiction where they were mobilized.

**Section 4: Prophylaxis and antiviral treatment for responders**
Chemoprophylaxis is not routinely recommended for persons who used proper personal protective equipment (PPE) while involved in culling bird populations or while handling sick birds or decontaminating affected environments (including animal disposal). Decisions to initiate antiviral chemoprophylaxis should be based on clinical judgement, with consideration given to the type of exposure and to whether the exposed person is at high risk for complications from influenza. If post-exposure antiviral chemoprophylaxis is initiated, treatment dosing for the neuraminidase inhibitors oseltamivir or zanamivir (one dose twice daily) is recommended in these instances instead of the typical antiviral chemoprophylaxis regimen (once daily). For more information please see [Interim Guidance on Influenza Antiviral Chemoprophylaxis of Persons Exposed to Birds with Avian Influenza A Viruses Associated with Severe Human Disease or with the Potential to Cause Severe Human Disease](#).

If a responder develops signs or symptoms consistent with influenza during their monitoring period, prompt initiation of treatment with influenza antiviral medications is recommended while laboratory testing is pending. **Recommended treatment is two doses per day of oral oseltamivir or inhaled zanamivir for 5 days.** When warranted, antiviral treatment should be initiated as early as possible, even if more than 48 hours has elapsed since illness onset.
There should be a low threshold to initiate treatment in symptomatic responders while laboratory testing is pending. If laboratory testing is negative for influenza virus, treatment can be stopped. For more detailed information please see Interim Guidance on the Use of Antiviral Medications for Treatment of Human Infections with Novel Influenza A Viruses Associated with Severe Human Disease. For responders who require antiviral treatment or post-exposure prophylaxis, state and federal stockpiles of oseltamivir may be available for use by state health departments. To request Strategic National Stockpile (SNS) antiviral drug products or for more information, please contact dsns-request@cdc.gov or (404)-553-7675.

For specific dosage recommendations for treatment, or prophylaxis using treatment dosing, please see Influenza Antiviral Medications: Summary for Clinicians. Physicians should consult the manufacturer’s package insert for dosing, limitations of populations studied, contraindications, and adverse effects. If exposure was time-limited and not ongoing, five days of medication (one dose twice daily), from the last known exposure is recommended.

Section 5: Introduction to responder monitoring via text messaging
Currently, monitoring after demobilization is likely conducted by state and local health officials via telephone calls, which can be a slow and time-consuming process. CDC is exploring a nationally-centralized option utilizing two-way Short Message Service (SMS)/text messaging to aid in the process. Text messaging is a potentially more efficient method to elicit, manage, and act on any post-deployment influenza symptoms experienced by responders, and research studies have used text messaging to monitor for influenza symptoms with success. Participation in the text monitoring program would be voluntary for both the state/local health departments and the responders. Consenting responders residing in participating state and local municipalities would automatically receive one text message each day for 10 days asking whether or not the responder has symptoms consistent with influenza. State/local health officials would immediately be alerted to any affirmative answers and to any responders who fail to respond to two consecutive messages (i.e., two days of no response to the message). All information shared through the text messaging service would remain confidential and would not be shared beyond the appropriate state/local health officials.

Section 6: Criteria for implementing, suspending, and reinstating monitoring
Recommendations for implementing, suspending, and reinstating monitoring of responders exposed to birds infected with avian influenza H5 viruses will be informed by a CDC risk assessment. The risk assessment will include:
- An analysis of the magnitude and distribution of outbreaks in birds
- New scientific data that change the understanding of transmission (e.g., genetic, antigenic, or animal-model evidence of increased or decreased infectivity due to a change in the virus)
- Epidemiologic evidence of a change in transmission risk (e.g., identification of human cases thought to be the result of animal-to-human or human-to-human transmission)

CDC’s risk assessment will be guided by an Influenza Risk Assessment Tool (IRAT; see http://www.cdc.gov/flu/pandemic-resources/tools/risk-assessment.htm), which evaluates 10 risk elements associated with influenza viruses. These 10 elements can be categorized into the following three major areas: (i) properties of the virus, (ii) attributes of the population, and
(iii) the ecology and epidemiology of the virus. The IRAT is intended to evaluate influenza A viruses that are not circulating in the human population.

Possible contributing criteria for implementing HPAI H5 monitoring
• Identification of HPAI H5 viruses in poultry flocks in the United States

Possible contributing criteria for suspending HPAI H5 monitoring
• Cessation of bird outbreaks in the United States
• Absence of human infection among a specified number of exposed persons or after a specified period of time (e.g., one season of bird outbreaks)
• Genetic and antigenic evidence suggesting that H5 viruses remain genetically unchanged after a specified period of time (e.g., one season of bird outbreaks)
• Alternate mechanisms for evaluating responders for illness are developed, which are thought to be adequate
• A series of IRAT assessment scores which indicate the risk of a pandemic posed by these HPAI H5 viruses is low

Possible contributing criteria for reinstating HPAI H5 monitoring
• New genetic or antigenic evidence suggesting an increase in animal-to-human transmission risk
• Identification of human cases of infection with avian influenza H5 viruses in persons exposed to infected birds during response activities
• A change in the scope or number of HPAI H5 identifications in birds (e.g., more states affected, new bird species affected) after monitoring activity has stopped
• Identification of a novel reassortant HPAI H5 virus in US poultry flocks
Attachment 5-1: Mobilization Instructions (to be given to responders when beginning response activities)

The Animal and Plant Health Inspection Service (APHIS) places the utmost priority on employee health and safety. As a responder to animal health disease outbreaks, such as highly pathogenic avian influenza (HPAI) H5, you may participate in activities that expose you to diseased birds during depopulation, disposal, cleaning, and disinfection of affected flocks. Although the risk of illness due to HPAI H5 viruses is low and no human infections with these viruses have been found in the United States to date, it is essential that you follow all APHIS and Centers for Disease Control and Prevention (CDC) precautions and instructions carefully. Correctly follow all personal protective equipment (PPE), biosecurity, and Safety Officer (SO) operating guidelines while on duty. Do not hesitate to ask questions to ensure your safety.

1. Monitor your health carefully during your mobilization and for 10 days from the end of your mobilization.
   a. Look for any of the following signs and symptoms:
      - Fever or feeling feverish/chills
      - Cough
      - Runny or stuffy nose
      - Eye tearing, redness, irritation
      - Sneezing
      - Sore throat
      - Difficulty breathing
      - Shortness of breath
      - Fatigue (very tired)
      - Muscle or body aches
      - Headaches
      - Nausea
      - Vomiting
      - Diarrhea
      - Seizures
      - Rash

2. If you have any of the above signs or symptoms at any time during your deployment, please make the following contacts immediately. The below information will be completed on site.
   a. Safety Officer (name): _________________________________________
      i. Primary Phone Number: _________________________________
      ii. Mobile Phone Number: _________________________________
   b. If unable to contact your SO and need to seek medical attention, please give the following State/Local Public Health Department contact information to your physician and tell them you are an incident responder for the HPAI H5 virus outbreak in that state: State/Local Public Health Department Phone Number: _____________________________________________

   In an emergency situation, please seek medical attention immediately.
   a. Safety Officer (name): _________________________________________
      i. Primary Phone Number: _________________________________
      ii. Mobile Phone Number: _________________________________
   b. If unable to contact your SO and need to seek medical attention, please give the following State/Local Public Health Department contact information to your physician and tell them you are an incident responder for the HPAI H5 virus outbreak in that state: State/Local Public Health Department Phone Number: _____________________________________________

The state/local public health department may ask you to seek medical attention for a test that determines if you have influenza. The cost of the test to determine if you have influenza will be free as long as the state/local public health department asks you to get tested and arranges for the testing. Your personal health insurance should cover other medical costs.
related to the care of your illness. Federal employees may file a workers’ compensation claim anytime they perceive there is a work related injury or occupational illness. There must be medical documentation that supports that claim, otherwise it may be denied by the Department of Labor.

Thank you for your contribution to the HPAI H5 response and for your cooperation to help ensure your health and the health of other incident responders is monitored and well maintained. Your health and safety is our priority.
Attachment 5-2: Instructions to APHIS and Contractor Safety Officers (to be given to USDA/APHIS Safety Officers and Contractor Safety Officers involved in HPAI H5 response activities)

Objective: To protect incident responder health by ensuring proper follow-up if they exhibit symptoms consistent with influenza (flu) during their mobilization.

Background:
- This protocol is necessary to protect the health of HPAI H5 responders.
- Although the risk of illness due to HPAI viruses is low and no human infections with these viruses have been found in the United States to date, CDC considers newly-identified U.S. HPAI H5 viruses as having the potential to cause severe disease in people.
- The USDA Office of General Counsel has determined that Safety Officers and Safety Coordinators (SO/SC) can provide HPAI H5 incident responder information to support CDC recommendations and assist State and Local Public Health Departments (S/LPHD) officials.

Self-Monitoring Guidance:
- ROSS Dispatch will provide the Symptom Reporting Instructions for Responders: Mobilization to each responder with mobilization documentation. At the end of response activities and prior to their release, the Demobilization Unit Leader will provide each responder with Symptom Reporting Instructions for Responders: Demobilization.
- It is important that all responders understand the importance of self-monitoring as part of an effective surveillance and reporting process. Frequent reminders of the importance of self-monitoring should be disseminated through effective communication channels at each command post and should include a list of flu signs and symptoms.
- APHIS SO/SCs provide direct points of communication and contact with incident responders. These responders rely on their SO/SC to answer questions and should be available for assistance when responders report illness. It is the responsibility of the SO/SC to follow the protocol below when reporting suspected HPAI H5 infection responders to the state/local public health department (S/LPHD). Timely notification and coordination between health care facility staff, the S/LPHD, USDA/APHIS, and CDC is important to ensure appropriate medical care is received.

Symptom Reporting Process:
1. Concurrent with the beginning of HPAI H5 response activities, contact the state public health department (contact info provided in appendix) for the jurisdiction where HPAI response activities are occurring. Work with state public health officials regarding 1) location of the response, 2) approximate number of responders and 3) a point-of-contact at the state health department to notify in case signs and symptoms consistent with flu are identified among any responders. SO/SC should update SPHD with any change in the location of the response and significant changes in the number of responders mobilized in the state. SO/SC
should work with the state health department to identify healthcare facilities that can obtain respiratory specimens for H5 testing, taking into account responder health insurance/provider concerns.

2. Instruct incident responders to contact you, their designated SO/SC, if they have any symptoms consistent with flu during mobilization (list available below). Provide daily or frequent reminders to all responders of the importance of self-monitoring through effective communication channels and include a list of flu symptoms. Visually assess any responders you interact with for signs and symptoms of flu.

3. SO/SCs will follow the below reporting process for any HPAI H5 incident responder reporting new onset of the following signs or symptoms of concern, including:
   - Fever or feeling feverish/chills
   - Cough
   - Runny or stuffy nose
   - Eye tearing, redness, irritation
   - Sneezing
   - Sore throat
   - Difficulty breathing
   - Shortness of breath
   - Fatigue (very tired)
   - Muscle or body aches
   - Headaches
   - Nausea
   - Vomiting
   - Diarrhea
   - Seizures
   - Rash

4. The SO/SC will have the following initial communication with the HPAI incident responder:
   a. If this is a medical emergency, advise calling 911 immediately or going to nearest medical facility.
   b. Note the start and duration of the signs and symptoms the responder is experiencing.
   c. Note the activities the responder participated in during the previous 10 days and the specific locations of those activities.
   d. Note where the ill responder is currently staying and if they are traveling.
   e. The SO will notify incident responder that the SO is sharing his/her information with the S/LPHD for public health reasons so the S/LPHD can determine if testing for HPAI H5 flu is needed.
   f. Offer guidance on behaviors to prevent exposure of other individuals. Please see [http://www.cdc.gov/flu/takingcare.htm](http://www.cdc.gov/flu/takingcare.htm) for more information.

