



HPAI Biosecurity Checklist

If we hope to control the spread and eventually eradicate this HPAI virus, all segments of the industry will need to follow comprehensive and stringent biosecurity practices on an ongoing basis. The steps listed below are a sound start.

Premises

- A comprehensive biosecurity plan has been implemented and shared with all employees.
- Signs warning people not to enter the farm or any of its buildings because of disease control (No Admittance—Biosecurity Zone) are posted at all entrances.
- External entrances to poultry houses are kept locked during nonbusiness hours.
- Houses are bird-proofed against wild or free-flying birds.
- Procedures are in place to prevent the accidental entrance of wildlife and to remove them from poultry houses and other areas should they gain entrance.
- Backyard poultry are prohibited from the premises.
- Dogs and cats are not allowed in chicken houses and egg processing areas.
- Feed bins are secured to prevent contamination by wild birds or rodents, and spilled feed is cleaned up promptly to prevent attracting wild birds and rodents.
- Water is drawn from secure sources that can not be accessed by free-flying birds or rodents.

Equipment

- Footwear disinfection stations, site-provided footwear, or site-provided foot covers are available outside all external entrances. If footbaths are used, they must be changed at least daily or

more often if the footbath collects dirt, egg contents, or manure.

- Hand washing or hand-sanitizing stations are available at entrances.
- Equipment and tools brought to the farm are thoroughly cleaned and disinfected prior to use.
- Chicken transport equipment (carts, loaders, ramps) is cleaned and disinfected prior to use.
- For egg-laying facilities, only clean, sanitized, and disinfected plastic egg flats or new disposable egg flats are allowed on the premises.
- Cleaned and disinfected equipment is held under conditions that prevent exposure to wild birds.

Personnel

- Everyone is required to clean and disinfect their footwear or wear site-provided footwear or footwear covers prior to entering chicken houses, processing areas, and office areas.
- Everyone is required to wash/sanitize their hands before entering and after leaving poultry houses and processing areas.
- Employees receive biosecurity training when hired, and annually after that. Records of biosecurity training should be kept up to date.
- Farm policy requires that employees do not own other birds—including pet birds, domestic chickens, fighting chickens, ducks, geese, waterfowl, exotic birds, quail, partridge, or pheasants.



- ❑ Employees sign a document when hired and during annual biosecurity training sessions stating that they will avoid contact with other birds not owned by the business. Employees should not be shared between operations.
- ❑ In the event that contact is made with other birds, employees agree that they will comply with a 2-day waiting period prior to any entry into any portion of the farm to include the barns, processing plant, and office.
- ❑ Farm policy prohibits exposure to equipment from other farms that has not been washed and disinfected.
- ❑ Farm policy requires personnel who have visited a rendering plant to shower and change clothes before entering the farm or any of its buildings.
- ❑ Spent hen removal crews are prohibited from entering other chicken houses or egg processing areas.

Visitors

- ❑ Visitors do not enter chicken houses unless absolutely necessary.
- ❑ Visitors Logbook records the (a) visitor's name, (b) company, (c) time of entry, (d) statement confirming no contact with premises containing birds or rendering activities during the preceding 2 days, (e) time of leaving, and (f) a contact telephone number.
- ❑ Visitors and contractors who have had contact with birds during the preceding 2 days are prohibited from entering chicken houses or egg processing areas.
- ❑ Clean coveralls (or disposable suits), disinfected boots (or shoe covers), and hairnets are available and required for visitors and contractors to wear before entering barns, egg processing areas, or other work areas.

Vehicles

- ❑ All vehicles that have traveled to a location where other birds are present—even the feed store—are cleaned and disinfected before entering the premises.
- ❑ If drivers are required to make multiple stops at more than one individual farm in any given day, they are prohibited from entering chicken houses or egg processing areas.
- ❑ Farm policy requires cleaning and disinfection of vehicles and containers from a rendering plant before they enter an egg layer premises.
- ❑ Manure trucks never go from one poultry farm to another on the same day. However, if required, the manure trucks must be washed with detergent and disinfected prior to arrival at the next farm.



