



# Avian Influenza 2006 Conference Handbook

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# Table of Contents

<b>1</b>	<b>Introduction</b> .....	<b>3</b>
<b>2</b>	<b>Avian influenza facts</b> .....	<b>4</b>
	Flu terms defined .....	4
	7 bird flu facts everyone should know: .....	4
<b>3</b>	<b>Tools and resources on the Web</b> .....	<b>5</b>
<b>4</b>	<b>Frequently asked questions about AI</b> .....	<b>6</b>
<b>5</b>	<b>Surveillance and monitoring</b> .....	<b>9</b>
	WSDA surveillance and monitoring program .....	9
	Premises registration for emergency calls .....	9
	How bird owners can register with WSDA .....	10
	National Animal Identification System (NAIS) .....	10
<b>6</b>	<b>If HPAI is suspected in your area</b> .....	<b>11</b>
	What to expect .....	11
	Preparing for an outbreak: questions to ask .....	11
	Disposal .....	12
	Sample investigation history form .....	13
<b>7</b>	<b>Keeping domestic birds healthy</b> .....	<b>15</b>
	What is backyard biosecurity? .....	15
	6 ways to prevent poultry disease .....	15
	Biosecurity steps for Highly Pathogenic Avian Influenza .....	17
	How to disinfect.....	18
<b>8</b>	<b>Keeping people healthy</b> .....	<b>19</b>
	Food handling .....	19
	Stop spreading germs .....	20
<b>9</b>	<b>Wild birds and other animals</b> .....	<b>21</b>
	Wild birds .....	21
	Pet bird care .....	21
	HPAI in cats, dogs, and other species .....	21
<b>10</b>	<b>Farm security planning</b> .....	<b>23</b>
	Prioritize assets and security .....	23
	Protecting information and counter-intelligence measures .....	24
	Physical protection procedures .....	25
	Reporting security events to authorities .....	27
<b>11</b>	<b>Reporting: who to contact</b> .....	<b>28</b>
	Hotline numbers .....	28

# 1 Introduction

This manual was created for Washington's poultry farmers, bird owners and anyone who has regular contact with farmed or wild birds.

This handbook provides the latest facts about avian influenza and will increase your preparedness for a disease outbreak.

The Animal Services Division of the Washington State Department of Agriculture (WSDA) is committed to maintaining the health of livestock within our state. Our approach to avian influenza reflects this commitment, with the following goals:

1. To make sure that animals entering our state comply with Washington's animal health regulations.
2. To carry out rapid response and containment of disease through surveillance, testing and early detection.
3. To conduct outreach and education on the care of birds and how to protect them from avian influenza.
4. To encourage bird owners to register their emergency contact numbers so that information on bird care and protection will reach them quickly if there is an avian influenza outbreak in Washington.
5. To help keep avian diseases from impacting human health.

WSDA continues to refine its training and outreach to prepare for the possibility of an avian influenza outbreak in Washington. Quick, effective response to an outbreak depends on coordination among local, state, federal and tribal government partners, as well as Canadian animal health officials. It also depends on you.

WSDA is here to give you information about avian diseases and the tools to prevent them. Together, we can work to protect the health of Washington's poultry and agricultural economy.

## 2 Avian influenza facts

### Flu terms defined

Producers and the general public should know about the different types of flu viruses that affect humans, birds and other species.

**Seasonal influenza (or common flu)** is a respiratory illness that can be easily transmitted person to person. Most people have some immunity, and a vaccine is available.

**Avian influenza (AI or bird flu)** is a group of viral diseases that can affect most species of domestic poultry, as well as migratory wildfowl and shore birds. There are many different varieties of AI that naturally occur in Washington and around the world. The vast majority of these AI viruses do not kill infected birds or impact humans. Avian influenza viruses tend to move easily between birds, and can change their genetic fingerprint in the process.

**Highly pathogenic avian influenza (HPAI)** is of greatest concern to veterinarians and poultry operations because it can infect and kill large numbers of birds very quickly. The strain known as Asian H5N1 receives the most attention because humans living in very close contact with bird waste have caught Asian H5N1 bird flu. No HPAI or Asian HN51 bird flu has ever been found in Washington State.

**Pandemic flu** is viral human flu that causes a global outbreak, or pandemic, of serious illness. Because there is little natural immunity, the disease can spread easily from person to person. Currently, there is no pandemic human flu.

### 7 bird flu facts everyone should know:

- Most avian influenza viruses are not a threat to human health
- Highly pathogenic avian influenza has never been detected in Washington state
- Only humans in very close contact with diseased birds and their waste have caught Asian H5N1 bird flu
- Quick human-to-human transmission of Asian H5N1 has not occurred and may never happen
- WSDA and partner agencies are closely monitoring the movement of Asian H5N1 in domestic poultry and wild waterfowl around the world
- Normal cooking of bird meat kills all avian influenza viruses
- No diseased birds will be allowed to enter the food supply under the WSDA response plan

The vast majority of avian influenza viruses do not kill birds or affect humans.