5. The SO/SC will notify the appropriate S/LPHD as soon as possible (before close of business that day) that a responder has reported symptoms consistent with flu. The SO/SC will work with the employee, S/LPHD and health care facility to ensure appropriate medical care taking into account health insurance concerns. The S/LPHD will determine if HPAI H5 flu testing is needed and notify the health care facility.
   o See Appendix for S/LPHD contact information.
   o Note – If SO/SC is unaware of appropriate S/LPHD to contact, please contact CDC Influenza Division at 404-639-3747 or after hours contact the CDC EOC at 770-488-7100.
6. The SO/SC will have a follow-up conversation with the ill H5 responder:
   g. Provide directions to agreed healthcare facility.
   h. The SO/SC will inform the responder that medical care costs may vary depending on their personal health care plan and the local health care facility. As long as the S/LPHD was notified of symptoms and testing has been authorized, the cost for the flu diagnostic test will be provided at no cost. Other costs associated with routine clinical care of the illness should be covered by the responder’s personal health insurance.
   i. If the H5 responder returns to his/her current location after receiving medical care, they should follow the advice of their physician and S/LPHD to reduce spread of any infectious disease. If a responder is being tested for influenza H5, no travel should occur until H5 test results are known.
   j. Emphasize the importance of compliance for ensuring the health of the ill responder and others.

7. The SO/SC will notify the following persons of the reported illness and whether HPAI H5 flu testing was authorized by the S/LPHD:
   k. HPAI ICG Health & Safety – Deborah Nelson (515 450-6096) or Steve Karli (515 708-5018)
   l. In turn, HPAI ICG Health & Safety will notify Dr. Richard Walker, ICG One Health and CDC at aimonitoring@cdc.gov.
      i. Dr. Richard Walker, APHIS MD [Thomas.R.Walker@aphis.usda.gov]
      ii. Dr. Tom Gomez [VS.OHCO@aphis.usda.gov]

8. The SO/SC will notify the other SO/SCs in the same incident response unit/location of the reported illness to raise awareness of a potential human infection.
Attachment 5-3: Demobilization Instructions (to be given to responders upon completion of response activities)

Thank you for your contribution to the Animal and Plant Inspection Service’s (APHIS) response efforts. APHIS places the utmost priority on employee health and safety, and as an incident responder to the highly pathogenic avian influenza (HPAI) H5 outbreak, you may have participated in activities that exposed you to diseased birds during depopulation, disposal, cleaning, and disinfection of affected flocks. Although the risk of illness due to HPAI viruses is low and no human infections with these viruses have been found in the United States to date, it is essential that you follow all APHIS and the Centers for Disease Control and Prevention (CDC) precautions and instructions carefully and monitor yourself for any signs or symptoms of illness for 10 days after the end of your mobilization. Early identification and treatment of a person infected with HPAI H5 virus is important for appropriate response measures and to prevent possible spread to others.

Please follow the instructions below carefully:

1. Monitor your health carefully for **10 days** from the end of your mobilization. Look for new onset of any of the following signs and symptoms:
   - Fever or feeling feverish/chills
   - Cough
   - Runny or stuffy nose
   - Eye tearing, redness, irritation
   - Sneezing
   - Sore throat
   - Difficulty breathing
   - Shortness of breath
   - Fatigue (very tired)
   - Muscle or body aches
   - Headaches
   - Nausea
   - Vomiting
   - Diarrhea
   - Seizures
   - Rash

2. If you have any of the above signs or symptoms at any time during the 10 days, please contact your state/local public health department **immediately**. Please see attached list for contact information for your state/local public health department.

   **In an emergency situation please seek medical attention immediately.**

3. The state/local public health department may ask you to seek medical attention for a test that determines if you have influenza. The cost of the test to determine if you have influenza will be free as long as the state/local public health department asks you to get tested and arranges for the testing. Your personal health insurance should cover other medical costs related to the care of your illness. Federal employees may file a workers’ compensation claim anytime they perceive there is a work related injury or occupational illness. There must be medical documentation that supports that claim, otherwise it may be denied by the Department of Labor.
4. In addition to your self-monitoring, your contact information has been shared with state/local public health department officials so that they may contact you by phone or email to verify that you are healthy. Contact frequency will vary by the home state of the responder and could be as frequent as daily.
   a. Your contact information will not be shared outside of official public health channels.
   b. Any information you provide during this contact will be strictly confidential.
   c. Your contact information will be removed once your 10 day monitoring period has been completed with no reported illness.

Again, thank you for your contribution to the HPAI H5 response and for your cooperation to help ensure your health and the health of other incident responders is monitored and well-maintained. Your health and safety is our priority.
Attachment 5-4: Process For Identifying Demobilizing Responders

Process:

- APHIS Dispatch (ROSS) Unit will export a daily demobilizations spreadsheet at 1100 Eastern Time.

- The report will include APHIS employees (and anyone else we have information on) demobilized during the previous 24 hours.

- That report will contain at least the following information:
  - Report Date (This will be in the naming convention used for the report)
  - Organization
  - Incident:
  - Last Name
  - First Name
  - Incident Site (unique identifier which may include the State)
  - Group assigned (IMT section)
  - Position assigned
  - E-mail address
  - Primary Phone Number
  - Mobile Phone Number
  - State
  - City
  - County
  - Zip Code
  - Name (First and Last)
  - Report Date (Mobilization date)
  - Release Date (Demobilization date)

- APHIS Dispatch (ROSS) Unit will email a password protected report to the CDC Influenza Division at aimonitoring@cdc.gov by Noon Eastern Time each day.

- CDC Influenza Division will distribute sections of the list to appropriate State Public Health points of contact.
Some state health departments have requested more guidance on how to determine whether an exposed responder should be tested for possible HPAI H5 influenza. All potentially-exposed responders who exhibit signs or symptoms consistent with influenza meet the definition of a case under investigation (CUI) for HPAI H5 virus infection and should be tested. Since the risk of animal-to-human transmission of domestic HPAI H5 viruses is currently considered to be low, and the list of signs and symptoms provided by CDC is broad, this may result in testing many people for influenza, the vast majority of whom will likely test negative for HPAI H5 virus infection. This may create a considerable burden on state and local public health resources and lead to a desire to limit testing to persons deemed to be “at greatest risk”.

If resources permit, we recommend that all exposed responders exhibiting signs or symptoms consistent with influenza be tested. If demand for testing exceeds local public health capacity, then prioritizing CUIs for testing may be considered. Unfortunately, CDC cannot offer a prioritization algorithm to address all CUIs; states must use their best judgement and consider each CUI on a case by case basis. However, here we describe some guiding principles.

- We recommend a low threshold for testing persons exposed to birds infected with HPAI H5 viruses or potentially-contaminated surfaces and environments. No human infections with these H5 viruses have been identified, and the clinical manifestation of human infection with them is therefore unknown. Human infection with these avian influenza viruses may share characteristics of human infection with other avian influenza viruses (e.g., H7N9, HPAI H5N1), and a wide range of clinical presentations may be possible, including mild clinical illness such as conjunctivitis only or self-limited influenza-like illness.

- If prioritizing CUIs for testing, you may want to consider both (i) a patient’s clinical signs and symptoms and (ii) the nature of his or her exposure. The signs and symptoms listed in the monitoring plan list more classic respiratory illness signs and symptoms in the left column, and other signs and symptoms in the right column. New onset or worsening of any sign or symptom from the left column should prompt testing for influenza. A CUI with an isolated sign or symptom from the right column (e.g., headache only, generalized fatigue, diarrhea only) may be of lower priority for testing, depending on the nature of the exposure. Direct and/or prolonged exposure (e.g., a breach in PPE that was not discovered until the end of an 8-hour culling shift) may mean that testing should be prioritized, even in CUIs with an isolated sign or symptom from the right column. The presence of multiple signs or symptoms from the right column may also mean that testing should be prioritized.
The comments on this page (Attachment 5) are for use by public health authorities only and should not be provided to responders self-monitoring for illness after demobilizing. Responders and APHIS and Contractor Safety Officers should still notify public health if they experience any of the signs or symptoms on either column of the list.

CDC will continue to evaluate guidelines for testing exposed persons as more information on the epidemiology and potential for transmission of these HPAI H5 viruses from animals to humans becomes available.

If you have questions about whether testing is appropriate for a CUI and wish to discuss with CDC, please call the Influenza Division at 404-639-3747 during normal business hours and the CDC Emergency Operations Center at 770-488-7100 after hours.

HPAI H5 bird outbreaks may occur during the peak of the influenza season in the United States, and many responders may become ill with seasonal influenza. This could result in a large number of people who would qualify for testing. These persons should be tested for influenza, as people with seasonal influenza who present with "classic" ILI signs and symptoms are exactly the people who should be tested for HPAI H5 virus infection under this monitoring plan. Without RT-PCR testing, it is not possible to determine whether a responder with ILI has a seasonal or avian influenza virus infection.

For additional information on testing for patients under observation for potential HPAI H5 virus infection, (including specimen collection and processing) please see http://www.cdc.gov/flu/avianflu/severe-potential.htm.
ATTACHMENT 6: Worker Post-exposure Questionnaire

Last Name ______________________  First Name ______________________  MI ____________
Phone Number (_____) _______________________  City ________________________, State ______
Employer/Agency ______________________________________________________________

Hello, my name is ______________________, and I am calling from the ______________________ Health Department. We are conducting routine surveillance of the workers involved in the recent avian influenza response effort. Since human infections with avian influenza viruses have been documented, we would like to ask you some questions regarding your activities during the response and any illness that you may have developed subsequently.