Producer Information Sheet

Questions and Answers: Highly Pathogenic Avian Influenza

Q. What is USDA's response process?

A. As part of the existing **USDA avian influenza response plans**, Federal and State partners as well as industry are responding quickly and decisively to these outbreaks by following these five basic steps:

1. **Quarantine**—restricting movement of poultry and poultry-moving equipment into and out of the control area;
2. **Eradicate**—humanely euthanizing the affected flock(s);
3. **Monitor region**—testing wild and domestic birds in a broad area around the quarantine area;
4. **Disinfect**—killing the virus in the affected flock locations; and
5. **Test**—confirming that the poultry farm is AI virus-free.

Once a flock tests positive for avian influenza (AI), USDA or a State animal health official will complete a flock inventory to use for appraisal purposes. The flock will be depopulated as soon as possible using the most efficient method available. The carcasses will be disposed of using one of several methods. These include:

- in-house composting,
- outdoor on-site composting,
- burial,
- off-site composting,
- landfill, or
- incineration.

APHIS and State officials evaluate disposal options based on the size of the flock, local conditions, and applicable local, State, and Federal laws/regulations. There are different timelines associated with each disposal option. It is extremely important to follow all steps as outlined by disposal experts in order to minimize the risk of disease spread during the disposal process.

After all carcasses are removed from the barn, the cleaning and disinfection process begins. First, all organic material is removed. Then all areas and items are washed thoroughly with detergent, rinsed, and allowed to dry. Next, a disinfectant is applied and allowed to remain wet on the surfaces for the label-specified contact time. After the contact time, surfaces are rinsed again and allowed to air dry. These processes help eliminate any remaining virus.

After cleaning and disinfection, environmental samples are collected and tested to confirm that the virus is no longer present.

Premises must remain empty for a minimum of 21 days following these steps before being released from quarantine. After being released, the premises can be restocked.

Q. What do producers need to do?

A. APHIS seeks to engage producers and their employees wherever appropriate during the disease response process. We recognize this can be a difficult time for all involved, and producers are not expected to complete the process without expert assistance.

The first point of contact for reporting sick birds is the producer’s veterinarian or the State animal health official. Producers can also report sick or unusual dead birds by calling USDA’s toll-free number at **1-866-536-7593**. If AI is suspected, samples should be taken and sent to a local or nearby National Animal Health Laboratory Network laboratory. If the results are positive, the producer will be contacted by either a State or Federal veterinary medical officer (VMO), and USDA will start the process of inventory for indemnity, the epidemiological investigation, depopulation, and so forth—all with caseworker assistance.

Producers should talk to involved animal health officials about their level of involvement and how the responders and producers can work together. Anyone who works on the farm during these processes will need to wear appropriate personal protective equipment and follow strict biosecurity procedures, as outlined by the response team.

If producers have any questions about the depopulation and disposal processes, they should talk to the State or Federal animal health officials responding to the disease event in their area.

Following confirmation of AI in their operation, a producer will need to develop a **flock plan** for all premises with confirmed H5/H7 AI infection or exposure. The flock plan sets out the steps to eradicate the virus and prevent its spread to other flocks. It also specifies the procedures required to get the facility back into production, including requirements for quarantine release. The flock plan will include cleaning and disinfection requirements, but does not require cost estimates. The flock plan must be signed by the owners, a State animal health official, and the APHIS District Director or Assistant Director. This is required before the indemnity payment can be processed. An APHIS Veterinary Services case manager will work with the producer to walk them through the process and the information required to complete all steps.

An **appraisal document** for indemnification will then be prepared by APHIS and be presented to the producer as quickly as possible (see next question for details about the appraisal process). Affected producers need to sign the appraisal document before depopulation can occur.

