

**OVERVIEW
AVIAN
INFLUENZA**

3/29/06

PREPARING FOR PANDEMIC FLU

What You Can Do

A pandemic is a global disease outbreak. An influenza pandemic occurs when a new influenza virus emerges for which there is little or no immunity in the human population, begins to cause serious illness, and then spreads easily person-to-person worldwide. The federal government, states, tribal organizations, communities and industry are taking steps to prepare for and respond to an influenza pandemic.

A pandemic is likely to be a prolonged and wide-spread outbreak that could require temporary changes how we operate in many areas of society, such as schools, businesses, churches, transportation and public services.

An informed and prepared public can take appropriate actions to decrease their risk during a pandemic.

Communities, Businesses and Individuals Should:

- Develop preparedness plans as you would for other public health emergencies.
- Participate and promote public health efforts in your state and community.
- Implement prevention and control actions recommended by your public health officials and providers.
- Adopt business/school practices that encourage sick employees/students to stay home.
- Anticipate how to function with a significant portion of the workforce/school population absent due to illness or caring for ill family members.
- Practice good health habits, including eating a balanced diet, exercising daily, and getting sufficient rest and take these common-sense steps to stop the spread of germs:
 - ▶ Wash hands frequently with soap and water or waterless hand cleaner.
 - ▶ Cover coughs and sneezes with tissues.
 - ▶ Stay away from others as much as possible if you are sick.
- Stay informed about pandemic influenza and be prepared to respond.
 - ▶ Consult www.epi.hss.ak.us/id/influenza/fluinfo.htm frequently for updates on state, national and international information on pandemic influenza.
 - ▶ Use national and local pandemic hotlines that will be established in the eventuality of a global influenza outbreak.
 - ▶ Listen to radio and television and read news stories about pandemic flu.



Alaska Department of Health & Social Services
Office of the Commissioner
P.O. Box 110601
Juneau, Alaska 99811-0601



"I am committed to the promotion and protection of the health of Alaskans, and I am committed to ensuring that we have a strong public health agency that is well prepared to rapidly detect and respond to outbreaks."

Governor Frank H. Murkowski

FLU, BIRD FLU and PANDEMIC FLU

Bird flu risks to people

- Bird flu infection to people from infected poultry is a rare event and usually results in mild disease, but the resulting disease from the current strain of H5N1 is severe. The virus causes a severe viral pneumonia and multi-organ failure.
- Symptoms of bird flu in humans have ranged from typical flu-like symptoms to pneumonia, and other severe and life-threatening complications.

Bird flu prevention and treatment

- Studies suggest that the certain prescription medicines approved for human flu viruses would work in treatment of bird flu infection in humans. Currently there is no widely available vaccine to protect humans against the H5N1 bird flu virus that is being seen in Asia. However, vaccine development efforts are under way.
- The H5N1 bird flu virus is resistant to some antiviral medications commonly used for flu. However, two antiviral medications, oseltamivir (Tamiflu) and zanamivir, are being used to treat flu caused by the H5N1 virus.

What has Alaska done to prepare?

- Completed and posted the Alaska Pandemic Influenza Plan: <http://www.epi.bhs.state.ak.us/id/influenza/fluinfo/pandemicplan.pdf>.
- Completed and updated the Alaska Strategic National Stockpile Plan. This Plan will be used to request and receive assets of the CDC Stockpile, including flu vaccine and antiviral drugs, and to distribute to hub communities.
- Completed four mass immunization clinics in 2004 and 2005. These exercises demonstrated that we can immunize 500-600 people an hour.
- Tested our ability to respond to a public health emergency during the 2005 Alaska Shield/Northern Edge statewide exercise.
- Passed new Public Health law in July 2005.
- Implemented the 2005-2006 seasonal influenza vaccine initiative.
- Completed the Emergency Public Information Plan.
- Distributed Alaska Division of Public Health and CDC advisories regarding flu immunizations, flu activity and avian flu to healthcare providers statewide.

What remains to be done?

- Support community efforts to address pandemic influenza in local disaster plans to address pandemic influenza.
- Assure that rural Alaskans have access to medications, vaccine and health care.
- Develop an Alaska stockpile of Medical supplies including antiviral drugs.
- Update the Alaska Pandemic Influenza Plan to reflect new guidance in the U.S. DHHS Pandemic Influenza Plan (<http://www.hhs.gov/pandemicflu/plan/>).
- Expand public information and communication on avian and pandemic flu.
- Ensure that communication systems between federal, state, tribal and local agencies work during emergencies and disasters.
- Identify persons who should be prioritized for receiving limited supplies of antiviral drug and vaccines to prevent disruption of vital services and death.



**Alaska Departments of Health & Social Services, Fish & Game,
and Environmental Conservation**

FOR IMMEDIATE RELEASE: March 29, 2006

Contact: Sarah Gilbertson, F&G, (907) 465-6137, Cell (907) 321-5212
Lynda Giguere, DEC, (907) 465-5009
Sherry Hill, DHSS, (907) 465-1618, Cell (907) 321-2838
Barbra Holian, DHSS, (907) 465-8116, Cell (907) 321-2610

**ADF&G, DEC, and DHSS detail state preparations
regarding avian flu**

(Juneau, Alaska) — The Directors of Wildlife Conservation and Public Health and the State Veterinarian today provided detailed briefings to legislators regarding the State's cooperative and coordinated efforts regarding Asian H5N1 avian influenza, and introduced the state's new interagency website that provides Alaskans with a single source for all state information related to avian and pandemic flu.

"To date, H5N1 has never been found in Alaska or anywhere in North America, and there is no evidence that anyone, anywhere has caught it from a wild bird," said Matt Robus, Fish & Game's Director of the Division of Wildlife Conservation. "At this point, there is no need to stop hunting and eating wild birds in Alaska. We are working closely with federal, state, and local officials to ensure that if the Asian H5N1 flu virus makes its way to Alaska, that it is detected early."

