

HPAI Response

Cleaning & Disinfection Basics (Virus Elimination)

October 5, 2022

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 will 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)

At least three days must be consecutive days drying and heating at specified temperature; heating to 100-120 °F must occur for seven days total.

and/or as needed

Wet Disinfection with EPA Approved Antimicrobial

and/or as needed

Fumigation with EPA Registered Disinfectant, Antimicrobial, Microbiocide, or Alternative Science-Based Method

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 circumstances 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. Expected owner compliance are local decisions and are determined based on resources and other factors (e.g., owner compliance, environment, etc.).

Fallowing should be reserved for premises that would need to be completely repaired or destroyed in order to be effectively cleaned and disinfected or where contamination of residences or extensive outdoor areas is likely. 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 any Job Aids found on the [HPAI site](#), under Response and Policy Information -> Disposal & Cleaning/Disinfection (Virus Elimination).

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:
<https://www.epa.gov/pesticide-registration/list-m-registered-antimicrobial-products-label-claims-avian-influenza>