# DOSH DIRECTIVE

Department of Labor and Industries
Division of Occupational Safety and Health
Keeping Washington safe and working

# 12.00 Highly Pathogenic Avian Influenza Directive

Date Issued: May 23, 2025

# I. Purpose

This Directive establishes inspection procedures and enforcement policies related to higher risk exposures to Highly Pathogenic Avian Influenza (HPAI) in the workplace.

# **II. Scope and Application**

This Directive covers all general industry and agricultural work where workers are at higher risk of exposures to HPAI.

DOSH considers the following work tasks and settings to be higher risk exposures for the purposes of the scope and application of this Directive:

- Worksite contact with live or dead poultry, livestock, or other animals confirmed or potentially infected with HPAI, including handling, culling, transporting, or disposing of such animals.
- Worksite contact with animal products or materials such as raw milk, manure, udders, viscera, or other secretions or wastes from animals confirmed or potentially infected with HPAI.
- Worksite exposure during the cleaning and disinfecting of contaminated or exposed areas or barns used to house or contain HPAI-infected animals or their wastes, or equipment used to move contaminated material.
- Worksite contact at laboratory operations involving samples, cultures, or other
  materials that are known to or potentially contain HPAI; or exposure through
  worksite sampling by individuals for the purposes of conducting routine or
  nonroutine surveillance of asymptomatic animals for HPAI, except for field
  sampling of milk.

DOSH Directive 12.00 Page 2 of 15

For the purposes of this Directive, DOSH defines an animal to be "confirmed or potentially infected" with HPAI if it:

- has been laboratory confirmed with HPAI through United States
   Department of Agriculture recognized testing methods (National Animal
   Health Laboratory Network or National Veterinary Services Laboratory
   confirmed), or
- 2. has or had clinical signs and high suspicion for HPAI and is undergoing sampling for the purposes of diagnostic testing to determine whether it is or was infected, or
- 3. has become sick or died with an unknown or uncertain HPAI status and is being reported to the Washington State Department of Agriculture, Washington State Department of Fish and Wildlife, or to another regulator as a possible HPAI-related event, or
- 4. is suspected of HPAI infection based on presentation and is being investigated under the authority or direction of the Washington State Department of Agriculture, United States Department of Agriculture, United States Department of the Interior, or the Washington State Department of Fish and Wildlife, or
- 5. has been identified as requiring isolation, quarantine, or destruction due to suspected or confirmed HPAI infection by the Washington State Department of Agriculture, or
- 6. is present at an establishment for which the Washington State Department of Agriculture has issued a quarantine order; movement restriction; or infection control order due to an increased risk of HPAI infection.

Also, once one bird on a poultry farm is confirmed to test positive for HPAI, DOSH considers all other birds on the premises potentially exposed and infected for the purposes of the scope and application of this Directive, until such time the Washington State Department of Agriculture has assessed and defined an epidemiologic unit, or Line of Separation, or both for the affected farm.

Employers with confirmed or potential exposures to HPAI in the workplace that are other than higher risk as defined above must still take all feasible steps necessary to create a safe and healthy workplace.

This Directive does not cover human health care workplaces.

# III. References

• Chapter 296-27 WAC Recordkeeping and reporting

DOSH Directive 12.00 Page 3 of 15

- Chapter 296-307 WAC Safety standards for agriculture
- Chapter 296-800 WAC Safety and Health Core Rules
- Chapter 296-841 WAC Airborne contaminants
- Chapter 296-842 WAC Respirators
- DOSH Compliance Manual
- Washington State Department of Health: Avian Influenza
- <u>Interim Guidance for Employers to Reduce Exposure to Avian Influenza A</u> Viruses for People Working with Animals | Bird Flu | CDC
- <u>United States Department of Agriculture: Highly Pathogenic Avian Influenza</u> <u>Emergency Response</u>
- United States Department of Agriculture: Public Health Monitoring Plan for USDA/APHIS Responders to Detections of Avian Influenza Virus in Poultry

# IV. Background

#### A. Current outbreak

Avian Influenza (bird flu) is an influenza A virus that is named for its ability to infect and spread among birds. It is broadly categorized into highly pathogenic and low pathogenic types. Avian Influenza that is able to cause severe disease and high mortality (death) in infected birds is referred to as Highly Pathogenic Avian Influenza (HPAI).

