



FAST FACTS:

- Highly pathogenic avian influenza (HPAI) has been confirmed in states throughout the central and western United States as well as Montana.
- Although avian influenza is a highly contagious disease to domestic poultry, there are no apparent risks to human health at this time.
- It is safe to eat properly handled and cooked poultry products, including meat and eggs.
- Good biosecurity helps keep birds healthy:
 - **Minimize contact with wild birds or other poultry**
 - Sanitize equipment and clothing used around them
 - Control access to poultry pens.
- Monitor your birds closely and contact your veterinarian and the Montana Department of Livestock immediately if you suspect illness at 406-444-2976.

Additional Information on High Path Avian Influenza (HPAI)

Background:

In January of 2022, highly pathogenic avian influenza (HPAI) was confirmed in wild birds in South Carolina, and in February the first case of HPAI in domestic poultry was confirmed in Indiana. Subsequently, HPAI has been confirmed in wild birds and poultry (backyard and commercial) in more than 25 states in the United States resulting in international trade restrictions on poultry and poultry products. Montana's first confirmed case was announced April 8.

About Avian Influenza:

Avian influenza is a highly contagious viral disease of chickens, turkeys, pheasants, quail, ducks, geese, guinea fowl, and many wild birds. It can be carried in wild waterfowl that display no clinical signs of illness. Contact with infected birds, contaminated objects/equipment, and aerosol (short distances) can spread the virus which is found in feces, saliva, and respiratory secretions.

HPAI can cause high mortality in poultry and game birds. Poultry affected by avian influenza can also show:

- Decreased food consumption, huddling, depression, closed eyes.
- Respiratory signs, such as coughing and sneezing.
- Decreased egg production or misshapen eggs.
- Watery greenish diarrhea, excessive thirst.
- Swollen wattles and combs.

The risk to human health associated with the current outbreaks is considered to be low according to the Centers for Disease Control (CDC) with no reported cases of human illness. It is safe to eat properly prepared poultry and poultry products. The United States Department of Agriculture (USDA) recommends that poultry and wild birds are cooked to a temperature of 165 °F.

Biosecurity Measures:

Owners are encouraged to practice good biosecurity measures:

- Prevent contact between wild or migratory birds and domestic poultry, including access by wild birds to feed and water sources.
- House birds indoors to the extent possible to limit exposure to wild or migratory birds.
- Limit visitor access to areas where birds are housed.
- Use dedicated clothing and protective footwear when caring for domestic poultry.
- Wash and disinfect items going on and off your farm, such as footwear, vehicles, and equipment. Effective disinfectants include bleach, Comet bathroom cleanser, Lysol multi-purpose cleaner, Virkon, and Tek-Trol.
- Isolate sick animals and contact your veterinarian or Montana Department of Livestock (MDOL).

Who Can I Contact?

- If you see sickness or increased death loss in poultry, immediately contact **MDOL at 406-444-2976**.
- If you find sick or dead wild birds that have died from unknown causes, please contact your local FWP Warden, Biologist or Regional office, or call the **FWP wildlife veterinarian at 406-577-7880**.

More Information:

- Biosecurity - <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/defend-the-flock-program>
- Human health and HPAI - <https://www.cdc.gov/flu/avianflu/avian-flu-summary.htm>
- Poultry Manual: Cleaning and Disinfection of Facilities, Equipment, and Vehicles - www.cfsph.iastate.edu/pdf/fad-prep-nahems-poultry-industry-manual
- 2022 Detections of Highly Pathogenic Avian Influenza- <https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/avian/avian-influenza/2022-hpai>

Highly Pathogenic Avian Influenza (HPAI)

Depopulation and Disposal for Birds in Your HPAI-Infected Flock

Highly pathogenic avian influenza (HPAI) is a very contagious and deadly disease for poultry. All it takes is one infected bird, and the disease can spread from flock to flock within a matter of days. As with any highly contagious animal disease, a quick and early response is our best chance to limit the size and scope of the outbreak. Depopulating affected animals is a key part of the response: it's one of the most effective ways to stop disease spread and protect U.S. animal health as a whole.

Federal law gives the U.S. Department of Agriculture (USDA) authority to depopulate animals in these situations to stop disease spread. USDA's goal is to complete this work within 24 hours of first detecting HPAI at a property. The sooner we act, the faster we can contain the outbreak and help business return to normal.

Your case manager will walk you through the process as we prepare to depopulate your flock and find out—as best we can—how HPAI may have entered your facility and if it has spread to any neighboring farms. We will also handle the disposal process, working with you to make sure it's done safely, in compliance with all applicable laws, and without spreading HPAI further.

