

Development and Approval of Initial State Response and Containment Plans for H5/H7 Low Pathogenicity Avian Influenza (LPAI)

1. Purpose and Background

This document provides Veterinary Services' (VS) guidance on developing and approving Initial State Response and Containment Plans (ISRCPs) for H5/H7 LPAI.

This guidance document represents the Agency's position on this topic. It 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. VS may make this information 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: April 20, 2021.
- B. This document cancels and replaces VS Memorandum No 565.15.

3. Reason for Reissuance

VS has revised this document to clarify procedures, add resources, and update the associated materials.

4. Authority and References

- A. Authorities (*Code of Federal Regulations* (CFR) and U.S. Code (U.S.C.)):
 - [7 CFR 371.4](#)
 - [9 CFR part 56](#)
 - [9 CFR part 145](#)
 - [9 CFR part 146](#)
- B. Guidance documents
 - [VS Guidance 8602, Response, Communication, and Investigation of Notifiable Avian Influenza in Domestic Poultry](#)
 - [VS Guidance 8603, Procedures for Flock Plans, Compliance Agreements, and Indemnity Claims in Cases of H5/H7 Low Pathogenicity Avian Influenza in Poultry](#)
 - [VS Guidance 12000, Policy for the Investigation of Potential Foreign Animal Disease/Emerging Disease Incidents](#)
 - [VS Guidance 8604, Reporting Confirmed Findings of Low Pathogenicity Notifiable Avian Influenza H5/H7 Subtypes to the World Organization for Animal Health \(OIE\) and to Trading Partners](#)
 - [OIE Terrestrial Manual Chapter 2.3.4](#)
 - [Policy and Approach to HPAI Vaccination](#)

- [VS Memo 800.85 Avian Influenza Vaccines](#)

C. Definitions

Avian Influenza. VS adopts the World Organization for Animal Health (OIE) definition of avian influenza (AI). The OIE Terrestrial Animal Health Code defines AI (which is notifiable to the OIE) as an infection of poultry caused by any influenza A virus with high pathogenicity (HPAI) and by H5 and H7 subtypes with low pathogenicity (H5/H7 LPAI). Non H5/H7 influenza A viruses (i.e., H1-4, H6 and H8-16) are not defined as “avian influenza” and are not notifiable. See [OIE Terrestrial Manual Chapter 2.3.4](#).

Backyard Flock. A poultry flock (not including pet birds and commercial breeder birds) on a premises having fewer than the number of birds required to participate in the National Poultry Improvement Plan (NPIP) part 56 Control of H5/H7 LPAI program:

- For egg-laying flocks, flocks with fewer than 75,000 birds.
- For meat-type chickens, plants slaughtering fewer than 200,000 birds a week.
- For meat-type turkeys, plants slaughtering fewer than 2 million birds a year.
- For Commercial Waterfowl and Upland game, plants slaughtering fewer than 50,000 birds a year.
- For Raised for Release upland game bird premises, premises releasing fewer than 25,000 birds per year.

(VS uses this definition for reporting to the OIE and bilateral trading partners. VS makes the final determination of a flock as either commercial or noncommercial/backyard once it examines all flock data).

Breeding flock. A flock composed of stock developed for commercial egg or meat production and maintained for the principal purpose of producing hatching eggs.

Cleaning. The 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). Cleaning should minimize remaining organic material for effective disinfection.

Commercial meat-type flock. All meat-type poultry on one farm.

Commercial table-egg layer flock. All table-egg layers of common age or pullet source on one premises.

Commercial upland game birds. Upland game bird pheasants, quail, or partridges grown under confinement to produce eggs and/or meat for human consumption.

Commercial waterfowl. Domesticated ducks or geese grown under confinement to produce eggs and/or meat for human consumption.

Compensation. In the case of AI infection, compensation specifically refers to reimbursement for the activities associated with the depopulation of infected or exposed poultry, the disposal of contaminated carcasses and materials, and the cleaning and disinfection of premises, conveyances, and materials that came into contact with infected or exposed poultry. In the case of materials, if the cost of cleaning and disinfection would exceed the value of the materials, or cleaning and disinfection would be impracticable for any reason, VS bases compensation on the fair market value of those materials. Compensation does NOT include payment for depopulated birds or eggs destroyed (see definition of Indemnity).

Contact Survey. A data collection tool used to gather information about all of the individuals, vehicles, equipment, and materials that may have come into contact with an infected or exposed flock. This generates trace-in and trace-out information.

Cooperating State Agency. Any State authority VS recognizes as cooperating in administering [9 CFR part 56](#). This may include the State animal health authority or the Official State Agency.

Disinfection: The process of destroying or eliminating AI virus on cleaned surfaces through physical (e.g., heat) or chemical (e.g., disinfectant) means, or both.

Flock plan. A written flock management agreement VS, the Official State Agency (OSA), and the flock owner develop, with input from other affected parties. The flock owner may be either a poultry company or an individual. A flock plan sets out the steps the owner needs to take to eradicate H5/H7 LPAI from a positive flock or to prevent the introduction of H5/H7 LPAI into another flock. A flock plan includes poultry and poultry product movement procedures and geographically appropriate infected and control/monitoring zones. Flock plan control measures should include detailed plans for safe handling of fomites (conveyances, containers, and other associated materials); flock disposal; cleaning and disinfection; downtime; and repopulation. See [9 CFR 56.1](#) for more information.