Cooking meat to 165 degrees Fahrenheit kills avian influenza viruses.

### **3 Tools and resources on the Web**

Washington State Department of Agriculture  
Animal Health Program  
**[www.agr.wa.gov/FoodAnimal/AnimalHealth/default.htm](http://www.agr.wa.gov/FoodAnimal/AnimalHealth/default.htm)**

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service (APHIS)  
**[www.aphis.usda.gov](http://www.aphis.usda.gov)**

Biosecurity for Birds  
**[www.aphis.usda.gov/vs/birdbiosecurity](http://www.aphis.usda.gov/vs/birdbiosecurity)**

National Chicken Council website  
**[www.nationalchickencouncil.com](http://www.nationalchickencouncil.com)**

Washington State Department of Fish and Wildlife  
Information on avian influenza in wild birds  
**[http://wdfw.wa.gov/factsheets/avian\\_flu.htm](http://wdfw.wa.gov/factsheets/avian_flu.htm)**

Federal information on pandemic flu and avian influenza  
**[www.pandemicflu.gov](http://www.pandemicflu.gov)**

Washington State Department of Health  
Influenza prevention and preparedness Web site  
**<http://www.doh.wa.gov/panflu/>**

US Centers for Disease Control (CDC)  
Basic information about avian influenza  
**[www.cdc.gov/flu/avian](http://www.cdc.gov/flu/avian)**

World Health Organization (WHO)  
Worldwide avian flu and pandemic flu tracking  
**[www.who.int/csr/disease/avian\\_influenza/en/](http://www.who.int/csr/disease/avian_influenza/en/)**

Canadian Food Inspection Agency  
**<http://www.inspection.gc.ca/english/toce.shtml>**

## 4 Frequently asked questions about AI

### **Q: We have a small flock of chickens. Is it safe to keep them?**

A: Yes. In the United States there is currently no need to stop raising chickens because of concerns about avian influenza. The U.S. Department of Agriculture monitors potential infection of poultry and poultry products by avian influenza viruses and other infectious disease agents.

### **Q: If I register my farm or small flock with WSDA, what will happen?**

A: If you raise birds on your property, and you register your location and phone number with WSDA, state veterinarians will call you if HPAI is suspected or confirmed in your area. The process is comparable to providing basic contact information to a child's school, so parents can be located quickly in an emergency.

Information in the contact database is not used for any purpose other than emergency notification about disease outbreaks.

Let WSDA know if you have birds on your property. Knowing how to reach you will save valuable time during an outbreak.

### **Q: Can people get AI from eating or preparing poultry or eggs?**

A: There is currently no scientific evidence that people have been infected with bird flu by eating safely handled and properly cooked poultry or eggs.

Most cases of Asian H5N1 infection in humans have resulted from direct contact with infected birds or surfaces contaminated with waste from infected birds. Even if poultry and eggs were to be contaminated with the virus, proper cooking (to 165 degrees Fahrenheit) would kill it.

### **Q: Could infected poultry products come into the US from another country?**

A: The U.S. government carefully controls domestic and imported food products, and in 2004 issued a ban on importation of poultry from countries affected by avian influenza viruses, including the Asian H5N1 strain. This ban still is in place.

To date, Asian H5N1 has only infected 251 people worldwide, and has not been detected in the U.S.

**Q: What is happening with Asian H5N1 that has been reported in Africa, Asia, Europe, and the Near East?**

**A:** Outbreaks of Asian H5N1 occurred among poultry in Asian countries (Cambodia, China, Indonesia, Japan, Laos, South Korea, Thailand, and Vietnam) during late 2003 and early 2004. At that time, more than 100 million birds in the affected countries either died from the disease or were killed to control outbreaks. By March 2004, the outbreak was reported to be under control.

Beginning in June 2004, however, new outbreaks of influenza H5N1 among poultry and wild birds were reported in Asia. Since that time, the virus has spread geographically. Reports of Asian H5N1 infection in wild birds in Europe began in mid-2005.

In early 2006, Asian H5N influenza infections in wild birds and poultry were reported in Africa and the Near East.

Human cases of Asian H5N1 infection have been reported in Azerbaijan, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Thailand, Turkey, and Vietnam.

To track avian influenza worldwide, see the World Health Organization Avian Influenza website:  
[http://www.who.int/csr/disease/avian\\_influenza/en](http://www.who.int/csr/disease/avian_influenza/en)

**Q: Is it risky to import pet birds from countries with Asian H5N1 Influenza?**

**A:** The U.S. government has determined that there is a risk to importing pet birds from countries experiencing outbreaks of Asian H5N1 influenza. CDC and USDA have both taken action to ban the importation of birds from areas with cases of H5N1. The ban applies to affected countries in Africa, Asia, and Europe. The regulation states that no person may import or attempt to import any birds, whether dead or alive, or any products derived from birds (including hatching eggs), from the specified countries.