Depopulation Methods

There are two main methods we use to depopulate HPAI-affected flocks: water-based foam for floor-raised birds and carbon dioxide gas for caged birds. These are the most humane and effective options available in an emergency situation involving mass numbers of birds. Trained personnel will arrive onsite and handle these tasks under the supervision of Federal and State animal health officials.

If our preferred methods don't allow us to depopulate the flock as quickly as needed—within 24 hours—we must consider other options. These may include shutting off the facility's ventilation fans ("ventilation shutdown"). Federal and State officials will carefully evaluate your farm and work with you to figure out the best option for meeting the goal of 24-hour depopulation.

In every case, we take the decision very seriously and weigh many factors when choosing what depopulation method to use. These include, among other things, the size and type of the animals, their behavior, and their containment/housing facilities. We also look at the number of animals in the flock, the location of the farm and environmental conditions there, disease information, and available resources and personnel.

WHAT IS DEPOPULATION?

There is a difference between "depopulation" and "euthanasia."

Depopulation is when large numbers of animals must be destroyed in response to an animal health emergency. With depopulation, the welfare of the animals is given as much consideration as practical, but the situation is understood to be extenuating.

Euthanasia, however, involves transitioning an animal to death as painlessly and stress-free as possible.

While euthanasia is preferable to depopulation, it is not always possible during an animal health emergency because of the need to move quickly to slow or stop disease spread.

During an HPAI outbreak, depopulating flocks within 24 hours is crucial. It's the best way to eliminate the disease and, overall, is a more humane approach. A lengthier depopulation process can lead to a greater number of birds suffering the terrible effects of HPAI.

USDA follows the recommendations of the American Veterinary Medical Association and the World Organization for Animal Health whenever possible. We use trained veterinarians, animal health technicians, and specialized contractors to complete depopulation work. Throughout the process, our focus is on keeping personnel safe while minimizing stress to the animals.

Disposal Options

There are many safe methods for carcass disposal. These include composting, onsite burial, incineration, rendering, and landfilling. Each disposal option can take a different amount of time to complete. When deciding which method to use, we look at several factors, including the size of the flock, space requirements, associated costs, local conditions, and applicable laws.

We also consider the benefits and limits to using each method:

- **Composting.** Contains the virus to the farm and produces a soil amendment/fertilizer product. However, composting requires ample flat space and may not be possible for all farming operations, such as egg layer facilities or other places where space is limited.
- **Burial.** Must be approved by the State environmental regulatory agency and may not be permitted if the water table is close to the ground surface.
- **Incineration.** A safe method for disposing of carcasses, but the fuel requirements are substantial and can be costly.
- **Rendering.** This involves processing carcasses until they are reduced to water, fat or tallow, and meat or bone meal. It is very effective but requires added safety precautions to make sure the virus does not become aerosolized and dispersed throughout the rendering plant. It is also disruptive for the plant's normal operations.
- **Landfilling.** Landfilling allows safe and efficient disposal of large quantities of carcasses. However, individual landfill managers may put restrictions on the type or quantity of materials they accept.

Depending on the situation, we may end up taking a combined approach and use a few or all of these methods.

For More Information

If you have specific questions, talk with your case manager or call the nearest USDA office (www.aphis.usda.gov/animal-health/state-offices).

For general information on HPAI and emergency response, go to www.usda.gov/avian_influenza.html and www.aphis.usda.gov/fadprep. Here, you can also download USDA's "Ventilation Shutdown Evidence & Policy," which gives more technical details about this topic.

USDA's goal is to complete depopulation work within 24 hours of first detecting HPAI at a property. The sooner we act, the faster we can contain the outbreak and help business return to normal.

ACTIONS YOU NEED TO TAKE

- Talk with your case manager about how you'll be involved and if you'll work directly with emergency responders on these activities.
- Wear personal protective equipment if you are on the farm at the time depopulation or disposal work is happening or if you are directly involved in this work.
- Require that your employees also wear personal protective equipment if they are on the farm or helping with response activities. Your case manager can provide guidance on personal protective equipment if needed.
- Adhere to strict biosecurity procedures at your farm.
- Follow all other steps outlined by the response team to minimize risk of spreading the disease during the process.

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Please note: These procedures may be revised as the situation continues to change.

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 eliminating the virus through either heating of houses or fumigation is 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 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: 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 destroy or eliminate 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

CLEANING OPTIONS

Dry Cleaning (Timing & method of dry cleaning must not aerosolize virus.) and/or Wet Cleaning

Step 2

DISINFECTION OPTIONS

Drying & Heating (100-120 °F for 7 days total) and/or as needed
Wet Disinfection with EPA Approved Antimicrobial and/or as needed
Fumigation with EPA Registered Sterilant for Porous and Non-Porous Surfaces or Alternative Science-Based Methods

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.