Influenza A viruses also circulate naturally in other animals, and Avian Influenza has been known to cause flu pandemics in human populations in the past. This occurs when a new or different influenza A virus circulates that is: able to infect people, can efficiently spread from person to person, and is aided by either the limited presence or absence of preexisting immunity in the population in which it spreads.

Since 2022, Influenza A(H5N1) has been circulating in wild birds, spilling over to wild animals, and causing poultry outbreaks in the United States. The circulating virus is considered a novel influenza A virus.

In 2024 the United States Animal and Plant Health Inspection Service reported the first detection of Highly Pathogenic Avian Influenza A(H5N1) in dairy cattle. This

DOSH Directive 12.00 Page 4 of 15

strain of H5N1 continues to cause outbreaks among dairy cattle herds in multiple states. As part of this current outbreak, sporadic human cases of bird flu including at least one death have occurred in the United States. Most of these cases have occurred following exposure to HPAI in animals or their environment.

The current outbreak is not yet controlled, and while the current risk to the general U.S. population is considered low, the risk from HPAI to certain occupationally exposed populations is a serious hazard.

As part of the response to the current outbreak, this Directive describes the requirements and implementation of DOSH rules applicable to general industry and agricultural workplaces where workers are at higher risk from occupational exposures to HPAI, including during depopulation and milking activities on infected farms.

#### **B.** Routes of transmission to humans

HPAI is thought to be capable of spreading in four ways—reviewed here—that expose the respiratory tract, gastrointestinal tract, and mucous membranes to virus: direct contact between infected birds and other animals; contact with virus-contaminated environments or animal by-products; spread of virus through the air (from HPAI-containing aerosols such as droplets or dust); and rarely, person-to-person.

# 1. Exposure to infected birds or other animals

People can become infected after exposure to respiratory droplets, saliva, mucus, or feces that contain virus from infected birds or other animals. Infected dairy cattle also shed the virus in milk. Human infections can happen when a person touches the virus and then touches the eyes, nose, or mouth.

# 2. Contact with virus-contaminated environments or animal by-products

People can become infected by touching surfaces contaminated with infected animal mucus, saliva, or feces and then touching their eyes, mouth, or nose; or if liquid contaminated with live virus (like raw milk from an infected cow) splashes into the eyes. Infection can also occur if people touch their eyes, nose, or mouth with a finger, hand, or glove that is contaminated with raw milk or other by-product containing live HPAI.

It is also possible to become infected by eating or drinking something contaminated with the virus, such as raw milk from an infected cow.

# 3. Through the air

DOSH Directive 12.00 Page 5 of 15

People can become infected when virus is in the air and a person breathes it in. The closer a person is to an infected animal or contaminated environment and the longer the person remains in a contaminated environment, the more likely infection is to occur. The risk is highest when an exposed individual is close to the source, or when ventilation is poor.

The risk is highest when an exposed individual is close to the source (e.g. within six feet) or when ventilation is poor.

#### 4. Person-to-person (currently rare)

Person-to-person spread of HPAI in the United States is not known to have occurred, but is a risk. Rarely, limited spread of Avian Influenza A virus has occurred in other countries from a sick person to another person who was not wearing adequate protective equipment, typically after prolonged close exposure. Preventing human-to-human transmission of HPAI reduces risk to occupationally-exposed groups and can forestall wider uncontrolled spread of HPAI in presently unexposed human populations.

