



Infection Control and Personal Protective Equipment Guidelines for Persons Involved in Surveillance, Eradication and Control of Avian Influenza Outbreaks in Birds in Florida

From the Florida Department of Health Emergency Operations Plan, Pandemic Influenza Annex, October 2006. Appendix 5: Zoonotic Avian Influenza Surveillance and Response Protocol.

Basic infection control

Strict adherence to and proper use of hand hygiene after contact with wild and domestic birds, contact with contaminated surfaces, and after removing gloves is very important. Hand hygiene should consist of washing with soap and water for 15-20 seconds or the use of hand-disinfectants with 70% alcohol. Hand disinfectants are less effective when hands are soiled. Soiled hands should be washed with soap and water. Gloves should be changed between procedures.

Specific guidelines for animal workers handling:

Apparently healthy birds in areas where highly pathogenic avian influenza (HPAI) H5N1 virus is not suspected should:

- When possible, work in well-ventilated areas if working indoors. When working outdoors work upwind of animals, to the extent practical, to decrease the risk of inhaling aerosols such as dust, feathers, or dander.
- Wear rubber, nitrile or latex gloves that can be disinfected or disposed of and protective eyewear or a face shield while handling animals.
- Wash hands with soap and water often and disinfect work surfaces and equipment between sites.
- Use protective clothing (such as a protective coverall or apron) that can be disinfected or disposed when there is extensive physical contact with the bird.
- Wear a dust mask to protect against respiratory irritants when performing work with significant dust levels such as cleaning cages.
- Carry a bottle of hand sanitizer for hand hygiene when hand washing stations are not readily accessible.
- Not eat, drink, smoke, apply cosmetics or lip balm while handling animals.
- Not place laboratory specimens in coolers or refrigerators holding food.
- Disinfect or wash protective clothing at the end of the day.

Wild birds or poultry that are sick or associated with an undiagnosed mortality event in areas where HPAI H5N1 is not suspected should:

- Follow the recommendations above and at a minimum wear protective clothing, including coveralls, rubber boots, latex, nitrile or rubber gloves that can be

disinfected or disposed. Personnel working in a poultry house should wear disposable coveralls (such as Tyvek® suits).

- Minimize exposure to mucosal membranes by wearing protective eyewear (goggles) and a particulate respirator (NIOSH N95 respirator or higher).
- Disposable particulate respirators (e.g., N-95, N-99, or N-100) are the minimum level of respiratory protection that should be worn. Workers must be fit-tested to the respirator model that they will wear and also know how to check the face-piece to face seal. Workers who cannot wear a disposable particulate respirator because of facial hair or other fit limitations should wear a loose-fitting (i.e., helmeted or hooded) powered air purifying respirator equipped with high-efficiency filters.
- Decontaminate and properly dispose of potentially infectious material including carcasses per DOH and DEP guidelines.
- Decontaminate, remove and properly dispose of all Personal Protective Equipment (PPE) except eyewear and respirator. Wash hands thoroughly. Remove protective eyewear and respirators.
- Wash hand again after removing all PPE.

Wild birds or backyard flocks of poultry that are sick or associated with an undiagnosed mortality event in areas where HPAI has been detected should:

- Follow the recommendations above.
- Wear a fluid resistant apron over protective clothing.
- Get vaccinated with the seasonal influenza vaccine
- Unvaccinated workers should receive the current season's influenza vaccine to reduce the possibility of dual infection with avian and human influenza viruses. There is a small possibility that dual infection could occur and result in reassortment. The resultant hybrid virus could be highly transmissible among people and lead to widespread infections. Vaccination of all residents of affected areas is not supported by current epidemiologic data.
- Consult with a health care provider regarding any health concern
- If avian influenza infection is suspected, report to the local CHD.
- Follow the latest guidelines from CDC and the WHO for prophylactic medications and precautions for persons involved in avian influenza disease control:

Adapted from joint USDA and CDC recommendations posted at:
www.cdc.gov/flu/avianflu/h5/worker-protection-ppe.htm.

Commercial poultry flocks that are sick or associated with an undiagnosed mortality event in areas where HPAI has been detected:

Personal Protective Equipment (PPE)

Disposable gloves made of lightweight nitrile or vinyl or heavy duty rubber work gloves that can be disinfected should be worn. To protect against dermatitis, which

can occur from prolonged exposure of the skin to moisture in gloves caused by perspiration, a thin cotton glove can be worn inside the external glove. Gloves should be changed if torn or otherwise damaged. Remove gloves promptly after use, before touching non-contaminated items and environmental surfaces.

Personnel should carry a bottle of hand sanitizer and use it, at a minimum, before changing gloves. The bottle should be disposed with other PPE at the end of the day.

Protective clothing, preferably disposable outer garments or coveralls such as Tyvex® suits, an impermeable apron or surgical gowns with long cuffed sleeves, plus an impermeable apron should be worn.

Rubber or polyurethane boots with shallow treads that can be cleaned and disinfected should be worn.

Non-vented snug fitting safety goggles should be worn to protect the mucous membranes of eyes.

Disposable particulate respirators (e.g., N-95, N-99, or N-100) are the minimum level of respiratory protection that should be worn. This level or higher respiratory protection [negative or positive pressure respirators] may already be in use in poultry operations due to other hazards that exist in the environment (e.g., other vapors, manure, dust) and for improved vision or comfort. Workers must be fit-tested to the respirator model that they will wear and also know how to check the face-piece to face seal. Workers who cannot wear a disposable particulate respirator because of facial hair or other fit limitations should wear a loose-fitting (i.e., helmeted or hooded) powered air purifying respirator equipped with high-efficiency filters.

Personnel should receive appropriate personal protective equipment, instructions and training in PPE use, and respirator fit-testing.

Disposable PPE should be properly discarded, and non-disposable PPE and underwear should be cleaned and disinfected as specified in the Department of Agriculture and Consumer Services Avian Influenza Response Plan.

Protective clothing and gloves should be removed and discarded before removing respirators and goggles. Thorough hand hygiene measures should be performed before removing the respirator and goggles and after removal of all PPE.

Personnel should shower, and put on clean clothing before leaving the premises at the end of the day.

Administration of Antiviral Drugs for Prophylaxis

Workers participating in the eradication and control of an avian influenza outbreak should receive an influenza antiviral drug daily for the duration of time during which direct contact with infected poultry or contaminated surfaces occurs and 7 days post exposure. The choice of antiviral drug should be based on sensitivity testing when possible. In the absence of sensitivity testing, a neuraminidase inhibitor (oseltamavir) is the first choice since the likelihood is smaller that the virus will be resistant to this class of antiviral drugs than to amantadine or rimantadine.