H5/H7 LPAI exposed. At risk of developing H5/H7 LPAI because of association with:

- Birds or poultry infected with H5/H7 LPAI.
- Excrement from birds or poultry infected with H5/H7 LPAI.
- Other material touched by birds or poultry infected with H5/H7 LPAI.
- There is reason to believe that association has occurred with H5/H7 LPAI or vectors of H5/H7 LPAI, as determined by the Cooperating State Agency and confirmed by APHIS.

H5/H7 LPAI virus infection (infected). VS considers poultry infected with H5/H7 LPAI if:

- H5/H7 LPAI virus has been isolated and identified as such from poultry, or viral antigen or viral RNA specific to the H5 or H7 subtype of AI virus has been detected in poultry; or

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- Antibodies to the H5 or H7 subtype of the AI virus that are not a consequence of vaccination have been detected in poultry. If vaccine is used, use methods to distinguish vaccinated birds from birds that are both vaccinated and infected.
- In the case of isolated serological positive results, H5/H7 LPAI infection may be ruled out on the basis of a thorough epidemiological investigation that does not demonstrate further evidence of H5/H7 LPAI infection.

Indemnity. AI indemnity specifically refers to payments representing the fair market value of destroyed birds and eggs. AI indemnity does not include reimbursements for depopulation, disposal, destroyed materials, or cleaning and disinfection activities; these are covered under compensation.

Meat-type chicken. A domesticated chicken grown to produce meat, including but not limited to broilers, roasters, fryers, and Cornish hens.

Meat-type turkey. A domesticated turkey grown to produce meat.

Official State Agency (OSA). The State authority VS recognizes to cooperate in administering the NPIP.

Part 56 / Part 145 Poultry. Domesticated fowl, including chickens, turkeys, ostriches, emus, rheas, cassowaries, waterfowl, and game birds, except doves and pigeons, bred to produce eggs or meat.

Part 146 Poultry. Domesticated chickens and turkeys bred to produce eggs or meat.

Premises Designations.

- **Infected Premises:** Premises where a presumptive positive case or a confirmed positive case exists based on laboratory results and/or compatible clinical signs. These premises are in the Infected Zone.
- **Contact premises:** Premises with susceptible animals potentially exposed to AI, either directly or indirectly, including but not limited to exposure to animals, animal products, fomites, or people from Infected Premises. These premises may be in the Infected Zone or the Buffer Zone.
- **Suspect Premises:** Short-term designation for premises under investigation due to the presence of susceptible animals reported to have laboratory results or clinical signs compatible with AI. These premises may be in any zone or in the free area.
- **At-Risk Premises:** Premises with susceptible animals, but none of those susceptible animals have AI-compatible laboratory results or clinical signs. Premises objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises (via flock testing or epidemiological investigation). These premises may be in the Infected Zone or Buffer Zone.
- **Monitored Premises:** Premises objectively demonstrates that it is not an Infected Premises, Contact Premises or Suspect Premises (via flock testing or epidemiological investigation). Only At-Risk Premises are eligible to become Monitored Premises. Monitored Premises meet a set of defined criteria in seeking to

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move susceptible animals or products out of the Control Area. These premises may be in the Infected Zone or Buffer Zone.

- Free Premises: Premises outside a Control Area and not a Contact Premises or Suspect Premises. These premises may be in the Surveillance Zone or Free Area.

Raised-for-release upland game birds. Non-breeding stock pheasants, quail, and partridge raised under confinement for game preserve release.

Raised-for-release waterfowl. Non-breeding stock waterfowl raised under confinement for game preserve release.

Table-egg layer. A domesticated chicken grown to produce eggs for human consumption.

Virus Elimination (VE): Cleaning and disinfection measures primarily conducted to destroy or eliminate all AI virus on the premises as cost effectively as possible.

Zone Designations:

- Infected Zone: Zone that immediately surrounds an Infected Premises.
- Buffer Zone: Zone that immediately surrounds an Infected Zone or a Contact Premises.
- Control Area: Consists of an Infected Zone and a Buffer Zone.
- Surveillance Zone: Zone outside and along the border of a Control Area. The Surveillance Zone is part of the Free Area.
- Free Area: Area not included in any Control Area. Includes the Surveillance Zone.

5. Audience

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

6. Guidance

A. General

On September 26, 2006, APHIS published an interim final rule entitled “Low Pathogenicity Avian Influenza; Voluntary Control Program and Payment of Indemnity,” adding parts 56 and 146 to title 9, *Code of Federal Regulations*. The final rule took effect May 1, 2009. This rule established the H5/H7 LPAI program for commercial poultry as part of the NPIP. It also set conditions for indemnity and compensation for poultry infected with or exposed to H5/H7 LPAI. One of the conditions for indemnity and compensation is that each OSA must develop an ISRCP and obtain VS approval.