Heat treatment:

For more information on the requirements for heat treatment as a disinfection option, positioning of sensors, and examples of the 3 consecutive day and 7 day total heating requirements, please see the document [Using Heat Treatment for Virus Elimination](#). Please note: USDA APHIS does not suggest that all methods of cleaning and/or disinfection are equivalent in terms of destroying or eliminating living organisms; however, the scientific evidence at this time demonstrates that heat treatment—as prescribed above—is effective at eliminating avian influenza on previously infected premises.

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. An inspection may be required by the State Animal Health Official or APHIS at the end of the fallow period.

FOR MORE INFORMATION

Please see these FAD PReP documents: [NAHEMS Guidelines: Cleaning and Disinfection](#), [NAHEMS Guidelines: Tactical Topic on Cleaning and Disinfection \(C&D\)](#), and the [NAHEMS Cleaning and Disinfection Presentations](#).

Further HPAI policy guidance, including *Using Heat Treatment for Virus Elimination*:
www.aphis.usda.gov/fadprep.

EPA Antimicrobial Products Registered for Use Against Avian Influenza A Viruses:
<http://www.epa.gov/sites/production/files/2015-09/documents/list-m-avianflu.pdf>.

HPAI Response

Using Heat Treatment for Virus Elimination

April 13, 2022

Please note: These procedures may be revised as the situation continues to change.

BACKGROUND

Traditionally, cleaning with subsequent application of wet disinfectant has been used to eliminate highly pathogenic avian influenza (HPAI) virus on Infected Premises. However, dry cleaning and heating of houses (also called heat treatment) is now an accepted method of disinfection/virus elimination where feasible. Heat treatment is not a “new” approach, but it has re-emerged as a tested, cost-effective option.¹

Any disinfectant method(s) selected should consider the characteristics of the premises/houses and other factors which may impact the effectiveness of the virus elimination activities. Heat treatment may not be appropriate in all situations. The cleaning and disinfection options selected and implemented *must* be included as part of the approved virus elimination plan and approved by State Animal Health Officials and APHIS.

DRY CLEANING

Before the virus elimination/disinfection step, an Infected Premises must undergo dry cleaning. Dry cleaning must be conducted prior to heat treatment or other disinfection options. For more information, see [Cleaning and Disinfection Basics](#).

By definition, dry cleaning involves the removal of any gross contamination and organic material (e.g., soil, manure, bedding, feed, eggs, feathers) from all production areas and equipment. Shovels, manure forks, brooms, and brushes should be used to sweep, scrape, and remove organic material and debris from surfaces.

While the removal of all organic material is ideal, this may not be a realistic objective for every Infected Premises. The following steps provide general guidance for dry cleaning; if there are any questions regarding dry cleaning of premises, please contact Incident Command for further guidance.

1. Minimize remaining organic material by removing any gross contamination and organic material; in most cases the original surface should be visible on floors, walls, and fans (e.g., wood or metal).
2. No more than 0.25 inches of organic material should be present on any given surface that will come into contact with poultry when restocking occurs.
3. No more than 0.25 to 0.5 inches of organic material should be present on any surface that is *not* accessible to restocked poultry.
4. Priority is to ensure all wet organic material is dry or removed. This is likely to be the most recent deposits to the site and thus, the most likely to have infectious material.
5. Ensure all remaining organic material dries; i.e., if weather has made material damp or wet, allow to dry naturally or remove. Drying is an effective way to destroy/eliminate the virus.

¹ Heat treatment was presented as an option for inactivating AI viruses in 1986; Halvorson, David A. “Avian Influenza-A Minnesota Cooperative Control Program.” *Proceedings of the Second International Symposium on Avian Influenza, Georgia Center for Continuing Education, University of Georgia, Athens, Georgia. Sept 3–5, 1986.* Symposium on Avian Influenza, US Animal Health Association.

6. The primary disposal method for poultry litter on the floor or ground is composting, with landfill, burial, or other options.
7. For situations with stored manure or manure pits, State and APHIS officials will make a disposal determination with the Incident Management Team.

Once dry cleaning is complete and the facility has been inspected and approved, as needed, disinfection can be performed by heat treatment of the barns/houses. This procedure involves whole house heating, carefully balancing time, temperature, and environmental factors that may impact virus elimination.

