

# **When a Flock is Infected with Highly Pathogenic Avian Influenza - What Happens Next?**

*General Overview for Producers—From Diagnosis of Highly Pathogenic Avian Influenza (HPAI) through Restocking*

9/12/23

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### **A. Definitions:**

1. **Poultry**: Per the World Organization for Animal Health (WOAH): All birds reared or kept in captivity to produce any commercial animal products or for breeding for this purpose, fighting cocks used for any purpose, and all birds used for restocking supplies of game or for breeding for this purpose, until they are released from captivity.
2. **Non-poultry**: Per the World Organization for Animal Health (WOAH): Birds that are kept in a single household, the products of which are used within the same household exclusively, are not considered poultry, if they have no direct or indirect contact with poultry or poultry facilities.
3. **Commercial flock**: Per the National Poultry Improvement Plan (NPIP), a commercial flock is defined as:

Bird Type	Number
Commercial Layers and pullets	75,000 or more birds on premises at one time
Commercial Broilers	Raise 100,000 or more/year
Commercial Meat Turkeys	Raise 30,000 or more/year
Commercial Upland Game Birds/ Commercial Waterfowl	Raise 25,000 or more/year
All Breeder Flocks (all types)	5,000 breeder birds or more on premises at one time

**B. What Happens if a flock is suspected of being infected with HPAI (as determined by PDA or USDA)?**

1. **Quarantine:** Based on suspicion of HPAI, a poultry premises is placed under quarantine to prevent movements onto and off of the premises, to reduce the risk of spreading disease to other flocks.
2. **Preparation for next steps:** After laboratory confirmation of HPAI—
  - a. A flock plan is developed to determine the best methods for depopulation, disposal, and virus elimination (VE). VE includes cleaning and disinfection (C&D) of any areas potentially contaminated by AI virus, and disposal of any contaminated materials that can't be completely cleaned and disinfected.
  - b. A USDA Field Reimbursement Specialist (FRS) will be assigned to coordinate reimbursement to the producer for indemnity of birds, eggs, and feed; disposal expenses, and virus elimination costs when applicable. The FRS coordinates directly with the producer and with the USDA's National Avian Indemnity group regarding reimbursement.
  - c. A Case Manager (CM) is assigned to partner with and guide the producer through the steps to reach freedom from disease.
  - d. A Site Manager (SM) may be assigned to the premises to ensure biosecurity is maintained, in order to prevent the spread of disease by people or equipment off the premises. A "hot zone" will be established on the premises, including a "clean/dirty line" for entering and exiting the premises. The SM assures that anyone entering the hot zone has adequate personal protective equipment/clothing, and any persons or equipment exiting the hot zone decontaminates appropriately. A staging area may be set up on the "clean" side as a place for the responders to check in, review plans, and take breaks as needed. Portable toilets may be set up on site.

### **3. Depopulation:**

- a. PDA and USDA personnel will coordinate with the producer and provide a team to quickly and humanely euthanize the remaining birds on the premises.
- b. When possible, bird carcasses are left in the poultry house for a period of at least 72 hours after depopulation to allow the high level of virus to decrease and minimize the risk of aerosolizing HPAI virus into the environment when carcasses are moved for disposal.

### **4. Disposal:**

- a. Bird carcasses are disposed of in a manner which meets the requirements of PDA's Domestic Animal Law and observes USDA standards for minimizing the risk of spreading disease. The Department of Environmental Protection may need to be consulted before disposal on site.
- b. The Case Manager will work with the PDA and USDA incident management team, disposal subject matter experts (SMEs) such as Penn State Extension staff, and the producer to determine the safest and most efficient way to dispose of the bird carcasses and other materials. Composting on site is the preferred method of disposal if it is possible to build mortality windrows on the premises. The Case Manager will work with the producer and the incident management team to ensure that all resources are available, and the disposal is done properly.
- c. If composting is the chosen method of disposal, a Subject Matter Expert (SME) will assist with planning the building of the compost windrows (including size, selection of carbon sources, and siting of the mortality windrows). The SME will maintain oversight and the completed windrows must have SME approval.
- d. Temperatures of the windrows will be collected daily for a minimum of 28 days, and the windrows will be turned on or after day 14, if viral kill temperatures were met and the SME approves the turn. Daily temperature data may be collected by PDA or USDA task force members or, in some cases, the producer or an employee may be trained by the SME to collect temperatures. Daily temperatures are sent to the PDA or USDA Disposal Team Leader and SME for review. If a windrow is not performing as expected, the SME will recommend corrective actions. At the end of the second cycle, after the turn, if all requirements have been met the SME and Disposal Team Leader will approve release of the windrows. However, the windrow must remain in place for an additional 14 days before the windrow is moved to another location on the premises or is permitted to move off the premises.