**Q: Should I avoid traveling to places with known H5N1 outbreaks?**

**A:** The CDC does not recommend any travel restrictions to affected countries at this time. However, CDC currently advises that travelers to countries with known outbreaks of H5N1 influenza avoid poultry farms, contact with animals in live food markets, and any surfaces that appear to be contaminated with feces from poultry or other animals.

**Q: Could H5N1 or another avian influenza virus cause a pandemic?**

**A:** Three conditions must be met for a pandemic to start:

- 1) a new flu virus must emerge for which there is little or no human immunity;
- 2) it must be able to infect humans and cause illness; and
- 3) it must be able to spread easily among humans, and keep spreading without interruption.

The H5N1 virus in Asia and Europe meets the first two conditions: it is a new virus for humans and it has infected more than 250 humans, killing over half of them.

However the third condition, the ability to spread easily and keep spreading among humans, has not occurred. For this to take place, the Asian H5N1 virus would need to adapt and change to move easily from person to person.

**Q: Can a person become infected with Asian H5N1 virus by cleaning a bird feeder?**

**A:** There is no evidence of Asian H5N1 causing disease in birds or people in the United States. At the present time, there is no risk of becoming infected with Asian H5N1 virus from bird feeders.

Generally, perching birds (Passeriformes) are the types of birds found at backyard bird feeders. While there are documented cases of Asian H5N1 killing some perching birds such as sparrows and finches in both free-ranging and experimental settings, none occurred in the U.S. Most of the wild birds traditionally associated with avian influenza viruses are waterfowl and shore birds.

## **5 Surveillance and monitoring**

### **WSDA surveillance and monitoring program**

By state law, the Director of Agriculture's responsibility is to "supervise the prevention of the spread and the suppression of infectious, contagious, communicable and dangerous diseases affecting animals within, transit through, and imported into the state."

Within this authority is the ability to conduct testing and diagnostic procedures, to limit animal movement, and to control and stop foreign and emergency diseases.

To protect the health of the state's poultry flocks from all types of avian diseases, WSDA has established a disease surveillance, testing and response program.

WSDA veterinarians and technicians are looking for contagious avian diseases at:

- Backyard flocks near wild bird habitat
- Small egg and fryer operations
- Poultry processing plants
- Upland game bird breeders
- Fairs, exhibits and shows
- Auctions and swap meets
- Farmers markets selling eggs

Large commercial poultry producers (more than 75,000 birds) have existing testing programs conducted by their private veterinarians.

### **Premises registration for emergency calls**

A "premises" is an identifiable physical location where activity affecting the health of animals may occur. WSDA began voluntary premises registration in January 2005.

The ability to act quickly is the key to containing viruses such as HPAI. When bird owners give their location and phone number to WSDA, they are potentially saving thousands of farms and flocks from quick-spreading viruses.

For example, in 2004 HPAI was confirmed on a farm in British Columbia just a few hundred yards from the Washington border. WSDA staff spent three months going door-to-door, surveying thousands of households near the infection site to see if people owned birds, and if the birds were getting sick. Fortunately, the virus did not come into our state but it took over 90 days to make sure.

Quick action is the key to containing highly pathogenic diseases like Asian H5N1 influenza

## **How bird owners can register with WSDA**

To register a premises, WSDA needs the business name, the name of the location, an address or legal description, contact information (names, phone numbers) for use in an emergency, type of operation, and types of animals.

A unique premises number is permanently assigned to a location. A premises number may be requested by the landowner, the producer using the land, or the person responsible for managing operations.

Producers and business operators are responsible for keeping the contact information up to date. Registering online allows you to see or update your information at any time.

To register or update your account, go to:

[http://agr.wa.gov/FoodAnimal/Animal\\_Premise/default.htm](http://agr.wa.gov/FoodAnimal/Animal_Premise/default.htm)

## **National Animal Identification System (NAIS)**

The National Animal Identification System (NAIS) is a federal program to identify animals and track them as they move from their place of origin and mingle with other animals.

The system is being developed for all species that would benefit from rapid trace backs in the event of a disease concern: cattle, swine, sheep, goats, horses, poultry, bison, deer, elk, llamas, and alpacas.

Many of these species can be tracked through existing ID systems, but these systems are not consistent between states. This makes tracing an animal's movements time-consuming during a disease outbreak, especially if the animal has moved across state lines.

The sooner animal health officials can identify infected and exposed animals the sooner they can contain the disease and stop its spread.

The NAIS will eventually be used in all states to trace a sick animal or group of animals back to the likely infection source. It will also trace potentially exposed animals as they move.

The goal of NAIS is to identify all premises and animals that have had contact with a disease within 48 hours of discovery.

## **6 If HPAI is suspected in your area**

### **What to expect**

A foreign animal disease diagnostician (FADD), a specially trained veterinarian from USDA or WSDA, will visit the suspect farm and collect samples to confirm a diagnosis.

Samples are sent to the National Veterinary Services Laboratory (NVSL) or the Washington Animal Disease Diagnostic Laboratory (WADDL) for confirmation

The FADD, in consultation with state and federal veterinarians, will determine the next steps to take. The WSDA must have evidence of disease to take regulatory action, so the plan for individual farms will depend on what lab results reveal, and the type of production involved.