Robus, Department of Environmental Conservation's State Veterinarian Bob Gerlach, and Department of Health and Social Services' Public Health Director Dr. Mandsager each spoke regarding steps their departments are taking to detect and respond to any appearance of Asian H5N1 avian flu in Alaska.

With the first migratory birds expected to arrive in the state within the next two weeks, Fish & Game and federal wildlife agencies are continuing to monitor migrating birds for the virus. Fish & Game, in conjunction with its federal partners, has published informational materials and provided information on the State interagency website regarding the Asian H5N1 avian flu, how to report sick or dead birds, and steps that hunters and subsistence food gatherers can take to protect themselves while in the field or while handling wild birds and game.

Both Environmental Conservation and Fish & Game officials gave warnings regarding boiling water, or properly washing berries, bird eggs or other vegetation for human consumption that may have been contaminated by bird droppings. They also stressed the need to cook meat all the way through to 165 degrees F (or until the juices run clear) to protect against all bacteria and viruses.

Environmental Conservation is educating the public on how individuals can protect domestic birds — from backyard poultry flocks to parrots. Dr. Gerlach described symptoms to look for and what to do if Alaskans suspect they have a sick bird. “Bird owners are the first line of defense to protect their birds from avian influenza,” Gerlach said. Dr. Gerlach recommends that any sick birds be isolated immediately and access to the related flock be restricted. “If you find a sick or dead bird, and no obvious cause is apparent, do not touch it.” Dr. Gerlach stated. Instead, call 1-866-5brdflu (1-866-527-3358).

“The DEC Environmental Health laboratory is obtaining approval from USDA to test bird samples for Avian Influenza so that we can test samples as soon as April,” said Kristin Ryan, Director of the Division of Environmental Health. “It is essential that a facility in Alaska has the capacity to test bird sample results so we can quickly identify threats and protect public health.”

Departments of Fish and Game and Environmental Conservation are working with the Division of Public Health to prepare to respond to possible detection of Asian H5N1 avian flu in Alaska. Public Health is in the process of establishing a resource and referral phone line to have a single point of contact to respond to public health questions and concerns regarding human health concerns or planning for pandemic flu.

The Division of Public Health is planning for a potential flu pandemic if Asian H5N1 avian flu becomes transmittable between humans. “No one knows for sure when the next pandemic may strike or whether or not it will be related to the current Asian H5N1 avian flu virus,” Dr. Mandsager said. “Now is the right time to plan for the complex issues and serious impacts that a new influenza pandemic could cause in Alaska. The more Alaskans who understand the issues and participate in the planning — whether it is at the personal, community or state level — the better off we all will be should a pandemic or another disaster strike.”

More information regarding the avian flu and pandemic flu is available at a single location, provided by all three departments to ensure consistent information is available to Alaskans: www.pandemicflu.alaska.gov or www.avianflu.alaska.gov. To report dead or sick birds, where no obvious cause is apparent, call the U.S. Fish and Wildlife Service hotline at 1-866-5-BRDFLU (1-866-527-3358). The Public Health pandemic flu phone line will be operational by mid-April, and will be 1-888-9Panflu (1-888-972-6358).

STATE OF ALASKA

Frank H. Murkowski, Governor

PANDEMIC INFLUENZA INTERAGENCY INCIDENT MANAGEMENT TEAM

P.O. Box 5750
Ft. Richardson, AK 99505-5750
Phone: (907) 428-7000
Fax: (907) 428-7009
www.ak-prepared.com

For Immediate Release:

February 28, 2006

State Takes Action to Plan, Prepare For Avian Influenza and Pandemic Influenza

(Anchorage, AK) – The State Departments of Military and Veterans Affairs and Health and Social Services, in response to Governor Frank Murkowski's Administrative Order (AO) No. 228, have formed a Multi-Agency Coordination (MAC) Group and an Interagency Incident Management Team (IMT) to lead Alaska's efforts to plan and prepare for avian influenza reaching Alaska and for a possible outbreak of pandemic influenza.

"The IMT is made up of representatives from local, State, and Federal agencies who are working together developing a public outreach plan to educate and inform Alaskans on avian and pandemic flu, and to develop a response plan in case the flu strain mutates and leads to a pandemic flu event here in the State," said Division of Homeland Security and Emergency Management (DHS&EM) Deputy Director for Emergency Management Jim Butchart. Butchart serves as the IMT's Incident Commander.

"The MAC Group is made up of 26 agencies, to include the Governor's Office, and is chaired by the Commissioners of the lead State departments named in AO 228, Military and Veterans Affairs and Health and Social Services. This group's primary function is to provide policy and priority direction to the IMT," continued Butchart.

Unlike seasonal influenza, pandemic influenza is caused when a new influenza virus develops, is easily spread, and causes widespread illness and death because people have no immunity to the new virus. Pandemic influenza strains are thought to develop because of genetic changes in influenza viruses that have infected birds and other animals.

Today, wild fowl continue to transmit the latest strain of avian flu, known as H5N1, to domestic poultry stocks from Asia to Africa, Europe, and the Middle East. People who have contracted the H5N1 virus thus far have had contact with infected domestic poultry or have come in contact with the bodily fluids of infected birds. To date, no cases of infections have been found in persons who have handled wild birds. Additionally, there are no reports of the H5N1 strain being passed from person to person, however, world health officials believe that the virus could mutate and be able to be spread person to person. Therefore, health officials are preparing for a possible pandemic outbreak.

-MORE-

"Right now, avian flu has not reached Alaska and Alaskans are not at risk," said Dr. Richard Mandsager, State Director of Public Health. He added that if the current strain of H5N1 reaches the state, most Alaskans will not be at risk unless they are in close, regular contact with domestic poultry. "If the H5N1 virus were to change form and acquire the ability to spread easily from person to person, the State would put into place its plan to mitigate the effects of a pandemic in our state" he said. "Health officials can't say for sure if that will happen, but we are preparing for that scenario just in case."