HEAT TREATMENT

Heating barns/houses that have been dry cleaned is often the most efficient way to disinfect poultry houses and destroy/eliminate HPAI virus. Current policy guidance (provided in *Cleaning and Disinfection Basics*) states that barns/houses must be heated to between 100°F and 120°F for a total of 7 days; with at least 3 *consecutive* days (of the 7 days) of heating continuously to within this temperature range. USDA APHIS does not suggest that all methods of disinfection are equivalent in terms of destroying or eliminating living organisms; however, the scientific evidence at this time demonstrates that heat treatment is effective at eliminating HPAI virus. To-date, application of heat treatment following this guidance has successfully eliminated HPAI virus. If new scientific information becomes available, this guidance may be adapted. Temperatures should generally not exceed 120°F to avoid damage to fixtures and structures.

100-120°F for a Total of 7 days

- At least 3 consecutive days of drying and heating must be at this specified temperature (maintaining a temperature within this range).

Examples of Heat Treatment

In the first example, the premises is able to keep the barn at the specified temperature (between 100°F and 120°F) for seven straight days. This fulfills the requirement for a total of 7 days at temperature as well as 3 consecutive days at temperature:

Example 1. Successful Heat Treatment

Heat Treatment Begins

- Day 1 – 100°F
- Day 2 – 100°F
- Day 3 – 110°F
- Day 4 – 105°F
- Day 5 – 110°F
- Day 6 – 115°F
- Day 7 – 115°F

Heat Treatment Ends

In the second example, the premises experiences a severe cold wave at the same time as a heater breakdown. This premises is able to repair the heater quickly, but the barn temperature slips below 100°F for 2 days. In this case, the premises must heat the barn for a longer period to fulfill the requirement of 7 total days at temperature and 3 consecutive days at temperature. However, the premises can count that first day at temperature towards the 7 total day requirement.

Example 2. Successful Heat Treatment

Heat Treatment Begins

- Day 1 – 100°F
- Day 2 – 95°F
- Day 3 – 95°F
- Day 4 – 100°F
- Day 5 – 110°F
- Day 6 – 115°F
- Day 7 – 110°F
- Day 8 – 105°F
- Day 9 – 100°F

Heat Treatment Ends

If a premises cannot meet the 7-day total requirement (between 100 and 120°F) in addition to the 3 consecutive day requirement at temperature for an extended period of time (greater than 2 weeks or as recommended by Incident Command), the premises may need to consider an alternative means of disinfection, in discussion with State and APHIS officials.

USE & POSITIONING OF SENSORS/THERMOMETERS

When heat treatment is used for virus elimination, temperature monitoring is required. At a minimum, there should be three thermometers placed in each barn (at each end and in the center). Additional sensors, particularly in larger facilities, are recommended. Preferably, sensors should transmit the temperature remotely and continuously to ease the burden of monitoring. In all cases, sensors/thermometers should be checked and in good working order prior to use. In turkey houses, sensors should be placed between 4 and 6 feet high. In layer houses, sensors should be placed at the cage level. To avoid an artificially high temperature reading, do not place sensors near or directly on an individual heat source.

DOCUMENTATION

If heat treatment is used for virus elimination, it is critical to document the barns/houses reaching and maintaining appropriate temperatures. Incident Command can provide logs for documentation; records should indicate the temperature of the house at least two to four times per day for the seven day period. These logs should be uploaded in the Emergency Management Response System (EMRS).

ENVIRONMENTAL SAMPLING

In addition to cleaning and disinfection steps, including heat treatment, environmental sampling is conducted at the completion of virus elimination activities. Taking environmental samples and

testing them for HPAI provides additional confidence that virus elimination activities have been successful. Please see [Post C&D Sampling Guide](#) for more information.

EVIDENCE SUPPORTING THE USE OF HEAT TREATMENT

It is well established that HPAI viruses can survive in cool and moist conditions, particularly when organic material is present.² The World Organisation for Animal Health (OIE)³ along with other research⁴ has demonstrated that avian influenza (AI) viruses can live for extended periods in water, liquid feces, and in soil at ambient temperatures (see Table 1). In particular, evidence suggests that both dry and wet feces can harbor the virus for extended periods of time. One study of H5N1 suggested that virus can remain infectious in both wet and dry feces for 18 hours, even when the temperature is raised to 107.6°F.⁵

Conversely, in the absence of moisture and at high temperatures, AI viruses can be quickly inactivated. At 107.6°F, the virus was inactivated in both wet and dry feces after 24 hours; at 98.6°F, virus was no longer infectious after 30 hours. HPAI virus also does not survive extended periods of time on surfaces that are not contaminated with organic matter.

