VS Guidance 8602.2

Response, Communications, and Investigation of H5/H7 Avian Influenza in Domestic Poultry

1. Purpose and Background

This document describes procedures to ensure a common and consistent approach in Veterinary Services (VS)' response to, communications regarding, and investigation of avian influenza (AI) subtypes H5 and H7 (H5/H7) detected in U.S. domestic poultry. This document aligns with Animal and Plant Health Inspection Service (APHIS) regulations and World Organization for Animal Health (OIE) guidelines. The document applies to poultry as defined by the OIE and regulated by VS. APHIS Wildlife Services conducts surveillance for AI viruses in wild migratory birds.

The VS National Poultry Improvement Plan (NPIP) and Live Bird Marketing System (LBMS) H5/H7 low pathogenicity avian influenza (LPAI) programs are voluntary. However, participants' response, communication, and investigation processes for H5/H7 LPAI must be structured consistently with title 9, *Code of Federal Regulations* (9 CFR) parts 56, 145, 146, and147; the NPIP Program Standards; and the Live Bird Marketing System Uniform Standards.

The Official State Agency (OSA) administers the NPIP and the LBMS H5/H7 LPAI Program within the State according to the applicable provisions in 9 CFR 145.23(h), 9 CFR 145.33(l), 9 CFR 145.43(g), 9 CFR 146.23(b), 9 CFR 146.33(b), 9 CFR 146.43(b), the NPIP Program Standards, 9 CFR part 56, and the Live Bird Marketing System Uniform Standards as well as the Memorandum of Understanding NPIP has with that State.

Highly pathogenic avian influenza (HPAI)is a foreign animal disease (FAD) in the United States and is reportable to the VS Area Veterinarian in Charge (AVIC) according to 7 USC 8301 et seq. and 9 CFR part 71. HPAI is also reportable to the State animal health official (SAHO). If HPAI is suspected based on either the VS epidemiological definition of a suspect case (a bird with HPAI-consistent clinical signs) or other clinical indications, animal health officials conduct a FAD investigation. VS Guidance Document 12001.4, Policy for the Investigation of Potential Foreign Animal Disease/Emerging Disease Incidents, and the National HPAI Response Plan describe investigation procedures, including notification procedures. In these instances, the notification processes described in this document do not apply.

This guidance document represents the Agency's position on this topic and is intended solely as guidance. It does not have the force and effect of law, does not create or confer any rights for or on any person, and does not bind the U.S. Department of Agriculture (USDA) or the public. Language suggesting that this guidance is mandatory (e.g., "shall,"

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"must," "required", or "requirement") should not be construed as binding unless the terms quote from a statutory or regulatory requirement. The information this document contains may be made available to the public. While this document provides guidance for users outside VS, VS employees may not deviate from the directions provided herein without appropriate justification and supervisory concurrence.

2. Document Status

A. Review date: 5/31/2024.

B. This document replaces Veterinary Services Guidance 8602.1.

3. Reason for Reissuance

VS is reissuing this guidance to reflect changes in procedure and structure. VS also amended the content of the document to account for changes in addressing H5/H7 after the 2015 outbreak.

4. Authority and References

A. **Authorities** (*Code of Federal Regulations* (CFR)):

- 7 CFR 371.4
- 9 CFR part 53
- 9 CFR part 56
- 9 CFR part 71
- 9 CFR part 145
- 9 CFR part 146
- 7 USC 8301 *et seq.*

B. **References:**

- VS Guidance 12001.4, Policy for the Investigation of Potential Foreign Animal Disease/Emerging Disease Incidents
- National HPAI Response Plan
- Live Bird Marketing System Uniform Standards
- Avian Influenza Chapter (10.4) of the 2019 OIE Terrestrial Animal Health Code
- LPAI Website for additional LPAI Guidance Documents, forms and templates

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C. Definitions:

The OIE defines H5/H7 and HPAI in the Avian Influenza Chapter (10.4.1) of the 2019 Terrestrial Code as follows:

