# What Hunters Should Know About Avian Influenza

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As of August 2005, Highly Pathogenic H5N1 avian influenza has not been found in North America—there are no records of positive tests in wild or domestic birds, and no known human cases of illness.

QUICK FACTS. Avian influenza is common in wild bird populations, but usually affects small numbers of birds and generally does not cause obvious clinical signs of infection. The virus is largely spread through nasal and oral discharges, and fecal droppings. Few bird viruses are able to infect humans, but influenza viruses are able to adapt and change over time. In 1997, a variety of H5N1 virus in Hong Kong was able to spread directly from birds to humans.

H5N1 is very contagious among birds and is deadly to poultry, such as chickens and domestic ducks. Since 2003, a virulent strain of H5N1—a Highly Pathogenic Avian Influenza (HPAI)—emerged and spread across Southeast Asia in domestic poultry. Although large numbers of poultry were destroyed to stop the virus, it spread in Asia during 2005, and by late July outbreaks were reported in Siberia and Kazakhstan.

Most H5N1 infections in humans resulted from close contact with infected poultry or contaminated surfaces. These viruses do not move easily to humans, and there are <u>no known cases of human infection from wild birds</u>. Since December 2003, 112 human cases of H5N1 and 57 deaths have been reported from four countries in Southeast Asia.

### SURVEILLANCE FOR H5N1 IN ALASKA BIRDS

Because H5N1 has spread into northern Asia, the US Fish and Wildlife Service (USFWS), US Geological Survey (USGS), Alaska Department of Fish & Game (ADF&G), and public health agencies have formed a partnership to conduct surveillance for the occurrence of H5N1 in wild birds in Alaska. This work is in conjunction with ongoing research on avian influenza by the University of Alaska. During summer of 2005, several thousand waterfowl and shorebirds were tested for avian influenza in Alaska, and more extensive monitoring is planned for 2006. Field sampling efforts will be integrated with surveillance programs throughout the U.S. and Canada.

#### TO REPORT DEAD BIRDS

If you find a group of dead birds, contact wildlife authorities. Please do not pick up birds!

#### **Anchorage**

ADF&G (907) 267-2257 U.S. Fish and Wildlife Service (907) 786-3309

#### Fairbanks

ADF&G (907) 459-7206

#### Juneau

ADF&G (907) 465-4148 Elsewhere: Your local office of ADF&G, Parks or Refuges

#### FOR HUMAN HEALTH QUESTIONS

Alaska Department of Health & Social Services, Section of Epidemiology

Anchorage (907) 269-8000

#### **Prospects of H5N1 in North America**

There are increasing reports that H5N1 is infecting and causing death in wild birds in Asia, including some migratory species. These events and the spread of the H5N1 virus to new regions in Asia have created concerns that H5N1 virus could be carried to North America by migratory birds. To date, there is little evidence that migratory birds have been a major cause of the spread of H5N1, and it is not clear what role they could play on a larger scale.

Some migratory birds, particularly waterfowl and shorebirds, move between Alaska and Asia. Some species breed in North America and cross the Bering Strait to molt during summer or to winter along the Asian coast. Other species breed in Russia and migrate to wintering grounds in North America. However, it is still not clear whether these migrants will acquire the H5N1 virus in Asia, how persistent H5N1 is in wild bird populations, or whether migratory birds can become long distance carriers. At present, the probability of H5N1 infected birds getting to Alaska is unknown.

#### Susceptibility of Other Animals to Avian Influenza

Although influenza strains are common in many groups of birds, information on infection and impacts to other animal groups is not complete. Recent literature demonstrates that H5N1 can infect pigs and cats (wild and domestic).

#### Safe Preparation and Cooking of Game Animals

There are no known cases where H5N1 has been transmitted from wild birds to humans. However, even apparently healthy wild birds can be infected with other microorganisms and parasites that can move between wildlife and people. Therefore, it is always a wise and safe practice to wear some basic protection, and keep tools and work surfaces clean when preparing game animals. Clean and sanitary handling of animals and meat prevents common infections that can become serious.