A **compliance agreement** must be developed if depopulation, disposal, or cleaning and disinfection will be performed by personnel other than Federal or State officials or the State, and indemnity will be requested for those activities. A compliance agreement is separate from the flock plan. The flock plan specifies the necessary procedures for the premises to resume normal production; a compliance agreement indicates what tasks will be completed, who will be responsible for each task, and how much the work is expected to cost. A compliance agreement is comparable to a statement of work produced for a contract.

Q. What is the appraisal process for payment of indemnity?

A. Once a herd or flock is confirmed by a designated laboratory to have tested positive for H5/H7 AI, animal health officials will complete an inventory to use for appraisal purposes. The inventory will list out the number of birds in the flock, along with their age at the time and their intended use.

APHIS will use this inventory as the basis for the flock appraisal. APHIS economists developed a series of species-specific appraisal calculators that use publicly available prices, costs, and productivity data to develop a value per animal. The calculators are updated monthly to account for changing feed costs and values.

The value per animal type multiplied by the number of each animal type is used to calculate total indemnity. In most cases, APHIS provides 100 percent of the indemnity amount; however, there are certain situations where APHIS may provide a lesser percentage to producers. For example, indemnity percentage may be less than 100 percent for large-scale producers who do not participate in the National Poultry Improvement Plan (NPIP; www.poultryimprovement.org).

Q. When can producers restock their facilities?

A. After cleaning and disinfection, environmental samples are collected and tested to confirm that the virus is no longer present. Animal health officials will determine the number and frequency of samples needed and will collect them accordingly. The samples will be tested at a designated laboratory, usually the National Veterinary Services Laboratories in Ames, IA.

In general, premises must remain empty for a minimum number of days after the completion of cleaning and disinfection to ensure that any residual virus has been eliminated. For HPAI, that period must be at least 21 days, as this is a single incubation period for avian influenza. (Note that this is not an OIE requirement, but a basic disease control measure and part of USDA's response plan.) The actual number of days will depend upon the specific disease agent and method of disposal used. Please discuss the exact timeline with the animal health officials responding on your farm.

Surveillance testing must also be complete in the area around the affected premises before APHIS can release it from quarantine and restocking can occur. However, in most cases, this surveillance will be completed before the 21-day waiting period begins.

Q. Can producers compost outside of barns?

A. Composting out of doors is an option in facilities (such as egg layer barns) where indoor space is restricted. However, outdoor composting requires a great deal of space and additional mitigations to discourage scavengers and keep viable pathogens from being blown around. Mitigations include a compost fleece or a thick layer of clean woodchips or other clean carbon source covering the compost pile. This cover keeps particles from blowing around and keeps scavengers out. In addition, in most instances, the State would have to permit the outdoor compost pile. APHIS is working with each facility to determine the best course of action given the size, scope, and needs of the individual operation, as well as the goal of ensuring that necessary disease control measures are taken.

Q. What can producers do with compost? Can it be sold?

A. APHIS does not regulate sale of the compost. The State agency that regulates fertilizers in any given State (could be Dept. of Ag, DNR, or Dept. of Environment) would have regulations pertaining to what the producer can or cannot do with the compost. This varies from State to State.

However, APHIS does regulate when anything can be done with the compost (sell, store, use, etc), as it can lead to the further spread of AI. Once the compost pile is assembled, it goes through two 14-day heat cycles. This is just letting the compost sit around to naturally compost. After 14 days, a composting consultant checks the temperature and turns the compost over (the turning over could take a day or so). We then wait another 14 days and check the temperature again. If the composting consultant determines that the appropriate temperature has been reached for an acceptable amount of time, APHIS releases the compost to the owner to use as allowed by State law.