For the purposes of the *Terrestrial Code*, avian influenza is defined as an infection of poultry caused by any influenza A virus of the H5 or H7 subtypes or by any influenza A virus with an intravenous pathogenicity index (IVPI) greater than 1.2 (or as an alternative at least seventy-five (75) percent mortality) as described below. The OIE divides these viruses into high pathogenicity avian influenza (HPAI) viruses and low pathogenicity avian influenza (H5/H7 LPAI) viruses:

a. HPAI viruses have an IVPI in six (6) week-old chickens greater than 1.2 or cause at least seventy-five (75) percent mortality in four (4 to eight (8) week-old chickens infected intravenously. H5 and H7 viruses which do not have an IVPI of greater than 1.2, or cause less than seventy-five (75) percent mortality in an intravenous lethality test should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0); if the amino acid motif is similar to that observed for other HPAI isolates, the isolate being tested should be considered as HPAI;

b. LPAI are all other influenza A viruses of H5 and H7 subtypes that do not meet the definition of HPAI.

The following defines the occurrence of infection with an avian influenza virus: The virus has been isolated and identified as such or specific viral ribonucleic acid has been detected in poultry or a product derived from poultry.

5. Audience

VS employees, other Federal and State agencies, and members of the public.

6. Guidance

A. Identification of H5/H7

1) Sample Collection for Virus Detection

For routine surveillance, animal health officials collect appropriate samples in the field (refer to VS Guidance on Avian Sample Collection for Influenza A and Newcastle Disease (WI-AV-0020)) and enter epidemiological information on VS Form 10-4, Specimen Submission. The officials submit sample(s) to the relevant VS-

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authorized laboratory (NPIP laboratories), or VS-approved laboratory (National Animal Health Laboratory Network (NAHLN)), or the National Veterinary Services Laboratories (NVSL) for AI testing.

2) Notification Processes for Presumptive Positive H5/H7 (Note: These actions should be concurrent)

   a. A VS-authorized or approved laboratory conducts requested diagnostic testing on the submitted samples and notifies the submitter, SAHO, and AVIC of the affected State of any non-negative results for influenza A (fluA), H5, or H7 from active/passive surveillance samples. If the testing laboratory is in a different State than the animal location State, then the laboratory notifies the submitter and the OSA, SAHO, and AVIC of the laboratory's State. The AVIC of the laboratory's State notifies the AVIC from the animal location State, who, in turn, notifies the OSA and SAHO of the animal location State. VS considers laboratory results from VS-authorized or approved laboratories as presumptive positives until NVSL conducts confirmatory testing.

   b. The laboratory forwards all samples testing non-negative for fluA, non-negative for H5 or H7, or samples collected from flocks with incidence of increased morbidity/mortality with fluA detection to NVSL. The laboratory contacts the NVSL Diagnostic Virology Laboratory – Avian section (DVL-AV; 515-337-7551) directly. The submitting laboratory should email DVL-AV (nvsl.dvl.avian@usda.gov; refer to WI-AV-0020 §5.1) with submission and tracking information, a summary of test results (including PCR Cts by sample ID), production type, premises identification, clinical presentation and other relevant information to NVSL with cc to the SAHO and AVIC. If the animal location is in another State, the submitting laboratory also emails, or faxes, notification to the AVIC and the SAHO in the animal location State as well. The SAHO and the AVIC may facilitate shipping samples to NVSL.

   c. The submitting State's AVIC contacts the Avian Health staff and VS Field Operations leadership to capture the information needed for response. Concurrently, the District Office or affected SAHO initiates data entry into the Emergency Management Response System (EMRS) and notifies the OSA and Avian Health staff of the entry.

3) Cooperative Discussions

   The AVIC initiates and facilitates cooperative phone discussions with District Office personnel, Avian Health staff, the States, State laboratories and/or NVSL, and industry regarding the potential response to a presumptive positive AI incident. A

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State may activate its Standing Emergency Disease Management Committee as described in 9 CFR 56.10. VS will withhold action until the State officially requests Federal assistance in compliance with 9 CFR 56.2(c).