# C. Human symptoms of HPAI infection

Symptoms can include:

- Eye redness and irritation (conjunctivitis)
- Fever (temperature of 100°F [37.8°C] or greater) or feeling feverish
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue
- Shortness of breath or difficulty breathing
- Less common symptoms:
  - o diarrhea

DOSH Directive 12.00 Page 6 of 15

- o nausea
- vomiting
- o seizures

# V. Enforcement Policies

### A. Protect employees from biological agents

All employers must protect employees from biological agents. For both general industry (WAC 296-800-099) and agricultural (WAC 296-307-009) employers, biological agents are "organisms or their by-products". HPAI is a biological agent within the meaning of WAC 296-800-11045 (general industry) and WAC 296-307-018(11) (agriculture).

If an employer does not protect employees from exposure to HPAI, cite the relevant code pursuant to the procedures for safe place violations described in Chapter 5 of the DOSH compliance manual.

### **B.** Employers must train employees

General industry employers must train workers according to the requirements of WAC 296-800-14020 (Develop, supervise, implement, and enforce safety and health training programs that are effective in practice), WAC 296-800-16025 (Train your employees to use PPE), and WAC 296-842-16005 (Respirators, Provide effective training).

Agricultural employers must instruct all employees in safe working practices at the beginning of employment (WAC 296-307-030(1)) and must provide employees with an on-the-job review of the practices necessary to perform job assignments in a safe and healthful manner as necessitated by HPAI exposures (WAC 296-307-030(3)(f)). Agricultural employers must also train workers according to the requirements of WAC 296-307-10025 (Training for personal protective equipment) and WAC 296-307-60805 (Respirators, Provide effective training).

# C. Foods and beverages must not be consumed in any area where HPAI exposure exists

All employers must ensure that foods and beverages only be consumed in spaces where no exposures to toxic materials or toxic substances exist. If an employer permits employees to consume foods and beverages where HPAI exposure exists, cite

DOSH Directive 12.00 Page 7 of 15

WAC 296-800-23040 (for general industry employers) or WAC 296-307-24030 (for agricultural employers).

General industry employers must provide a lunchroom separate from the work area if employees are exposed to toxic substances like HPAI (WAC 296-800-23060).

Agricultural employers with workplaces that expose employees to HPAI must provide a separate lunchroom unless it is convenient for employees to lunch away from the premises (WAC 296-307-24030).

If due to the emergency nature of an outbreak response existing lunchroom and break infrastructure is temporarily inadequate to meet demands, employers may establish temporary structures to meet the square footage and other requirements of these rules.

# D. A hazard assessment is required

#### 1. Hazard assessment for PPE

If a general industry employer does not identify hazards or potential hazards and determine if PPE is necessary on the job, cite WAC 296-800-16005.

If an agricultural employer does not identify hazards or potential hazards in the workplace and determine if PPE is necessary to protect employees, cite the appropriate code under Part H of Chapter 296-307 WAC.

# 2. Hazard assessment for HPAI respiratory exposure

HPAI is considered a "biological hazard" for general industry employers within the meaning of WAC 296-841-20005, and a "biological agent" for agricultural employers within the meaning of the definition of "exposed or exposure" at WAC 296-307-624. All employers that are within the scope and applicability of this Directive must conduct an exposure evaluation to determine or reasonably estimate whether an employee is or could be exposed to HPAI-containing aerosols, which are suspensions of liquid or solid particles in the air, including droplets, droplet nuclei, fomites, and dusts. Cite these codes if an employer does not conduct an HPAI respiratory exposure evaluation.

General industry employers must protect employees from potentially hazardous exposure while performing these exposure evaluations "using all available resources to determine adequate protective measures" (WAC 296-841-20003).

Agricultural employers must also protect employees from potentially hazardous exposure while performing these exposure evaluations (WAC 296-307-62605).

DOSH Directive 12.00 Page 8 of 15

Further requirements for the HPAI respiratory exposure evaluation are at WAC 296-841-20005 (general industry) and WAC 296-307-62605 (agriculture). These requirements are also visually summarized with the algorithm that appears in Appendix A.