For heat treatment to be an effective virus elimination step, it remains critical to ensure 1) organic material is removed as prescribed above and 2) barns are heated to the recommended time and temperature, with adequate monitoring and documentation. Heat treatment is a valuable and cost effective option to eliminate virus from Infected Premises.⁶

Where Heat Treatment is Not Effective

As also seen in Table 1, heat treatment is not effective at deactivating HPAI virus in dried egg white, even at extremely high temperatures.⁷ Evidence from the 2014–2015 HPAI outbreak confirms that HPAI viruses can live for extended periods in the presence of dried egg white/albumen, including on egg belts or elsewhere that this material may be found (e.g., on the floor underneath an egg belt).

For egg belts, two options are available: (1) the egg belt can be removed, disinfected with an approved disinfectant, dried, and that belt may be replaced or (2) the egg belt can be disposed of, through approved mechanisms, and replaced with a new egg belt. The most cost effective option should be implemented.

It is critical that where dried egg white (egg albumen) is present, these areas are disinfected with an approved disinfectant (if heat treatment is applied to the rest of the premises). In some cases, it may be necessary to consider other methods of disinfection for the entire barn/house.

² David E. Swayne, 2008. "Epidemiology of Avian Influenza in Agricultural and Other Man-Made Systems," in David E Swayne, ed., *Avian Influenza*. Ames, IA: Blackwell Publishing.

³ World Organization for Animal Health (OIE) 2010, OIE Technical Disease Card.

⁴ M. Elin Doyle et al., 2007. "Destruction of H5N1 Avian Influenza Virus in Meat and Poultry Products." UW-FRI Briefings. https://fri.wisc.edu/files/Briefs_File/FRI_Brief_H5N1_Avian_Influenza_8_07.pdf.

⁵ Baleshwari Kurmi et al., 2013. "Survivability of Highly Pathogenic Avian Influenza H5N1 Virus in Poultry Faeces at Different Temperatures." *Indian J. Virol.* 24(2):272-277. DOI 10.1007/s13337-013-0135-2.

⁶ Heat treatment has been used effectively to eliminate other diseases, such as infectious laryngotracheitis in broiler houses, demonstrating some industry knowledge and familiarity with this approach: see Giambone, J.J. et al., 2008. "Management Practices to Reduce Infectious Laryngotracheitis Virus in Poultry." *J. Appl. Poult. Res.* 17:64–68.

⁷ For more information, also see Swayne, D.E. & Beck, J.R. 2004. "Heat inactivation of avian influenza and Newcastle disease viruses in egg products." *Avian Pathology.* 33(5):512-518. DOI 10.1080/03079450400003692.

Table 1. Avian Influenza Viral Persistence

Material/Substance	Temperature (°F)	Duration (Days unless otherwise noted)
Water^a	82.4	26-30
	62.6	94-158
Liquid Feces^a	39.2	30-35
	68.0	7
	77.0-89.6 ^b	4
Dry Feces^a	N/A	14
Wet & Dry Feces^d	107.6	18 hours
Dried Egg White^f	152.6	20 hours
	129.9	513 hours (21.4 days)
Feathers^e	68.0	15
Culture Media^c	Room Temp.	15
	Refrigeration Temp.	243
Soil^c	41.0	365
	71.6	49
Surfaces (e.g., steel, tiles, tire, plastic, etc.)^c	N/A	3

^a World Organisation for Animal Health (OIE), 2010, OIE Technical Disease Card.
^b These temperatures were taken in the shade.
^c M. Ellin Doyle et al., 2007. "Destruction of H5N1 Avian Influenza Virus in Meat and Poultry Products." UW-FRI Briefings. https://fri.wisc.edu/files/Briefs File/FRI Brief H5N1 Avian Influenza 8_07.pdf.
^d Baleshwari Kurmi et al., 2013. "Survivability of Highly Pathogenic Avian Influenza H5N1 Virus in Poultry Faeces at Different Temperatures." Indian J. Virol. 24(2):272-277. DOI 10.1007/s13337-013-0135-2.
^e USDA, 2015. "Reduction of Infectious HPAI in Animal Agricultural Settings." https://www.aphis.usda.gov/animal_health/downloads/animal_diseases/ai/hpai-reduction-of-infectious.pdf.
^f OIE, 2021, Terrestrial Animal Health Code. Chapter 10.4: Infection with Avian Influenza Viruses.

OTHER FACTORS AFFECTING VIRUS ELIMINATION

Many factors impact the survivability of HPAI viruses. Changing any one factor may influence the virus's ability to survive in the environment. These factors include:

- ◆ Relative Humidity
- ◆ Time
- ◆ Weather
- ◆ Temperature
- ◆ Type of Surface Material (e.g. wood, concrete, etc.)
- ◆ Light (UV)
- ◆ pH
- ◆ Virus Strain
- ◆ Salinity
- ◆ Matrix (the makeup of any remaining organic material).