- e. If birds are disposed of in another approved manner (incineration, landfill, burial), the Case Manager will work with the producer and the incident management team to ensure that all resources are available, and the disposal is done properly and in a biosecure manner.
- f. Eggs, manure, and contaminated materials in and around the poultry houses, such as feed and shavings, will also be disposed of in an approved manner.

**5. Virus Elimination (VE):**

- a. The Case Manager will guide the producer in working on the components of “Initial Virus Elimination” (IVE), which is designed to further reduce virus load and spread of virus.
- b. Elements of IVE include applying rodenticide and insecticide and cleaning the exterior of the poultry structures.
- c. When IVE is complete, the next stage of virus elimination can begin. This includes cleaning of the interior of the building(s). If compost windrows are set up inside the poultry houses (preferred when possible), interior cleaning can begin when the compost is moved outside.
- d. The Case Manager will inspect the facility after cleaning. Upon approval, and after adequate drying time, disinfection can begin. The Case Manager will provide appropriate disinfection options for the producer.

**6. Environmental Sampling:**

- a. After disinfection has been completed on commercial and other WOAHP poultry operations, PDA or USDA personnel will collect environmental samples for testing from the poultry houses/areas, to ensure that no live virus remains. A period of 14 days post-disinfection, and negative test results for the environmental samples, are both required for release of a quarantine on the premises.
- b. If live virus is detected in environmental samples, additional cleaning and disinfection will be required, and the 14 days post-disinfection period will restart. The premises quarantine may be released with negative environmental samples at the end of the 14-day period.

**7. If Virus Elimination is not an option**

On non-poultry premises, or other premises where a successful virus elimination cannot be completed due to the building materials, age of the facility, outdoor poultry areas, etc., the premises may be placed under an extended 120-day quarantine period which begins when IVE is completed to the extent possible. No environmental samples are collected from these premises.

## 8. Control Areas and Surveillance Zones:

- a. The area around an infected commercial flock or other WOAHP poultry flock will be designated as a “Control Area” (10 km radius (6.21 miles)) and a “Surveillance Zone” (an additional 10 km radius surrounding the Control Area).
- b. Surveillance testing around an infected poultry flock is necessary to prove that HPAI has not spread to other flocks, so that control areas and surveillance zones can be released, and PA can once again be designated HPAI-free.
- c. The location of a premises relative to a HPAI-infected premises can be determined through the EMRS Gateway or by the PADLS control area address checker map at [Highly Pathogenic Avian Influenza \(arcgis.com\)](https://arcgis.com).
  - i. In the Surveillance Zone, avian influenza surveillance testing should be conducted on a weekly basis (every 5-7 days) for all commercial waterfowl flocks. Cloacal swabs are required for testing of waterfowl.
  - ii. In the Surveillance Zone, other commercial flocks (chickens, turkeys, and gamebirds) should be tested for avian influenza within every 14 day period. Oropharyngeal or tracheal swabs are required for testing of these flocks.
  - iii. In the Control Area, all commercial flocks should be tested weekly (every 5-7 days).
  - iv. If no additional infected flocks are found, the Control Area and Surveillance Zone may be released. Surveillance testing in the Control Area and Surveillance Zone is expected to end approximately 14 days after the completion of Initial Virus Elimination (IVE) on an infected premises.
  - v. A Surveillance Zone (10 km (6.21 miles radius)) may be placed around an infected WOAHP non-poultry flock if state officials determine it is necessary for disease control. There will be no Control Area placed, thus there will be no requirement for movement permits around a WOAHP non-poultry flock.
  - vi. For more information, refer to the HPAI Sampling/Submitting Information tab on the PADLS website: [HPAI Sampling and Submitting Information](#) .