Q. What can APHIS do to reduce wait times for depopulation?

A. To reduce wait times for depopulation, APHIS has increased its number of foaming units. APHIS started with one but as the number of infected premises expanded, APHIS' National Veterinary Stockpile (NVS) increased its capability to five foaming depopulation teams and contracted for six additional teams. For depopulating the layer houses, incident command teams and the NVS acquire CO₂ carts through various means and are having some fabricated locally. These additional assets allow us to begin depopulation within 72 hours of a presumptive positive result.

Q. Has APHIS discussed coordinating with National Guard forces?

A. The National Guard is invited to participate in a response by that State once the Governor has declared a state of emergency. APHIS works with the National Guard, but does not activate them.

Q. How is APHIS working to manage all of these steps in the larger and more complicated scenario of an egg-laying hen operation?

A. APHIS is bringing in personnel that can manage large disposal jobs, such as companies like Clean Harbors that manage massive HAZ-Mat, tornado, and other disaster-type cleanup. We're contracting with incinerator companies, setting up mass incineration sites that could be used in a region, and working with landfills to ease their concerns about the suitability of this sort of waste in their landfills.

Q. What do OIE guidelines state about lifting trade restrictions on infected regions?

A. There are additional international trade considerations in play. The OIE guidelines include a 90-day waiting period after the last infected premises has been cleaned and disinfected before a zone or region can regain its freedom from HPAI. Most countries that have accepted our definitions of regions or zones follow this guideline and may reinstate trade after this 90-day period.



Producer Information Sheet

USDA Avian Influenza Response: Mass Depopulation and Carcass Disposal

As part of its safeguarding mission, the U.S. Department of Agriculture (USDA) protects the health of the Nation's livestock and poultry. USDA responds to major animal disease events, helping to keep dangerous diseases from spreading and threatening even more animals. USDA also works to reduce the economic impact of disease events.

Since December 2014, USDA has confirmed cases of highly pathogenic avian influenza (HPAI) H5 in the Pacific, Central, and Mississippi flyways (or migratory bird paths). The disease has been found in wild birds, as well as in a few backyard and commercial poultry flocks. The Centers for Disease Control and Prevention (CDC) considers the risk to people from these HPAI H5 infections to be low. No human cases of these HPAI H5 viruses have been detected in the United States, Canada, or internationally.

In responding to the detections, USDA must depopulate affected flocks to prevent the spread of this highly contagious disease to additional flocks and must safely dispose of all depopulated birds. USDA and State officials evaluate disposal options based on the size of the flock, local conditions, and applicable laws/regulations.

Mass Depopulation Method

- HPAI eradication activities typically involve quarantine and movement controls, a humane depopulation component, disposal, and cleaning and disinfection activities.
- When depopulation is deemed necessary, Federal authorities, in conjunction with State and Tribal agricultural officials and industry, will euthanize infected birds and affected flocks.
- USDA's Animal and Plant Health Inspection Service (APHIS) employs depopulation technologies that are humane, limit human exposure to the AI virus, and better accommodate large-scale eradication efforts.
- The use of water-based foam has the potential to reduce the number of workers involved in depopulation efforts, decreases their exposure to zoonotic HPAI viruses, is relatively easy to deploy under field conditions, and will mitigate the physical threat to responders who depopulate animals in a structurally unsound building.

Biosecurity During Carcass Disposal

If USDA determines that moving the carcasses to a landfill for disposal is the best available option, animal health officials will ensure this move is safe for both landfill operators and the general public, and that all necessary biosecurity steps are followed.

General Carcass Disposal

Q. What are the carcass disposal options?

A. There are a variety of safe methods for carcass disposal. These methods include composting, onsite burial, incineration, rendering, and landfilling.

