



Wildlife Health Bulletin 05-03

To: Natural Resource/Conservation Managers
From: Leslie Dierauf, Director, USGS National Wildlife Health Center
Title: Interim Guidelines for the Protection of Persons Handling Wild Birds With Reference to Highly Pathogenic Avian Influenza H5N1
Date: August 29, 2005

These Guidelines have been developed in consultation with the Centers for Disease Control and Prevention. They are advisory in nature and intended to provide guidance for field biologists and others working with or handling wild birds with specific reference to highly pathogenic avian influenza. The guidance reflects information available as of August 2005 and may be updated as more information becomes available.

Highly Pathogenic Avian Influenza H5N1

To date, Highly Pathogenic Avian Influenza A H5N1 has not been detected in humans, poultry or wild birds in North America and no data suggest that H5N1 should be suspected of being in North America or in wild birds migrating from Asia to North America this fall (2005).

Avian influenza, or bird flu, is a virus typically found in wild birds, especially waterfowl and shorebirds. The virus is only found in a small number of birds in the wild, and generally does not cause clinical signs of disease. The virus is shed in fecal droppings, saliva and nasal discharges. Since 2003, a particularly virulent strain of this virus has emerged in Asia—the highly pathogenic avian influenza (HPAI) H5N1 virus. The HPAI H5N1 virus probably originated from domestic poultry in that region and is of concern because: 1) it poses a threat to domestic poultry, especially chickens; and 2) it has caused illness in 112 persons, including the deaths of at least 57 people as of August 2005. Most human cases are thought to have become infected with the virus through direct handling of infected poultry, consumption of uncooked poultry products, or contact with virus-contaminated surfaces/materials. However, to date, the risk of H5N1 transmission to people through direct contact with infected poultry remains very low. Probable, limited person-to-person transmission of H5N1 viruses in a small number of cases has been reported.

There are an increasing number of reports that HPAI H5N1 is infecting and causing death in wild birds, including some migratory species. These events and the associated spread of the H5N1 virus to new geographical areas in Asia have created concerns and questions about the possibility that the H5N1 virus could be carried into North America in migratory birds.

These Guidelines provide advice about practices and precautions people should exercise to mitigate the risk of HPAI H5N1 viral infection based on the level of exposure to wild birds. Because situations can change quickly, we have included recommendations for handling wild birds in the event that HPAI H5N1 is detected. It is important to check with your respective public health, animal health, and natural resource agencies for up-to-date information on HPAI H5N1.

There is no known case where H5N1 has been transmitted from wild birds to humans. However, even apparently healthy wild birds can be infected with microorganisms other than HPAI, some of which are currently of more concern to human health in North America than HPAI H5N1.

Recommendations:

Thoroughly washing hands with soap and water (or with alcohol-based hand products if the hands are not visibly soiled) is a very effective method for inactivating influenza viruses, including HPAI. These viruses are also inactivated with many common disinfectants such as detergents, 10% household bleach, alcohol or other commercial disinfectants. The virus is more difficult to inactivate in organic material such as feces or soil.

The **General Public** should, as a general rule, observe wildlife, including wild birds, from a distance. This protects you from possible exposure to pathogens and minimizes disturbance to the animal.

- Avoid touching wildlife. If there is contact with wildlife do not rub eyes, eat, drink, or smoke before washing hands with soap and water as described above.
- Do not pick up diseased or dead wildlife. Contact your state, tribal or federal natural resource agency if a sick or dead animal is found.

Hunters should follow **routine precautions** when handling game.

- Do not handle or eat sick game.
- Wear rubber or disposable latex gloves while handling and cleaning game, wash hands as described above, and thoroughly clean knives, equipment and surfaces that come in contact with game.
- Do not eat, drink, or smoke while handling animals.
- All game should be thoroughly cooked (well done or 160° F). Additional information can be found at: www.who.int/entity/foodsafety/fs_management/No_02_Avianinfluenza_Dec04_en.pdf.

Field Biologists handling apparently healthy wild birds in areas where HPAI H5N1 is not suspected

should 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.

- When possible, wear rubber or latex gloves that can be disinfected or discarded and protective eyewear or a face shield while handling animals.
- Wash hands often as described above, and disinfect work surfaces and equipment between sites.
- Do not eat, drink, or smoke while handling animals.

Field Biologists handling sick or dead birds associated with a mortality event should:

- Follow the recommendations above and at a minimum wear protective clothing, including coveralls, rubber boots, latex or rubber gloves that can be disinfected or discarded.
- Minimize exposure to mucosal membranes by wearing protective eyewear (goggles) and a particulate surgical mask (NIOSH N95 respirator/mask is preferable).
- Decontaminate work areas and properly dispose of potentially infectious material including carcasses. For additional information see the USGS Field Guide to Wildlife Diseases: http://www.nwhc.usgs.gov/pub_metadata/field_manual/chapter_4.pdf
- Do not eat, drink, or smoke while handling animals.

Recommendations if HPAI is detected in North America

Field Biologists working with wild birds in areas where HPAI H5N1 has been detected, particularly during disease control operations, should consult with a health care provider and follow the latest guidelines from CDC and the WHO for prophylactic medications and precautions for persons involved in avian influenza disease control: http://www.who.int/entity/csr/disease/avian_influenza/guidelines/Avian%20Influenza.pdf

- Follow the recommendations above and the basic guidelines for infection control, including how to put on and use, remove, disinfect or dispose of personal protective equipment and clothing.
- Wash hands frequently and disinfect exposed surfaces and field equipment between work sites.
- Do not eat, drink, or smoke while handling animals.
- Wear coveralls, gloves, shoe covers, or boots that can be disinfected or discarded, a respirator (NIOSH N95 respirator/mask is preferable) and protective eyewear (goggles).
- Monitor your health for clinical signs of influenza infection during and for one week after your last exposure to potentially HPAI virus-infected or exposed birds.
- Contact your healthcare provider if you develop fever, flu-like symptoms or conjunctivitis (eye inflammation). Inform them prior to arrival that you have potentially been exposed to HPAI.

Additional information about HPAI H5N1 can be found at the following Web links:

USGS National Wildlife Health Center: http://www.nwhc.usgs.gov/research/avian_influenza/avian_influenza.html

Centers for Disease Control and Prevention: <http://www.cdc.gov/flu/avian/index.htm>