### ***Premises may be labeled***

- Infected premise: one where a disease has been isolated.
- Dangerous contact premise: one associated with an infected premise by being adjacent to it, or traced to it by exposed animals, people or equipment.
- Restricted premise: an infected premise which has been cleaned, or a dangerous contact premise 30 days after the contact.

### ***Restrictions could include***

1. Seven day hold order: a restriction of animal movement for a single premise for seven days before movement can resume. This is used while waiting for test results
2. Quarantine: a restriction on movement of animals and people involving one or more premises. It must be actively lifted before movement can resume.

### **Preparing for an outbreak: questions to ask**

- How am I going to take care of my animals during an outbreak?
- How will I get my products to market during an outbreak?
- How will my employees and families get on and off the property during an outbreak?
- How will I protect my family and employees if the outbreak is a disease that can harm them?
- What can I do to protect my business?

## **Disposal**

If there is an outbreak of a highly pathogenic disease among Washington's poultry, the State Veterinarian or the state's emergency poultry disease team may be required to euthanize flocks.

Disposing of dead animals, debris from the poultry house, and manure is vital to preventing further spread of disease. WSDA will use the proper disposal method for a given site, based on clean air and water regulations, and what is allowed by local health authorities. Disposal methods could include composting, burial, land filling, incineration or rendering.

## Sample investigation history form

This form is provided to show the types of questions WSDA will ask if there is a foreign animal disease outbreak.

### Owner information:

Name: \_\_\_\_\_ Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone numbers: \_\_\_\_\_

Circle which livestock species are on the premise:

Beef Dairy Swine Sheep Goats Poultry Other:

Circle how many rats and/or mice are on the premise:

None Few Moderate Plentiful

Total number of animals on premise: \_\_\_\_\_

For the following questions, circle the appropriate response

Have any domestic livestock (ruminants or swine) on the premises been sick in the last month? Y N

Have any domestic livestock (ruminants or swine) moved onto the premises in the last 90 days? Y N

Do farm employees live on other farms or have contact with other livestock? Y N

Are any family members or employees employed off the farm? Y N

Have any family members or employees visited a foreign country in the last 90 days? Y N  
 If yes, which countries and what food? \_\_\_\_\_

Have any family members or employees received food from a foreign country in the last 90 days? Y N  
 If yes, which countries and what foods? \_\_\_\_\_

Are wildlife, especially feral swine, deer elk or birds (domestic or wild) on the premises? Y N

Are the premises located near a zoo or fair? Y N

Are there any pets on the premises? Y N

Is household refuse or garbage fed to domestic livestock (ruminants or swine)? Y N

If yes, how is it processed? \_\_\_\_\_

***Sample investigation history form, continued***

Are there any garbage or refuse dumps near the premise?	Y	N
Has manure been applied to fields on the premise in the last 180 days?	Y	N
Is there any active vector (i.e. fly) control on the premise?	Y	N
Have any other animal conditions or diseases been treated on the premise in the last 90 days?	Y	N

## 7 Keeping domestic birds healthy

### What is backyard biosecurity?

As a bird owner, keeping your birds healthy is a top priority. Biosecurity means doing everything you can to protect your birds from disease. Your birds can become sick or die from exposure to just a few unseen bacteria, viruses, or parasites. In a single day, these germs can multiply and infect all your birds. But by creating and using a biosecurity plan, you can keep your birds safe from these threats.

Biosecurity plain and simple: don't bring germs to your birds, and don't bring your birds to germs.

In simple terms, biosecurity is informed common sense. Don't bring germs to your birds and don't bring your birds to germs. Germs are persistent, invisible killers that can survive in soil, droppings, and debris waiting to hitch a ride into your backyard and into your flock.

Biosecurity practices don't have to be cumbersome or expensive. In fact, a small tub, a gallon of bleach or disinfectant, and a brush will go a long way toward protecting your birds from outside disease. Your property needs to be a safe area and biosecurity practices are the barriers you can use to keep disease out.

### 6 ways to prevent poultry disease

#### **1. Keep your distance.**

Restrict access to your property and your birds. Consider fencing off the area where your birds are to form a barrier between "clean" and "dirty" areas. The clean area is the immediate area surrounding your birds, and the dirty or buffer area must be considered to be infected with germs, even if the birds appear healthy and disease free.

Allow only people who take care of your birds to come into contact with them. Your caretakers should not attend bird shows or other events where birds are present. If visitors to your property want to see your birds, be sure they wash their hands first and clean their shoes. Better yet, keep clean boots for visitors to wear. If your visitors have birds of their own, do not let them near your birds at all.

Game birds and migratory waterfowl should not have contact with your flock because they can carry germs and diseases. If your birds are outdoors, try to keep them in a screened area.