Q. How do animal health officials decide which disposal method to use?

A. USDA and its State partners evaluate disposal methods based on a variety of factors, including the size of the flock, space requirements, associated costs, local conditions, and applicable laws/regulations. There are benefits and limitations to using each method:

- **Composting.** This method contains the virus to the farm and produces a soil amendment/fertilizer product. However, composting requires wide-open spaces and may not be feasible for all farming operations, such as egg layer facilities or other facilities where space is limited.
- **Burial.** On-farm carcass 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.** Incineration is another method that can be safely used to dispose of carcasses. The limitation of this method is that 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 additional safety precautions to ensure that the virus does not become aerosolized during the rendering process and transported throughout the plant. It also necessitates disruption of the plant's normal operations.
- **Landfilling.** Landfilling allows safe and efficient disposal of large quantities of carcasses.

When necessary, USDA takes an integrated approach and uses a combination of some or all of these methods.

Landfilling—Health and Safety Concerns

Q. Is landfilling an environmentally safe option for HPAI carcass disposal?

A. Yes. Landfills are highly regulated by the U.S. Environmental Protection Agency (EPA) and—in many cases—individual States to ensure that disposed materials do not present a risk to human health and the environment. Under EPA and State regulations, landfills are located, designed, operated, and monitored to ensure protection of the environment from contaminants that might be present.

Q. What measures are in place at the landfill to protect the environment?

A. There are numerous, overlapping safety controls in place to protect the environment. For example, per EPA and State requirements, municipal solid waste landfills must include an impermeable liner overlaying 2 feet of clay soil along the bottom and sides of the landfill. This protects groundwater and soil from water that trickles through the landfill and absorbs some of its materials, referred to as leachate. In addition, a collection and removal system sits on top of the liner system and removes leachate from the landfill for treatment and disposal.

Q. Will the carcasses in the landfill pose a threat to human health?

A. No. The CDC considers the risk to people from these HPAI H5 infections to be low. No human cases of these HPAI H5 viruses have been detected in the United States, Canada, or internationally. In addition, the virus does not survive more than 6 days in carcasses held at room temperature.

Carcass Transport

Q. How will the carcasses be safely moved to the landfill?

A. A clean trailer is brought onsite by State-licensed haulers and is fitted with a biosecure containment bag. The carcasses are then loaded into the biosecure containment bag, which is sealed, and the truck and trailer—including the exterior of the biosecure containment bag—are disinfected with EPA-registered products labeled for this use. Upon arrival at the landfill, the biosecure containment bag slides out and is immediately buried. The truck and trailer are then cleaned and disinfected again prior to leaving the landfill.

Q. Will moving the carcasses spread the virus to new locations or farms?

A. No. USDA has conducted a thorough assessment of the risks associated with transporting such carcasses; the risk assessment found that, when transporting the carcasses is necessary, the movement can be done safely and will not spread the disease if the protocols described are followed. In addition, we employ several layers of redundant safety measures and carefully monitor all cleanup and disposal activities to ensure that they are done in compliance with USDA protocols.

Q. Who is ultimately responsible for ensuring this transport is done safely?

A. USDA is responsible for ensuring that carcasses are transported safely. Each truck carrying infected carcasses is issued a permit by USDA which allows it to move outside of the quarantine zone. USDA also establishes the requirements that must be met to allow such movement.

Q. Has this been done successfully in previous disease outbreaks?

A. Yes. USDA has successfully used landfilling in several major disease situations over the years. In 2002, USDA used landfills to dispose of turkeys infected with low pathogenic avian influenza in Virginia and routinely uses landfilling in Wisconsin to dispose of cervid carcasses infected with chronic wasting disease.

Q. Is there anything the public or producers in the area need to do?

A. All bird owners, whether commercial producers or backyard enthusiasts, need to continue:

- practicing good biosecurity,
- preventing contact between their birds and wild birds, and
- reporting sick birds or unusual bird deaths to State/Federal officials, either through your State veterinarian or through USDA's toll-free number at 1-866-536-7593.

You can find more information online at <http://healthybirds.aphis.usda.gov>.



