On November 15, 2024, the Hawai'i Department of Agriculture (HDOA) received confirmation from the U.S. Department of Agriculture National Veterinary Services Laboratories (NVSL) that highly pathogenic avian influenza (HPAI) was detected in a backyard flock of various birds in Central O'ahu.

Key Takeaways

- Follow your established company policies and procedures
- Call Department of Health Disease
 Outbreak Control Division to report
 illness from infectious disease:
 (808) 586-4586
- Call Department of Agriculture -Animal Industry Division to report multiple or unusual illnesses in poultry, livestock, or other wild birds or animals: (808) 483-7102
- Call Hawai'i Occupational Safety and Health to report work-related complaints (808) 586-9092

1. Understanding Avian Influenza

What is Avian Influenza?

Avian influenza, commonly referred to as bird flu, is a disease caused by the avian influenza Type A virus. These viruses are very contagious among birds and have the potential to cause severe illness among poultry, other animal species, and even among humans exposed to the virus.

H5N1 bird flu virus has been circulating worldwide and has been causing outbreaks in poultry and dairy cows in the U.S. A limited number of human cases have occurred in 2024 and 2025 following exposure to infected animals.

How does it spread?

The majority of human infections with avian influenza have occurred when individuals inhale aerosolized droplets or dust containing the virus, or when these droplets come into contact with mucous membranes, including the eyes, nose, or mouth.

Infections can also arise from direct interaction with infected birds or by touching surfaces that have been contaminated with saliva, mucus, or feces from these birds. Additionally, transmission may occur through an intermediate host like another animal, such as cows.

In Hawai'i, the virus has the potential to affect common backyard birds, including mynahs, bulbuls, and zebra doves.



Symptoms in Humans

The CDC reported signs and symptoms of avian influenza A virus infections in humans have ranged from no symptoms or mild symptoms to moderate to severe disease and complications, including resulting in death.

Mild signs and symptoms may include:

- eye redness and irritation (conjunctivitis)
- mild fever (temperature of 100°F [37.8°C] or greater) or feeling feverish*,
- cough
- sore throat
- runny or stuff nose
- muscle or body aches
- headaches
- fatigue

Eye redness has been the predominant symptom among recent U.S. cases of avian influenza A(H5) virus infection.
Less common symptoms include diarrhea, nausea, or vomiting.

*Fever may not always be present

Signs and Symptoms of Moderate to Severe Disease

- high fever
- shortness of breath or difficulty breathing
- · altered consciousness.
- seizures

2. Understanding Occupational Exposure Risk Employees at High-Risk for H5N1 Exposure

Employers must take steps to reduce workers' exposure to novel influenza A viruses from sick animals or contaminated environments. Workers may be exposed when working with animals confirmed or potentially infected with novel influenza A viruses.

They may also be exposed when working with materials, including raw milk, that are confirmed or potentially contaminated with novel influenza A viruses. Examples of related workers include, but not limited to:

- Poultry workers
- · Dairy workers

Other types of workers that may also be exposed:

- Other livestock workers
- Animal health responders including:
 - Poultry culling
 - Handling sick or dead wild animals
- Backyard bird flock owners
- Dairy laboratory workers
- Food processing workers handling raw milk and other confirmed or potentially contaminated materials
- Public health responders
- Slaughterhouse workers performing certain tasks on lactating dairy cattle including:
 - Unloading or handling live lactating dairy cattle for slaughter, including working in holding pens and tasks involved with ante-mortem inspection
 - Post-mortem processes including the post-mortem inspection, handling, and transporting of viscera
 - Removing and transporting udders from dairy cattle for further processing or rendering
- · Veterinarians and veterinary staff
- Zoo, other wild animal facility, or other animal farm workers, such as:
 - Sanctuary workers
 - Aguarium workers
 - Wildlife rehabilitators
 - Fur farm workers

Other Employees at High-Risk for H5N1 Exposure

Workers who may handle or come into contact with sick or dead animals and other materials that may be contaminated with H5N1 also have the high-risk of infection.

Examples of high-risk work tasks include, but are not limited to, handling or contacting:

- Sick birds, livestock, or other animals
- Carcasses of birds, livestock, or other animals that have died from unknown causes
- Feces or litter

- Surfaces and water that might be contaminated with animal waste (e.g., ponds, waterers, buckets, pans, troughs) on farms with potentially infected animals
- Raw milk
- Viscera and udders from lactating dairy cattle

Employees with Medium-Risk for H5N1 Exposure

Workers with Contact with:

- Healthy non-lactating animals on a dairy farm that has animals confirmed or potentially infected;
- Animals from a farm without confirmed or potentially infected animals, but when there are confirmed or potentially infected animals in this region;
- Healthy birds and mammals at a zoo or other wild animal facility that has animals confirmed or potentially infected.