Would it be OK to ask you a few questions?  (If Yes proceed to #1)

If No: >Thank you very much.____________________________________________________
(________________________)  (Sign and date)

What activities were you involved with during the outbreak response?
(Check all that apply)
  o Culling birds
  o Bird disposal
  o Bird transport
  o Bird composting and/or compost management
  o Decontamination of trucks
  o Decontamination of farm and/or farm equipment
  o Other (please specify)________________________________________

Did you have direct contact with poultry, poultry houses, or any other potentially infective material?  Y   N

What personal protective equipment (PPE) were you using?  (Check all that apply.)
  o Surgical mask
  o Fitted, disposable respirators (N95, N99, N100)
  o Powered Air Purifying Respirator (PAPR)
  o Gloves
  o Protective outerwear (ie Tyvek® suit, disposable coveralls, impermeable apron)
  o Goggles
  o Boots
  o Other________________________________________

Did you wear all of this equipment during all activities involving direct contact with potentially infective material?  Y   N

Did you perform daily personal decontamination protocols following your response activities?  Y   N  (If Yes, proceed to #6; If No, skip to #7)
6. What specific type(s) of personal decontamination did you perform? (Check all that apply.)
   o Disposed of all PPE that was disposable after visit to the farm, but prior to leaving the premises
   o Disinfected non-disposable PPE as specified by outbreak response guidelines
   o Changed clothes after visiting the farm and before leaving the premises
   o Showered prior to leaving the premises
   o Washed your hands prior to leaving the premises

7. Have you received seasonal flu vaccine this season?   Y  N
   If Yes, what was the date of vaccination?     _____ / _____ / _____

8. What were the dates you were on-site at the affected farm?

9. During the 7 days since the last date you were on-site, have you developed any illness?   Y  N
   (If Yes, proceed to #10; If No, skip to #15)

10. Did you have any of the following symptoms?
    Conjunctivitis     Y  N
    Fever             Y  N
    Headache          Y  N
    Sore Throat       Y  N
    Cough             Y  N
    Difficulty Breathing     Y  N
    Runny Nose        Y  N
    Nasal Congestion  Y  N
    Diarrhea          Y  N
    Other symptoms __________________________________

11. What was the date of illness onset?     _____ / _____ / _____

12. What was the date well?      _____ / _____ / _____

13. Did you receive any treatment for your illness? If so, what, by whom and where?

14. Was any lab testing performed for your illness? If so, what were the results?
    What lab performed the testing?

15. Did you take any antiviral medication during or after you assisted with this response?   Y  N   (If Yes, proceed to #16; If No, skip to #19)

16. What was the name of antiviral medication?____________________________________
    (Such as Amantadine (Symmetrel), Rimantadine (Flumadine), Oseltamivir (Tamiflu)).
17. How long did you take the antiviral medication? (Choose the best answer.)
   o Daily, but only the days I was assisting with depopulation and/or disposal
   o Daily while I was assisting with depopulation and disposal and for 7 days after that
   o Daily, but I started after I was no longer assisting with this operation
   o Occasionally throughout the time I was assisting with this operation
   o Occasionally throughout the time immediately after I was no longer assisting with this operation
   o Occasionally both while I was assisting with the operation and immediately after I was no longer assisting with this operation

18. What, if any, adverse side effects did you have during your course of antiviral medication?
   o None
   o Vomiting
   o Diarrhea
   o Nausea
   o Other (please specify)________________________________________

19. What other individuals, agencies, or companies were involved in the outbreak response? (Check all that apply.)
   o Poultry company workers
   o Workers contracted specifically for depopulation and cleaning/disinfection of premises
   o Workers contracted specifically for composting purposes
   o Federal or state government workers
   o Other (please specify)________________________________________

20. Can you provide contact information for anyone/group identified in #19?

21. Do you have any other comments or information regarding human health issues associated with this outbreak response?

22. Have any of your family members or other close contacts developed any of the above symptoms? □ No □ Yes If yes, who?
   Name Age (Yrs.) Relationship Contact #

If you develop any illness within 7 to 10 days of the last date you were on the farm, we recommend you seek medical attention and report the illness to your local health department. We greatly appreciate your help with this investigation. If you have any further questions, please call the Virginia Department of Health at 804-864-8141 and ask to speak with either Dr. Julia Murphy or Dr. Karen Gruszynski. Thank you.

__________________________________________________
Signature of interviewer
What is low pathogenic avian influenza (LPAI)?
Worldwide, there are many strains of avian influenza (AI) virus that can cause varying amounts of clinical illness in poultry. AI viruses can be classified into low pathogenicity (LPAI) and high pathogenicity (HPAI) based on genetic sequencing and the severity of the illness they cause in poultry. Some LPAI virus strains are capable of mutating into HPAI viruses. Migratory waterfowl have proved to be a natural reservoir for LPAI.

How does a person become infected with LPAI?
Not many human cases of LPAI have been identified; however, it is believed that most cases of avian influenza infection in humans have resulted from direct contact with infected poultry or contaminated surfaces. Indirect exposures may occur if the virus is aerosolized and contaminates exposed surfaces of the mouth, nose, or eyes, or is inhaled into the lungs.

What kind of symptoms would I have if I became ill with LPAI?
While it is not known how the distinction between low pathogenic and highly pathogenic strains might impact the health risk to humans, the human cases of LPAI that have been identified usually report mild symptoms, such as eye infections, fevers and respiratory symptoms. If you develop these symptoms, you should see your doctor.

How quickly would I develop these symptoms after I was exposed?
If symptoms are going to develop they will usually occur within one week after the exposure. Responders who may have had contact with infected poultry or contaminated surfaces should closely monitor themselves for these symptoms for seven to ten days following their last potential exposure to avian influenza. For many people this will mean monitoring themselves for one week following their last visit to a farm where LPAI was recently detected. Responders should also seek medical attention during the time of potential exposure related activities if they develop fever, respiratory symptoms, or conjunctivitis.

Why should I get the seasonal flu vaccine?
Responders should be vaccinated for the seasonal flu because there is an added concern that a person infected with a LPAI virus could also become infected with a normal human influenza virus at the same time. This may allow for the mixing of the LPAI virus and the seasonal human influenza virus. Such an event could result in the development a new variation of the influenza virus that could potentially be transmitted easily from person-to-person.

Is there anything particular I should tell my doctor if I become ill?
Tell your doctor that you may have been exposed to LPAI through your involvement in these activities. Share this document with your physician, provide information regarding when your symptoms started and when you last visited the poultry farm, and identify whether or not you have had a seasonal flu vaccine. It is important to detect an LPAI infection in a person early so that medication can be prescribed in order to shorten the duration of the illness and limit the potential for viral mixing and further transmission.
ATTACHMENT 8: HPAI Worker Fact Sheet

What is high pathogenic avian influenza (HPAI)?
Worldwide, there are many strains of avian influenza (AI) virus that can cause varying amounts of clinical illness in poultry. AI viruses can be classified into low pathogenicity (LPAI) and high pathogenicity (HPAI) based upon genetic sequencing and the severity of the illness they cause in poultry. Certain HPAI viruses have caused serious illness and even death in humans.

How does a person become infected with HPAI?
Human cases of HPAI have been identified; however, it is believed that most cases of avian influenza infection in humans have resulted from contact with infected poultry or contaminated surfaces. A possible route of infection is consuming infected, raw or undercooked poultry or poultry products. Indirect exposures may occur if the aerosolized virus lands on exposed surfaces of the mouth, nose, or eyes, or is inhaled into the lungs.

What kind of symptoms would I have if I became ill with HPAI?
While it is not known how the distinction between low pathogenic and highly pathogenic strains might impact the health risk to humans, the human cases of HPAI that have been identified have reported signs and symptoms of fever, cough, shortness of breath, muscle aches, diarrhea, eye infections, pneumonia and severe respiratory diseases. If you have been exposed to infected poultry and develop these symptoms, you should see your doctor.

How quickly would I develop these symptoms after I was exposed?
If symptoms are going to develop they will usually occur within two to four days after the exposure. Responder should closely monitor themselves for these symptoms for seven to ten days following their last potential exposure to avian influenza. For many people this will mean monitoring themselves for one week following their last visit to a farm where HPAI was recently detected. Responder should also seek medical attention any time they develop fever, respiratory symptoms, gastrointestinal symptoms or conjunctivitis.

Should I receive the seasonal flu vaccine?
People should also receive the seasonal flu vaccine. In this particular situation, there is concern that a person infected with HPAI could also become infected with a normal human influenza virus at the same time. This may allow for the mixing of the HPAI virus and the seasonal human influenza virus. Such an event could result in the development a new variation of the influenza virus that could potentially be transmitted easily from person-to-person.

Is there anything particular I should tell my doctor if I become ill?
Tell your doctor that you may have been exposed to HPAI through your involvement in these activities. Share this document with your physician, provide information regarding when your symptoms started and when you last visited the poultry farm, and identify whether or not you have had a seasonal flu vaccine. It is important to detect an HPAI infection in a person early so that medication could be prescribed in order to shorten the duration of the illness and limit the potential for viral mixing and further transmission.
ATTACHMENT 9: Classification Levels of Personal Protective Equipment

- **Level A** protection is required when the greatest potential for exposure to hazards exists, and when the greatest level of skin, respiratory, and eye protection is required. Examples of Level A clothing and equipment include positive-pressure, full face-piece self-contained breathing apparatus (SCBA) or positive pressure supplied air respirator with escape SCBA, totally encapsulated chemical- and vapor-protective suit, inner and outer protective gloves, and disposable protective suit, gloves, and boots.

- **Level B** protection is required under circumstances requiring the highest level of respiratory protection, with lesser level of skin protection. Examples of Level B protection include positive-pressure, full face-piece self-contained breathing apparatus (SCBA) or positive pressure supplied air respirator with escape SCBA, inner and outer chemical-resistant gloves, face shield, hooded disposable suit and outer chemical-resistant boots.

- **Level C** protection is required when the concentration and type of airborne substances is known and the criteria for using air purifying respirators are met. Typical Level C equipment includes full-face air purifying respirators, disposable coveralls, inner and outer protective gloves, goggles, hard hat, and disposable chemical-resistant outer boots / boot covers in addition to the requirements of Level D. The main difference between Level C and Level B protection is the type of equipment used to protect the respiratory system.

- **Level D** protection is the minimum protection required. Level D protection may be sufficient when no contaminants are present or work operations preclude splashes, immersion, or the potential for unexpected inhalation or contact with hazardous levels of contaminants. Appropriate Level D protective equipment may include gloves, hairnets, coveralls, safety glasses, coveralls, face shield, and chemical-resistant, steel-toe boots or shoes.
ATTACHMENT 10: Hot, Warm and Cold Surveillance Zones

Sample Farm Layout / Diagram w/ ZONES

- **Compost Building**
- **Chicken Houses**
- **Owner / Operator Barn**
- **Owner / Operator Residence**
- **Water Trailer**
- **Secondary Access Driveway**
- **Blocked Entrances - No entry / Exit**
- **Main Road**
- **Alternate Parking Areas**
- **Main Access Gate – Security Controlled**
- **Single Hot Zone Entry Point**
- **Decontamination area, Mobile Decon Unit, PPE disrobe, etc.**
- **HOT ZONE**
- **COLD Zone** Anywhere outside the Warm and Hot Zones
- **Minimum Distance to barrier – 70’ (feet) or maximum available**

- **WARM Zone** Decontamination area, Mobile Decon Unit, PPE disrobe, etc.
## ATTACHMENT 11: DECON Stations

### Personnel DECON Station

| Water Source | Emergency DECON | Tool Drop | PPE | PPE Removal | Cold/Clean | Warm | Hot/Dirty |

### Personnel Decontamination Supply List

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Use</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Cones</td>
<td>8</td>
<td>Reduction Corridor</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Can</td>
<td>2</td>
<td>Tool Drop</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Bags</td>
<td>2</td>
<td>Tool Drop</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>50’ Garden Hose/Nozzle</td>
<td>1</td>
<td>Emergency DECON</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>DECON Tarps</td>
<td>2</td>
<td>DECON Line</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Kiddie Pools</td>
<td>3</td>
<td>DECON Line</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>50’ – 13/4” Supply Line</td>
<td>1</td>
<td>DECON Line</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Manifold</td>
<td>1</td>
<td>DECON Line</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Garden Sprayer/1% Vircon Solution &amp; Detergent</td>
<td>1</td>
<td>Gross Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>DECON Shower/Short Garden Hose &amp; Nozzle</td>
<td>1</td>
<td>Gross Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>50” Garden Hose</td>
<td>1</td>
<td>Gross Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>5 Gallon Bucket/1% Vircon Solution &amp; Detergent</td>
<td>2</td>
<td>Soap Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Long Handle Scrub Brushes</td>
<td>2</td>
<td>Soap Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Boot Brush</td>
<td>1</td>
<td>Soap Wash</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>50’ Garden Hose/Nozzle</td>
<td>1</td>
<td>Rinse</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Can</td>
<td>1</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Bags</td>
<td>10</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Folding Chairs</td>
<td>2</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>1 Gallon Zip Lock Bags</td>
<td>1 box</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Black Sharpie</td>
<td>2</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Can</td>
<td>1</td>
<td>PPE Removal</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Lysol Spray</td>
<td>1</td>
<td>Personal Hygiene</td>
<td>Cold/Clean Zone</td>
</tr>
<tr>
<td>Clorox Wipes</td>
<td>1 box</td>
<td>Personal Hygiene</td>
<td>Cold/Clean Zone</td>
</tr>
<tr>
<td>Baby Wipes</td>
<td>1 box</td>
<td>Personal Hygiene</td>
<td>Cold/Clean Zone</td>
</tr>
<tr>
<td>Paper Towels</td>
<td>2 rolls</td>
<td>Personal Hygiene</td>
<td>Cold/Clean Zone</td>
</tr>
</tbody>
</table>
Personnel DECON Procedures

If an emergency arises to personnel assigned to the “de-pop” crew, proceed to Emergency DECON immediately. Personnel will get flushed, stripped (PPE and personal clothing), and then flushed again. Emergency personnel will take over care of patient.