Emergency Response Procedures—Depopulation and Disposal

As part of its mission to protect American agriculture, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) responds to serious diseases if they are found in the U.S. livestock and poultry populations. Highly contagious diseases such as avian influenza, classical swine fever, Newcastle disease, and foot-and-mouth disease would cause significant losses and damage if they became established in our country's animal populations. APHIS responds quickly and decisively to any U.S. detections of these diseases.

Depopulation

Federal law gives APHIS the authority to depopulate affected herds and flocks to contain or stop the spread of the disease. Unfortunately, this is a necessary step when facing serious and highly contagious animal disease outbreaks.

Animal health officials consider many factors when determining the most appropriate method of depopulation. These include, but are not limited to, the size and type of the animals being destroyed, their temperament, their familiarity with people, and their containment/housing facilities. The number of animals in the herd or flock and the location of the farm are also important to consider.

APHIS follows the recommendations outlined by the American Veterinary Medical Association and the World Organization for Animal Health whenever possible. The herd or flock will be depopulated as soon as practical using the best option available under the specific circumstances. During a large disease event, there might be a delay while waiting for appropriate resources and personnel to arrive onsite. Animals will continue to receive care up until depopulation occurs.

APHIS uses trained veterinarians, animal health technicians, and specialized contractors to complete depopulation activities. APHIS emphasizes keeping the responders safe while minimizing stress to the animals.

Disposal

The carcasses will be disposed of using one of several methods:

- in-house composting
- outdoor, onsite composting
- burial
- off-site composting
- landfill
- incineration

APHIS and State officials evaluate disposal options based on the size of the herd/flock, local conditions, and applicable laws/regulations. There are different timelines for each disposal option. It is extremely important to follow all steps as outlined by disposal experts to minimize the risk of disease spread during the disposal process.

Producer Responsibilities

APHIS seeks to engage producers and their employees wherever appropriate during the disease response process. APHIS recognizes this can be a difficult time for all involved and will do everything it can to help producers and their employees through the process.

Producers should talk to animal health officials about their level of involvement and how they can work together with responders. Anyone who works on the farm during these processes will need to wear appropriate personal protective equipment and follow strict biosecurity procedures, as outlined by the response team.

For More Information

If you have any questions about the depopulation and disposal processes, talk with the State or Federal animal health officials responding to the disease event in your area.



Producer Information Sheet

Emergency Response Procedures—Appraisal and Indemnity

As part of its mission to protect American agriculture, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) responds to serious diseases if they are found in the U.S. livestock and poultry populations. Highly contagious diseases such as avian influenza, classical swine fever, Newcastle disease, and foot-and-mouth disease would cause significant losses and damage if they became established in our country's animal populations. APHIS responds quickly and decisively to any U.S. detections of these diseases.

Indemnity Basics

Federal law gives APHIS the authority to depopulate affected herds and flocks to contain or stop the spread of the disease. To encourage early reporting of disease issues, farmers are paid for euthanized animals, which helps stop the outbreak and support impacted farmers at the same time. When depopulation occurs, APHIS will give the producer an indemnity payment equal to the fair market value of the animal. APHIS also offers indemnity for materials, such as tools or pallets, that must be destroyed because they cannot be disinfected after contact with infected animals or animal matter.

Indemnity does not cover all production losses for the time a farm will be out of commission after a disease detection. While APHIS recognizes that this can pose a hardship for affected producers and their employees, our ability to provide indemnity is set by specific conditions in the Animal Health Protection Act of 2002.

Appraisals

Once a herd or flock is confirmed by a designated laboratory to have tested positive for one of these significant diseases, animal health officials complete an inventory to use for appraisal purposes. The inventory lists all living animals in the herd or flock, along with their age at the time and their intended use (for meat, eggs, milk, breeding, etc.).

APHIS uses this inventory as the basis for the herd or flock appraisal. APHIS economists created a series of species-specific appraisal calculators that use publicly available prices, costs, and productivity data to develop a value per animal. The calculators are updated monthly to account for changing feed costs and values.