Job Hazard Assessment (JHA) for PPE

All employers who have employees with exposure to avian influenza A viruses must perform a Job Hazard Assessment (JHA) for PPE based on work tasks and settings. The JHA will:

- 1. Identify Hazards
- 2. Evaluate Risks
- 3. Select appropriate PPE for workers to protect them from the hazards, and
- 4. Train workers on the hazards of the tasks and methods being employed to protect them.

Employers of farm workers who handle livestock, veterinarians, and slaughter houseworkers must take precautions to prevent worker exposure to and limit the risk infection from H5N1. A JHA for work tasks in agriculture, animal care and husbandry, and dairy or meat processing centers identifies workers at risk of exposure to H5N1.

3. Protective Measures for Employees

Policy and Procedures

Establishing comprehensive company policies and procedures that meets §12-60-2(b)(1), HAR is essential for promoting workplace safety.

The policies must outline clear protocols for preventing the spread of illness, including hygiene practices, appropriate PPE, and decontamination.

Employees use company policies to familiarize themselves with the guidelines to minimize exposure and ensure swift and proper action and responsibility in the event of an outbreak.

Personal Protective Equipment (PPE) based on JHA

PPE may be required in some cases to reduce the risk of exposures, especially for workers in direct contact with animals or their secretions.

Employers must provide appropriate PPE according to their completed JHA at no cost as well as training on its proper use. Putting on and removing PPE must occur during work hours.

Recommended PPE to protect against novel influenza A viruses in high-risk exposure settings:

- NIOSH Approved® particulate respirator
- Fluid-resistant coveralls
- · Safety goggles
- Boot covers or boots
- Head cover or hair cover
- Disposable gloves
- Optional items:
 - Waterproof apron over the top of coveralls to prevent cross contamination during PPE removal

- Face shield over the top of goggles and respirator to protect against large amount of liquid splashing onto the filtering facepiece respirator
- Outer work gloves to protect the disposable gloves

Recommended PPE to for medium-risk exposure settings:

- NIOSH Approved® particulate respirator
- Safety goggles
- Disposable gloves with optional outer work gloves

Promote Personal Hygiene + Safe Practices

- Provide safe storage locations for workers' food and personal items, including clothing worn off-site.
- Prohibit storage of food and personal items in potentially contaminated areas, including where PPE is put on and removed.
- Provide workers access to hand washing stations with soap and clean water.
 - Provide alcohol-based hand sanitizer containing at least 60% alcohol if soap and water are not immediately available.
 - Place hand washing stations and alcohol-based hand sanitizer in multiple locations to encourage hand hygiene, especially in areas where workers frequently have contact with animals.
 - If possible, choose hand washing stations, hand sanitizer stations, and trash receptacles that are touch-free.
 - Consider other workplace practices to promote personal hygiene like building additional short breaks into staff schedules.
 - Remind workers to wash their hands for 20 seconds before eating, drinking, touching their phones, smoking, vaping, chewing gum, or dipping tobacco.

Provide workers access to shower facilities at the end of the work shift and a clean area to put on clean, uncontaminated clothing.

4. Applicable HIOSH Standards

The Hawai'i Occupational Safety and Health Law (HIOSH Law) requires employers to "furnish to each of the employer's employees employment and a place of employment which are safe as well as free from recognized hazards." §396-6, HRS.

General industry requirements may be found in §12-60, HAR. Construction requirements may be found in §12-110, HAR, and Agriculture requirements may be found in §12-208, HAR.

General Duty Clause

The Hawai'i Occupational Safety and Health (HIOSH) has a general duty clause, §12-60-2(a)(3), Hawai'i Administrative Rules (HAR), that requires the employer to provide a safe workplace for its employees. This pertains to sectors under HIOSH's authority concerning employers identified in §12-60-1, HAR, including agricultural settings.



Written Safety and Health Programs

Chapter §12-60-2(b)(1), HAR HIOSH requires employers with 10 or more employees to have a written Safety and Health Program to (1) identify, (2) evaluate, and (3) control workplace hazards.

As a part of the written Safety and Health Program, employers are required to:

- Set forth policies, procedures, and practices that recognize and protect employees from occupational safety and health hazards.
- Provide for visible top management leadership in implementing the program and ensure all workers at the site, including contract workers, are provided equally high quality safety and health protection, so that all workers will understand that management's commitment is serious.
- Assign and communicate responsibilities for all aspects of the safety and loss prevention program to managers, supervisors, and employees so that they all know and understand what is expected of them in the implementation of the program.
- Provide a system to hold managers, supervisors, and employees accountable for their responsibilities under the safety and health program.
- Provide a reliable system for employees to notify management personnel or safety and health committee members of conditions that appear hazardous or of noncompliance with the terms of the safety and health program without fear of reprisal and provide a mechanism to ensure timely and appropriate responses to correct these conditions.
- See Chapter 12-60-2(b)(1)(A) for a full list of requirements.