## ***2. Keep it clean.***

You wouldn't think of tracking dirt and disease into your house, where it could infect your family. Don't do that to your birds either! Germs can be picked up on shoes and clothing and moved from one area to another.

To protect your birds, keep a pair of shoes and a set of clothes to wear only around them. Many people keep these clean clothes in a covered pail at the entrance to their bird area. Or, clean and disinfect your shoes and launder your clothes before you work with your birds.

Scrubbing your shoes with a long-handled scrub brush and disinfectant (see section below on disinfectants) will remove droppings, mud, or debris. Clothes should be washed in a washing machine with laundry detergent.

Wash your hands thoroughly with soap, water, and a disinfectant before entering your bird area.

Keep cages, food, and water clean on a daily basis. Clean and disinfect equipment that comes in contact with your birds or their droppings. That includes tools such as feed scoops, shovels, rakes, and brooms. All manure must be removed before disinfectant can work, so clean surfaces with soap and water first.

## ***3. Don't haul disease home.***

Car and truck tires, poultry cages, and equipment can all harbor germs. If you travel to a location where other birds are present, or even to the feed store, be sure to clean and disinfect these items before you return to your property.

Taking some of your birds to a fair or exhibition? Keep those birds separated from the rest of your flock and watch them for at least two weeks after the event to ensure that they didn't pick up a disease.

New birds should be kept separate from your flock for at least 30 days before putting them with the rest of your birds. To prevent disease, it is best not to mix young and old birds, or birds from different species or different sources.

## ***4. Don't borrow disease from your neighbor.***

Do not share birds, lawn and garden equipment, tools, or poultry supplies with your neighbors or other bird owners. If you do bring these items home, clean and disinfect them before they reach your property. And remember to clean and disinfect borrowed items before returning them. Never share items such as wooden pallets or cardboard egg cartons because they are porous and cannot be adequately cleaned and disinfected.

### **5. Know the warning signs of infectious bird diseases.**

Many bird diseases can be difficult to diagnose. The list below includes some of the things to look for that signal something might be wrong with your birds. Early detection is very important to prevent the spread of disease.

- Sudden death
- Diarrhea
- Decreased or complete loss of egg production; soft-shelled, misshapen eggs
- Sneezing, gasping for air, nasal discharge, coughing
- Lack of energy and appetite
- Swelling of tissues around eyes and in neck
- Purple discoloration of the wattles, combs, and legs
- Depression, muscular tremors, drooping wings, twisting of head and neck, incoordination, complete paralysis

### **6. Report sick birds.**

Do not wait to report unusual signs of disease or unexpected deaths among your birds. Call your agricultural extension agent, local veterinarian, the State Veterinarian, or U.S. Department of Agriculture (USDA) Veterinary Services office.

USDA operates a toll-free hotline (1-866-536-7593) with veterinarians to help you. USDA wants to test sick birds to make sure they do not have a serious poultry disease.

Early reporting is important to protecting the health of your birds!

### **Biosecurity steps for Highly Pathogenic Avian Influenza**

If there is an outbreak of HPAI in Washington, WSDA will provide specific instructions to farms with infected animals.

Best practices for highly pathogenic disease outbreaks, such as Asian H5N1, include:

- Avoid driving vehicles into or through animal production sites.
- If driving through a production area is necessary, clean any organic debris from tires and wheel wells, and disinfect tires prior to leaving premises.
- If possible, avoid livestock areas, pens, barns, etc.
- Remove as many dead insects from your vehicle as possible.
- Clean hands before entering and leaving premises.
- Wear clean rubber boots or new disposable boot covers upon exiting vehicle. Disposable boots should be worn only in activities where it is possible to damage the boots and compromise biosecurity.
- Wear clothing free of organic debris or freshly laundered clothing (coveralls are preferred).

There is no charge for  
USDA or WSDA  
veterinarians to work with  
you on disease  
investigation or  
biosecurity planning.

- Removed soiled clothing before entering vehicle and place in a plastic bag.
- Clean and disinfect any reusable equipment such as rubber boots with a brush and USDA approved disinfectant. (See list below)
- If wearing disposable boots or clothing, place in a plastic bag before disposing in a place that prevents exposure to livestock.
- Designate separate “clean” and “dirty” areas in your vehicle to store clothing, disposables in plastic bags, and equipment.
- At the end of the day, launder all clothing in water that is 160 degrees Fahrenheit, and shower making sure to shampoo hair and clean under fingernails.

### **How to disinfect**

Cleaning and disinfecting is one of the most important steps you can take in practicing backyard biosecurity. Below are some examples of disinfectants available on the market. Follow the directions on the label carefully for the best results.

Thoroughly clean and scrub objects before applying disinfectants. Disinfectants cannot work on top of caked-on dirt and manure, so thoroughly wash surfaces before disinfecting.

Apply disinfectants using brushes, sponges and spray units. Allow adequate contact time (follow manufacturer’s instructions.)

Dispose of used disinfectant according to local regulations.