The ISRCP is only one of three requirements for State participation in the H5/H7 LPAI program. The other two are:

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- 1) Maintaining an active surveillance program for eligible commercial poultry. The regulations at [9 CFR Parts 145](#), [146](#), and [147](#) outline NPIP surveillance requirements.
- 2) Maintaining a diagnostic (passive) surveillance program for all poultry.

Cooperative State Agencies must determine whether to request Federal assistance in the event of an incident/outbreak of H5/H7 LPAI. A State seeking VS indemnity or compensation assistance for an H5/H7 LPAI incident/outbreak must request and receive approval in writing before initiating any potentially indemnifiable or compensable activities. (Agencies can email the Incident Coordination Group via the Assistant Director (AD) or District Director (DD)).

B. ISRCP Development and Administration

1) Development

The OSA must develop the ISRCP. The Cooperating State Agency must administer the ISRCP with the State's standing Emergency Disease Management Committee (EDMC), outlined in [9 CFR 56.10\(a\)\(1\)](#).

The [FAD PReP HPAI](#) site has many resources. Many of the LPAI policies, procedures, and paperwork match those for HPAI. VS updates the FAD PReP site documents regularly, so it has not attached paper copies to this guidance. States should monitor this site regularly, especially while revising their ISRCP annually, for the most current information.

VS provides this ISRCP guidance to help States develop their plans. States must include details specific to their State for these plans to be complete.

- 2) Development considerations. In developing the ISRCP, the committee should consider:
 - a. The variety and location of poultry industries in the State and in nearby States.
 - b. The resources available to the State.
 - c. The ability to work closely with adjacent States.
 - d. Consistency with the APHIS National Incident Management System and the APHIS Command System.

3) Required components:

- a. For poultry owners within a State to be eligible for indemnity and compensation of up to 100 percent of eligible costs under [9 CFR 56.3\(b\)](#), the State in which the poultry participate in the Plan must have in place a VS-approved ISRCP. The Official State Agency must develop the ISRCP. In States where the Official State Agency is different than the Cooperating State Agency, the Cooperating State Agency must help develop the plan. The relevant Cooperating State Agency must administer the plan. This plan must include:
 1. Provisions for a standing emergency disease management committee, regular meetings, and exercises, including coordination with any affected Tribal governments.
 2. A minimum biosecurity plan followed by all poultry producers.
 3. Provision for adequate diagnostic resources.
 4. Detailed, specific procedures for initial handling and investigation of suspected H5/H7 cases.
 5. Detailed, specific test reporting procedures. The State must consult with poultry producers to develop these procedures and must report only confirmed cases of H5/H7 LPAI in accordance with [9 CFR 146.13](#).
 6. Detailed, strict quarantine measures for presumptive and confirmed index cases.
 7. Provisions for developing flock plans for infected and exposed flocks.
 8. Detailed plans for disposal of infected flocks, including preexisting agreements with regulatory agencies and detailed plans for carcass disposal, disposal sites, and resources for conducting disposal, and detailed plans for disposal of materials that come into contact with poultry infected with or exposed to H5/H7 LPAI.
 9. Detailed plans for cleaning and disinfecting premises, repopulation, and monitoring after repopulation.
 10. Provisions for appropriate control/monitoring zones, contact surveys, and movement restrictions.
 11. Provisions for monitoring control zone activity.

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12. If vaccination is considered as an option, a written plan for use in place with proper controls and provisions for VS approval to use vaccine.
 13. Plans for H5/H7 LPAI-negative flocks that provide for quarantine, testing, and controlled marketing.
 14. Avian influenza public awareness and education programs.
- b. If a State is designated a “U.S. Avian Influenza Monitored State, Layers” under [9 CFR 146.24\(a\)](#), or a “U.S. Avian Influenza Monitored State, Turkeys” under [9 CFR 146.44\(a\)](#), it will lose that status during any H5/H7 outbreak and for 90 days after the destruction and disposal of all infected or exposed birds and cleaning and disinfection of all affected premises.

C. Recommended Details to Include in the ISRCP

1) Standing emergency disease management committee (EDMC):

The State must establish and keep current an emergency disease management committee or poultry disease task force, scheduling several activities throughout the year. The committee should include representatives from all facets of the State’s poultry industry (including small flock owners), laboratory personnel, NPIP Official State Agency representatives, and State poultry health officials. The VS AD, the Emergency Coordinator (EC), and District epidemiologists and/or District poultry points of contact should be included as ex-officio members. States may also want to include public information officers on the EDMC.

- a. The committee should meet at least annually to review and update the ISRCP. The committee should submit the updated plans electronically to the NPIP office and/or the VS Avian Health Team.
- b. The VS Avian Health Team and the NPIP office formally reviews the ISRCP every 5 years.
- c. The committee should appoint a communications officer, who should update contact lists and communications at least annually. After hours, holiday, and weekend contact information should be available for all EDMC members. The officer should develop a plan for quick communication in the case of a suspected outbreak.
- d. The EDMC should develop a communication plan for distributing information before, during and after an outbreak to EDMC members, commercial premises, back yard flock owners, and the general public.
- e. The ISRCP may not apply as written to every circumstance and may need to be changed or updated during an incident. Include the process by which this would occur quickly during an outbreak (A vote? Is a quorum required? At the discretion

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of the State Veterinarian?). All EDMC members should review this process to ensure a clear understanding.