To learn what you, your family, or your business can do to prepare for avian and pandemic flu, please go to www.pandemicflu.alaska.gov. For more information on the IMT or MAC Group, contact the DHS&EM Public Information Office at 907-428-7052.

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State of Alaska
DEPARTMENT OF HEALTH & SOCIAL SERVICES

Frank H. Murkowski, Governor

Karleen Jackson
Commissioner
P.O. Box 110601
Juneau, Alaska 99811-0601
FACT SHEET



Sherry Hill
Communications Officer
/Legislative Liaison
907-465-1618
FAX: 907-465-3068
www.hss.state.ak.us

FOR IMMEDIATE RELEASE: November 29, 2005

Contact: Jeff Kasper: (907) 465-8194, Cell (907) 321-3158
Sherry Hill: Cell (907) 321-2838, (907) 465-1618

Flu, bird flu, and flu pandemics

Information about bird flu for Alaskans

- **Flu, or influenza viruses** are a group of viruses that primarily infect birds, but also can infect and cause illness in mammals, including pigs, horses, and humans. Influenza has probably existed in mammals and birds since ancient times.
 - There are three types of influenza: A, B and C. **Influenza A** has the greatest propensity to change its genetic material and is the only type that has caused human pandemics.
- **Flu epidemics** occur every year or two years when a flu virus undergoes a small genetic change, just enough that many people are susceptible to infection. Epidemics have high attack rates, sometimes up to 20 percent. Severe illness and death during annual influenza epidemics is most common among the elderly and persons with underlying medical conditions.
- **Flu pandemics** occur when there is a major change in the genetic make up of the virus. All humans are susceptible, attack rates are high, and mortality rates may be high as well. Influenza pandemics are explosive, spread rapidly, and can travel around the world in only a few months.
- **Bird flu (Avian influenza)** is a contagious disease of birds, but may occasionally cause disease in other animals, including humans. The current outbreak of the H5N1 bird flu virus, which began in 2003, is the most severe outbreak in poultry ever recorded. It is unusual in the severity of illness which it causes in humans.
 - The H5N1 bird flu virus has been extraordinarily difficult to control among poultry, even after death or destruction of 150 million domestic birds. This virus is now firmly entrenched in poultry in Indonesia, Viet Nam and some parts of Cambodia, China, Thailand, and Laos. The Republic of Korea, Japan, Malaysia, Russia, Kazakhstan and Mongolia have also reported H5N1 bird flu in poultry.
 - Deaths in wild birds from H5N1 bird flu were reported from Russia, Kazakhstan, and Mongolia in August 2005. Most recently, the H5N1 bird flu virus has been reported in poultry in Turkey, Romania, and possibly in Greece.
 - There is concern that the H5N1 bird flu virus could make its way to North America via the wild bird flyway between Asia and Alaska. Theoretically, the virus could then make its way to the rest of the United States via North American wild bird flyways and could result in a significant risk to the domestic poultry industry.

Bird flu risks to people

- **Direct bird flu infection to people from infected poultry:** This is a rare event and usually results in mild disease, but the resulting disease from the current strain of H5N1 is severe. The virus causes a severe viral pneumonia and multi-organ failure. There is a 50 percent death rate among those who are known to have become ill from bird flu. Most of the over 130 human cases have occurred in children and young adults.
 - Human infection occurs after direct contact with infected domestic poultry, or with surfaces contaminated by bird feces. The virus is shed in large numbers in bird droppings. Most human cases have occurred in rural or near urban areas, where households keep small poultry flocks that roam freely, entering homes or sharing outdoor areas where children play.
 - Exposure may also occur at the time of butchering, defeathering, and preparation of infected poultry.
 - Rarely, person-to-person transmission of H5N1 bird flu virus has occurred, associated with poultry outbreaks. It has never been spread beyond the immediate close contacts to a human case, or caused illness in the general community.
- **Symptoms of bird flu in humans** have ranged from typical flu-like symptoms (fever, cough, sore throat and muscle aches) to eye infections, pneumonia, severe respiratory diseases (such as acute respiratory distress), and other severe and life-threatening complications. The symptoms of bird flu may depend on which virus caused the infection.

Bird flu prevention and treatment

- Studies suggest that the certain prescription medicines approved for human flu viruses would work in preventing bird flu infection in humans. Currently there is no widely available vaccine to protect humans against the H5N1 bird flu virus that is being seen in Asia. However, vaccine development efforts are under way. Research studies to test a vaccine to protect humans against H5N1 virus began in April 2005.
- The H5N1 bird flu virus currently infecting birds in Asia that has caused human illness and death is resistant to some antiviral medications commonly used for flu. However, two antiviral medications, oseltamavir (Tamiflu®) and zanamavir, would probably work to treat flu caused by the H5N1 virus, though studies still need to be done to prove their effectiveness.

How great is the risk that the H5N1 avian influenza strain will trigger a pandemic?

The risk is real. With the H5N1 bird flu virus firmly entrenched in large parts of Asia, there are likely to be more human cases. With each additional human case, the virus has an opportunity to improve its ability to transmit among humans, and perhaps to develop into a pandemic strain. With the recent spread to poultry and wild birds in new areas, the possibility of additional human cases increases.

- The current risk to Americans from the H5N1 bird flu outbreak in Asia is low. The strain of H5N1 bird flu virus found in Asia and Europe has not been found in the United States. There have been no human cases of H5N1 bird flu in the United States. It is possible that travelers returning from affected countries in Asia could be infected if they were exposed to the virus. Since February 2004, medical and public health personnel have been watching closely to find any such cases.

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What is the Alaska Department of Health & Social Services, Division of Public Health doing to prepare?