Employee Training

Per §12-60-2(b)(4) HAR, employers must provide training to their staff on the hazards to which they may be exposed, the procedures or practices needed to protect them from the hazards. This includes:

- Relevant equipment, procedures, and hazards (for example, potential for exposure to avian influenza A virus through contact with animals, animal secretions, or contaminated objects),
- Infection control practices,
- Heat illness prevention,
- Recognizing signs and symptoms of avian influenza A virus infection in themselves and others,
- Any new procedures in the workplace, and
- PPE including how to put on, use, and take off

Training, using a language and vocabulary employees understand, will ensure the use of work practices that prevent infection, including proper care and use of personal protective equipment (PPE).

The training must also emphasize the need to wash hands thoroughly or use hand sanitizer when soap and water is not immediately available to prevent the spread of potentially infectious pathogens.

Other HIOSH Standards

Other HIOSH standards that may be applicable to occupational exposure to avian influenza viruses and reporting work-related illnesses include:

- Recordkeeping (29 CFR 1904 + §12-52.1, HAR)
- Personal Protective Equipment (29 CFR 1910, Subpart I,)
- Bloodborne Pathogens (29 CFR 1910.1030 Subpart Z)
- Hazard Communication (29 CFR 1910.1200 Subpart Z)

5. Other Considerations

What to do if I have become infected with bird flu?

The Hawai'i Department of Health (DOH) recommends that infected individuals must stay at home and away from others for 10 days from last known exposure, including household members, except for when seeking medical evaluation.

If you need to leave home or are not able to fully isolate from others, wear a mask and increase your hand hygiene (soap and water for at least 20 seconds) to prevent the spread of the virus.

Treatment for bird flu infections in humans is available. A health care provider might prescribe an antiviral medication for you that is used for treatment of seasonal flu. These drugs can also be used to treat an avian influenza virus infection. It is important to start antiviral treatment as soon as possible and to follow the directions for taking all of the medication that is prescribed.

Further guidance can be reached at Department of Health - Disease Outbreak Control Division Reporting Lines: (808) 586-4586.



Should I remove dead or sick birds?

According to DOH, in the event that you come across a deceased wild bird on your property, it is advisable to wear disposable gloves or invert a plastic bag to safely collect the body.

Then place the carcass in two bags before disposing of it with your regular waste. After you've handled the bird, ensure you wash your hands thoroughly and disinfect your clothing and footwear.

To report multiple or unusual illnesses in poultry, livestock, or other wild birds or animals, contact Hawai'i Department of Agriculture (HDOA) Animal Industry Division at 808-483-7100, Monday to Friday from 7:45 a.m. to 4:30 p.m., or 808-837-8092 during non-business hours and holidays. Email to HDOAIC@hawaii.gov.

Do I need to get rid of all those feral chickens?

To minimize the risk of avian flu, it's advisable to limit contact with wild birds and feral chickens whenever you can.

Typically, if the chickens seem healthy and act normally, the threat level is likely reduced.

However, should you encounter multiple dead or sick birds in one location, it's important to notify the Department of Health (DOH) and the Hawaii Department of Agriculture (HDOA) immediately.

From a medical perspective, it is not clear that a mass culling of feral chickens would appreciably reduce the risk to humans.

How to Contact HIOSH

Under the Hawai'i Occupational Safety and Health Law, employers are responsible for providing safe and healthful workplaces for their employees.

HIOSH's mission is to assure Hawai'i's workers have safe and healthful working conditions free from unlawful retaliation.

HIOSH carries out its mission by setting and enforcing standards; enforcing antiretaliation provisions of the HIOSH Law; providing and supporting training, outreach, education, and assistance.

For more information, call HIOSH at (808) 586-9100. or visit www.labor.hawaii.gov/hiosh.

For more information on this topic:

- State of Hawai'i, Department of Health -Disease Outbreak Control Division | Avian Influenza
- State of Hawai'i, Department of Agriculture – Animal Industry Division | Avian Influenza
- CDC | Highly Pathogenic Avian Influenza A(H5N1) Virus: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations
- USDA | Detections of Highly Pathogenic Avian Influenza in Mammals
- USDA | Detection of Highly Pathogenic Avian Influenza (H5N1) in Dairy Herds: Frequently Asked Questions



This is one in a series of informational fact sheets highlighting HIOSH programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of HIOSH standards or regulations, refer to Title 12, Subtitle 8 of the Hawai'i Administrative Rules.

Auxiliary aids and services are available upon request to individuals with disabilities. TDD/TTY Dial 711 then ask for (808) 586-9116