## 9. Movement Permits:

- a. Any poultry premises in the Control Area will need to obtain movement permits and provide proof of negative avian influenza testing for movement of poultry and certain poultry products moving within, into, or out of the Control Area.
- b. Manure movements related to a Control Area also require a permit.
- c. Items **NOT** needing permits for movement during the incident: (new-September 2023)

- (1). **Feed:** Feed mills are to adhere to the minimum biosecurity requirements as identified below, although the documents do not have to be submitted to PDA with the permit request:
  - i. Feed mill truck biosecurity requirements:  
[FeedMillTruckBiosecurityRequirements.pdf \(pa.gov\)](#)
  - ii. Feed mill truck disinfection log:  
[FeedMillTruckDisinfectionLog.pdf \(pa.gov\)](#)
  - iii. Additionally, feed mills should provide a list of premises that poultry feed is provided to in the control area to [RA-AG-PAPERMITS@pa.gov](mailto:RA-AG-PAPERMITS@pa.gov). The control area includes the 10 kilometer area surrounding an infected premises.

(2). **Washed and Sanitized Eggs**, unless being moved to another state that requires permitted movements.

(3). **Clean litter/shavings**

- d. The premises of origin and/or destination must have a federal premises ID.
- e. The premises of origin and/or destination may need to have an approved biosecurity plan prior to obtaining movement permits. To determine when a biosecurity plan is needed for a permit, refer to the permitting guidance table on the PADLS website at [Permit Guidance Table](#); or contact the permitting section at :[RA-AG-PAPERMITS@pa.gov](mailto:RA-AG-PAPERMITS@pa.gov) or call 717-772-2852, and choose option 1, followed by option 4.

**10. Biosecurity Plan Requirements for Permits:** There are now two options for certain non-commercial premises to meet the biosecurity plan requirements when needed for obtaining a movement permit:

- a. **Option 1** is a written biosecurity plan that follows the NPIP Program Standard E format and has been reviewed and approved by PDA.
  - Biosecurity plan templates are available on the PADLS website: at [NPIPStandardEBiosecurityPlanTemplate.pdf \(pa.gov\)](#) and [HatcherySampleBiosecurityPlan.pdf \(pa.gov\)](#)
  - An example of a commercial flock biosecurity plan is available at: [SampleCommBasicBiosecurityPlan.pdf \(pa.gov\)](#)
  - Submit a plan in the proper format to [RA-AGBIOSECURITYPLAN@pa.gov](mailto:RA-AGBIOSECURITYPLAN@pa.gov) for evaluation.
  - **This is required if the poultry premises meets the commercial size requirement as specified below or has a flock of any size containing**

**waterfowl**. Non-commercial premises are encouraged to submit an approved biosecurity plan using this template along with a permit application.

Bird Type	Number
Commercial Layers and pullets	75,000 or more birds on premises at one time
Commercial Broilers	Raise 100,000 or more/year
Commercial Meat Turkeys	Raise 30,000 or more/year
Commercial Upland Game Birds/ Commercial Waterfowl	Raise 25,000 or more/year
All Breeder Flocks (all types)	5,000 breeder birds or more on premises at one time

- b. **Option 2** is acknowledging and signing the applicable Secure Poultry Supply (SPS) plan permit guidance document which applies to the species related to the permit application.
- The signed SPS plan permit guidance document must be attached to the permit request to avoid delays in obtaining an approved permit.
  - Signature acknowledgement of adherence to the SPS biosecurity guidance document can be used for non-commercial flocks of the following species: layers, pullets, broilers, meat turkeys, and upland gamebirds, if a biosecurity plan is not currently approved.
  - There is currently no written SPS plan for waterfowl — use option 1 (above) and if you have questions, please contact the permitting unit for additional information at [RA-AG-PAPERMITS@pa.gov](mailto:RA-AG-PAPERMITS@pa.gov) or call 717-772-2852, and choose option 1, followed by option 4.