- Completed and posted the Alaska Pandemic Influenza Plan: <http://www.epi.hss.state.ak.us/id/influenza/fluinfo/pandemicfluplan.pdf>. We are in the process of receiving comments and reviewing the Plan for its next update.
- Completed and updated the Alaska Strategic National Stockpile Plan. This Plan will be used to request and receive assets of the CDC Stockpile, including flu vaccine and antiviral drugs, and to distribute to hub communities.
- Completed a mass flu immunization clinic in October 2004. This exercise demonstrated that Public Health can immunize between 500-600 people an hour. Facilitated three additional community-based influenza vaccination exercises during in Valdez, Sitka and Fairbanks in the fall of 2005.
- Tested our ability to respond to a public health emergency during the 2005 Alaska Shield/Northern Edge statewide exercise.
- Signed into law a new public health emergency bill in July 2005.
- Implemented the 2005-2006 influenza vaccine initiative.
- Completed the Emergency Public Information Plan, which is again under review.
- Distributed CDC advisories regarding flu immunizations, flu activity and avian flu.

Priorities for improving the Alaska Pandemic Influenza Plan:

- Expand and improve disaster response plans.
- Assure that rural Alaskans have access to medications, vaccine and health care.
- Make decisions as to whether to purchase oseltamivir (Tamiflu®) (how much, where to store, how to use before shelf life expires, etc.)
- Integrate our state plan into the federal plan when published.
- Improve and increase public information and communication on the issue.
- Ensure that communication systems between federal, state, tribal and local agencies work during emergencies and disasters.
- Identify persons who should be prioritized for treatment with Tamiflu, assuming there will be an inadequate supply.

What Hunters Should Know About Avian Influenza

As of March 2006, Asian 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 in rare cases able to spread directly from birds to humans.

Since 2003, a virulent strain of Asian H5N1 emerged and spread across Southeast Asia. This particular virus is a Highly Pathogenic Avian Influenza (HPAI) because it is highly contagious and deadly to domestic poultry. Although large numbers of poultry were destroyed to stop the virus, it spread in Asia and to Siberia and Kazakhstan during 2005. By early this year, the virus was documented in Europe and in Africa.

Most Asian H5N1 infections in humans resulted from close contact with infected poultry or poultry products. This virus does not move easily to humans, and there are no known cases of human infection from wild birds. As of March 21, 187 human cases of H5N1 and 106 deaths have been reported from nine countries.

SURVEILLANCE FOR Asian H5N1 IN ALASKA BIRDS

Because Asian H5N1 has spread into northern Asia and eastern Europe, 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 this virus in wild birds in Alaska. This work complements 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. In 2006, more intensive sampling will be conducted in Alaska and will be integrated with surveillance programs throughout the U.S. and Canada.

TO REPORT DEAD BIRDS

If you find a group of sick or dead birds, contact wildlife authorities. Please leave birds where they are and call as soon as you can.

**STATEWIDE (866) 5BRDFLU
(866) 527-3358**

Anchorage

ADF&G (907) 267-2257
USFWS (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 Asian H5N1 in North America

There are increasing reports that Asian H5N1 is infecting and killing wild birds in Asia, including some migratory species. These events and the spread of this virus to new regions have created concerns that it could be carried to North America by migratory birds. To date, new outbreaks in poultry and deaths of wild birds have been linked to the movement of domestic birds and poultry products. There is little evidence that migratory birds have been a primary cause of the spread of Asian H5N1, and it is not clear what role they could play.

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 this virus is in wild bird populations, or whether migratory birds can become long distance carriers. At present, the probability of Asian 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 Asian H5N1 can infect cats, domestic pigs, and a few other species of mammals. It is not documented in dogs.

Safe Preparation and Cooking of Game Animals

There are no known cases where Asian 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 wise and safe to wear some basic protection, and keep tools and work surfaces clean when preparing game animals. Clean and sanitary handling of animals and meat reduces risk of serious infections.

Viruses like Asian H5N1 are shed from birds in fecal material and other body fluids, so avoiding contact with these materials while plucking and cleaning birds is a good practice. Most viruses do not live very long after they have left their host and can be neutralized with heat, drying, and disinfectants, but they may persist in cold fresh water and even when frozen.

Practical hygiene for hunters includes: (1) Do not handle or butcher 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 hot water, then disinfect with a 10% solution of chlorine bleach; and (6) Cook game meat thoroughly—birds should reach an internal temperature of 165°F.

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

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

1. 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 (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 pandemics of other influenza viruses 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 cannot be excluded. Normally, avian flu viruses are passed between various species of wild birds, and some avian flu viruses are highly pathogenic to domestic poultry. The human cases of Asian H5N1 have occurred in people who have been heavily exposed to infected poultry and poultry products.

Q: How could Asian H5N1 arrive in North America?

A: If it arrives in North America, Asian H5N1 is more likely to be transported through virus-contaminated articles or illegally imported birds or bird products. 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 the primary carriers of Asian H5N1 between regions.

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

A: Hunters should not be overly concerned about Asian H5N1 at present—it rarely infects humans, and there are no known cases of human infection by Asian H5N1 from wild birds. Also, it is not clear how persistent this virus is in wild bird populations or whether wild birds pose a long-distance, long-term means of spreading this disease. More research and surveillance over the coming year will allow better assessments of risks to birds and people in Alaska. Hunters should take common-sense precautions and use good hygiene while hunting, cleaning birds, and preparing game for the table.

For More Information on:

- Avian influenza in Asia – World Health Organization
http://who.int/csr/disease/avian_influenza/en/
- Avian Influenza in North America - National Wildlife Health Center
http://www.nwhc.usgs.gov/disease_information/avian_influenza/
- Avian Influenza: Alaska status
<http://www.avianflu.alaska.gov/>
- Wildlife health in Alaska – Alaska Dept. of Fish & Game
<http://wildlife.alaska.gov/index.cfm?adfg=disease.main>
- Poultry and livestock health - US Dept. of Agriculture
<http://www.usda.gov/wps/portal/usdahome>
- Human health information in Alaska – Alaska Dept of Health & Social Services, Section of Epidemiology
<http://www.epi.alaska.gov/id/influenza/fluinfo.htm>
- Human health information national - National Centers for Disease Control and Prevention (CDC)
<http://www.cdc.gov/flu/avian/>



Alaska Avian Influenza Information Group

Avian Influenza

Some Questions and Answers about Avian Influenza ("Bird Flu")

Contents:

- First, the Basics:
- General information
- What can I do to protect myself from H5N1?
- Information for Hunters
- Information about Wild Bird Surveillance in Alaska
- Domestic Birds and Animals
- Can I Catch the Asian H5N1 Virus if...?