After confirming the DECON station is set-up and ready for entry, the “de-pop” crew may enter two (2) personnel at a time. Progression through the DECON station is as follows:

- Exit “Hot/Dirty Zone” into the DECON station through the “Reduction corridor” established by cones
- Tools placed into the “Tool Drop” trash can, prior to red tarp
- Remove outer boot covers before entering DECON shower and place in trash bag for discarded materials
- Step into the DECON shower and ensure all areas of suit are rinsed (raise arms and complete a 360 degree turn SLOWLY) until all organic materials are removed
- DECON Team Leader needs to ensure 1% Vircon solution is in bottom of the pool
- Turn DECON shower off and spray person down with 1% Vircon solution using garden sprayer
- Turn DECON shower on and rinse off Vircon solution
- As stepping out of shower spray soles of boots with 1% Vircon solution
- Enter Soap Wash pool for complete scrub down with 1% Vircon solution using scrub brushes
- Ensure soles of boots are scrubbed when stepping out of the pool and proper footing
- Step into the Rinse pool for final removal of Vircon solution, ensure all areas are rinsed thoroughly including bottom of boots as stepping out of pool
- Enter onto the PPE Removal tarp and remove items in the following order:
  - Remove outer gloves and place in trash bag for discarded materials
  - Remove helmet place in marked trash bag (Name on bag)
  - Peel back hood of suit (depending on suit)
  - Remove hair-net and place in trash bag for discarded materials
  - Remove goggles and place in marked zip-lock bag (Name on bag)
  - Remove boots and place in marked trash bag with helmet
  - Remove suit and place in marked trash bag (Name on bag)
  - Remove respirator and place in marked zip-lock bag (Name on bag)
  - Remove inner gloves and place in trash bag for discarded materials
- Enter onto the Personal Hygiene tarp
  - Use baby wipes to clean head, face, neck, arms, and hands and place in trash bag for discarded materials
  - Wipe hands down with Clorox wipes and place in trash bag for discarded materials
  - Spray boots, especially soles of boots, with Lysol spray
  - Remain in Personal Hygiene area until being released by DECON Team Leader
- Acquire trash bag to bag personal clothing before departure, preferably changing into clean outer garments before leaving farm. Garments bagged should be laundered as soon as reasonably possible.
- Exit to vehicle through Cold/Clean Zone ONLY, DO NOT re-enter Warm Zone
- Travel directly to home/hotel, no stops, and shower immediately to remove any possible contamination
- Wash personal clothing using caution when loading washing machine. Dump clothes from bag to washing machine, dispose of bag, and wash hands.
### Equipment DECON Station

#### Equipment Decotamination Supply List

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Quantity</th>
<th>Use</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Cones</td>
<td>8</td>
<td>Reduction Corridor</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Can</td>
<td>1</td>
<td>Soap Cleaning</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Bags</td>
<td>1</td>
<td>Soap Cleaning</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>High Pressure Sprayer</td>
<td>1</td>
<td>Soap Cleaning</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>100’ Garden Hose</td>
<td>1</td>
<td>Soap Cleaning</td>
<td>Hot/Dirty Zone</td>
</tr>
<tr>
<td>35 Gallon Trash Can (extra)</td>
<td>3</td>
<td>Hose C&amp;D</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>2 Gallon Garden Sprayer/ 1% Vircon Solution</td>
<td>2</td>
<td>Hose C&amp;D</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Detergent Soap (Dawn)</td>
<td>1</td>
<td>Hose C&amp;D</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Lysol Spray</td>
<td>1 Can</td>
<td>Inside Truck</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Chlorox Wipes</td>
<td>1 Box</td>
<td>Inside Truck</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Baby Wipes</td>
<td>1 Box</td>
<td>Inside Truck</td>
<td>Warm Zone</td>
</tr>
<tr>
<td>Sharpie Pens</td>
<td>2</td>
<td></td>
<td>Warm Zone</td>
</tr>
</tbody>
</table>
Personnel DECON Procedures

After confirming the DECON station is set-up and ready for entry, vehicles and equipment may enter the DECON reduction corridor as follows:

- Stop vehicle just before the “Hot/Dirty Zone” line prior to “Warm Zone” for high pressure sprayer cleaning. Ensure all areas of vehicle and equipment is sprayed using soap and Vircon solution, paying close attention to the under carriage and tires of vehicle & trailer. This should take at least 15-30 minutes.
- Move vehicle to the Hose C&D station in the warm zone.
- After ensuring all dirt & organic material is removed, apply Vircon solution to all equipment and wait a minimum of 5 minutes. Use Clorox wipes or Lysol to clean equipment that is unable to be cleaned with Vircon solution.
- Place all hoses, fittings, and nozzles into the Soap Wash to remove organic material first, then into the DECON solution, and then into the Rinse container.
- Before movement of vehicles, disinfect interior of vehicle paying special attention to floor board and any area touched IF a clean driver was not maintained during entire operation.
- Clean driver will be needed to move the vehicle once entering the “Cold/Clean Zone”.
- All personnel involved with “de-pop” need to proceed to the “Personnel DECON Station”. DO NOT enter the “Warm Zone” of the “Equipment DECON Station”!
- ALL vehicles and equipment need to be properly cleaned prior to leaving farm. A final inspection should be completed in the “Warm Zone” to “Cold/Clean Zone” transition. Repeat procedures when necessary.
APPENDIX 21 (updated 4/16)
Protocol for HPAI in Virginia, Immediate Response Procedures

The following is a summary of activities taken during the first 48 hours. This timeline assumes a sample was submitted because of increased mortality. Screening samples would have a couple additional steps in the initial laboratory diagnostics. Based upon the time when a sample is submitted will dictate some changes to this timeline. This is our current best plan for response activities and specifics of each case will modify the activities and the timeline.

Initial Laboratory Diagnostics and Follow-Up:

Day 1
Hour 0: Sample submitted and PCR testing begun.

Hour 2: PCR AI matrix results completed – VDACS LAB reports positive results to the SAHO, Incident Commander (IC), and Company Veterinarian. A positive PCR diagnosis of H5 or H7 virus coupled with classical HPAI clinical symptoms with mortality rates of 30 percent or greater requires immediate (within 24 hours) depopulation and onsite disposal of the index flock. It will not be practical to await NVSL virus isolation results before acting.

Hour 4: Sample re-extracted and PCR re-run. Positive duplicate samples packaged and sent to National Veterinary Services Laboratory (NVSL). VDACS LAB reports positive results to SAHO, IC, and Company Veterinarian, who take the following actions:

1. SAHO will contact the Commissioner of Agriculture who will immediately request and attempt to secure within 24 hours a Declaration of Emergency from the Governor.

2. SAHO will contact AD-USDA to notify and tentatively ask for USDA IMT (to be available when H5/H7 results are reported in several hours)

3. SAHO will also contact VPF – VPF president will likely plan an industry conference call

4. IC will contact the PSC (or RESL if not unavailable) to ask that they contact the IMT C&G, requesting that the IMT mobilize and meet at the RAHL at 7:00am or other established time and location. Reference IMT Org Chart, also send USDA NVS 213-RR resource requests to NVS@aphis.usda.gov.
5. The IC will contact the OSC and Disease Management Branch Director to ask that a case manager prepare to go to the farm as soon as possible (if needed may wait until daylight) to initiate case management procedures using the Case Manage Premise Checklist to include the following tasks:

a. Appraisal and Indemnity procedures and forms.
   USDA reference for FY2016 HPAI Response:
   Details for Bird and Egg Appraisal & Indemnity Procedures;
   Appraisal and Indemnity Request Form Appendix A1: Form for Poultry Owner;
   Appraisal and Indemnity Request Form Appendix A2: Form for Contract Grower;
   Appraisal & Indemnity Procedures Appendix B1: Contract Grower Worksheet for Meat Birds;
   Appraisal & Indemnity Procedures Appendix B2: Contract Grower Worksheet for Layers;
   Appraisal & Indemnity Procedures Appendix C: DUNS and SAM;
   Overview of Finance & Administration Procedures

b. Collect epidemiologic investigation onto the Initial Contact Epi Report.

c. Take additional samples to include EMRS2 Premise ID#.

d. Discuss flock plan with owner and get it started. Appendix 26, 26a contain flock plan templates.

e. Quarantine flock/premises, issue notice of quarantine. Appendix 19 contains samples of VDACS Notice of Quarantine.


**Hour 5 to 6:** H5 PCR results received from ABI 7500 machine. VDACS LAB reports positive results to SAHO, IC, and Company Veterinarian

**Hour 6 to 7:** H7 PCR results received from ABI 7500 machine. VDACS LAB positive results to SAHO, IC, and Company Veterinarian

Note: In a perfect situation, total time from sample submission to all runs completed is 6 hours, 20 min
**IMT Response Goals:**

1. To mitigate the effects of an HPAI outbreak on the poultry industry in VA
   
a. It is critical that infected poultry be depopulated within 24 hours of disease diagnosis in order to minimize the spread of the virus. USDA reference for HPAI 2014–2015: [Stamping-Out & Depopulation Policy; Ventilation Shutdown Evidence and Policy and](#) USDA reference for FY2016 HPAI Response: [Using Ventilation Shutdown to Control HPAI](#)
   

2. To accomplish this goal in a way that is safe for responders certain procedures will be initiated that focuses on biosecurity so that the disease is not spread as part of the response, and promotes the humane treatment of affected birds to the greatest extent possible.
   
a. The flock will be depopulated humanely by a pre-identified depopulation team, including a safety officer, who will be on site during the operation. Guidelines for team health and safety are contained in [Appendix 20](#). USDA reference for HPAI Outbreak 2014-2015: [Safety, Health & Environmental Protection and Interim Recommendations on PPE for Selected Activities](#).
   
b. A disposal team, following strict biosecurity protocols, will compost the carcasses in-house if possible. If in-house methods are not feasible due to building or equipment access limitations, the carcasses will be composted on-site, but out of the house. See [Appendix 16](#) for detailed on-site composting procedures. Additional USDA Guidance and Composting Temperature Monitoring Log Sheets can be found at FY2016 HPAI Response Mortality Composting Protocol for Avian Influenza Infected Flocks. Alternative, backup methods of disposal will be evaluated and implemented as necessary.
c. Poultry companies will rapidly implement increased biosecurity measures on any infected premises to contain the virus to that premises and prevent further transmission. Immediately cease all service staff farm visits and only essential farm visits will be allowed following stringent biosecurity protocols. All responders will observe and execute strict biosecurity procedures to prevent virus spread.

d. Poultry companies will notify all growers within 24 hours. The VPF will notify vendors within 24 hours and request immediate cessation of all but essential farm visits.

e. AI Surveillance of all flocks within a minimum of a 10-kilometer (6.2-mile) radius from Infected Premises and on any other high-risk flocks will be completed within 24 hours in accordance with protocols found in Appendix 11. Surveillance of All flocks within a six-mile radius will be tested within 72 hours.