- f. The committee must consider resource availability for its H5/H7 ISRCP. It should conduct emergency exercises at least once every 3 years.

2) Biosecurity:

Commercial and breeding poultry producers must follow minimum biosecurity protocols at all times. Biosecurity is a critical component of a poultry company's poultry health program. Following strict biosecurity guidelines can not only reduce the possibility of an AI outbreak at commercial poultry operations but also help prevent disease spread once an outbreak begins.

- a. All poultry premises should have a written biosecurity plan in use every day that adheres to [NPIP Program Standard E - Biosecurity Principles](#). A [biosecurity plan template](#) is also available.
- b. Premises should prohibit visitors and non-essential personnel from entering any facility, but especially one that has a suspected or confirmed LPAI infection.
- c. Facilities should develop clear biosecurity protocols for essential visitors such as flock supervisors, service crews, and drivers (feed trucks, egg trucks, propane delivery, etc.).
- d. Facilities should also develop and exercise additional enhanced biosecurity protocols for suspect and infected premises for different premises types (i.e., meat birds, layers, aviary-raised birds, backyard premises, etc.). Producers need to tailor protocols to meet specific premises needs when they suspect or have confirmed infection. VS should consult the producers and employees who implement the enhanced biosecurity while they write and review these protocols. Facilities should provide enhanced written guidelines to all personnel requiring access to facilities with suspected or confirmed cases of LPAI.
- e. The U.S. Poultry and Egg Association has additional biosecurity resources addressing all levels of production producers may find useful for developing biosecurity plans for the ISRCP. Follow the link to these [Poultry Biosecurity Training Materials](#).

3) Provisions for adequate diagnostic resources:

- a. List all NPIP labs authorized to conduct AI testing in the State. This may include labs in other States if the collector obtains samples in one State and sends them to labs in another.
 1. Provide the address, contact person, and types of tests each laboratory can conduct.

2. List normal surveillance and surge laboratory capacity.
- b. Provide closest National Animal Health Laboratory Network (NAHLN) laboratory information for H5/H7 Real Time Reverse transcription polymerase chain reaction (rRT-PCR) testing capability.
 1. Provide the address, contact person, and types of tests each laboratory can conduct.
 2. List normal surveillance and surge laboratory capacity.
- c. The NPIP OSA and each NPIP AI-authorized lab should sign a memorandum of understanding (MOU) specifying the approved testing methods for authorized laboratories, as well as specific protocols to immediately report any non-negative samples to VS. VS recommends reporting non-negative test results via phone call to the AD of the suspect flock's State.
- d. Because VS cannot approve indemnity and compensation before NVSL confirms LPAI, VS recommends that producers collect duplicate samples when they suspect LPAI in a flock. Producers should have one sample set tested immediately at the closest NAHLN lab, and send the other sample set immediately and directly to NVSL to accelerate confirmation.
- e. Follow the NVSL recommended guidelines for collecting specimens for AI, *Avian Sample Collection for Influenza A and Newcastle Disease*, on the [FAD PReP HPAI site](#), under the Surveillance and Diagnostics tab.

4) Procedures for initial handling and investigation of suspicious cases:

Companies or independent growers should maintain defined and written baseline flock health and production parameters. In the presence of any of the following signs or symptoms, the company flock supervisor or independent grower should immediately submit samples for AI diagnostic testing:

- Significant, unexplained decreases in feed and/or water consumption.
- Significant, unexplained decreases in egg production.
- Increases in respiratory signs.
- Significant, unexplained mortality or morbidity.

While waiting for test results, independent growers or companies should initiate a self-imposed quarantine as part of the enhanced biosecurity guidelines recommended above before State animal health officials take official action.

- a. Recommended company procedures for handling a suspect flock:
 1. Company or contract growers suspecting disease should:

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- a) Immediately call the flock supervisor and initiate additional biosecurity measures.
 - b) Apply enhanced biosecurity protocols and proceed as if the flock is infected.
2. Independent growers or flock supervisors of a suspect flock should:
- a) Immediately give this flock top priority.
 - b) Confer with the company veterinary contact.
 - c) Arrange to immediately submit duplicate samples for AI PCR tests to both the local NAHLN laboratory and NVSL. As only NVSL can officially confirm H5/H7 LPAI, sending NVSL suspect samples as soon as possible hastens response efforts.
3. Follow the NVSL recommended guidelines for collecting AI specimens, *Avian Sample Collection for Influenza A and Newcastle Disease*, on the [FAD PReP HPAI site](#), under the Surveillance and Diagnostics tab.
- a) Apply enhanced biosecurity protocols and proceed as if the flock is infected. Exclude exposed employees and/or flock supervisors from other premises according to the company's enhanced biosecurity protocols.
- b. Recommended State procedures for handling a suspect flock:
1. Refer to VS Guidance Document 8602, "Response, Communications, and Investigation of Notifiable Avian Influenza (NAI) in Domestic Poultry."
 2. Immediately report a non-negative H5 or H7 test result to the AD of the suspect flock's State.
 3. The State contact (generally the State Veterinarian and/or NPIP OSA) and the AD send proper diagnostic samples to NVSL for confirmation, with a tracking number and estimated time of arrival.
 4. The AD collects basic information on the finding and arranges for a conference call with the State, OSA, appropriate company officials, local APHIS personnel (AD, EC, etc.), APHIS Avian Team, and Emergency Management Staff for planning and next steps. Minimum information needed includes:
 - a) Type of operation (i.e., turkey, layer, backyard).
 - b) Number of houses on the premises.