#### E. Feasible exposure controls against airborne HPAI are required

All employers covered by either WAC 296-841-20010 (general industry) or WAC 296-307-62610 (agriculture) must use feasible exposure controls to reduce employee exposure to airborne HPAI to a level that removes the hazard from the air entirely, or to the lowest achievable level when the HPAI cannot be removed entirely. This is true under all circumstances where HPAI exposures exist and either WAC 296-841-20010 or WAC 296-307-62610 is applicable.

Employers subject to WAC 296-841-20010 must not create or increase employee health hazards with the exposure controls they use. Compliance inspectors must determine whether there are feasible exposure controls that an employer could implement at the inspected worksite. Examples of such controls may include:

- Use a ventilation system that provides a constant supply of fresh air
- Strategically place fans and vents (clean to less-clean, placement removes dirty air)
- Do not discharge high velocity air into areas with HPAI-contaminated material, to prevent aerosolizing such material
- Regularly clean and maintain ventilation systems

# F. Selection of personal protective equipment

# 1. Respirators

General industry (WAC 296-841-20015) and agricultural (WAC 296-307-62615) employers that are within the scope of this Directive must develop and implement a full respiratory protection program and require employees to use respirators either when confirmed or potential airborne HPAI is not completely removed, or when any of the other conditions of these WACs are applicable. Respirator guidelines from the United States Centers for Disease Control and Prevention (CDC) do not relieve employers of their obligations to meet the requirements of these WACs.

In most cases an N95 respirator—if used as part of a compliant respiratory protection program—will provide adequate personal respiratory protection. There are some

DOSH Directive 12.00 Page 9 of 15

circumstances, however, where it is necessary to use a higher grade respirator, such as when environmental conditions compromise N95 respirator performance, reliability or safety, or to address concurrent hazards. Examples of such conditions include extremes of humidity, concurrent significant splash risk, and concurrent exposures to other airborne hazards.

#### Humidity

If extremes of humidity occur in a milking parlor or other workplace, employers must require employees to wear a different respirator appropriate to the humidity levels of the environment.

### Concurrent significant splash risk

For environments or work tasks where the worker's face is at risk of being splashed with liquids, the employer must address this hazard. If this cannot be accomplished with feasible exposure controls, employers can select an appropriate respirator design, such as a full-face elastomeric respirator or a powered air-purifying respirator. Employers can also choose to address this hazard by requiring the use of additional PPE appropriate to the splash risk.

#### Concurrent airborne exposures

The existence of concurrent airborne exposures could warrant selecting respirators other than N95s. Employers must select the respirator that meets or exceeds the highest level of respiratory protection required to protect the employee from the combined exposures.

Compliance inspectors must assess each use case to determine whether general industry employers have adequately evaluated user and workplace factors that might compromise respirator performance, reliability or safety (WAC 296-842-13005 Step 9). The same applies to agricultural employers, which must similarly "select and provide respirators that are appropriate for the hazard, user, and worksite conditions" (WAC 296-307-602, also see WAC 296-307-60205 Step 9).

Elastomeric or powered air-purifying respirators with oil resistant or oil proof filter cartridges may be more appropriate than non-oil-resistant filter class respirators for some tasks and settings.

Soiled or contaminated N95 respirators must be discarded and replaced according to section V.G.2 on decontamination.

Reusable respirators that become contaminated must be decontaminated before reusing, or discarded if decontamination is not possible. When cleaning and

DOSH Directive 12.00 Page 10 of 15

decontaminating reusable respirator parts, employers must follow the manufacturer's instructions.

### 2. Non-Respirator PPE Selection

For PPE selection other than respirators, all employers must follow core rules. Specific to the HPAI hazard, employers that require their employees to wear the following non-respirator PPE are deemed to be in compliance with respect to the PPE selection requirements of WAC 296-800-160 (general industry employers) or WAC 296-307-100 (agricultural employers):

- fluid-resistant coveralls
- splash goggles (unless equivalent or better eye protection is provided by respirator)
- head cover or hair cover
- gloves appropriate to the hazard and work task
- boot covers or boots, such as one-piece pull-on waterproof boots that can be cleaned and disinfected

Mucous membranes are a point of entry for transmission of HPAI, and therefore in addition to the protection provided by the selected respirator (see section V.F.1), employers must ensure that workers' eyes receive protection through the use of splash goggles.