The current policy guidance for heat treatment (between 100°F and 120°F for 7 days; with at least 3 consecutive days continuously maintaining a temperature in this range) takes into account that many of these factors are difficult or impossible to control. In the future, there may be additional recommendations reflecting the role that these factors can play in the effectiveness of virus elimination activities.

Highly Pathogenic Avian Influenza (HPAI)

The HPAI Indemnity and Compensation Process Start to Finish

Highly pathogenic avian influenza (HPAI) is one of the most serious diseases that can affect your poultry flock. An HPAI outbreak is an animal disease emergency. The U.S. Department of Agriculture (USDA) and States have authority to respond to and protect our country's poultry and livestock from harmful diseases.

First Steps

The [response](#) process starts as soon as a case is suspected. Trained personnel will collect samples from your poultry for testing and confirmation. Initial testing will take place at a National Animal Health Laboratory Network (NAHLN) lab. With a positive test result from NAHLN, a suspect case becomes a "presumptive positive" case. A USDA case manager will be assigned to you and will be your liaison with USDA's Animal and Plant Health Inspection Service (APHIS) throughout the entire process. The National Veterinary Services Laboratories (NVSL) will then work to confirm initial test results. This can take some time, but will not slow down the onsite response process.

Compensation Overview

The Animal Health Protection Act authorizes USDA to provide indemnity payments to producers for birds and eggs that must be destroyed during a disease response. APHIS also provides compensation for depopulation and disposal activities and virus elimination activities. While the cost of HPAI goes well beyond the value of destroyed flocks and cleanup work, our ability to pay indemnity is limited by specific terms in the Animal Health Protection Act. For example, we cannot offer indemnity for income or production losses during downtime or other business disruptions due to HPAI.

Indemnity Payments for Birds and Eggs

USDA will compensate an individual for birds that must be destroyed using species-specific calculators. We also pay for some other losses, such as eggs that must be destroyed.

Making a Claim

You will need to work with your case manager to sign an appraisal and indemnity request form and accept compensation for your birds. Once this paperwork is complete, APHIS can begin depopulation work and move forward with the claims process. While depopulation work is underway, APHIS will prepare the full appraisal and related paperwork with the compensation amount, which is split between owner and grower if they are separate entities. Once you sign the full appraisal and related paperwork and return it to your case manager, USDA can finalize the indemnity payment.

An HPAI outbreak is an animal disease emergency. The Animal Health Protection Act authorizes USDA to provide indemnity payments to producers as part of the disease response. Compensating you and other affected producers for some losses and costs gives you needed support in a difficult time.

WHAT'S COVERED?

USDA **does pay** for indemnity for birds and eggs. USDA may also provide compensation for depopulation and disposal activities and virus elimination activities.

USDA **cannot** offer indemnity for income or production losses suffered due to downtime or other business disruptions.

Receiving Payment

To receive your payment, you must register your “DUNS” number through the Federal Government’s System for Award Management (SAM). A DUNS number is the standard business identifier for Federal electronic commerce. If you already participate in certain USDA programs, you probably already have a DUNS number. If you do not have a DUNS number, your case manager can help you with obtaining one. After receiving your number, follow the guidance listed in this document to register with SAM: www.sam.gov/sam/transcript/Quick_Guide_for_Contract_Registrations.pdf.

USDA will need to verify your SAM registration before any payments can be processed. USDA deposits compensation funds directly into your bank account. You can expect to see the deposit approximately 2 to 3 weeks after you have given USDA the account information needed to process the payment.

Compensation for Depopulation, Disposal, and Virus Elimination Activities

Flock Plan

You must have a flock plan to receive compensation for depopulation, disposal, or virus elimination activities. A flock plan is not required for indemnity payments for birds or eggs. Your case manager will help you develop your flock plan, which is an agreement between APHIS, the State Animal Health Official, and you that:

- describes the methods used for depopulation, disposal, and virus elimination;
- documents your intention to eliminate HPAI from your premises and maintain [strong biosecurity measures](#) to prevent transmission or future introduction of the virus; and
- details regulatory requirements to release State and/or Federal quarantine areas.