USDA reference for FY2016 HPAI Response: [Contact Premises; Surveillance Sampling Commercial Premises in Control Area; Surveillance of Backyard Flocks Around Infected Premises; Avian Sample Collection for Avian Influenza A and Newcastle Disease]. Region-wide testing will be completed within two weeks. Region-wide, a negative antigen test (PCR) will be required before any poultry is moved to the processing plant. USDA references for HPAI Outbreak 2014-2015 [Testing Requirements for Movement from the Control Area].

f. Infected Premises must be both cleaned and disinfected focusing on virus elimination in a cost effective manner. Cleaning and disinfection can be performed with the following cleaning method(s) dry, wet, heat, fumigation, or a combination of two or more. The method(s) selected should consider the characteristics of the premises/houses and other factors which may impact the effectiveness of the virus elimination activities. USDA References for 2016 HPAI Response: [Cleaning & Disinfection Basics (Virus Elimination); Response Using Heat Treatment for Virus Elimination].

g. State and APHIS release of the control area, regaining HPAI-free status, and meeting all eligibility requirements for restocking approval of the infected premises will be granted after an inspection has been conducted and passed. USDA guidance for HPAI Outbreak 2014-2015: [Control Area Release; Post C&D Environmental Sampling Guidance] and
FY2016 HPAI Response Timeline, Eligibility, and Approval for Restocking.

h. VPF, VDACS and DOH State Public Affairs, along with USDA APHIS Legislative and Public Affairs, APHIS Trade Staff, & Industry will coordinate timing and content for ANY public announcements and bilateral trade notifications.

On-Going Laboratory Diagnostics and Follow-Up

Day 2

Late Morning: NVSL receives samples

Early Evening: NVSL confirmation of AI H5 positive. Automated email sent to DA-USDA, SAHO, and VDACS LAB. VDACS LAB notifies IC and Company Veterinarian.

The mail is picked from the Harrisonburg RAHL at 2:30pm and the last pick-up in Harrisonburg is at 5:30pm at a Kinkos. If samples cannot be sent to NVSL on Day 1, they will be mailed first thing on Day 2. In that case, results from NVSL will not be returned until Day 3.

VDACS LAB would report to the Harrisonburg RAHL on Day 2 to assist in managing the response.

Laboratory responses, including additional personnel, ordering supplies, or second shift, would depend on volume of submissions.

IMT Response: (all times are subject to change)

Day 2

7:00am or other set time: Initial UC Meeting, at Harrisonburg RAHL, ICP, or other established meeting location. Topics: initial briefing, establish objectives, operational period, meeting schedule, solidify organizational structure using ICS Form 201, make recommendation to request a Governor’s declaration of Emergency, call in the rest of the IMT, establish time and location to report to ICP.

8:00am: IC call with USDA leadership: DA-USDA, and ED-USDA, and National IC - USDA. Discuss when USDA will release information.

10:00am: IC call with VDACS leadership, and other state personnel to provide morning situational update to them. Discuss when VDACS will release information, based on when USDA will release it.
11:00am: Incident Coordination Group/Area Command Call, Tuesday and Thursday: 11am-12pm EST (subject to change)

12:00pm: C&G Meeting, led by PSC. Establish objectives for next operational period (12 hours): resources, limitations, constraints. Preparing for the Tactics Meeting using ICS Form 215, identify and develop tasks and outline resource assignments, detailed task assignments, reporting locations, reporting times, special equipment, and supply needs.

2:00pm: Tactics Meeting, Operations meeting to finalize ICS Form 215, agree on work assignments, identify resources shortfalls, resolve conflicts and coordination. Discuss tactics for performing depopulation within 24 hours of disease report from lab, and disposal to follow. If possible, finalize tactics for depopulation to be performed this day, as soon as Form 1-23 is finalized/approved. USDA is usually available to approve 1-23 forms from 7:00am to 7:00pm.

Prepare for Planning Meeting:
- **Operations**: preparing update and coordinating with other staff
- **Planning**: prepares draft assignments, develop resource and support needs and submits to Logistics, publishes meeting agenda, duplicates documents
- **Logistics**: orders resources, verifies support and orders support (communications, transportation, medical)
- **Finance**: verifies financial and admin requirements

3:00pm: Incident Coordination Group/Area Command Call, Monday, Wednesday, Friday, Saturday, Sunday:3pm-4pm EST (subject to change)

4:00pm: Planning Meeting, present draft IAP for review and revision, discuss tactics selected for next operational period. Last chance to review/update IAP.
- **IAP preparation**: IAP completed and distributed to UC for approval. IAP duplicated and distributed for review before 7pm Debrief with C&G.

5:00pm: Group, Branch, Operations Debrief, field operators report accomplishments, shortfalls, issues up their chain of command. OSC relays information to make any adjustments to IAP.
7:00pm: Quick Debrief with C&G – any issues, assess progress

**Suggested schedule for future full operational periods 7:00am to 5:00pm**

**Day 3 and beyond:**
- 6:45am: OPS Brief with IMT
- 9:00am: IC Call with Industry
- 10:00am: IC Call with VDACS Leadership
- 11:00am: IC Call with USDA (T, Th)
- 12:00pm: C&G Meeting
- 2:00pm: Tactics Meeting
- 3:00pm: IC Call with USDA (M, W, F, Sa, Su)
- 4:00pm: Planning Meeting
- 5:00pm: Group, Branch, Operations Debriefing
- 7:00pm: Quick Debrief with C&G

**Acronym List**
- **AI**: Avian Influenza
- **AD-USDA**: Assistant District Director-United States Department of Agriculture
- **C&G**: Command and General Staff of the Incident Management Team, which includes the Section Chiefs
- **DOSC**: Deputy Operations Section Chief
- **ED-USDA**: Executive Director USDA
- **IAP**: Incident Action Plan
- **IC**: Incident Commander
- **ICP**: Incident Command Post, The field location at which the primary tactical-level, on-scene incident command functions are performed. Mostly likely Rockingham County Offices for Shenandoah Valley and Tri-County Council for Eastern Shore.
- **ICS**: Incident Command System
- **IMT**: Incident Management Team
- **NVSL**: National Veterinary Services Laboratories
- **OSC**: Operations Section Chief
- **PCR**: polymerase chain reaction, type of testing methodology
- **PSC**: Planning Section Chief
- **RAHL**: Regional Animal Health Laboratory
- **RESL**: Resource Unit Leader
- **SAHO**: State Animal Health Official
- **UC**: Unified Command
- **VDACS**: Virginia Department of Agriculture & Consumer Services
- **VPF**: Virginia Poultry Federation
APPENDIX 23
“Controlled marketing” Protocol

Controlled Marketing – At the discretion of the State Veterinarian and in consultation with USDA APHIS, poultry that are infected with or exposed to H5/H7 LPAI may be allowed to move for controlled marketing in accordance with 9 CFR 56.5 (c) and the following requirements.

1. Poultry infected with or exposed to H5/H7 LPAI will not be transported to processing until at least 21 days after the acute phase of the infection has concluded. This determination will be made by the State Veterinarian.
2. Strict biosecurity measures must be maintained to ensure that the virus does not spread during the extended time that the flock needs to clear the virus and meet conditions for movement to processing.
3. The flock must be sampled and tested negative for H5/H7 avian influenza virus within 72 hours prior to movement. Approved virus detection tests such as rRT-PCR or virus isolation must be used.
4. All personnel involved in the load out must observe strict biosecurity procedures including disinfection of all clothing, footwear, vehicles, and equipment that leave the farm.
5. All vehicles and containers transporting the flock to processing must be thoroughly cleaned and disinfected at the facility after unloading.
6. Following controlled marketing of a flock cleaning and disinfection of the premises, litter handling, and quarantine release will be performed according to Appendix 13 or Appendix 14.
APPENDIX 23A
Controlled Marketing Checklists

Approval for the controlled marketing of a flock infected with or exposed to H5/H7 LPAI is at the discretion of VDACS and APHIS. Controlled marketing would be considered under the following criteria:

Serology positive/virus negative
- Flock is serologically positive but has tested negative for virus.
- To be considered virus negative would require that the flock has been tested by RT-PCR or VI a minimum of 2 times at least 7 days apart. The last test should be conducted within 3 days of processing. Sample size is 11 swabs per house with a minimum of 33 swabs per flock.
- There are no clinical signs present in the flock.
- Strict biosecurity as outlined in the flock plan can be maintained until the flock is processed.
- Processing plant is available to receive the birds.
- Processing can occur when there is sufficient time to allow for a thorough cleaning and disinfection of the processing plant as well as all equipment used in the loading and transportation of the flock (e.g.) at the end of the week or the end of a shift.
- The preferred holding period for the flock is 21 days after the first detection of a positive serologic test. Consideration may be given to a shorter holding period based on other factors such as animal welfare.

Virus positive
- Flock is of an age where it could be held for the required time period. The holding period is 21 days after the acute phase of the disease. The end of the acute phase of the disease is defined as the first negative virus detection test.
- The flock should be tested for virus by RT-PCR and/or VI. Sample size is 11 swabs per house with a minimum of 33 swabs per flock.
- Strict biosecurity as outlined in the flock plan can be maintained until the flock is processed.
- Proximity to other commercial farms.
- Processing plant is available to receive the birds.
- Processing can occur when there is sufficient time to allow for a thorough cleaning and disinfection of the processing plant as well as all equipment used in the loading and transportation of the flock (e.g.) at the end of the week or the end of a shift.

Other items for consideration:
- Proximity to other commercial flocks.
- Treated flocks must not be moved to the processing plant without notification to Virginia Poultry Federation (VPF) within four days of movement.
- Once notified, VPF will notify poultry industry companies, VDACS, and APHIS of the time and route to the processing plant.
APPENDIX 24
Diagnostic Resources

The overall mission of the Virginia Department of Agriculture and Consumer Services (VDACS) Animal Health Laboratory System (AHLS) is to provide quality diagnostic and regulatory testing of specimens from animals, raw foods and limited environmental origin to the citizens of the Commonwealth of Virginia in a timely manner and at reasonable cost. As such, the 4 regional animal health laboratories (RAHLs), and in particular the Harrisonburg RAHL, provide diagnostic support for the detection of avian influenza throughout the Commonwealth. All 4 RAHLs are authorized by the National Poultry Improvement Plan (NPIP), and follow NPIP protocols and procedures. The Harrisonburg RAHL is a member laboratory of the National Animal Health Laboratory Network (NAHLN), providing contract real time reverse transcriptase polymerase chain reaction (RRT-PCR) testing for Avian Influenza (AI) and Exotic Newcastle Disease (END), in support of regional and national AI and END surveillance testing programs. Other AI testing services include agar gel immunodiffusion (AGID), and antigen capture immunoassay (ACIA) testing.

There is a written MOU in place that the lab will immediately report all non-negative results to the State Veterinarian and samples sent to NVSL for confirmation.

The VDACS NPIP approved laboratory providing AI testing:

Harrisonburg RAHL 621 Mt. Clinton Pike Harrisonburg, VA 22802 (540) 209-9130 (Necropsy/pathology, ELISA, AGID RT-PCR, ACIA)

Additional VDACS approved laboratories providing diagnostic services:

Lynchburg RAHL 4832 Tyreeanna Rd. Lynchburg, VA 24504 (434) 947-2518 (Necropsy/pathology)

Warrenton RAHL 272 Academy Hill Road Warrenton, VA 20186 (540) 347-6385 (Necropsy/pathology)

Wytheville RAHL 250 Cassell Road Wytheville, VA 24382 (276) 228-5501 (Necropsy/pathology)
Although all of the VDACS RAHLs above provide necropsy services to poultry producers in the Commonwealth, other routine and surge diagnostic testing for avian influenza occurs at the Harrisonburg RAHL. Analysts at the Harrisonburg RAHL are required to complete yearly avian influenza proficiency testing surveys coordinated by the National Veterinary Services Laboratories (NVSL) for both serology (AGID) and PCR testing. All avian influenza testing is conducted with strict adherence to NVSL and NAHLN protocols.