- c) Number and approximate age of poultry in each house.
 - d) The State and county of the operation (location of the birds, not the company). Though not required for immediate notification, VS needs the full 911 address and/or GPS coordinates.
 - e) Current test types, reason for initial testing, and results.
 - f) Follow-up testing planned or in progress and the estimated time of arrival at NVSL.
 - g) Description of the flock's clinical signs, if any.
 - h) Plans for quarantine and/or hold order.
 - i) Current State and/or Federal personnel designated as Incident Coordinator and Case Manager and contact information.
5. States should consult with company personnel and VS to consider controlled marketing/controlled slaughter if appropriate. If not, they should develop site-specific depopulation and disposal plans.
6. If the State or producer asks for depopulation, disposal, or cleaning and disinfection indemnity and/or compensation, the State should discuss this with VS and submit the request in writing as soon as possible. VS personnel can assist with the appropriate paperwork. VS does not consider indemnity or compensation requests for reimbursable activities begun before VS approves them. State officials should send the request to the AD. The AD should immediately forward the request to the District Director and Incident Coordination Group for consideration.
7. States should consider whether they may need a supplemental cooperative agreement to assist with State response costs. VS has posted information on supplemental cooperative agreement activities as well as a template on the [FAD PReP HPAI site](#), under the Initial Response tab, *Financing the Response: State/Tribal Information*.
8. States should consider whether their NAHLN lab will need additional funding to pay for the surveillance samples associated with the outbreak. If the State needs additional funds, the State Veterinarian or Laboratory Director should estimate the amount needed and ask the AD for them in writing as soon as possible as they will be unable to charge completed tests to this funding instrument. The AD should send the request to the NVSL Director and the NAHLN Coordinator with a copy to the Avian Health staff.

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9. States should include plans for handling cases of LPAI in backyard flocks. Quarantine and test out is the most common response for an infected backyard flock, but States may consider depopulation if the flock is considered to be a risk to commercial premises.
10. See the *New State Checklist* (this includes activities required for both HPAI and LPAI incidents) on the [FAD PReP HPAI site](#), under the Initial Response tab. The risk and severity of infection will determine the speed of the response.

DO NOT WAIT – Communication is key to a successful response. The sooner States make these calls the better. VS, State agencies and producers can cancel plans if the flock tests negative, but can begin to deploy supplies and personnel while waiting for confirmation. VS recommends that plans emphasize the need for quick communication and include timelines for response activities, including the initial contact with VS and the EDMC.

- 5) Detailed, specific procedures for reporting test results to APHIS:
 - a. According to [9 CFR 56.10\(a\)\(5\)](#), commercial poultry producers and breeders must work with State officials to develop reporting procedures. Producers and States must immediately report suspect cases of H5/H7 LPAI in accordance with [9 CFR 146.14](#). VS recommends reporting non-negative test results by calling the AD in the State with the suspect flock.
 - b. The NPIP OSA and each NPIP-authorized AI lab should sign a memorandum of understanding (MOU) specifying approved testing methods, as well as specific protocols to immediately report non-negative samples to VS.
 - c. VS is the governmental organization authorized to represent the United States to the OIE; procedures must specify that only VS, rather than any individual State, reports H5/H7 LPAI to the OIE.
- 6) Detailed, strict quarantine measures for suspect and confirmed index cases:
 - a. States and producers should develop quarantine procedures for handling suspect and confirmed cases of H5/H7 LPAI, adding specific details for each State.
 1. Immediately quarantine suspect and infected premises.
 - a) Do not allow animals or animal products, including but not limited to mortalities, litter, or manure to leave the premises.
 - b) Limit vehicle and human traffic to essential visits.
 - c) Establish a vehicle cleaning and disinfection station as soon as possible.

- d) Employees and service personnel who had contact with a suspect flock should refrain from visiting any other location that has poultry for a minimum of 48 hours.
 - e) Provide additional training and reminders of essential premises biosecurity.
2. All at-risk premises (including all commercial premises within the Control Area, see below) should have a hold order or quarantine placed until they have tested negative for H5/H7 LPAI at least twice over a 21-day period.
 3. All contact and suspect premises identified via the initial contact survey and/or epidemiological investigation (trace-in/trace-out, passive surveillance) should have a hold order or quarantine placed until their flocks have tested negative for H5/H7 LPAI at least twice.
- b. The quarantine or hold order for H5/H7 LPAI should contain:
1. Date issued.
 2. Name and address of quarantined premises.
 3. Location of the farm – 911 address, county, and Federal premises ID number.
 4. Type of poultry; e.g., table-egg layers, table-egg layer pullets, egg-type chicken breeders and pullets, meat-type chickens, meat-type chicken breeders and breeder pullets, meat-type turkeys, turkey breeders (i.e., toms or hens), ducks, exhibition poultry, game chickens, and game birds.
 5. General quarantine instructions, including animals, products, and other materials affected. Specify the items requiring written permission to move off or onto the premises.
 6. Special quarantine instructions. This may include site-specific issues such as producer/employee parking, mortality management in lieu of rendering, etc.
 7. Detailed activities required to lift the quarantine or hold order.
- 7) Provisions for developing flock plans for infected and exposed flocks