Depopulation and Disposal

USDA covers the cost of depopulating and disposing of HPAI-affected flocks. In most cases, USDA or its contractors carry out these activities and pay the costs directly. If you choose to manage your own depopulation and disposal activities, USDA will reimburse you according to a financial plan, which you will develop with your case manager. This plan will detail the costs associated with the depopulation and disposal activities that are described in your flock plan and must be signed prior to payment being processed. USDA will reimburse you for those activities at a rate equal to what would otherwise be paid to a contractor for the same work. USDA will only reimburse for activities outlined in the flock plan.

USDA also provides compensation for materials, such as tools or pallets-that must be disposed of because they cannot be safely or adequately cleaned. Your USDA case manager must review and approve in writing any items that must be disposed of, prior to them being placed in a dumpster, in order for you to receive compensation for those items.

You must have a biosecurity plan in place and a flock plan to receive compensation for depopulation, disposal, or virus elimination activities.

INFORMATION NEEDED FOR APPRAISAL AND INDEMNITY

Below is a list of what’s needed for the appraisal and indemnity paperwork. Your case manager will help you gather this information and verify details with others, such as your flock veterinarian, if needed.

- Type of flock (turkey, chicken, layer, breeder, backyard, etc.)
- Age, sex, and number of each type of bird
- Number of barns and number of birds in each barn
- Bird mortality records over the last 2 weeks
- Eggs on hand/current egg inventory (if applicable)
- Onset date of disease signs (if present)
- Date of facility quarantine
- Reason for test (area surveillance, pre-movement, National Poultry Improvement Plan, sick-bird call)
- County where your farm is located
- Premises identification number, or PIN (location of poultry, not company home)
- Global positioning system coordinates (latitude/longitude) and 911 address for your farm
- Name of your facility/complex
- Claimant name and address
- Confirmation of mortgage status
- Appraisal date (date value is assigned to the birds or eggs)
- Name of diagnostic lab testing samples

Virus Elimination Activities

Eliminating HPAI virus from affected premises is a crucial step toward resuming operations. USDA will make flat-rate compensation payments for virus elimination activities based on a flat per-bird rate, with separate rates for caged- versus floor-reared operations. You may choose the method of virus elimination that works best for you. The method chosen will not impact the amount of flat-rate compensation for the affected premises.

If you decide to fallow your premises instead of completing virus elimination activities, you are not eligible for virus elimination payments.

Activities included in the calculation of flat rates include barn preparation, a cleaning step, and a disinfection step. In developing the flat-rate payment structure, APHIS looked at existing data on these types of activities and calculated flat rates based on those that would be performed in a future outbreak.

Direct and early payment of a standard amount for virus elimination will give you the resources to conduct these activities yourself or directly retain and oversee contractors to do the work. USDA will publish a list of acceptable contractors at the time of a future outbreak, but producers would not be limited to those.

You can find more details about flat-rate payment for HPAI virus elimination in USDA's "[HPAI Virus Elimination: Flat Rate Payment](#)." To download this document, go to www.aphis.usda.gov/animal-health/aiupdates and click on "HPAI Virus Elimination: Flat Rate Payment" (in the top area of that page).

For More Information

More information about USDA's HPAI response activities can be found on our Avian Influenza Web pages at www.aphis.usda.gov/animal-health/aiupdates.

If you have any questions about the indemnity or compensation processes, talk with your case manager.

Direct and early payment of a standard amount for virus elimination will give you the resources to conduct these activities yourself or directly retain and oversee contractors to do the work.

HPAI INDEMNITY AND COMPENSATION RESOURCES

- **SAM Registration**
www.sam.gov/sam/transcript/Quick_Guide_for_Contract_Registrations.pdf
- **Flat-Rate Payment Details**
www.aphis.usda.gov/animal_health/animal_dis_spec/poultry/downloads/hpai_flat_rate.pdf
- **HPAI Response Activities**
www.aphis.usda.gov/animal-health/aiupdates
- **Biosecurity Self-Assessment Checklist**
www.uspoultry.org/animal_husbandry/intro.cfm

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Highly Pathogenic Avian Influenza (HPAI)

Appraisal and Compensation: What You Need To Know If You Have an HPAI-Infected Bird Flock

The U.S. Department of Agriculture (USDA) shares the financial burden of highly pathogenic avian influenza (HPAI) with you. When an outbreak occurs, indemnity payments are an important part of the disease response.

Compensating you and other affected producers for some losses and costs gives you needed support in a difficult time. It can also encourage cooperation overall in the disease response, including early reporting of disease signs. This helps stop the outbreak and restore production as fast as possible.

The Animal Health Protection Act authorizes USDA to make these payments. Our goal is to appraise your flock, begin processing the paperwork needed for indemnity payments, and start depopulation work within 24 hours of detecting HPAI on your farm.