4) Situation Report (SITREP) Preparation and Distribution

a. Use an AI SITREP template and an AI Epidemiology Report template for all domestic poultry H5/H7 events (see the LPAI website for templates).

b. After receiving a non-negative or presumptive positive laboratory report, the District Office Avian Health Point of Contact (POC) prepares an initial SITREP in consultation with the OSA and forwards it to the Avian Health Staff.

c. The Avian Health Staff and NVSL review and amend the SITREP as necessary for completeness and add national information as needed.

d. Avian Health staff distributes the amended SITREP to the AI distribution list set forth in subsection e.

e. The AI distribution list consists of:

1. The VS Executive Team: The Deputy Administrator, Associate Deputy Administrators, and Executive Directors.

2. Strategy and Policy:

i. Aquaculture, Swine, Equine and Poultry Health Center (ASEP), Including NPIP and Avian Health staff.
ii. National Preparedness and Incident Coordination Center.
iii. Center for Epidemiology and Animal Health, including Domestic Disease Epidemiology and Risk and Monitoring and Surveillance.
iv. Office of Interagency Coordination.
v. Live Animal Import and Export.
vi. Animal Product Import and Export.
vii. Regionalization Evaluation Services.

3. Field Operations:

Including AVICs, District Directors, District Office Avian Health POCs, and the Directors of the Logistics Center, Veterinary Export Trade Services, and Port Services.

4. NVSL.

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5. Directors of Legislative and Public Affairs.

f. The AVIC forwards notifications to the affected SAHO.

g. DVL-AV maintains communication with the submitting laboratory, the AVIC, and others as directed by the AVIC or Avian Health staff regarding sample receipt, estimated turnaround times, etc.
   - NOTE: Official NVSL reports are distributed per business rules to the submitter, the VS State inbox (managed by the AVIC) of the animal location and the laboratory location, and the State veterinarian of the animal location and of the laboratory location. Partial and pending reports are sent and updated as results are available. The final report is not sent until virus characterization is complete. If an official report is needed prior to that time, contact DVL-AV.

h. District and Avian Health staff update the SITREP through the process stipulated in 6.A.4) as the following laboratory diagnostic results become available, or at least once weekly.

   1. Results of influenza A, H5 and H7 real-time reverse-transcriptase polymerase chain reaction (rRT-PCR) tests.

   2. HA subtype and pathotype (by HA cleavage site sequence which determines LPAI vs. HPAI where sufficient nucleic acid is present or from virus as below). Include NA subtype where available, and statement of whether clinical presentation is consistent with HPAI.

   3. Virus isolation and characterization (including NA subtype).

   4. Results of other AI tests as requested or performed.

B. H5/H7 LPAI Response

The type of response and sequence of actions depend on the affected sector(s) (e.g., commercial poultry or LBMS/backyard and non-commercial poultry).

1) The State, consistent with its H5/H7 LPAI Initial State Response and Containment Plan (ISRCP) and 9 CFR 56.10, may activate its Standing Emergency Disease Management Committee. The committee should be immediately activated for any H5/H7 LPAI findings in commercial poultry. For events in LBMS or backyard/non-commercial poultry that do not require immediate OIE notification, VS, the State, and the affected industry will communicate continuously on response as described in the LBMS Uniform Standards.

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2) Officials address the following aspects of the response:

   a. Quarantine and movement controls.

   b. Depopulation or controlled marketing.

   c. Vaccination options.

   d. Disposal and cleaning and disinfection/virus elimination (the District Office field reimbursement specialist prepares a compliance agreement with the help of Avian Health staff).

   e. Indemnity.

   f. Enhanced surveillance (the State Cooperator may prepare a Supplemental Cooperative Agreement to submit to the District Office).

   g. Epidemiological investigation: If an H5/H7 LPAI event involving one or more States occurs in commercial poultry or the LBMS/backyard/non-commercial poultry, VS and the State animal health authorities conduct an epidemiological investigation per 9 CFR part 56 and the LBMS Uniform Standards. The National Epidemiology Officer – Avian Health leads the investigation with assistance from the Avian Health staff, the District Offices, CEAH, and the respective State animal health authorities.

3) In the event of an H5/H7 LPAI outbreak the State may request Federal assistance for any of these actions per 9 CFR 56.2(c). The State writes to the AVIC requesting Federal assistance; VS recommends that the State and/or owner of the affected flock fill out the Indemnity and Compensation Decision Determination (Appendix 1) form and submit to the AVIC for the determination of the disposition of the flock to be made as soon as possible. This document serves as the official request for indemnity and compensation funds as required by 9 CFR 56.2(c)..

   a. The District Office calls VS staff (Avian Health) and includes the State Animal Health Official or Official State Agency in subsequent conference calls.

   b. The District Office makes subsequent VS, State, and industry (stakeholder) conference calls promptly for local level response activities.

   c. The District Office and Avian Health staff work with the State and affected industry to make decisions consistent with 9 CFR parts 56, 145, and 146, and with the LBMS Uniform Standards. They also use the ISRCP as guidance. When making these decisions, they consider factors of cost, time, availability, and movement risks.