Viruses like H5N1 are shed from birds in fluid discharges and fecal material, so avoiding contact with these materials while plucking and cleaning birds is a good practice. Most viruses do not persist very long after they have left their host and can be neutralized with heat, drying, and disinfectants.

Practical hygiene for hunters includes: (1) Do not handle or butcher game animals that are obviously sick or are found dead; (2) Do not eat, drink, or smoke while cleaning game; (3) Wear rubber gloves and washable clothing when cleaning game; (4) Wash your hands with soap and water or alcohol wipes immediately after handling game; (5) Wash tools and working surfaces with soap and water, then disinfect with a 10% solution of chlorine bleach; and (6) Cook game meat thoroughly—poultry should reach an internal temperature of 155-165°F.

## How can I protect myself from H5N1 and other diseases while hunting?

It is possible that H5N1 and other diseases may be acquired from contact with infected birds. Hunters should take these precautions:

- Do not handle birds that are obviously sick or birds found dead.
- 2. Keep your game birds cool, clean and dry.
- 3. Do not eat, drink, or smoke while cleaning your birds.
- 4. Use rubber gloves when cleaning game.
- 5. Wash your hands with soap and water or alcohol wipes after dressing birds.
- 6. Clean all tools and surfaces immediately afterward; use hot soapy water, then disinfect with a 10% chlorine bleach solution.
- 7. Cook game meat thoroughly (155-165°F) to kill disease organisms and parasites.





#### **Frequently Asked Questions**

#### Q: Why is there such concern about bird flu?

A: Public health and medical officials around the globe are concerned because influenza viruses are constantly changing form, and new strains of flu develop each year as viruses change genetically. Some influenza strains can jump from birds to mammals, and to humans. Several global flu pandemics have occurred in the past, and the most worrisome scenario would occur if a new avian flu strain acquired the ability to spread from person to person, causing a widespread health crisis.

#### Q: Can humans catch avian influenza from wild birds?

A: There are no known cases where avian influenza has been passed from wild birds to humans, but direct transmission from wild birds to humans can not be excluded. Normally, avian flu viruses are passed between various species of wild birds, and some avian flu viruses of domestic poultry are highly pathogenic. However some bird viruses can adapt to forms that pass from chickens to pigs, and from pigs or chickens to humans (such as the current cases in Asia).

#### Q: How could H5N1 arrive in North America?

**A:** Migratory birds, particularly waterfowl and shorebirds, cross the Bering Sea between Alaska and Asia during their seasonal cycles of breeding, molting and wintering. While in Asia, migratory birds could contact infected domestic or wild birds. However, migratory birds have not been documented as carriers of H5N1 between regions. If it arrives in North America, H5N1 is more likely to be transported by people who are infected, or through virus-contaminated articles or illegally imported birds or bird products.

#### Q: How concerned should bird hunters be about H5N1?

A: Hunters should not be overly concerned about H5N1 at the present time, but should take common sense precautions about hunting hygiene. Wild migratory birds are not known to spread H5N1 between regions; there are no known cases of human H5N1 infection from wild birds; and it is not clear whether H5N1 is persistent in wild bird populations or whether birds pose a long-distance, long-term risk. More research and surveillance over the coming year will allow more accurate assessments of risks to Alaskans.

#### For More Information:

- For information on avian influenza in Asia: http://who.int/csr/disease/avian\_influenza/en/
- For human health information in Alaska: http://www.epi.alaska.gov/id/influenza/fluinfo.htm
- National Centers for Disease Control and Prevention (CDC): http://www.cdc.gov/flu/avian/index.htm
- USGS National Wildlife Health Center: http://www.nwhc.usgs.gov/research/avian\_influenza/avian\_influenza.html
- For updates on wildlife health in Alaska, ADF&G: http://wildlife.alaska.gov/aawildlife/disease/disease\_hm.cfm
- For information about poultry and livestock, US Dept. of Agriculture: http://www.aphis.usda.gov/vs/biosecurity/hpai.html