### **Examples of disinfectants**

- Roccal ®: mix with water according to label recommendations
- Nolvasan® (chlorhexidine diacetate 2 percent): mix 3 fluid oz of Nolvasan per gallon of water.
- Household bleach (sodium hypochlorite 6 percent): mix with water according to label recommendations
- Lysol ® spray for footwear
- Purell® hand pump for hand disinfection

## **8 Keeping people healthy**

The H5N1 avian influenza virus currently in Southeast Asia and Eastern Europe may be spread to people who directly handle infected birds or bird waste, but currently can't be spread easily from person to person.

However, flu viruses change, and this virus could change in a way that makes it possible for people to pass it to each other. If that happens and people in many countries get sick, the virus becomes a pandemic flu strain.

### **Why worry about a virus that infects birds?**

The strain of avian flu causing the outbreak in Asian and Eastern European birds is of concern for several reasons:

- This flu strain can spread from birds to people, and when it does, it can cause very serious human illness and even death. So far, the virus does not appear to spread easily from person to person.
- Whenever a bird flu strain infects people, there is a chance that the virus could change to a brand new flu virus that spreads easily from person to person. Because these viruses do not commonly infect people, we currently have little or no immune protection against them.
- Infections with new human flu strains can't be prevented by the flu vaccine that people get each year, so no one will be immune to the virus. Making a safe vaccine that can prevent infection with a new human virus can take months.
- Because this type of new virus couldn't be easily controlled, it could spread rapidly around the world and cause a pandemic. However, experts from around the world are watching the H5N1 situation in Asia and Europe very closely and are preparing for the possibility that the virus may begin to spread.
- There currently is no commercially available vaccine to protect humans against the H5N1 virus that is being detected in Asia and Europe. However, vaccine development efforts are taking place.

### **Food handling**

Recent studies have shown that the cooking methods that are already recommended by the U.S. Department of Agriculture (USDA) and the Food and Drug Administration (FDA) for poultry and eggs to prevent other infections will destroy influenza viruses as well.

So to stay safe, the advice is the same for protecting against any infection from poultry:

- Wash your hands with soap and warm water for at least 20 seconds before and after handling raw poultry and eggs.
- Clean cutting boards and other utensils with soap and hot water to keep raw poultry from contaminating other foods.
- Use a food thermometer to make sure you cook poultry to a temperature of at least 165 degrees Fahrenheit. Consumers may wish to cook poultry to a higher temperature for personal preference.
- Cook eggs until whites and yolks are firm.

### **Stop spreading germs**

The flu shot available each year only protects you from that season's flu. Still, the Washington State Department of Health recommends a seasonal flu shot as part of a personal health plan, and encourages everyone to stop the spread of germs with simple habits:

Washing your hands frequently with soap and warm water is one of the best ways to prevent getting and spreading viruses.

- Cover your nose and mouth with a tissue when sneezing, coughing or blowing your nose.
- Throw out used tissues in the trash as soon as you can.
- Use warm water and soap or alcohol-based hand sanitizers to wash your hands.
- Always wash your hands after sneezing, blowing your nose, or coughing, or after touching used tissues or handkerchiefs. Wash hands often if you are sick.
- Wash your hands before eating, or touching your eyes, nose or mouth.
- Wash your hands after touching anyone else who is sneezing, coughing, blowing their nose, or whose nose is running.
- Don't share things like food, beverage containers, cigarettes, towels, lipstick, toys, or anything else that might be contaminated with respiratory germs.
- Try to stay home if you have a cough and fever.
- See your doctor as soon as you can if you have a cough and fever, and follow their instructions, including taking medicine as prescribed and getting lots of rest.
- If asked to, use face masks provided in your doctor's office or clinic's waiting room; follow their instructions to help stop the spread of germs.

## **9 Wild birds and other animals**

### **Wild birds**

Wild birds are known to carry various strains of avian influenza, often without serious health effects. The Asian H5N1 influenza virus has not been found in North American wild birds, although surveillance testing for the virus is under way nationwide.

As a standard safety precaution for protection from diseases carried by wildlife, people should not handle dead wild birds or transport them. Most dead bird reports can be submitted by calling the Washington Department of Fish and Wildlife's toll-free line at 1-800-606-8768.

The exceptions are dead crows, ravens, magpies and jays, which should be reported to local city or county health departments that are tracking those species for potential West Nile virus cases.

Reports will be reviewed by state wildlife experts, who will respond as needed. Recently deceased shorebirds and waterfowl, such as ducks, geese and swans, are the birds most likely to be tested.

### **Pet bird care**

There are a few precautions that families should take with pet birds:

- Keep all pet birds inside to avoid exposure to wild or migratory birds.
- Always wash your hands after handling birds or having contact with bird waste.
- If you are buying a new pet bird—especially an exotic type—be sure it was born and raised locally. It is illegal to import birds from regions that are infected with avian flu because these birds can be a source of introducing avian flu to a new area.

### **HPAI in cats, dogs, and other species**

We know that pigs, tigers, leopards, ferrets, and domestic cats can be infected with Asian H5N1 bird flu viruses.