VS defines flock plans as written flock management agreements it develops with the OSA, with input from the flock owner and other affected parties ([9 CFR 56.1](#)). Flock plans should include the following:

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- a. Steps to eradicate H5/H7 LPAI from a positive flock, or to prevent introducing H5/H7 LPAI into another flock.
 - b. Poultry and poultry product movement and geographically appropriate infected and control/monitoring zones.
 - c. Control measures, such as detailed plans for safe handling of conveyances, containers, and other materials that could serve as fomites; flock disposal; cleaning and disinfection; downtime; and repopulation.
 - d. VS has flock plan templates on the [FAD PReP HPAI site](#), under the Finance and Administration Processes tab, *Commercial Flock Plan* and *Backyard Flock Plan*.
- 8) Detailed plans for disposal of infected flocks and materials that come into contact with poultry infected with or exposed to H5/H7 LPAI:

States can choose methods appropriate for their industries and geographical areas, as long as they follow the minimum standards set forth at [9 CFR 56.5](#):

- a. Destruction of poultry. VS and the Cooperating State Agency may destroy poultry infected with or exposed to H5/H7 LPAI in accordance with the ISRCP. The Cooperating State Agency and VS selects a method to destroy such poultry based on the following factors:
 1. The species, size, and number of the poultry to be destroyed.
 2. The poultry's environment.
 3. The risk to human health and safety of the method used.
 4. Whether the method requires specialized equipment or training.
 5. The risk the method poses of spreading the H5/H7 LPAI virus.
 6. Any hazard the method could pose to the environment.
 7. The degree of bird control and restraint required to destroy the birds.
 8. The speed needed to destroy the birds.

States should choose depopulation methods approved by VS and/or the American Veterinary Medical Association. VS does not pay indemnity for flocks depopulated by a non-approved method. See *the Stamping Out and Depopulation Policy and Ventilation Shutdown Evidence and Policy* documents on the [FAD PReP HPAI site](#), under the Initial Response tab.

- b. Disposal of Poultry. States and producers must dispose of carcasses of dead infected or depopulated poultry promptly and efficiently in accordance with the ISRCP to prevent the spread of H5/H7 LPAI. The Cooperating State Agency and VS select disposal methods which may include burial, incineration, composting, rendering, or when appropriate, controlled marketing or controlled slaughter. Regardless of the method used, producers must implement and enforce strict biosecurity procedures for all personnel and vehicular movement into and out of the area.
- c. Further guidance and examples on disposal of infected flocks:
 - 1. Detailed plans for biosecure and environmentally sound disposal of carcasses must be in place, including pre-existing agreements with other regulatory agencies and pre-identified disposal sites (whether by burial, incineration, rendering, or composting). States and producers can find additional disposal option resources on the [FAD PReP HPAI site](#), under the Disposal & Cleaning /Disinfection (Virus Elimination) tab.
 - 2. Some States may elect strict quarantine, followed by rigorous testing for virus and controlled marketing of subsequent virus-negative flocks. VS and the Cooperating State Agency may allow infected or exposed poultry to move for controlled marketing in accordance with the ISRCP and with the requirements (from [9 CFR 56.5\(c\)](#)), which are further set forth at Section 6. C.13) of this document.
- 9) Detailed plans for cleaning and disinfecting premises, plans for repopulation, and monitoring of repopulated flocks.

Producers must clean and disinfect all contaminated surfaces and buildings including pump houses and service areas.

- a. Dispose of all birds, eggs, contaminated litter, manure, debris, and contaminated feed. Compost this material in the house if possible or remove under permit to an approved site for burial, piling, or composting. Do not clean out the house or move or spread litter until inactivating any H5/H7 LPAI virus that may have contaminated the manure and litter. Dispose of and compost material in accordance with State and local regulations. If piling litter, cover the pile and allow it to set undisturbed for the amount of time VS and the Official State Agency have approved.
- b. Wash, disinfect, and inspect equipment used to clean out manure, debris, and feed. You may wash, disinfect, and inspect the equipment at offsite stations in inclement weather, at VS' and the Official State Agency's discretion.