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d. The ASEP Director, or his or her delegate, approves indemnity requests with concurrence from the District, Avian Health staff, and VS leadership.

4) The District Office updates the AI SITREPs and epidemiological investigation reports as it receives new information, or at least weekly, in consultation with the OSA or State Animal Health Official. The National Epidemiology Officer – Avian Health reviews the reports with Avian Health staff and National Preparedness and Incident Coordination staff for completeness and adds any relevant information. Avian Health staff distributes the SITREPs and epidemiological investigation reports to the AI distribution list.

5) Event closure:

a. NVSL reports final results to the submitter, the District Director or AVIC, and others the Avian Health staff specifies.

b. The District Office finalizes the SITREP and epidemiological investigation reports with the National Epidemiology Officer – Avian Health. These reports include information on quarantine, depopulation or controlled marketing, cleaning and disinfection, indemnity, and any enhanced surveillance activities.

c. The District Office sends the final reports to Avian Health staff and National Preparedness and Incident Coordination staff for final review. Avian Health staff sends the final reports to the AI distribution list.

d. The District Office processes indemnity requests.

7. Inquiries

Please contact the ASEP staff at (919) 855-7250 with any questions.

Appendix 1: Indemnity and Compensation Decision Determination form

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Appendix 1: Indemnity and Compensation Decision Determination

1. Please list all of the current test results available for this premises. For PCR, please list the Ct values:

   _____
   _____
   _____

2. Are there multiple ages of birds on the farm? (Y) (N)
   List the bird groups and ages and indicate if they would likely have time to clear the virus prior to humane issues occurring:

   _____
   _____
   _____
   _____

3. List the number of commercial premises in the following zones surrounding the infected premises:
   a. Within 1km (neighboring) _____
   b. Within 3km (Infected Zone) _____
   c. Within 10 km (Buffer Zone) _____

4. What are the estimated number of additional at-risk premises not included in the numbers above (this would include premises closely related by the network, business processes, or those identified by trace-in/trace-out):

   _____

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5. Where do these birds usually go for processing?
    a. In State or out of State (provide State if out of State) _____
    b. Approximate distance to plant (in miles) _____
    c. Can a route to the plant be planned that avoids other poultry premises?
    d. Any reason why the birds, once PCR negative, could NOT go to this plant? Please explain.
    _____
    _____
    _____

6. List any significant trade impacts of control marketing/slaughtering this flock:
_____
_____
_____
_____

7. List any other reasons why control marketing/depopulation via slaughter may not be a viable option for this flock (this may include other LPAI or HPAI circulating at the time):
_____
_____
_____
_____

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8. Please Indicate the State and/or Industry recommendation for the management for this flock: Controlled marketing, depopulation via slaughter, onsite depopulation, or a combination based on flock characteristics. Please indicate your reasoning for this recommendation.

   _____
   _____
   _____
   _____
   _____
   _____-
   _____
   _____
   _____

9. Please indicate the approximate indemnity and or compensation being requested for this flock (for owner and/or grower):
   a. Indemnity $_____
   b. Depopulation and disposal $_____
   c. Virus elimination $_____

   (A Field Reimbursement Specialist or Avian Indemnity Team member can assist with estimates)

Signature(s) and title(s) of official making the above recommendation. (State and Industry can submit separate forms or a joint form.)

Signature
Title

Signature
Title

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USDA APHIS VS Determination:

_____ Approve controlled marketing plan as recommended above.

_____ Approve onsite depopulation as recommended above.

_____ USDA/APHIS VS is NOT in agreement with the recommendation above.

Reason for difference in agreement:

_____
_____
_____
_____
_____

_____ More Information is needed.

A decision will be made within 48 hours once the information requested below is provided. (Enter information needed here.)

_____
_____
_____
_____
_____

Indemnity approved at _____

Depopulation approved at _____

Disposal, materials destroyed and VE approved at _____

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Signature of USDA APHIS VS ICG Official:

_____

Printed name and title of signatory: _____

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