In addition, in early March 2006, Germany reported Asian H5N1 infection in a stone marten (a weasel-like mammal).

All of the cases Asian H5N1 infection in domestic cats reported to date have been associated with H5N1 outbreaks among domestic poultry or wild birds and are thought to be caused by the cat eating raw, infected birds.

There is no evidence to date that cats can spread H5N1 to humans. No cases of avian influenza in humans have been linked to exposure to sick cats, and no outbreaks among populations of cats have been reported.

While dogs are not usually susceptible to avian influenza viruses, international health officials do not have enough studies to tell whether or not dogs could be infected.

80 percent of farmers responding to a 2002 Internet survey said they expect some form of agroterrorism in the US

## 10 Farm security planning

Even before the Oklahoma City bombing on April 19, 1995, and the September 11, 2001, terrorist attack on the World Trade Center, many farmers had concerns about biosecurity and agroterrorism.

Security is becoming an important issue for farmers. Even though the risk of an attack on your farm is minimal, you should at least consider your vulnerability to criminal acts such as the following:

- Theft of anhydrous ammonia for methamphetamine production
- Theft of farm equipment or chemicals
- Arson, poisoning of your well, or the deliberate opening of a valve on a chemical tank
- Criminal mischief involving unsecured equipment and machinery
- Destruction of confined animals, property, or products
- Destruction of bioengineered plants
- Intentional introduction or release of a contagious animal or plant disease
- General vandalism

### Prioritize assets and security

Minimum farm security is a must, and your first step should be to determine and understand the real threat to your property.

Ask yourself, what needs to be protected? Then consider the Three Ls: Lock, Light, and Limit access—in that sequence. Don't make the mistake of installing a protection system and implementing security measures without identifying what is most at risk – doing so could prove costly, ineffective, or inadequate.

What processes and operations are essential to the survival of your farm? That is, what are your critical assets? What would be the consequences of losing them? Prioritize your critical assets and your application of security measures to protect them.

*Strategies: deterrence, detection, delay*

An effective physical protection system is based on three basic principles: deterrence, detection, and delay.

*Deterrence:* Lighting a dark area may deter the would-be intruder who is simply not bold enough to risk being seen. Motion-activated lighting provides an element of surprise and can catch a perpetrator off guard. Other deterrence strategies include the installation of gates, fences, and no-trespassing signs.

*Detection:* The purpose of a detection system is to alert you when someone enters your property. Devices such as electronic

It doesn't have to cost anything to change your procedures, behaviors, and the kinds of information you share about your farm

sensors and cameras can be very effective. And, visual surveillance by employees and neighbors providing heads-up observation and awareness are hard to beat.

*Delay:* Delay strategies are meant to slow and disrupt the perpetrator's attempt to access your property. Physical barriers such as locks, fences, doors, and distance from the road are effective in delaying the intruder, but it is important not to hinder access for emergency responders or routes for evacuation. Effective delay tactics allow enough time—between detection and access—for law enforcement officials to respond and catch the intrusion in progress.

#### *Relative cost of security measures*

Operational security—changing procedures, behaviors and information-sharing— doesn't have to cost a thing. If you don't have a security plan in place, start by gearing day-to-day business procedures toward protecting your assets.

Educate your employees and family members to always be aware of their surroundings and what is going on around them. Alert them to assets that an intruder might want to damage, destroy, or steal. Make security a part of everyone's job.

Electronic security systems—alarms, access controls, video surveillance, and motion sensors—can be expensive, but the cost is justified by the protection they provide.

Physical security barriers such as fences, gates, locks, and security doors are relatively inexpensive by comparison, and they, too, are worth the investment.

### **Protecting information and counter-intelligence measures**

- Protect sensitive business information.
- Do not put your name on the mailbox.
- Place some lights and televisions on timers.
- Inform local law enforcement agencies when you will be away for an extended time.
- Notify a trusted neighbor of a planned extended absence, and leave a phone number and an address where you can be contacted.
- Do not discuss or advertise what you grow.
- Do not buy chemicals, fertilizers, equipment, or livestock at reduced prices from people you don't know.

## Physical protection procedures

Conduct an inventory of important assets and review your inventory regularly. For valuable items without serial numbers—or with numbers that are easily defaced—add an identifying mark of your own in a discrete location. Photograph the mark and give it to your insurance carrier; keep duplicate copies with your own records.

You or a designated, responsible employee should always be present when deliveries are made to your farm.

In coordination with emergency responders, develop and participate in realistic security training exercises. Develop and enact exercises that test the ability of your physical protection system to deter, detect, and delay a simulated intrusion.