**The Department may require an on-farm biosecurity audit before approving a permit request for any premises.**

**11. Restocking:**

- a. Prior to restocking, commercial and other WOAHP poultry premises must have an approved biosecurity plan and must successfully pass an on-site biosecurity audit. If any biosecurity deficiencies are identified during the on-site audit, the producer must address them, and a second audit may be necessary.
- b. Restocking Agreements are made between the USDA, PDA, and commercial and other WOAHP poultry premises owners outlining any avian influenza testing and monitoring

- requirements of the new flock. A restocking agreement is not required for non-poultry flocks.
- c. Commercial and other WOAHP poultry producers may restock their premises while adhering to their restocking agreement and biosecurity plan. WOAHP non-poultry producers may restock their premises after their premises quarantine has been formally released.
  - d. In the Control Area, a premises within the designated Infected Zone (usually 3 km around an infected flock) receiving poultry will not be eligible for USDA indemnity and compensation in the event poultry on the premises become infected with HPAI (diagnosed as a presumptive and/or confirmed positive case). After the Control Area is released, any premises containing poultry moved into the Infected Zone will not be eligible for indemnity and compensation until 14 days after the Control Area is released.

## **12. Indemnity Overview:**

- a. Poultry, eggs, and feed indemnity: Indemnity is split between or directed to the integrator and/or grower based on their contract.
  - i. Bird and egg appraisal values are based on USDA's current listing by species, type, and gender.
  - ii. The number of birds for indemnity purposes is based upon placement records and mortality records for that flock.
  - iii. The feed wastage amount is based upon the latest feed receipts, estimation of feed consumed, and subject matter expert (SME) measurement of the feed left in bins.
- b. Depopulation and disposal indemnity costs: This is based on the actual costs of labor, supplies, and equipment. It's important to keep track of employee hours, machine hours, receipts for supplies used in depopulation and disposal, electric & gas meter readings, and any other applicable costs discussed with and agreed upon with your FRS representative and/or Case Manager.

## **13. Virus Elimination Compensation:**

(From USDA guidance): For premises which do not require a 120-day extended quarantine:

- i. Virus Elimination Payment #1 – One half of the total payment initially. A flat rate is based on square footage of the poultry house for floor birds, and cubic footage for layer houses with pits. It is based on square footage in other areas in egg layer facilities (processing rooms, coolers, conveyors). Payment is only allowed for poultry houses which were populated with birds at the time HPAI was



identified. Poultry houses which were empty must still be cleaned and disinfected, but will not be eligible for compensation.

- ii. Virus Elimination Payment #2 – The rest of the payment will be available after environmental testing of the eligible house/area has been negative.
- iii. A Flock Plan, which is an agreement between USDA, PDA, and the producer outlining the HPAI recovery process specific to a poultry premises, must be signed and approved before any virus elimination payments are made.

### **C. Important links and phone numbers**

1. Sick Bird Reporting Line: 717-772-2852, option 1 (24/7)
2. Biosecurity plan submission: [RA-AGBIOSECURITYPLAN@pa.gov](mailto:RA-AGBIOSECURITYPLAN@pa.gov)
3. Premises registration or premises ID questions: [RA-PREMISE-ID@PA.GOV](mailto:RA-PREMISE-ID@PA.GOV) or call 717-772-2852, and choose option 5
4. Permitting questions: [RA-AG-PAPERMITS@pa.gov](mailto:RA-AG-PAPERMITS@pa.gov) or call 717-772-2852, and choose option 1, followed by option 4. More permitting information is available on the PADLS website at [Permitting Information](#) under the permitting tab
5. For specific product permit guidance, refer to the PADLS website: HPAI PA Permit Guidance Table [HPAI PA Permit Guidance Table](#)
6. Control Zone Address Checker Map on the PADLS website: [Control Zone Address Checker Map](#)
7. HPAI Sampling/Submitting Information on the PADLS website: [HPAI Sampling/Submission Information](#)
8. Additional HPAI Response Information—USDA APHIS: [HPAI Response Documents- USDA](#)

(<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/emergency-management/hpai/fadprep-hpai>)