The formula APHIS uses to calculate total indemnity is: the value per animal type multiplied by the number of each animal type. In most cases, APHIS provides 100 percent of the indemnity amount; however, there are certain situations where APHIS could provide a lesser percentage to producers. For example, indemnity might be less

than 100 percent for large-scale producers who do not participate in the [National Poultry Improvement Plan](http://www.poultryimprovement.org) (www.poultryimprovement.org).

APHIS then compiles all of the appraisal information into a final appraisal document. We present that document to the producer as quickly as possible.

Producer Responsibilities

Affected producers are asked to sign the appraisal document before depopulation occurs. Producers also must complete other needed paperwork provided with the appraisal document. Because APHIS delivers indemnity payments electronically, basic information needs to be collected from producers to route these payments.

Depending on the disease, there could be other planning and paperwork involved before APHIS can complete indemnity processing. For example, for flocks affected by highly pathogenic or H5/H7 strains of avian influenza, a flock plan must be developed and signed. The flock plan outlines the steps required to eradicate avian influenza from a flock and get the facility back into production. Animal health officials will discuss the flock plan or any further requirements with affected producers as soon as disease confirmation occurs.

After depopulation is complete and all required paperwork has been signed and approved, APHIS processes the indemnity payment.

For More Information

If you have any questions about the appraisal and indemnity processes, talk with the State or Federal animal health officials responding to the disease event in your area.



Producer Information Sheet

Emergency Response Procedures—Cleaning and Disinfection

As part of its mission to protect American agriculture, the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) responds to serious diseases if they are found in the U.S. livestock and poultry populations. Highly contagious diseases such as avian influenza, classical swine fever, Newcastle disease, and foot-and-mouth disease would cause significant losses and damage if they became established in our country's animal populations. APHIS responds quickly and decisively to any U.S. detections of these diseases.

Federal law gives APHIS the authority to depopulate affected herds and flocks to contain or stop the spread of the disease. After depopulation occurs and disposal of all carcasses is complete, the cleaning and disinfection process begins.

Cleaning and Disinfection

First, all organic material (e.g., soil, manure, bedding, feed) is removed using shovels, brooms, and brushes during the "dry cleaning" phase. These items will be disposed of per Federal, State, and local regulations. Any item that cannot be cleaned safely should be appraised and disposed of at this point.

Next, all areas and items are washed thoroughly with detergent to remove any oil, grease, or other films that could interfere with the use of disinfectant. All surfaces need to be rinsed and allowed to dry. After drying, an appropriate U.S. Environmental Protection Agency (EPA)-licensed disinfectant is applied and allowed to remain wet on the surfaces for the label-specified contact time. After the contact time, surfaces are rinsed again and allowed to air dry.

It is absolutely essential to do a thorough cleaning and disinfection. These processes help eliminate any remaining disease agents in the animal housing area.

Testing

After cleaning and disinfection, environmental samples are collected and tested to confirm that the virus is no longer present. Animal health officials will determine the number and frequency of samples needed and collect them accordingly. These samples will be tested at either the APHIS National Veterinary Services Laboratories in Ames, IA, or a designated National Animal Health Laboratory Network laboratory. Test results typically take 3–8 days to receive.

Before being released from quarantine, premises must remain empty for a minimum amount of time (typically 3–4 weeks) after cleaning and disinfection. The actual number

of days will depend on the disease agent and the method of disposal used. Please discuss the exact timeline with the animal health officials responding on your farm.

After cleaning and disinfection, testing, and the appropriate downtime, the premises can be released by Federal and State officials to be restocked.

Producer Responsibilities

Producers should talk to animal health officials about their level of involvement and how they can work together with responders. Anyone who works on the farm during these processes will need to wear appropriate personal protective equipment and follow strict biosecurity procedures, as outlined by the response team.

For More Information

If you have any questions about the cleaning and disinfection processes, talk with the State or Federal animal health officials responding to the disease event in your area.