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- c. Clean and disinfect the premises and materials thoroughly to remove all contaminants, especially manure, dried blood, and other organic materials. In most cases, heat disinfection effectively rids a premises of virus. If you use wet cleaning and/or disinfection, minimize the amount of water used. VS discourages wet cleaning in structures with dirt or clay floors.
- d. For outdoor pens, remove as much organic bird debris (manure, litter, feathers) as possible. Use UV light and drying to disinfect the premises. VS does not recommend wet cleaning or disinfection for outdoor structures.
- e. Clean and disinfect all trucks and vehicles transporting affected poultry or materials before soiled material dries in place.
 - 1) Clean both exterior, including the undercarriage, and interior surfaces, including truck cabs.
 - 2) Dry clean the truck cab interior or wash it with clean water and spray or sponge it with a disinfectant authorized in [9 CFR 71.10\(a\)](#).
 - 3) Handle manure and litter removed from these vehicles in a manner similar to that described above.

See the [FAD PReP HPAI site](#) under the Disposal & Cleaning /Disinfection (Virus Elimination) tab for additional information.

- f. You must check the premises for virus before repopulation in accordance with the IRSCP. Do not restock the premises with poultry until after the date specified in the ISRCP.

You can use AI antigen detection tests on environmental samples to ensure virus freedom. See the *Post C&D Environmental Sampling Guidance* document under the Recovery and Restocking tab of the [FAD PReP HPAI site](#).

- g. After placing new flocks, follow a monitoring protocol for subsequent flocks that includes specific directions to submit any unexpected mortality to the NAHLN lab for testing. Include specific morbidity and mortality parameters triggering testing of repopulated flocks in the flock plan.

10) Provisions for Appropriate Control/Monitoring Zones, Contact Surveys, and Movement Restrictions:

- a. Contact surveys:

Complete an Initial Contact survey (to determine trace-in and trace-out information). You can collect this information while waiting for final confirmation

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of LPAI infection. This should include trace-in and trace-out of animals, animal products, and materials for a minimum of 21 days before infection. Develop a list of contact premises to be tested as a part of the Control Area surveillance from this report. Producers at infected premises should complete full epidemiology questionnaires as soon as possible after confirming infection. You can find an *Initial Contact Epidemiological Report* template on the [FAD PReP HPAI site](#) under the Initial Response tab.

The [HPAI Redbook](#) has an epidemiology questionnaire in Appendix F, or you may develop one specific to the incident.

b. Control Area:

States establish control areas, establishing Infected, Buffer, and Surveillance Zones around the area of known infection.

1. Infected Zone. Place the boundary at least 3 kilometers beyond perimeters of suspect or confirmed infected premises.
2. Buffer Zone. Place the boundary at least 7 kilometers beyond the Infected Zone perimeter; width is generally not less than the minimum radius of the associated Infected Zone but may be larger.
3. Control Area. Includes the Infected Zone and Buffer Zone. Place the boundary at least 10 kilometers beyond the perimeter of the closest Infected Premises.
4. Surveillance Zone. The zone outside and along the border of a Control Area. This is part of the Free Area. It should be at least 10 kilometers wide but may be larger.
5. Free Area. Area not included in any Control Area; includes the Surveillance Zone.

VS recommends that premises designations match those used during an HPAI outbreak to avoid confusion. You can find a reference guide, *HPAI Zones and Premises*, and additional training materials for premises designations on the [FAD PReP HPAI site](#) under the Quarantine, Movement Control, and Continuity of Business tab.

c. Movement activity in and out of the Control Area:

The State may have official movement requirements which could apply to each compartment of the commercial industry (i.e., table-egg layers, layer pullets, egg-type chicken breeders, meat-type chickens, meat-type chicken breeders, turkey breeders, meat-type turkeys, table eggs, hatching eggs, baby chicks, and poults).

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1. Commercial premises within the Infected Zone should be free to move animals and animal products after completing appropriate testing.
 2. States may use shipping documentation to track trucks in and out of the zone to ensure premises are moving birds in a biosecure manner.
 3. Any movement onto and off an infected premises while there is active virus (e.g., for depopulation, disposal, etc.) requires cleaning and disinfection as best determined by the State.
 - d. Lift H5/H7 LPAI quarantines after receiving negative test results from environmental samples taken after cleaning and disinfection, if you have finished enhanced surveillance in the Control Area with negative results.
- 11) Provisions for monitoring activities in Control Zones:
- a. Test all commercial premises within the Infected and Buffer Zones via real time polymerase chain reaction test (rT-PCR), usually at the nearest NAHLN laboratory, as soon as possible after confirming a LPAI infected flock. VS recommends a second test 14-21 days later (approximating a 21-day incubation period). Do not move birds or products off a premise within the Infected or Buffer Zones before testing at least twice, or at minimum once within 24 hours of movement.
 - b. Test additional at-risk commercial premises (i.e., those in the Free Area) twice as above, including any premises adjacent to the Control Zone or traced in or out with exposed birds, people, product, equipment, or material. States should also work with companies to determine which flocks require additional testing based on their business model.
 - c. At a minimum, States should inspect backyard bird owners within the Infected Zone at least once with samples taken from any sick or dead birds. States do not need to test all the backyard birds within the Infected and Buffer zones.
 - d. In addition to the testing conducted on flocks within the infected zone, the combination of commercial and backyard testing should fairly represent the Control Area geographically. If the Infected and Buffer Zones contain very few commercial premises, conduct additional backyard testing in the Control Area to ensure proper geographical coverage. Trading partners value this information when asked to release trade bans. Avian Health Staff can help determine when States may need additional backyard testing.
 - e. Consider dead bird barrel surveillance in a very large outbreak or in a very poultry-dense area with limited service personnel to collect tests.
 - f. VS requires a Federal PIN to identify all premises tested during an H5/H7 LPAI infection. Include the Federal PIN on all sample submission forms.