First, the Basics:

The Asian strain of avian influenza, called H5N1 or just bird flu, has been in the news lately. You might be surprised to know that it has never been found in North America, and there is no evidence that anyone, anywhere, has caught it from a wild bird. It is also not the same as the colds and other illnesses people usually call "flu," or the common forms of flu that shots can prevent. Still, it's best to be safe. Here's what you can do:

- Cook any wild or store-bought birds or eggs until they are done all the way through before eating.
- Wash your hands and knife with soap and water after cleaning or handling any birds.
- The questions and answers below cover many of the concerns people might have about the Asian H5N1 virus.

General information

1) What is Avian Influenza?

Bird flu, or avian influenza, is a term that refers to a number of viruses found in domestic poultry and in wild birds, especially waterfowl and shorebirds. These viruses are found only in a small proportion of wild birds, and most cause few, if any, symptoms. The viruses can be passed from bird to bird (and in rare cases to humans or other animals) in fecal droppings, saliva and nasal discharges.

2) Is there a new strain of avian influenza?

Yes. A particularly deadly strain of avian influenza has emerged in poultry and wild birds in Asia – this is the Asian H5N1 virus. This virus is deadly to chickens and some other domestic birds. This strain is of concern to people because it has caused illness and death in some humans who had been in close contact with infected domestic poultry in Asia. The most dangerous situation would occur if this avian flu strain changed form and acquired the ability to spread easily from person to person.

3) Where is the Asian H5N1 virus now occurring?

There are increasing numbers of reports that the Asian H5N1 virus is infecting and causing death in domestic poultry and some wild birds in Asia, Europe, and Africa. In Asia some people have also been infected, and almost half of these have died. (As of the end of February, 2006, a total of approximately 170 human

cases have resulted in more than 90 deaths worldwide.) The virus has primarily been a problem for domestic poultry and has been spread by these birds, though wild birds have been affected. Some of the wild bird species affected are migratory, and there is concern that H5N1 might spread into North America as infected birds migrate.

4) How could the Asian H5N1 virus arrive in North America?

Migratory birds in the northern hemisphere will be migrating north this spring to breeding grounds in eastern Russia, Alaska, and Canada, and some of these might be coming from areas in Asia where the virus has been found. Bird migration is only one of the possible routes of introduction of the Asian H5N1 virus into North America. Travel by people who are infected or traveling with virus-contaminated articles, and illegal smuggling of birds or poultry products are more direct, and possibly more likely, means of introducing the virus into the United States. The USDA has prohibited the import of any birds, poultry equipment, or poultry products from any country that has had the Asian H5N1 virus diagnosed.

5) Can humans catch the Asian H5N1 virus from wild birds?

There is no known case where the Asian H5N1 virus has been passed from wild birds to humans, but it is not certain that transmission from wild birds to humans isn't possible. Normally, avian flu viruses are passed among various species of shore birds, waterfowl and domestic birds,

including poultry (chickens, turkeys, etc.). The Asian H5N1 virus has also, on rare occasions, passed directly from domestic birds, especially chickens, to humans. This is most likely if the people are in close and regular contact with diseased poultry, as they would be in a chicken farming operation. That is what has happened in Southeast Asia.

6) What is being done to make sure we know if the Asian H5N1 virus does arrive in North America?

Here in Alaska, a team of state and federal agencies, tribal organizations and universities is coordinating testing of live wild birds, hunter-harvested wild birds, and domestic poultry in hopes of spotting the Asian H5N1 virus if it does arrive here. Many of the same organizations are watching for die-offs, or large groups of dead wild birds. These die-offs can be the result of several causes, one of which might be the Asian H5N1 virus.

7) How likely is it that this virus will reach wild birds in Alaska?

The Asian H5N1 virus has not been detected in either wild or domestic birds or in humans in North America. Between 1998 and 2005, more than 12,000 wild bird samples from Alaska were examined for evidence of H5N1. No evidence of H5N1 virus has yet been discovered. However, the virus is more widespread in other parts of the world today than it has ever been, so now is a time to be vigilant.

8) Can mosquitoes spread the Asian H5N1 virus?

Mosquitoes have never been shown to spread any type of influenza virus. It is not likely that the Asian H5N1 virus could be carried by a mosquito ingesting blood from an infected animal like other diseases, such as West Nile virus, can be.

9) If this virus did arrive in North America, how long after being exposed to it would an infected person show symptoms?

According to the World Health Organization, the incubation period for the Asian H5N1 virus may be

longer than that for normal seasonal influenza, which is around two to three days. Current data for H5N1 infection indicate an incubation period ranging from two to eight days, but possibly as long as 17 days.

10) How can I tell a "normal" flu from the Asian H5N1 virus?

The symptoms of the Asian H5N1 virus in humans can range from "normal" flu symptoms (fever, cough, sore throat, and muscle aches) to eye infections, pneumonia, and more severe symptoms. In short, there is no way to confidently identify a human case of the Asian H5N1 virus from the symptoms.

What can I do to protect myself from H5N1?

11) If we get the flu shot are we safe?

Regular flu shots are not thought to protect against the Asian H5N1 virus, but it is very important to get them. Not only will you protect yourself from "normal" flu, but you can also prevent any chance that bird flu could combine with another type of flu in your body and become easier to pass from one person to another as a result.

12) Is there a vaccine for people to prevent the Asian H5N1 virus?

No, there isn't a vaccine yet available for this specific type of flu, though work is going on to develop one. There are medicines called antiviral drugs available that may help limit symptoms and reduce the chance that the disease will spread. There have been reports that the flu in some human patients has developed a resistance to some of these antivirals, however.