When workers are in contaminated areas and exposed to HPAI-contaminated materials such as animal waste, the workers must be protected from direct and indirect contact with such materials. The HPAI-contaminated materials must also be prevented from spreading outside the controlled area in which they are located.

For these reasons, workers must wear appropriate PPE that will permit decontamination, removal, and disposal (if appropriate) of personal protective equipment worn while working in the contaminated area. Such PPE includes coveralls (and if appropriate to the work, fluid-resistant coveralls), head cover or hair cover, gloves, and boot covers or boots that can be cleaned and disinfected.

Disposable boot covers (instead of boots that can be decontaminated) may only be used in areas where they will remain intact. Disposable boot covers are highly susceptible to rips and tears in many agricultural environments.

DOSH Directive 12.00 Page 11 of 15

In circumstances where employers do not require employees to wear one or more of these non-respirator PPE ensemble elements, compliance inspectors must determine whether the employer has complied with core rules requirements and adequately addressed the hazard from HPAI. If an employer does not protect employees from exposure to HPAI, cite the relevant code pursuant to the procedures for safe place violations described in Chapter 5 of the DOSH compliance manual.

### Additional PPE ensemble compliance options

Employers may also choose to strengthen their degree of compliance with DOSH requirements by electing to provide and require employee use of the following PPE:

- waterproof apron over the top of coveralls to prevent cross contamination during PPE removal
- if disposable gloves are used, outer work gloves to protect them
- 3. PPE is not a substitute for implementing engineering and administrative controls

Employers that require the use of PPE in their workplaces must still implement engineering and administrative controls in response to HPAI exposures that are otherwise required under DOSH rules, even when CDC or other guidance-producing bodies do not specifically recommend such exposure controls. Consult the applicable sections of this Directive to assess employer compliance with exposure control requirements.

# 4. PPE use must comply with regulatory requirements

Review the employer's practices for use of PPE, including for the presence of the following practices:

- worker training is appropriate to the language comprehension and proficiency levels of the workers required to wear the PPE
- workers are not required to pay for PPE they are required to wear, unless provision of PPE at no cost is otherwise exempted under DOSH rules
- the employer establishes, supervises, and enforces compliance with use of required PPE; does not permit workers to be exposed to HPAI without wearing required PPE; and ensures that the PPE be worn according to the manufacturer's instructions. Employers can elect to accomplish this with designated infection control officers or other use of monitors.

# 5. PAPRs in lieu of negative-pressure respirators

DOSH Directive 12.00 Page 12 of 15

Employers must provide a powered air-purifying respirator (PAPR) when the licensed health care professional determines the employee should not wear a negative-pressure air-purifying respirator and is able to wear a PAPR. Employers must pay for and supply PAPRs in such circumstances. If either a general industry or an agricultural employer does not provide a PAPR to such a worker, cite WAC 296-842-14005 or WAC 296-307-60405 accordingly.

# G. Employers must control access to HPAI-contaminated areas, provide for decontamination

#### 1. Control access to contaminated areas

Because HPAI can be spread from animals, equipment, and wastes, dispersion of HPAI-contaminated substances can create risk of exposures to this serious hazard in areas beyond the site(s) of initial contamination.

Thus, when HPAI contaminates part or all of a work site, employers must designate the area as contaminated and restrict access only to such persons who have the necessary training, equipment, and personal protection needed to work safely in the contaminated area. Employers must do so in order to:

- 1. ensure employees do not become unknowingly exposed to the hazard,
- 2. prevent dispersion of the contamination through contact and onward spread, and
- 3. ensure the contamination doesn't create a hazard for other workers.

