Avian influenza is divided into two groups based upon the severity of the disease they produce in poultry: low pathogenic avian influenza (LPAI) viruses and highly pathogenic avian influenza (HPAI) viruses. LPAI generally cause minor illness, while HPAI viruses are highly contagious and cause high mortality in poultry. Avian influenza viruses do not typically infect humans, however, infrequent human infections with avian influenza have occurred. To date, H5N1 viruses have been found in U.S. commercial poultry, backyard poultry, and hobbyist bird flocks across multiple U.S. states. This document provides interim recommendations for protecting employees who may be exposed due to an outbreak of HPAI in the United States.

**Background**
Although avian influenza viruses have the potential to develop into pandemic viruses if they acquire the ability to pass readily from person-to-person, to date, there is no evidence of sustained (ongoing) spread among people. For the most up-to-date information on avian influenza, consult the Center for Disease Control and Prevention’s Avian Flu information page: www.cdc.gov/flu/avianflu.

**Symptoms of Avian Flu in Humans**
Symptoms in humans can range from asymptomatic or mild illness (e.g., eye redness or mild flu-like upper respiratory symptoms) to severe illness (e.g., pneumonia) requiring hospitalization. Signs and symptoms may include fever, cough, sore throat, runny or stuffy nose, muscle or body aches, headaches, fatigue, and shortness of breath or difficulty breathing. Less common symptoms include diarrhea, nausea, vomiting, or seizures. Fever does not always occur in humans infected with avian influenza.

**How People Become Infected**
Most cases of avian influenza infection in humans are the result of direct contact with infected poultry (e.g., domesticated chickens, ducks, and turkeys) or contact with surfaces contaminated with saliva, mucus, or feces from infected poultry. Direct aerosolized exposure happens when virus particles in aerosolized droplets or dust are inhaled or contact a person’s mucous membranes, such as their eyes, nose, or mouth. Exposure can also occur when a person touches a contaminated surface, object, or material and then touches the mouth, nose, or eyes.

**Employees at Potential Risk of Exposure**
- Poultry workers, including workers involved in eradication activities (e.g., depopulating poultry and disposal)
- Animal handlers other than poultry workers (e.g., animal control, zookeepers, veterinarians)
- Laboratory employees who handle influenza viruses
- Healthcare workers treating patients with known or suspected avian influenza viruses

**Recommendations for Employees at Risk of Exposure**
- Avoid unprotected contact with poultry and other birds suspected or known to be infected, as well as any of the following associated with infected birds: poultry carcasses, poultry feces or litter, and surfaces and water that might be contaminated with poultry excretions.
- Use proper hand hygiene practices. Clean your hands often and thoroughly, using soap and water for 15-20 seconds (or a water-less, alcohol-based hand rub when soap is not available), especially if you are handling infected birds, poultry, or poultry products.
- Get the seasonal flu vaccine. While it cannot protect against avian flu, it can help prevent being infected with both seasonal and avian flu at the same time.
- If you are sick, stay at home except to get medical attention.
Contact your state or local health department for additional guidance, especially if you begin having symptoms after potential exposure.

Personal Protective Equipment (PPE) for Employees in Direct Contact with Potentially Infected Birds:

- Disposable gloves, disposable protective shoe covers or boots, disposable head cover or hair cover, and if needed beard cover
- Protective clothing (e.g., long-sleeved coveralls with waterproof aprons that can be cleaned and disinfected or disposed of)
- Properly-fitted unvented or indirectly vented safety goggles
- NIOSH-approved air-purifying respirators with a particulate filter that is rated N95 or higher. Employers must comply with OSHA’s Respiratory Protection Standard (29 CFR 1910.134) which requires, in addition to the provision and use of appropriate respiratory protection, a written respiratory protection program, medical evaluations, fit testing, and training.

Workers should put on and take off PPE in a separate clean area. Workers must receive training on PPE as outlined in 29 CFR 1910 Subpart I (Personal Protective Equipment). For additional information see CDC Recommendations for Worker Protection and use of PPE to Reduce Exposure to Novel Influenza A Viruses Associated with Severe Disease in Humans.

If You Believe That You Have Been Exposed to Avian Influenza:

- Tell your employer
- Monitor your health for 10 days
- Consult a health care provider and your state or local public health department about what steps to take if you become ill with fever or develop a cough or difficulty breathing
- Do not travel while sick, and limit contact with others as much as possible to help prevent the spread

Training
Workers with potential for exposure should receive training on proper PPE, hazards associated with exposure to avian influenza, and procedures in place in their facility to isolate and report cases to reduce exposures.

Additional Information
More information on avian influenza can be found on OSHA’s Avian flu webpage.

Workers’ Rights
Workers have the right to:

- Working conditions that do not pose a risk of serious harm.
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses.
- File a complaint asking OSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA’s rules. OSHA will keep all identities confidential.
- Exercise their rights under the law without retaliation, including reporting an injury or raising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see OSHA’s Workers page (www.osha.gov/workers).

How to Contact OSHA
Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA’s role is to ensure these conditions for America’s workers by setting and enforcing standards, and providing training, education and assistance. For more information, visit www.osha.gov or call OSHA at 1-800-321-OSHA (6742), TTY 1-877-889-5627.

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory-impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.