### *Other measures:*

- Post “No Trespassing” signs along property lines and maintain them.
- Post signs announcing the presence of alarms, detectors, or surveillance devices.
- Lock or remove valves on pesticide or fuel tanks when not in use.
- Store important papers in locked, fireproof cabinets—but remember that fire-insulated cabinets designed to store paper records do not provide protection for computer discs.
- Conduct background checks on all employees.
- Establish a check-in point for all farm deliveries.
- Designate a vehicle parking area and an access area for outside contractors.
- Establish checklist procedures to ensure that access and authorization are terminated for employees who leave your employment.
- Collect keys, credit cards, identification cards, and other means of access to your assets.
- Change your Personal Identification Numbers (PINs) if necessary.
- Change passwords or codes on alarm systems, locks, keys etc.
- If an employee is fired or quits without notice, notify the employee in writing, via mail, that he or she cannot enter your property without your prior authorization or an appointment.
- Move valuable equipment into a locked building at night or when not in use.

- Don't leave any equipment accessible to intruders for use to accomplish their mission: a forklift, a front-end loader, a crane, wrenches, etc.
- Do not leave pesticides and farm equipment unattended along roads and highways.

#### *Lock and key control procedures*

Most farms depend on lock and key systems for access control, but the effectiveness of locks is dependent upon key control. Without effective key control, locks are useless.

- Keep a record of all locks and keys stating how many keys there are and who has the keys.
- Require employees to sign for keys, and inventory all keys periodically.
- Keep control records and spare keys locked in a safe or another secure location.
- Do not hide keys.
- Issue keys to employees only as needed.
- Avoid or limit the use of master keys.
- Use high-security locks that are pick-resistant, with keys embossed by the manufacturer with the words "Do Not Duplicate."
- Valuable items should be secured with a lock and a built-in, programmable keypad.
- High security padlocks should have case-hardened steel shanks, and they should be tamper-resistant.
- Cables are not high-security. They do not protect. They merely help ensure the integrity of the lock or locked access.
- Use the same brand-name lock throughout your lock system to make detection of unauthorized locks more apparent.
- Periodically inspect padlocks to ensure that replacement locks have not been introduced, and look for signs of tampering.
- Do not leave keys in unattended vehicles parked outside overnight or for extended periods.

#### *Electronic security: alarms, access control, video surveillance*

If recommended by a credible security assessment, install electronic devices to improve detection, delay, and response. Electronic systems and devices for farmsteads include the following:

Switches activated by the opening of doors, gates, lids, etc.; motion sensors that light an area when movement is detected; video recorders that are activated by motion; and electronic access controls.

Electronic card access controls, rather than keyed locks, should be used to restrict access where valuable assets are stored. An important feature of electronic access is computerized control. This allows you to select and assign access levels and times when cardholders' cards can be used.

Video surveillance systems consist of cameras, monitors, and recorders. Video is most effective if you can integrate it with intrusion detection devices such as motion sensors.

Alarms can be monitored at the farm or at approved, off-site alarm monitoring stations. In addition to signaling a monitoring station and perhaps your computer, an activated alarm might trigger lights and sirens or place an automatic call to your cell phone.

### **Reporting security events to authorities**

Crimes do occur, and your goal and focus should be on preventing them. The following recommendations involve your actions relative to suspicious activities, crimes, and crime scenes:

- Keep employees up-to-date on any increased criminal activity within the community and in surrounding areas, and instruct them to report suspicious people or occurrences to you immediately. Notify them when you are expecting suppliers or visitors to the farm.
- Keep a record of all observations and reports of suspicious activities.
- Walk around buildings and along fence lines to look for signs of trespassing and unusual activity.

When reporting a crime or suspicious activity to the police, report **WHAT** you saw, **WHO** you saw (description of persons involved), **WHEN** (date and time) you saw it, **WHERE** you saw it, and **HOW** the perpetrators might have accessed the area.

After you contact the police, call your insurance representative to report any damage or loss resulting from the incident. Photograph damage to your property and take steps to prevent further loss.

## 11 Reporting: who to contact

An outbreak of a bird disease such as HPAI could not only harm your birds, it could quickly spread and kill other flocks nearby.

Early detection makes a difference. If your birds are sick or dying, call the state veterinarian's office, the U.S. Department of Agriculture or your local veterinarian.

Early detection makes a difference! Call right away if you have sick or dying birds

People who see more than one dead wild bird should contact the Washington Department of Fish & Wildlife.

Don't be afraid of "crying wolf." State and federal veterinarians want to hear about sick and dying birds.

There is no charge for USDA veterinarians to work with you to conduct a disease investigation.

***Don't wait!*** Call if you see these warning signs in birds:

- Diarrhea
- Decreased or complete loss of egg production; soft-shelled, misshapen eggs
- Sneezing, gasping for air, nasal discharge, coughing
- Lack of energy and appetite
- Swelling of tissues around eyes and in neck
- Purple discoloration of the wattles, combs, and legs
- Depression, muscular tremors, drooping wings, twisting of head and neck, incoordination, complete paralysis

### Hotline numbers

Washington State Department of Agriculture (WSDA)

Avian Health Hotline

**1-800-606-3056**

U.S. Department of Agriculture (USDA)

Veterinary Services toll-free reporting line

**1-866-536-7593**

Washington State Department of Fish & Wildlife

Report dead wild birds toll-free

**1-800-606-8768**