Any reactive samples are immediately forwarded to the NVSL for confirmatory testing. Those samples are sent via Federal Express overnight delivery.

By virtue of the flexibility inherent in the regional animal health laboratory system, additional personnel and diagnostic testing capabilities are available to the Harrisonburg RAHL in the event of a need for surge capacity testing. For example, RT-PCR testing capability can be increased 4 fold overnight by the supplementation of additional thermocycler equipment normally used in the other RAHLs for other programs. Overall surge capacity is primarily dependent on the availability of testing reagents.

### Routine and Surge Capacity for AI testing at the Harrisonburg RAHL

<table>
<thead>
<tr>
<th>Test</th>
<th>Routine</th>
<th>Surge Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGID</td>
<td>104,000/year</td>
<td>200,000</td>
</tr>
<tr>
<td>ACIA</td>
<td>Variable, depending on test kit availability</td>
<td></td>
</tr>
<tr>
<td>RRT-PCR</td>
<td>2000/year</td>
<td>52,000</td>
</tr>
</tbody>
</table>
Poultry Companies will identify the permit needed; meet all conditions required for each permit, and send permit information listed to vastatevet@vdacs.virginia.gov for approval.

**PERMIT**

**FEED INTO/OUT OF CONTROL ZONE**

<table>
<thead>
<tr>
<th>Permit Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permit number: «Permit_Name»: «movementName»</td>
</tr>
<tr>
<td>From (name, address): «Destination_Premises_Prem_ID» «Destination_Premises_Prem_Name» («Destination_Premises_Prem_Address_1» «Destination_Premises_City», «Destination_Premises_State» «Destination_Premises_Zip»)</td>
</tr>
<tr>
<td>To (name, address): «Date_Moved»</td>
</tr>
<tr>
<td>Email permit to: «Origin_Business_e_mail»</td>
</tr>
</tbody>
</table>

**Conditions**

<table>
<thead>
<tr>
<th></th>
<th>Truck drivers must wear disposable plastic boots or rubber boots that can be disinfected if they get out of the vehicle. Plastic boots may be disposed of on the premises.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Hands and rubber footwear must be thoroughly cleaned and disinfected prior to leaving the premises.</td>
</tr>
<tr>
<td>3</td>
<td>Tires must be sprayed with disinfectant before leaving the premises.</td>
</tr>
<tr>
<td>4</td>
<td>At the end of each day, floor mats in the cab must be washed with disinfectant.</td>
</tr>
<tr>
<td>5</td>
<td>A daily report must include identification (tractor license plate, trailer license plate, driver name) and all delivery locations (name of farm, 911 address) for the day.</td>
</tr>
<tr>
<td>6</td>
<td>Reports must be submitted each day to: <a href="mailto:vastatevet@vdacs.virginia.gov">vastatevet@vdacs.virginia.gov</a></td>
</tr>
</tbody>
</table>

Authorized by

Virginia Department of Agriculture

Date
PERMIT
MOVEMENT OF CONTROL ZONE BIRDS

Permit Information

<table>
<thead>
<tr>
<th>Permit number:</th>
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<tr>
<td>Email permit to:</td>
<td>«Origin_Business_e_mail»</td>
</tr>
</tbody>
</table>

Conditions

1. Truck drivers must wear disposable plastic boots or rubber boots that can be disinfected if they get out of the vehicle. Plastic boots may be disposed of on the premises.
2. Hands and rubber footwear must be thoroughly cleaned and disinfected prior to leaving the premises.
3. Tires must be sprayed with disinfectant before leaving the premises.
4. At the end of each day, floor mats in the cab must be washed with disinfectant.

Negative PCR test results (5 bird pooled sample)

<table>
<thead>
<tr>
<th>Date</th>
<th>«Neg_Test_Dates»</th>
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</table>

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**PERMIT**

**WOOD SHAVINGS INTO CONTROL AREA**

<table>
<thead>
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<tr>
<td>Permit number:</td>
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<th>Conditions</th>
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Authorized by
Virginia Department of Agriculture

Date
**PERMIT**
**MOVEMENT OF CONTROL MANURE/LITTER**

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<td>1</td>
<td>Truck drivers must wear disposable plastic boots or rubber boots that can be disinfected if they get out of the vehicle. Plastic boots may be disposed of on the premises.</td>
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<td>2</td>
<td>Hands and rubber footwear must be thoroughly cleaned and disinfected prior to leaving the premises.</td>
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<td>3</td>
<td>Tires must be sprayed with disinfectant before leaving the premises.</td>
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<td>4</td>
<td>At the end of each day, floor mats in the cab must be washed with disinfectant.</td>
</tr>
<tr>
<td>5</td>
<td>Trucks must be thoroughly cleaned and disinfected as soon as possible after leaving the facility.</td>
</tr>
</tbody>
</table>

Authorized by  
**Virginia Department of Agriculture**  
Date
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PERMIT
CORN TO PROCESSING FOR ETHANOL PRODUCTION
FROM HPAI INFECTED FLOCK

<table>
<thead>
<tr>
<th>Permit Information</th>
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<td>3</td>
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</tbody>
</table>

Authorized by
Virginia Department of Agriculture

Date
# Permit
**Hatching Eggs to Hatchery or Processing Plant**

## Permit Information

<table>
<thead>
<tr>
<th>Permit number:</th>
<th>«Permit_Name»: «movementName»</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issuance:</td>
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<td>To:</td>
<td>«Date_Moved»</td>
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<tr>
<td>Date of movement:</td>
<td>«Origin_Business_e_mail»</td>
</tr>
</tbody>
</table>

## Negative PCR test results (pooled samples)

<table>
<thead>
<tr>
<th>Date</th>
<th>«Neg_Test_Dates»</th>
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</thead>
</table>

## Conditions

<table>
<thead>
<tr>
<th>Condition</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Truck drivers must wear disposable plastic boots or rubber boots that can be disinfected if they get out of the vehicle. Plastic boots may be disposed of on the premises.</td>
</tr>
<tr>
<td>2</td>
<td>Hands and rubber footwear must be thoroughly cleaned and disinfected prior to entering or leaving the premises. Farm personnel should place hatching egg buggies on the loading dock but not enter the trailer. The hatching egg delivery truck driver should load the eggs from the dock and not enter the farm egg-storage room. The hatching egg delivery truck driver should wear appropriate PPE and the hatchery and the breeder farm. The hatching egg delivery truck driver should not enter the hatchery loading dock and the hatchery personnel should unload the eggs from vehicle trailer.</td>
</tr>
<tr>
<td>3</td>
<td>Transport vehicles must be cleaned and disinfected. Tires must be sprayed with disinfectant before leaving the premises. The exterior of the hatching egg vehicle should be cleaned and disinfected before entering the hatchery.</td>
</tr>
<tr>
<td>4</td>
<td>Hatching eggs must be packed in either new disposable materials or plastic materials that were previously cleaned and disinfected at the hatchery.</td>
</tr>
<tr>
<td>5</td>
<td>Egg-handling materials must be destroyed at the destination plant or cleaned and sanitized. Egg-handling materials can be returned to the premises of origin after at least 24 hours have elapsed since these materials were moved from the farm and without contacting materials going to other premises. New paper or fiber flats must be used for hand-gathered eggs.</td>
</tr>
<tr>
<td>6</td>
<td>Two negative real time PCR tests for avian influenza must be conducted on pooled samples of oropharyngeal swabs from 5 dead birds or 11 dead birds out of every 50 dead birds from each house on the premises. The second test must be on samples taken on the second day of holding or later.</td>
</tr>
</tbody>
</table>

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**Virginia Department of Agriculture**

Date
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**PERMIT**

**LIVE BIRDS MOVED INTO THE CONTROL ZONE**

<table>
<thead>
<tr>
<th>Permit Information</th>
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<tbody>
<tr>
<td>Permit number:</td>
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<td>Issued:</td>
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<tr>
<td>Type:</td>
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</tbody>
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|                    | «Destination_Premises_Zip») |
| Date of movement:  | «Date Moved» |
| Email permit to:   | «Origin_Business_e_mail» |

**Conditions**

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<table>
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<tr>
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<tbody>
<tr>
<td>1</td>
<td>Truck drivers must wear disposable plastic boots or rubber boots</td>
</tr>
<tr>
<td></td>
<td>that can be disinfected if they get out of the vehicle. Plastic</td>
</tr>
<tr>
<td></td>
<td>boots may be disposed of on the premises.</td>
</tr>
<tr>
<td>2</td>
<td>Hands and rubber footwear must be thoroughly cleaned and</td>
</tr>
<tr>
<td></td>
<td>disinfected prior to leaving the premises.</td>
</tr>
<tr>
<td>3</td>
<td>Tires must be sprayed with disinfectant before leaving the</td>
</tr>
<tr>
<td></td>
<td>premises.</td>
</tr>
<tr>
<td>4</td>
<td>At the end of each day, floor mats in the cab must be washed</td>
</tr>
<tr>
<td></td>
<td>with disinfectant.</td>
</tr>
<tr>
<td>5</td>
<td>Trucks must be thoroughly cleaned and disinfected as soon as</td>
</tr>
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<td></td>
<td>possible after leaving the facility.</td>
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Authorized by
Virginia Department of Agriculture

Date
## Permit

**Movement of Day Old Pouls**

### Permit Information

<table>
<thead>
<tr>
<th>Permit number:</th>
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<tbody>
<tr>
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<td>Type:</td>
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<tr>
<td>Date of movement:</td>
<td>«Date_Moved»</td>
</tr>
<tr>
<td>Email permit to:</td>
<td>«Origin_Business_e_mail»</td>
</tr>
</tbody>
</table>

### Conditions

1. Pouls will be moved in clean reusable or new paper boxes with clean reusable or new pads.
2. Trucks and trailers will be cleaned and disinfected before pouls are loaded.
3. Prior to coming onto the hatchery premises and or backing into the loading dock, the wheels and undercarriage should be disinfected.
4. Truck drivers must use full coverage on each farm of delivery (hairnet, mask, coveralls, gloves, and disposable boot covers) and follow protocols for movement between the farm and truck.
5. Floor mats, pedals, seat, and shoes must be sprayed with disinfectant and tires and undercarriage disinfected before leaving the farm.