#### 2. Decontamination

Workers who wear personal protective equipment indicated by the PPE hazard assessment must be provided with the means to don and doff that PPE without dispersing HPAI-contaminated materials beyond the controlled area of the work site or into the broader community. Contaminated PPE must not be removed from the contaminated area without first being decontaminated. Before workers leave the controlled area that contains the HPAI-contaminated substances, they must change out of or remove any contaminated articles of clothing or personal protective equipment. Soiled clothing should be bagged and be washed on site.

Contaminated tools and equipment used or stored in the controlled area must also be decontaminated prior to transfer into uncontaminated areas to prevent dispersion of the contamination and onward spread.

DOSH Directive 12.00 Page 13 of 15

# H. Employers must provide handwashing facilities

If a general industry employer does not provide convenient and clean washing facilities according to WAC 296-800-23025, cite the code. If an agricultural employer does not provide handwashing facilities according to the requirements of WAC 296-307-09515, cite the code.

Workers who need to decontaminate from HPAI exposure must have access to these handwashing facilities as part of the decontamination process.

# I. Monitor exposed employees for symptoms of HPAI and keep sick employees out of the workplace

Employees who have been exposed to HPAI and develop symptoms consistent with HPAI infection must not return to work until the workplace presence of the symptomatic worker is either no longer an exposure risk to other workers or the employer has otherwise controlled the risk. Compliance inspectors must determine whether an employer has both addressed this risk in their accident prevention plan, and correctly implemented that plan. If an employer does not do so, cite the relevant code from WAC 296-800-140 through 296-800-14025 (general industry employers) or WAC 296-307-030(3) (agricultural employers).

Employers may be subject to orders and instructions from public health officials that govern their response to the workplace presence of symptomatic employees following occupational exposure to HPAI. Employers may also consider guidance from the Washington State Department of Health, or Local Health Jurisdictions, or both, when considering how to control and protect employees from exposure to symptomatic coworkers.

Sick employees may have rights to paid sick leave and workers' compensation. Compliance inspectors may inform both the employers and workers during an inspection of these worker rights.

Recordkeeping and reporting requirements

For employers that have injury and illness recordkeeping and reporting requirements under Chapter 296-27 WAC, if an employee develops a work-related HPAI infection, compliance inspectors must determine whether an employer has recorded that on their injury and illness log as required by the standard.

Employers may be subject to the orders and instructions from public health officials to facilitate symptom monitoring and illness recordkeeping even when such requirements do not otherwise exist.

DOSH Directive 12.00 Page 14 of 15

Note: Employers are not relieved of their recordkeeping and reporting obligations for HPAI by the "common cold or flu" exemption at WAC 296-27-01103(2)(h). If an employer does not carry out the requirements of Chapter 296-27 WAC with regard to HPAI, cite the requirement.

#### J. Disposal requirements

Employers disposing of HPAI-contaminated animals and materials must do so without creating a hazard to other workers. This means access and handling of HPAI-contaminated materials must limit spread of the HPAI-contaminated substances and prevent further contamination. Employers can accomplish appropriate disposal by following instructions from the Washington State Department of Agriculture and any other Washington State agencies overseeing disposal.

#### K. Prohibited and hazardous employment for minors

Work involving culling HPAI-infected animals or animal by-products, or work involving respirators involves prohibited work duties for minors. Compliance inspectors must determine whether minors are doing any such work, and if they are found to be doing so, make a referral to the Employment Standards program at teensafety@lni.wa.gov.

# VI. Point of Contact

DOSH staff who have questions or need additional guidance or interpretive assistance are encouraged to contact DOSH IH Technical Services.

# VII. Review and Cancellation

DOSH will review this Directive for applicability on an "as needed" basis, and it will remain in effect until superseded or canceled.

Approved: (rag Blackwoo)

Craig Blackwood, L&I Assistant Director Division of Occupational Safety and Health DOSH Directive 12.00 Page 15 of 15

# Appendix A: Airborne Contaminants Algorithm (not for use with PPE other than respirators)