13) How can people best protect themselves from the Asian H5N1 virus when handling or eating wild birds or domestic poultry?

Remember that the Asian H5N1 virus has never yet been detected anywhere in North America. However, if you were to handle a raw, infected bird there is a chance

you could accidentally infect yourself by touching your mouth, eyes, etc. with contaminated fingers. You could also put yourself at risk by eating uncooked meat or organs from wild or domestic birds. Washing with soap and water or most commercial hand cleaners will kill the virus. It's important to avoid smoking, eating, drinking, etc. after handling raw wild or domestic birds until after washing your hands. Always cook any wild or domestic birds before eating. If possible, use a food thermometer to ensure food has reached the proper cooking temperature. Cook all whole birds and parts to at least 165-degrees (F). Use a minimum oven temperature of 325-degrees (F). If cooking in the field, make sure that the birds (or any bird parts cooked separately) are cooked through.

14) What should I do if I feel sick after handling wild or domestic birds?

Although the Asian H5N1 virus has not been found in the United States, its symptoms could resemble those of a variety of ailments. It is always best to contact your usual health care provider when you feel ill, and to tell him or her about any contact that you might have had with birds or sick animals.

Information for Hunters

15) Should hunters be concerned about the Asian H5N1 virus?

The Asian H5N1 virus has not yet been detected anywhere in North America, and there have been no confirmed reports of anyone, anywhere in the world, catching the Asian H5N1 virus from a wild bird. However, no one yet knows for sure if migrating birds might play a role in the movement and distribution of this virus. Only surveillance will tell us that. Federal, state, university, and tribal groups will be testing both live and hunter-harvested wild birds this spring in order to try to detect the virus early should it arrive in Alaska. While the risk to hunters is currently low, no one can guarantee that there is no risk. Precautions consistent

with the normal recommended procedures for the safe handling and cleaning of game should always be followed. A fact sheet from the State of Alaska is available at: http://alaska.fws.gov/media/avian_influenza/index.htm

16) Is there any way for me to tell if a wild bird has the Asian H5N1 virus?

Infected birds may have respiratory symptoms such as sneezing and coughing, swelling of the eyes, ruffled feathers, and diarrhea. However, any and all of these symptoms might also indicate other illnesses. Remember, too, that the Asian H5N1 virus has never yet been detected anywhere in North America, and that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1 virus from a wild bird.

17) Are hunting dogs at risk from the Asian H5N1 virus?

There is no evidence yet that dogs are able to catch this virus.

18) Could I catch the Asian H5N1 virus by drinking river water that ducks or other birds have been in?

Drinking water has never been known to transmit any type of influenza virus. If infected birds were present in large numbers in a confined (not flowing) body of water, levels of contamination in that water could infect someone who drank the water without treating it. However, unfiltered or untreated water can carry a number of other pathogens that are far more likely to cause problems at this time.

19) What kinds of water filters will protect me against the Asian H5N1 virus?

Many water filters, particularly those designed for camping, are *biological* filters, and can be used to remove bacteria and protozoa from water of suspect quality. These must be used in conjunction with a disinfectant (such as those found in commercially available water purification tablets), or boiling, to remove viral contaminations such as the Asian H5N1 virus. Remember that the Asian H5N1 virus has never

yet been detected anywhere in North America, and that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1 virus from a wild bird.

20) Will boiling the water provide protection?

Boiling for at least one minute will kill the Asian H5N1 virus.

21) Will rinsing my hands in salt water kill the virus?

Salt water alone can not be relied upon to kill the Asian H5N1 virus (see Question #13).

22) Will the virus survive if it's frozen?

Yes. The Asian H5N1 virus can withstand freezing and still be dangerous when it is thawed. See Question #13 for information on things you *can* do to protect yourself.

Information about Wild Bird Surveillance in Alaska

23) Scientists who are testing wild birds in the field are wearing gloves, face masks and other protective gear. Should hunters wear the same kind of gear?

Biologists testing wild birds handle many more birds than a hunter would, and are taking samples that contain bird droppings as part of their work. Furthermore, healthy, live birds tend to struggle while they're being tested, and can fling droppings, feathers, and dander on the scientists doing the tests. The extra protective gear shouldn't be necessary for hunters. Keeping your hands and tools cleaned with soap and water or other cleaners, and making sure to cook all birds before eating (see Question #13) are the common-sense steps recommended to keep hunters safe in the unlikely event that they handle a bird carrying the H5N1 virus. Remember that the Asian H5N1 virus has never yet been detected anywhere in North America, and that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1

virus from a wild bird.

24) If scientists test a duck that I shot, will I be told the results of the test?

There are no plans to get individual results back to the hunter. For one thing it might be weeks or months before a single sample can be completely tested. For another, if the duck is properly cooked and handled (see Question #13), there is no risk to those who eat it. Also, if the Asian form of H5N1 is ever detected in Alaska (or anywhere in North America) the public will be notified immediately.

25) Is it safe to eat a duck that has been tested?

If the duck is properly handled and cooked (see Question #13) there is no risk to those who eat it.

Domestic Birds and Animals

26) Is it risky to own pet birds like canaries or parakeets?

Having a pet bird that stays inside all the time is not likely to pose any threat. It is illegal to import pet birds into the U.S. from any regions that have experienced the Asian form of H5N1, so the chances of anyone buying an infected pet from a reputable pet store in the United States are extremely low.

27) Could I catch the Asian H5N1 virus from poultry that my neighbor keeps?

Poultry that are infected with the highly pathogenic (which means deadly to poultry) form of Asian H5N1 tend to die quickly, and so far most of the human cases in other parts of the world have involved people who have had exposure to sick backyard flocks or fighting fowl. There should be very little risk from a healthy backyard flock, and almost no risk at all as long as you wash your hands after handling the chickens and cook any birds you intend to eat (see Question #13).