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Virginia Department of Agriculture

**Date**

112
# PERMIT

**NEST RUN EGGS TO A LOCATION WITHOUT POULTRY FOR WASHING AND SANITIZING, BREAKING OR PROCESSING**

## Permit Information

<table>
<thead>
<tr>
<th>Permit number:</th>
<th>«Permit_Name»: «movementName»</th>
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<tbody>
<tr>
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## Negative PCR test results (pooled samples)

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## Conditions

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<tbody>
<tr>
<td>2</td>
<td>Hands and rubber footwear must be thoroughly cleaned and disinfected prior to leaving the premises.</td>
</tr>
<tr>
<td>3</td>
<td>Tires must be sprayed with disinfectant before leaving the premises.</td>
</tr>
<tr>
<td>4</td>
<td>Eggs must be moved directly to the designated facility for washing and sanitizing, breaking or processing.</td>
</tr>
<tr>
<td>5</td>
<td>Egg-handling materials must be destroyed at the destination plant or cleaned and sanitized. Egg-handling materials can be returned to the premises of origin after at least 24 hours have elapsed since these materials were moved from the farm and without contacting materials going to other premises. New paper or fiber flats must be used for hand-gathered eggs.</td>
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<td>Two negative real time PCR tests for avian influenza must be conducted on pooled samples of oropharyngeal swabs from 5 dead birds or 11 dead birds out of every 50 dead birds from each house on the premises. The second test must be on samples taken on the second day of holding or later.</td>
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**Permit**

**Product Moving out of the Control Area**

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<thead>
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<th>Permit Information</th>
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<tbody>
<tr>
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«Destination_Premises_Prem_Name»  
(«Destination_Premises_Prem_Address_1»  
«Destination_Premises_City», «Destination_Premises_State»  
«Destination_Premises_Zip») |
| Date of movement | «Date_Moved» |
| Email to: | «Origin_Business_e_mail» |

**Conditions**

| 3 | Truck drivers must wear disposable plastic boots or rubber boots that can be disinfected if they get out of the vehicle. Plastic boots may be disposed of on the premises. |
| 4 | Hands and rubber footwear must be thoroughly cleaned and disinfected prior to leaving the premises. |
| 5 | Tires must be sprayed with disinfectant before leaving the premises. |
| 6 | At the end of each day, floor mats in the cab must be washed with disinfectant. |
| 7 | Dedicated trucks will be used to transport materials between these sites and will be cleaned and disinfected after hauling each load and before being used to haul the next load. |
| 8 | Daily shipment reports must be submitted to the Board of Animal Health at: Include tuck and driver information (tractor license plate, trailer license plate, driver name). |

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Date
APPENDIX 26
Sample Flock Plan Templates (5/13/2015)

Flock Plan
for HPAI Euthanasia, Disposal, and Cleaning and Disinfection Procedures for Commercial Premises in (State)

Note: This is a general flock plan template intended to serve as a guide. It must be amended as necessary to be specific to the premises listed below.

Premises ID: (Premises identification number)

Premises State, county, and site number: (Two-letter State abbreviation, county, site number)

Premises Owner: (Name of premises owner)

Premises name and address: (Name of affected premises)
(Street address, city, State, zip)

Premises Contact Person: (Contact name)
(Phone number)
(Email address)

Poultry Owner: (Name of poultry owner)
(Name of representative, if applicable)
(Street address, city, State, Zip)

Poultry present: (Census, type, purpose, age in days)

Brief History: (Clinical signs, test results etc.)

This is a written flock management agreement developed between USDA,APHIS, Veterinary Services (VS) and the (State agency) (hereafter, “the State” or “State”) with input from (poultry owner and/or premises owner). This flock will be handled in accordance with the State Initial State Response and Containment Plan (ISRCP), HPAI Response Plan Red Book for Highly Pathogenic Avian Influenza (hereafter, “HPAI Response Plan Red Book”), and Code of Federal Regulations (CFR).

The main tenets of this plan include

- Depopulation of all poultry on affected premises
- Composting of poultry, litter, and any other appropriate materials
- Cleaning and disinfection of the premises
- Assuring the premises is disease free
  - Downtime and environmental testing
- Repopulation and monitoring for disease

**Primary Responsibilities**

Euthanasia will be the primary responsibility of (add responsible parties and specify those who will be doing oversight). The poultry owner(s) will be eligible for indemnification. All necessary indemnity documents regarding the live poultry will be completely filled out and signed prior to euthanasia. The value of the poultry will be obtained by a VS-prepared calculator based on the fair market value of the birds.

Disposal of dead poultry, litter (poultry bedding), and other contaminated materials that result from the depopulation will be the primary responsibility of (add responsible parties) with oversight by VS and the State. These materials will be managed by on-site composting (or insert other method), with concurrence from VS, State and State DNR, followed by approved disposal, as described below.

(The poultry/premises owner) will be primarily responsible for cleaning of the equipment, contaminated barns/areas, conveyances, and other contaminated materials during the composting/C&D process. (The poultry/premises owner) will also apply the insecticide and rodenticide.

Disinfection of equipment, conveyances, and other contaminated materials associated with the depopulation will be the primary responsibility of (poultry/premises owner, depopulation crew, or contractor) and VS. The disinfectant used will be approved by VS and the State from a list that has been EPA approved for use with HPAI.

**Quarantine and Enhanced Biosecurity**

The standard avian influenza quarantine form was issued on (date). This document was signed by (poultry or premises owner, or representative). The quarantine states that no animals, poultry, poultry products (hatching eggs), or other contaminated materials (manure, mortalities, eggs, shells, feed, etc.) are to enter or leave the premises without a permit issued by the State and appropriate biosecurity.

Quarantine instructions include increasing biosecurity measures to minimize traffic and implementing protocols to clean and disinfect vehicles and equipment. The quarantine will not be released before
- contaminated materials are composted or otherwise disposed of;
- the farm is cleaned and disinfected according to measures outlined in the ISRCP and HPAI Response Plan Red Book;
- all flock and environmental testing in the Control Area has been completed with negative results; and
- repopulated poultry are confirmed to be free of virus.
Control Area quarantines and movement control restrictions will be maintained until at least 21 days have elapsed since the decontamination of all confirmed infected premises and negative results for all surveillance activities within the Control Area are documented by the State.

**Epidemiologic Investigation**

An epidemiologic investigation to assess potential pathways of initial introduction of HPAI viruses onto this operation and potential lateral transmission routes of HPAI viruses from this infected premises to non-infected premises is to be conducted by a State or Federal veterinarian. This investigation should be initiated as soon as possible, preferably no later than one (1) week following detection.

An investigation form is provided and should serve as a guide for conducting a systematic and standardized assessment of potential pathways of initial virus movement onto the farm and potential movement of the virus off the farm. All sections of the form should be completed through direct conversation with the individual(s) most familiar with the farm’s management and operations and questions are to be answered for the period of two (2) weeks prior to the detection of HPAI. Direct observation of the biosecurity or management practices asked about should be conducted, where applicable.

Completed investigations are to be forwarded to USDA APHIS, Office of the Chief Epidemiologist with a copy to the signatories of this plan.

**Requests for Indemnity for Disposal, Cleaning, and Disinfection Activities**

Any disposal of poultry and cleaning and disinfection of premises, conveyances, and materials for which indemnity is requested by (the premises and/or poultry owner(s)) must be performed under a separate cooperative compliance agreement between the claimant and VS. The cooperative compliance agreement or a pre-award letter for the agreement must be signed by all parties before the start of any of the activities for which indemnity is claimed. Any work performed before the cooperative compliance agreement or pre-award is signed will not be eligible for reimbursement.

**Euthanasia**

All flocks on the affected premises will be depopulated in a timely manner. Workers will be fit tested and medically approved before entering the farm and will don appropriate personal protective equipment (PPE). Biosecurity will be maintained using a clean area and dirty area, to be established before euthanasia and disposal start.

Poultry will be/was euthanized by (a contractor, owner - name) using (method – foam, CO₂, etc.). The depopulation crew expects to begin euthanasia on (date) or completed euthanasia on (date). Euthanasia will be/was/ was not conducted under the direct supervision of State or Federal (VS) personnel.
Disposal of Euthanized Poultry

The euthanized birds will be composted on site following the procedures below. (If other methods in addition to, or instead of, composting are used, specify these procedures below.)

1. **Disposal of all euthanized poultry and eggs.** These items will be composted on site by (an authorized contractor/owner) with supervision by the State and/or VS. (Insert other method if applicable.)

2. **Disposal of litter, manure, debris, and feed.** These items will be composted on site by (an authorized contractor/owner) with supervision by the State and VS. (Insert other method if applicable.)

3. **Monitoring of materials.** Composted materials will be monitored by State and/or VS personnel to ensure virus destruction and to identify when material can be turned or removed from the facility. (Include specific information describing who is monitoring compost temperatures and who will be reviewing that information to direct the compost management.)

Cleaning and Disinfection of Conveyances Following Depopulation

All vehicles and equipment used in holding, handling, or transporting, or that have been in contact with, affected poultry, poultry products, or contaminated materials will be cleaned and disinfected prior to leaving the premises. The exterior, including the undercarriage, and interior surfaces, including truck cabs, will be cleaned. The interior of the truck cabs will be washed with clean water and a disinfectant applied as authorized in 9 CFR § 71.10(a). The cleaning and disinfection of these items will be completed by (specify), with approval and oversight by State or VS personnel.

Drivers will be instructed to avoid contaminating the cab of the truck. Should exiting the vehicle become necessary, plastic boot covers will be provided along with instructions on their proper use and disposal.

Manure, litter, and other debris removed from these vehicles will be handled in a manner similar to that described above.

Preparation for Cleaning and Disinfection

Following the depopulation of poultry on the premises, the following procedures will be completed prior to cleaning and disinfection:

- Secure and remove all feathers that might blow around outside the house in which the infected or exposed poultry were held and clean any debris from around the exterior of the poultry houses.
- Apply insecticides and rodenticides immediately after the depopulation of the birds. This will be documented by State and/or VS personnel. The buildings will remain undisturbed, with the exception of required compost monitoring, for as long as possible in order to allow as much of the HPAI virus as possible to deteriorate to a non-infective state.
Destruction and Disposal of Contaminated Materials that Can’t be Cleaned and Disinfected

Before cleaning and disinfection, the premises will be inspected by the poultry or premises owner and personnel from the State and/or VS to determine if there are contaminated items for which the cost of cleaning and disinfection would exceed the value of the materials or for which cleaning and disinfection would be impractical for another reason. The fair market value (used price) of these items will be determined by a State or VS appraiser with input from the owner. The destruction and disposal of these items will be conducted in accordance with VS Guidance 8603.1. Prior VS approval is required for destruction of items for which indemnity will be claimed.

When to Clean

Manure and litter will be composted within the poultry houses and must complete composting prior to any cleaning of the houses. (Remove if in-house composting is not occurring and specify when cleaning can commence.) Houses should not be cleaned out or litter moved until all potential HPAI virus that may have contaminated the manure and litter is inactivated, as determined by State and/or VS personnel and in accordance with the ISRCP and HPAI Response Plan Red Book. All compost material must remain on the infected premises for at least 30 days.

Cleaning and Disinfection

Cleaning and disinfection will be performed on all contaminated buildings and surfaces including pump houses and service areas.

1. Disposal of all litter, manure, debris, and feed. These items will be composted under the direction of State and/or VS personnel and in accordance with the ISRCP and HPAI Response Plan Red Book and allowed to remain undisturbed for an amount of time approved by State and/or VS personnel. The interior of the compost piles must reach a temperature determined by the State or VS as measured at multiple sites within the compost piles. The compost piles will be turned (at the direction of the State or VS) so that un-composted areas will be moved to the interior of the pile. Once the composted piles reach the required temperature a second time, as measured at multiple sites, the composting may be completed. This process will be monitored and directed by State or VS personnel. All composted material must remain on the premises for a minimum of 30 days. Composting will be the responsibility of (insert responsible parties).

Once composting is completed and the compost material is considered safe to move, said material can be (insert disposal method, spread on field, stored etc., and preferably be 2 miles from any other commercial poultry premises). State and/or VS personnel will oversee, monitor, and document this process. After use, equipment used to clean out manure, litter, debris, and feed will be washed, disinfected, and inspected at the
site to where those materials were transported. In the case of inclement weather, the equipment may be washed, disinfected, and inspected at off-site wash stations at the discretion of the State and VS.