What We Cover

USDA will compensate an individual for birds that must be destroyed using species-specific calculators. We also pay for some other losses, such as eggs that must be destroyed.

We also pay a standard amount for virus elimination activities (cleanup work). This amount is based on a flat per-bird rate (separate rates for caged- versus floor-reared operations) that depends on the preferred method of cleaning and disinfection to eliminate HPAI from the farm.

USDA does not, however, cover all losses from HPAI as an insurance program would. For example, we cannot offer indemnity for income or production losses during downtime or other business disruptions due to HPAI. Also, indemnity is not available for farms out of production because of HPAI at nearby properties.

Paperwork and Payment

In most cases, the process for making an indemnity claim is fairly simple. First, you'll need to agree in writing to accept fair market value for the birds. This is done via an appraisal and indemnity request form. In order to receive indemnity, the owner or grower must certify that a biosecurity plan was in place at the time of the HPAI detection. In 2016, APHIS issued an interim rule that allows for split payments between owners and contract growers. Once the form has been signed, we can begin depopulation work and move forward with the claims process.

OVERVIEW: APPRAISAL PROCESS

As soon as HPAI is identified in your flock, USDA and State animal health officials work with you to prepare a flock inventory.

The inventory lists all living animals in the flock, including their species, age, and other key details that help determine their value at the time of depopulation.

This inventory serves as the basis for the flock appraisal.

Any documentation you provide—for example, your own inventory, receipts, etc.—will be helpful as USDA works quickly to determine the fair market value.

We use calculators that are specific to the segment of the industry and species of bird; these calculators are updated quarterly to reflect current market prices.

USDA also updates the calculators to account for current industry practices when such practices impact the price of an animal. (With the calculator for layers, for instance, USDA lengthened the assumed period of lay from 80 to 90 weeks when industry members brought the current lay period to our attention.)

We arrive at a final indemnity amount by multiplying the value per animal by the number of live animals.

Then, USDA prepares the full appraisal and related paperwork with the compensation amount. Once you sign the paperwork and return it to the State or USDA animal health officials assisting you, USDA can make the indemnity payment.

USDA deposits compensation funds directly into your bank account. You can expect to see the deposit approximately 2 to 3 weeks after you have given USDA the account information needed to process the payment. In addition to your banking information, you'll need to obtain a free "DUNS" number and register through the Federal Government's System for Award Management (SAM).

DUNS stands for "Data Universal Numbering System;" the company Dun & Bradstreet created and manages this system. It's used as the standard business identifier for Federal electronic commerce. To generate a DUNS number, go to <https://iupdate.dnb.com/iUpdate/companylookup.htm> and complete the five listed steps.

After receiving your DUNS number, follow the guidance listed in this document to register with SAM:
www.sam.gov/sam/transcript/Quick_Guide_for_Contract_Registrations.pdf.

Actions You Need To Take

- Respond promptly and completely to USDA requests for information. The list at the right shows the main information we'll need for appraisal and indemnity paperwork.
- Carefully review the completed paperwork. Let your case manager know any concerns.
- Sign the paperwork as soon as you are ready, and return it to your case manager.
- Check your bank account once indemnity payment is received and confirm that the correct amount was given. If there are any concerns or delays beyond 4 weeks, let us know right away.
- Continue to maintain strict biosecurity on your farm.

For More Information

If you have specific questions, talk with your case manager or call the nearest USDA office (https://www.aphis.usda.gov/animal_health/downloads/sprs_contact/field_office_contact_info.pdf).

Biosecurity information, including an online tool kit, can be found here
<https://www.aphis.usda.gov/animalhealth/defendtheflock>.

For general information on HPAI and emergency response, go to www.usda.gov/avian_influenza.html and www.aphis.usda.gov/fadprep.

INFORMATION NEEDED FOR APPRAISAL AND INDEMNITY

Below is a list of what's needed for the appraisal and indemnity paperwork. Your case manager will help you gather this information and verify details with others, such as your flock veterinarian, if needed.

- Type of flock (turkey, chicken, layer, breeder, backyard, etc.)
- Age, sex, and number of each type of bird
- Number of barns and number of birds in each barn
- Bird mortality records over the last 2 weeks
- Eggs on hand/current egg inventory (if applicable)
- Onset date of disease signs (if present)
- Date of facility quarantine
- Reason for test (area surveillance, pre-movement, National Poultry Improvement Plan, sick-bird call)
- County where your farm is located
- Premises identification number, or PIN (location of poultry, not company home)
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- Name of your facility/complex
- Claimant name and address
- Confirmation of mortgage status
- Appraisal date (date value is assigned to the birds or eggs)
- Name of diagnostic lab testing samples

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