4

28) What about other domestic animals?

There have been no reports of Asian H5N1 causing illness to humans exposed to infected animals other than birds. There are reports that cats and pigs are able to catch the Asian H5N1 virus.

Could I Catch the Asian H5N1 virus if.....?

29) ...I eat the hearts, digestive tracts, gizzards, livers, etc. of wild birds after cooking them?

Heat is a good way to kill the virus, so properly cooked internal organs should be safe (see Question #13). There is some evidence that eating raw, contaminated poultry blood might have resulted in people becoming infected in Vietnam, so any bird products should be cooked before eating.

30) ...I swim or wade in water that ducks or other birds have been in?

Remember that the dangerous Asian H5N1 virus has never yet been detected anywhere in North America, and that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1 virus from a wild bird. If infected birds were present in large numbers in a confined (not flowing) body of water, levels of contamination in that water could theoretically infect someone who, while wading, accidentally got that water into his or her eyes or mouth. However, unfiltered or untreated water can carry a number of other illnesses that are far more likely to cause problems at this time.

31) ...I eat plants or fish that are in water used by wild birds?

To be safe, it is best to cook any wild plants or fish that have been in water frequented by wild or domestic birds before eating the plants or fish.

32) ...I clean wild birds or handle raw domestic poultry?

Remember that the Asian H5N1 virus has never yet been detected anywhere in North America, and

that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1 virus from a wild bird. If you were to handle a raw, infected bird there is a chance you could accidentally infect yourself by touching your mouth, eyes, etc. with contaminated fingers. Washing with soap and water or commercially available hand cleaners will kill the virus. It's important to avoid smoking, eating, drinking, etc. after handling raw wild or domestic birds until after washing your hands (see Question #13).

33) ...I buy a chicken from a store and cook it?

Asian H5N1 has not been found in the United States. Even if H5N1 were detected in the U.S. the chance of infected poultry entering a store would be extremely low. All poultry entering the food chain is inspected by the USDA and the farms raising these birds are under surveillance testing for infectious diseases. Proper handling and cooking of poultry provides protection against this virus as it does against many viruses and bacteria, including *Salmonella* and *E. coli* (see Question #13).

34) ...I eat a cooked chicken in a restaurant?

No one has ever caught the Asian H5N1 virus from a properly cooked bird, either wild or domestic. All poultry entering commercial markets are inspected by the USDA and the farms raising these birds are under surveillance testing for infectious diseases.

35) ...I eat cooked birds, either poultry or wild birds?

No one has ever caught the Asian H5N1 virus from a properly cooked bird, either wild or domestic (see Question #13).

36) ...I eat a smoked bird?

By cooking the bird to the proper temperature, either before or after smoking, you can ensure that it is safe to eat (see Question #13).

37) ...I eat wild bird eggs?

There is no evidence that anyone has caught the Asian H5N1 virus

from cooked eggs. Raw eggs should not be eaten. Wild bird eggs should be washed after collecting, and hands should be washed after handling eggs. Remember that the Asian H5N1 virus has never yet been detected anywhere in North America, and that there have been no confirmed reports of anyone, anywhere, catching the Asian H5N1 virus from a wild bird.

38) ...I use feathers of a bird in crafts or clothing?

Influenza viruses can sometimes be found on the feathers of birds. However, since Asian H5N1 has not been found in North America the risk would be extremely low. If you are going to use feathers for craft work, collect them from healthy, harvested birds. The feathers may be cleaned with a dilute bleach solution (one tablespoon of bleach to a quart of water) prior to use.

And, Finally

39) What should I do if I see a group of sick or dead birds?

Birds die for many reasons, but Asian H5N1 has been the cause of deaths of wild birds in Europe and Asia. Do not handle any sick or dead birds you find. If you encounter dead or sick wild birds, and no obvious cause is apparent, such as hitting a power line or building, call 1-866-5BRDFLU (1-866 527-3358). Please note the location (GPS coordinates are best), species of bird, and the date and time that you found them.

40) Where can I find out more?

For more information, see: http://alaska.fws.gov/media/avian_influenza/

Note: This material was produced on March 20, 2006. The avian influenza issue is constantly changing. See the website above to determine if the information in this copy has been updated due to new developments.

The Alaska Avian Influenza Information Group includes representatives from the Alaska Department's of Health and Social Services, Fish and Game, and Environmental Conservation, the Alaska Native Tribal Health Consortium, and the U.S. Fish and Wildlife Service.



Avian Influenza

"Bird Flu" Facts

A Few Facts about Avian Influenza in Alaska

("bird flu")

There have been a lot of stories in the news about avian influenza, or the bird flu virus.

Here are some facts that many news stories don't make clear:

- The current Asian H5N1 strain of bird flu that has been in the news has not been found in any wild or farm-raised birds in America.
- There's no evidence that anyone has caught the virus from a wild bird.
- No one has caught this virus from eating a fully cooked bird, either domestic or wild.
- When wild birds in other countries have caught this flu and died, it is believed that, at least in some cases, they caught it from farmed chickens or other domestic birds
- A number of state and federal agencies will be testing wild birds for H5N1 in Alaska this season. You may see biologists wearing protective gear while testing wild birds. These scientists handle many more birds than a hunter would, and are taking samples that contain bird droppings as part of their work. Furthermore, they are examining healthy, live birds that struggle while they're being tested, and can fling droppings, feathers, and dander all over the scientists doing the tests. Remember that the Asian H5N1 virus has not yet been detected anywhere in North



Izembek Lagoon, Alaska

USFWS

America, and that there have been no confirmed reports of anyone, anywhere, catching this form of avian influenza from a wild bird.

What You Can Do For Safety

The virus is more widespread in other parts of the world today than it has ever been, so now is a time to be careful. Here are a few things you can do.

- Cook any birds, wild or store-bought, until they're done all the way through before eating them.
- Wash your hands and knife with soap and water (or at least use a packaged commercial antiseptic hand cleaner) after handling or cleaning any birds, or wear rubber gloves. (And be sure not to smoke or eat until after you've cleaned up.) In remote

areas without cleaning supplies, use common sense and avoid touching your mouth or face.