- g. A NAHLN laboratory should conduct all testing associated with an H5/H7 LPAI infection; electronic messaging of results is required.
 - h. See the surveillance guidelines on the [FAD PReP HPAI site](#), under the Surveillance and Diagnostics tab for additional information on the suggested number of surveillance samples to collect from different premises types:
 - 1. Surveillance Sampling of Commercial Flocks in the Control Area.
 - 2. Surveillance of Backyard Flocks Around Infected Premises.
- 12) Vaccination – need for approval and plan:
- a. A State considering vaccination as a control option needs VS' approval to use it. To get approval, write a vaccination plan containing proper controls and provisions.
 - 1. The plan must define procedures to prevent vaccination teams from spreading LPAI. Surveillance must continue to assess vaccination effectiveness and detect any antigenic change. The vaccinated premises are subject to risk assessments, surveillance requirements, and biosecurity procedures. Consider any national or OIE standards or conditions for movement as well.
- As noted, VS must approve vaccination plans before States use H5/H7 AI vaccine. VS Memoranda numbers 565.12 and 800.85 describe restrictions and use guidelines for H5 and H7 vaccines. VS controls distribution and use of H5 and H7 vaccines and will only distribute them under the approval of each State Veterinarian as part of an official animal disease control program. VS covers the cost of purchasing vaccine but will not incur the costs associated with administering the vaccine. States considering using vaccination must carefully consider the efficacy of the vaccine, any impacts of using vaccine in the field, and the potential trade impacts.
- b. VS will probably not approve using vaccine in a small, localized H5/H7 LPAI outbreak. However, if States believe that vaccination may be an option for a larger or more prolonged outbreak, VS recommends they develop detailed plans for use. The NPIP office has a Protocol for Sequential Depopulation and Use of Vaccine for Eradication of H5/H7 LPAI available on request.
 - c. See the following policy documents regarding AI vaccination below:
 - 1. [Policy and Approach to HPAI Vaccination](#)
 - 2. [VS Memo 800.85 Avian Influenza Vaccines](#)

- 13) Plans for H5/H7 LPAI-negative flocks that provide for quarantine, testing, and controlled marketing:
- a. Impose quarantine for all flocks within the Buffer Zone, as well as for contact and suspect flocks, while conducting testing, following normal State quarantine guidance or guidance elsewhere in this document.
 - b. Testing should follow other surveillance guidance during the outbreak for the premises zone. If you put testing details elsewhere in the ISRCP, please reference those details in this section.
 - c. The regulations at [9 CFR 56.5\(c\)](#) reference controlled marketing: At VS' and the Cooperating State Agency's discretion, infected or exposed poultry may move for controlled marketing in accordance with the ISRCP and the following requirements:
 1. No transport of poultry infected with or exposed to H5/H7 LPAI to a market for controlled marketing without Cooperating State Agency approval in accordance with the ISRCP.
 2. Test the flocks moved for controlled marketing for H5/H7 LPAI within 7 days before slaughter using a test approved by the Cooperating State Agency and found to be free of the virus.
 3. Routes to slaughter must avoid other commercial poultry operations whenever possible. All load-out equipment, trailers, and trucks used on premises that have housed infected or exposed poultry must be cleaned and disinfected and not enter other poultry premises or facilities for 48 hours after removing such poultry from their premises.
 4. Flocks moved for controlled marketing must be the last poultry marketed during the week they are marketed.
 5. Poultry moved for controlled marketing are not eligible for indemnity under [9 CFR 56.3](#). However, producers can seek indemnity for any costs related to cleaning and disinfecting premises, conveyances, and materials that came into contact with poultry moved for controlled marketing.
- 14) Public awareness and education programs regarding avian influenza:

States should develop a comprehensive AI communication and education plan to help prevent AI infection. The plan should include information on handling suspected or confirmed cases. Communication and education plans should include the following people or groups:

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a. Producers:

1. Growers (independent and contracted).
2. Flock Supervisors. Give all flock supervisors/complex managers (full or part-time) instructions to follow if they encounter H5/H7 LPAI. Direct special effort to newly hired flock supervisors.
3. Company/Complex.
4. Emergency response team (industry, State, and Federal).
5. General public.
6. Backyard bird owners.

Distribute additional education and outreach materials during an outbreak, emphasizing the area in and around the Control Area. This material should include detailed instructions on how to report sick birds. Describe the plan for distributing these materials and investigating reported sick birds. Public awareness campaigns should include messages about human health, including the fact that poultry and eggs are safe to eat.

Educational and instructional materials should be in English and Spanish, with other languages available as the area requires. Provide education alternatives for those who may not be able to read.

7. Inquiries

Please contact the NPIP Office at 770-922-3496 with any inquiries about this document.