2. **Cleaning of the premises and equipment.** Dry cleaning (the removal of contaminated materials without the use of water) and wet cleaning (washing) processes will be sufficient to ensure that all materials and substances contaminated with HPAI virus, such as manure, dried blood, and other organic materials, are removed from all surfaces. Equipment will be disassembled as required to clean all contaminated surfaces. Special attention will be given to automatic feeders and other closed areas to ensure adequate cleaning. Houses and equipment will be inspected and documented by the State and/or VS to ensure that cleaning has removed all contaminated materials or substances and that houses and equipment are completely dry before applying disinfectant.

3. **Disinfection of premises and materials.** *(Insert parties)* will be responsible for disinfection. When cleaning has been completed and all surfaces are dry, all contaminated interior surfaces of the structure should be saturated with a disinfectant as approved by EPA and selected by the State and/or VS. Disinfectants will be applied as specified by the manufacturer, ensuring disinfection of all surfaces occurs, and that the disinfectant gets into cracks and crevices. Special attention will be given to automatic feeders and other closed areas to ensure adequate disinfection. Disinfection procedures will be overseen and documented by State and/or VS personnel.

**Ensuring the Premises is Free of Avian Influenza**

1. **Environmental Testing:** Following depopulation, cleaning and disinfection, the premises will remain free of avian species for 21 days. Quarantine and movement control restrictions in the Control Area will be maintained until at least 21 days have elapsed since the decontamination of all confirmed infected premises and negative results of surveillance activities within the Control Area determined by the State and/or VS. During this time environmental sampling will be performed by State and/or VS personnel.

2. **Repopulation and flock monitoring:** The State and APHIS officials must concur in writing prior to any restocking activities. If restocking occurs without prior written approval of State and APHIS officials, this repopulation is at the producer’s risk; APHIS will not indemnify previously affected premises that are restocked without prior written approval and subsequently become re-infected.
Birds Restocked After 21 Day Downtime

After repopulation of the premises, the repopulation flock must undergo at least three tests for avian influenza. Sampling for the tests must occur at least seven days apart. All birds sampled for testing must be at least 21 days old. The birds will be tested by collection of tracheal swabs and submission of the samples to (NAHLN lab) for PCR testing for evidence of avian influenza.

Post-Quarantine Avian Influenza Poultry Surveillance

Besides normal NPIP surveillance, all post-quarantine abnormal mortality within 180 days of quarantine release should be investigated and tested for avian influenza by State and/or VS personnel. Abnormal mortality is defined as follows: (Remove info that does not apply to this flock.)

- Commercial broiler turkeys: mortality in excess of 2 birds/1,000 per day for 2 consecutive days;
- Commercial breeder turkeys: mortality in excess of 2 birds/1,000 per day (after 21 days of age);
- Commercial layers: 4 times normal daily mortality for 2 consecutive days (0.5 per 1,000 per day for layers from 2-50 weeks and 0.75 per 1,000 per day for layers over 50 weeks) or 5 percent drop in egg production over 3 days.

Producer/Grower Representative:

Signature: ____________________________ Date: __________

Poultry Owner Representative:

Signature: ____________________________ Date: __________

VS Incident Commander or (State) Assistant Director:

Signature: ____________________________ Date: __________

(State) Incident Commander or (State) State Veterinarian:

Signature: ____________________________ Date: __________
Note: This is a general flock plan template intended to serve as a guide. It must be amended as necessary to be specific to the premises listed below.

Premises ID: (Premises identification number)

Premises State, county, and site number: (Two-letter State abbreviation, county, site number)

Premises Owner: (Name of premises owner)

Premises Name and Address: (Name of affected premises)

(Street address, city, State, zip)

Premises Contact Person: (Contact name)

(Phone number)

(Email address)

Bird Owner: (Name of bird owner)

(Name of representative, if applicable)

(Street address, city, State, zip)

Birds Present: (Census, type, purpose, age)

Brief History: (Clinical signs, test results etc.)

This is a written flock management agreement developed between USDA APHIS Veterinary Services (VS) and the (State agency) (hereafter, “the State” or “State”) with input from (bird owner and/or premises owner). This flock will be handled in accordance with the State Initial State Response and Containment Plan (ISRCP), HPAI Response Plan Red Book for Highly Pathogenic Avian Influenza (hereafter, “HPAI Response Plan Red Book”), and Code of Federal Regulations (CFR).

The main tenets of this plan include

- Depopulation
Disposal of birds, eggs, litter, and any other appropriate materials  
Cleaning and disinfection  

**Primary Responsibilities**  

- **Euthanasia** will be  
  o the responsibility of (specify responsible party), and  
  o carried out by (specify who will be doing the euthanasia), with oversight by VS and the State.

- **Disposal** of dead birds, litter (bedding), and other contaminated materials will be  
  o the responsibility of (specify responsible party), and  
  o carried out by (specify who will be doing the disposal), with oversight by VS and the State.

- **Cleaning** of contaminated equipment, structures, conveyances, and other contaminated areas and materials will be  
  o the responsibility of (specify responsible party), and  
  o carried out by (specify who will be doing the cleaning), with oversight by VS and the State.

- **Disinfection** of equipment, conveyances, and other contaminated materials will be  
  o the responsibility of (specify responsible party), and  
  o carried out by (specify who will be doing the disinfecting), with oversight and documentation by VS and the State. The disinfectant used will be approved by VS and the State from a list that has been EPA approved for use with HPAI.

**Quarantine and Enhanced Biosecurity**  
The standard avian influenza quarantine form was issued on (date). This document was signed by (bird or premises owner, or representative). The quarantine states that no domesticated birds or other animals, bird products such as hatching eggs, or contaminated materials (manure, mortalities, eggs, shells, feed, etc.) are to enter or leave the premises without a permit issued by the State and appropriate biosecurity.

Quarantine instructions include increasing biosecurity measures to minimize traffic and implementing protocols to clean and disinfect vehicles and equipment. The quarantine will not be released before  

- contaminated materials are appropriately cleaned, disinfected, and/or disposed of;
• the premises is cleaned and disinfected according to measures outlined in the ISRCP and HPAI Response Plan Red Book.

The premises quarantine will not be released before completion of an epidemiologic investigation with no detection of HPAI, and, if not all birds on the premises were euthanized, completions of surveillance testing with no detection of HPAI.

**Epidemiologic Investigation**
An epidemiologic investigation to assess potential pathways of initial introduction of HPAI viruses onto this operation and potential lateral transmission routes of HPAI viruses from this infected premise to non-infected premises is to be conducted by a State or Federal veterinarian. This investigation should be initiated as soon as possible, preferably no later than one (1) week following detection.

An investigation form is provided and should serve as a guide for conducting a systematic and standardized assessment of potential pathways of initial virus movement onto the farm and potential movement of the virus off the farm. All sections of the form should be completed through direct conversation with the individual(s) most familiar with the farm’s management and operations and questions are to be answered for the period of two (2) weeks prior to the detection of HPAI. Direct observation of the biosecurity or management practices asked about should be conducted, where applicable.

Completed investigations are to be forwarded to USDA APHIS, Office of the Chief Epidemiologist with a copy to the signatories of this plan.

**Requests for Indemnity for Disposal, Cleaning, and Disinfection Activities**
The bird owner(s) will be eligible for indemnification. All necessary indemnity documents regarding the live birds will be completely filled out and signed prior to euthanasia. The value of the birds will be obtained from (a) a VS-prepared calculator based on the fair market value of the birds, and/or (b) receipts.

Any disposal of birds and cleaning and disinfection of premises, conveyances, and materials for which indemnity is requested must be performed under a separate compliance agreement or cooperative compliance agreement between the claimant and VS. The agreement or a pre-award letter for the agreement must be signed by all parties before the start of any of the activities for which indemnity is claimed. Any work performed before the agreement or pre-award letter is signed will not be eligible for reimbursement.
Euthanasia
(All, or specify which subset of) domesticated birds on the premises will be euthanized in a timely manner. Workers will be fit tested and medically approved before entering the premises and will don appropriate personal protective equipment (PPE). Biosecurity will be maintained using a clean area and dirty area, to be established before euthanasia and disposal start.

Birds will be/were euthanized using (specify method – foam, CO₂, etc.). Euthanization is expected to begin euthanasia on (date) or Euthanasia was completed on (date). Euthanasia will be/was/was not conducted under the direct supervision of State or VS personnel.

Disposal
(Amend the text below as necessary for this premises, to clearly describe the disposal methods and procedures used.)

1. **Disposal of all euthanized birds and eggs.** These items will be (specify disposal method(s)).
2. **Disposal of contaminated litter, manure, debris, and feed.** These items will be (specify disposal method(s)).

Destruction and Disposal of Contaminated Materials that can’t be Cleaned and Disinfected
Before cleaning and disinfection, the premises will be inspected by the bird or premises owner and VS to determine whether there are contaminated items for which the cost of cleaning and disinfection would exceed the value of the materials or for which cleaning and disinfection would be impractical for another reason. The fair market value (used price) of these items will be determined by a State or VS appraiser with input from the owner. The destruction and disposal of these items will be conducted in accordance with VS Guidance 8603.1. Prior VS approval is required for destruction of items for which reimbursement will be claimed.

Cleaning and Disinfection
All contaminated structures, equipment, and surfaces will be cleaned and disinfected.

1. **Cleaning.** Dry cleaning (the removal of contaminated materials without the use of water) and wet cleaning (washing) processes will be sufficient to ensure that all materials and substances contaminated with HPAI virus, such as manure, dried blood, and other organic materials, are removed from all surfaces. Equipment will be disassembled as necessary to clean all contaminated surfaces. Special attention will be given to automatic
feeders and other closed areas to ensure adequate cleaning. Houses and equipment will be inspected by the State and/or VS to ensure that cleaning has removed all contaminated materials or substances and that houses and equipment are completely dry before applying disinfectant. The State and/or VS will document that this has occurred.

2. **Disinfection.** When cleaning has been completed and all surfaces are dry, all contaminated surfaces should be saturated with a disinfectant. The disinfectant will be applied as specified by the manufacturer, ensuring disinfection of all surfaces occurs, and that the disinfectant gets into cracks and crevices. Special attention will be given to automatic feeders and other closed areas to ensure adequate disinfection.

**Ensuring the Premises is Free of Avian Influenza**

If birds remain on the premises, any remaining birds that were in contact with birds, eggs, or materials from an infected flock, must at a minimum, be sampled via rtPCR diagnostic testing every other day for 14 days. *(If applicable, specify other surveillance testing scheme determined by the State and VS to be appropriate. See official VS Guidance for details and examples.)* The samples will be submitted to *(specify NAHLN lab)* for testing for evidence of avian influenza.

Owner/Operator:

**Signature:**_________________________________________  **Date:** __________

VS Incident Commander or *(State)* Assistant Director:

**Signature:**_________________________________________  **Date:** __________

*(State)* Incident Commander or *(State)* State Veterinarian:

**Signature:**_________________________________________  **Date:** __________
APPENDIX 27
VPF Company Notification Protocol

When the rapid response plan requires VPF to notify Virginia poultry companies of diagnostic testing results, it is important that both VPF and poultry companies manage the information efficiently, effectively, and discretely. VPF will attempt to notify a designated primary contact at each company. If that attempt is unsuccessful, VPF will attempt to notify designated backup contacts with each company. VPF will use its discretion to determine the most appropriate means of notification, such as phone call and e-mail. The designated poultry company contact or backup will be responsible for sharing the information with others within his or her company on a need-to-know basis only. The information should NOT be disseminated beyond company personnel with a definite need to know.