- If you see dead or sick birds, especially if something you notice seems unusual, call 1-866-5-BRDFLU (1-866 527-3358). *Do not handle birds found sick or dead!*

For more information:

http://alaska.fws.gov/media/avian_influenza/

Note: This material was produced on March 23, 2006. The avian influenza issue is constantly changing. See the website above to determine if the information in this copy has been updated due to new developments.

The Alaska Avian Influenza Information Group includes representatives from the Alaska Departments of Health and Social Services, Fish and Game, and Environmental Conservation; the Alaska Native Tribal Health Consortium, and the U.S. Fish and Wildlife Service.

What Hunters Should Know About Avian Influenza

As of August 2005, 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 reached China and Korea by early 2005; 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 no known cases of human infection from wild birds. 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) 267-2277
U.S. Fish and Wildlife Service
(907) 786-3309

Fairbanks

ADF&G (907) 450-7206

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 associated spread of the H5N1 virus to new regions in Asia have created concerns that the H5N1 virus could be carried into North America by migratory birds. To date, migratory birds have NOT been documented as a cause for the spread of H5N1 between regions in Asia.

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 birds that are obviously sick or are found dead; (2) Do not eat, drink, or smoke while cleaning animals; (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:

1. 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 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 may be possible. Normally, avian flu viruses are passed between various species of birds, and some types are particularly lethal among domestic poultry. 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>
- 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 livestock, US Department of Agriculture:
<http://www.aphis.usda.gov/vs/biosecurity/hpai.html>

Answering questions about **bird flu** for **subsistence hunters in Alaska**

March 2006



What is bird flu?

Birds carry many kinds of flu viruses, but recently a more serious type of bird flu has developed. The technical name of this specific bird flu is Asian H5N1, but it is commonly just called bird flu. You may also hear it called avian flu, avian influenza, or Highly Pathogenic H5N1. This bird flu began in Southeast Asia where wild birds and people caught it from infected chickens. It is now spreading to birds in other countries, but has not yet been found in Alaska or North America.

How serious is bird flu?

Most types of bird flu don't cause serious harm. However, the Asian H5N1 type of bird flu is deadly to poultry and some wild birds—but it rarely infects people. Currently less than 200 people worldwide have caught this flu, and half of them survived. The reason health officials are worried is because flu viruses frequently change. Right now birds and people can only get bird flu from infected *birds*. If this bird flu or some other flu virus changes so that *people* could easily pass it to other people, it would be possible for it to spread to millions of people around the world. This would be called a pandemic. *This has not happened*, but governments want us to be prepared just in case.

Do we have bird flu in Alaska?

Not yet—but it's possible that it could arrive here with birds that return to Alaska from Asia this spring and summer. Infected wild birds have died in Europe, Asia, and Africa.

Can we get bird flu from the birds we hunt?

The risk is very low—but we don't know for sure. So far, this bird flu has rarely infected humans. Also, people have *only* caught this bird flu from *domestically* raised birds, such as chickens. Nobody has caught this bird flu from *wild* birds. Wild birds carry viruses that are spread mainly through their droppings (anaq), so avoid contact with fresh bird droppings, handle birds cleanly, and thoroughly cook your birds.

Can we get bird flu from berries or bird eggs?

Bird viruses are found in bird droppings, so they could be on the *outside* of eggs. Even if a mother bird was infected, the virus would not be *inside* her eggs. Washing eggs is always a good idea, and cooking eggs kills any viruses and bacteria that cause illness. There is very little chance that bird droppings are on berries, but it is a good practice to wash berries, too.

Can we get bird flu from store-bought chicken?

No. Chicken and turkey sold in the U. S. is regularly inspected and tested, and comes from North American farms free of Asian H5N1 bird flu. Also, no birds, poultry or eggs are allowed into the U. S. from infected parts of the world.



Prepared by ADF&G

Answering questions about **bird flu** for **subsistence hunters in Alaska**

March 2006



Prepared by ADF&G

How worried should we be about bird flu?

There's no need to stop your subsistence practices. Just follow the safety guidelines.

What safety guidelines should we follow?

- Don't handle birds and game that appear sick or you find dead.
- Use rubber gloves when cleaning birds and game, and gathering eggs.
- Don't eat, drink or smoke while cleaning birds and game; keep your hands away from your face and mouth.
- Wash your hands with soap and water, or alcohol wipes or gel after cleaning birds and game.
- Clean all tools and surfaces immediately; use hot soapy water first, then disinfect with a mix of 1 part bleach to 10 parts water.
- Keep dead birds and game meat cool, clean & dry. Wash eggs.
- Cook birds and game thoroughly (155 – 165 degrees). Cook eggs.

What is being done about bird flu in Alaska?

Wildlife agencies are prepared to sample thousands of birds for bird flu this summer. They are coordinating with wildlife agencies across the U. S. and Canada, and working closely with Alaska public health agencies.

What else do we need to know?

You need to keep up with current news and information. The situation with bird flu is constantly changing and advice may change. **Stay informed!**

Where can we go for more information?

For bird information or to report sick or dead birds:

Alaska Dept. of Fish & Game

Anchorage (907) 267-2257, Fairbanks (907) 459-7206, Juneau (907) 465-4148,
or your local ADF&G office.

website: www.wildlife.alaska.gov/aawildlife/disease/avian_influenza.pdf

U. S. Fish & Wildlife Service

Toll free 1-866-527-3358 (1-866-5 BRD FLU), or your local refuge office.

website: alaska.fws.gov/media/avian_influenza/index.htm

For human health information:

Alaska Dept. of Health & Social Services, Section of Epidemiology

Anchorage (907) 269-8000, or your local health aide, clinic or hospital.

website: www.epi.alaska.gov/id/influenza/fluinfor.htm and select *Avian Influenza*.