

# **Avian Influenza and Pandemic Flu Frequently Asked Questions**

## **NH Department of Health and Human Services – 7-12-06**

### ***GENERAL INFORMATION***

#### **1. What is avian influenza?**

Avian influenza (aka avian flu) is a virus that infects wild birds, such as ducks and geese, and domesticated birds, such as chickens and turkeys. There are strains of avian flu that infect birds every year in the U.S. and around the world. Most of these strains can kill birds but do not infect people.

#### **2. Why is it called avian flu?**

Avian comes from the Latin word meaning bird, and avian flu is most commonly an illness found in birds

#### **3. What is H5N1 avian flu?**

H5N1 is a type of avian flu that is currently circulating among wild and domestic birds in other parts of the world. It has a high mortality (death) rate in some birds and it is unusual because it has also infected people in rare circumstances

#### **4. What is a pandemic?**

A pandemic is an outbreak of a contagious disease that circles the globe and affects many people.

#### **5. Is H5N1 avian flu going to start a pandemic?**

Scientists cannot predict whether an avian influenza (H5N1) virus will cause a pandemic. Today, H5N1 is a bird flu. There are no reported cases of sustained human-to-human passage of H5N1. However, as the virus changes, it is possible for it to become capable of passing human to human and then spread very quickly. That is why New Hampshire and the country are focusing on comprehensive public health efforts, such as increasing surveillance, monitoring for outbreaks, international cooperation, increasing antiviral stockpiles, and building more robust capacity for vaccine production, that will help protect us no matter what pandemic strain emerges or where.

#### **6. When will H5N1 avian flu get to the U.S.?**

Nobody knows if or when the H5N1 version of avian flu will get to the U.S. or New Hampshire. It is important to remember that less dangerous strains of avian flu viruses are present in the U.S. and around the world all the time. If and when H5N1 avian flu comes to the U.S., the federal government and the NH DHHS will let citizens know and will provide guidelines on what they should be doing.

### **7. How does pandemic flu differ from seasonal flu?**

Almost everyone has some immunity to seasonal flu, but virtually no one has immunity to a pandemic strain. A pandemic flu will likely make more people much sicker than the seasonal flu. Symptoms of seasonal flu include fever, cough, sore throat, runny nose, and muscle pain. These symptoms may be much more severe, and complications such as pneumonia, may be much more common with pandemic flu.

### **8. Can mosquitoes spread the avian H5N1 virus?**

Mosquitoes have not been shown to spread any kind of influenza virus. It is not likely that the H5N1 virus could be carried by a mosquito ingesting blood from an infected animal, as in the transmission of some other diseases.

### **9. What are isolation and quarantine?**

Isolation is the separating of individuals who are sick with a communicable disease from the rest of the population. Quarantine is the separation of individuals who may have been exposed to a communicable disease but who are not yet ill from the rest of the population. Public health officials to help prevent the spread of disease, going back to the days of smallpox and plague, have long used both of these practices.

## ***AVIAN FLU IN BIRDS AND OTHER ANIMALS***

### **10. What are the symptoms of avian flu in birds?**

Avian flu can cause a runny nose, coughing, soft-shelled or misshapen eggs, lack of coordination, lack of energy, and other symptoms.

### **11. Is there a way to prevent birds from becoming ill?**

Some countries have been using a vaccine made for domestic birds, such as chickens, but it is not known how effective this is. Some countries are attempting to keep domestic birds indoors all the time to prevent them from coming into contact with wild birds that may spread the disease.

### **12. How do birds get avian flu?**

Avian flu is found naturally in many wild birds and often does not make them ill. The virus is then spread by the bird in its saliva, urine, and feces to other birds, and occasionally to people. People can also spread the virus unintentionally if their shoes, hands, or clothes become contaminated.

### **13. Will infected birds get to the United States?**

It is certainly possible that migratory birds infected with H5N1 avian flu will reach the U.S. Many scientists believe it is migratory birds that have spread avian flu so rapidly. It is important that we are prepared for this possibility, even if it H5N1 avian flu never reaches the U.S.

**14. Is it safe to eat chicken and other fowl?**

Yes. As long as chicken, eggs, and all meat are handled appropriately they are safe to eat. All parts of the chicken (or other fowl) need to be fully cooked to a temperature of 165°F (with no “pink” parts) – this temperature will kill the H5N1 virus as well as other illnesses. Make sure eggs are fully cooked so that the yolks are not runny or liquid. Keep raw meat separate from cooked or ready-to-eat foods, such as lettuce or fruit. Do not use the same knife, utensils, or cutting board for raw meat and ready-to-eat foods. It is important to wash hands thoroughly with soap and warm water in between handling raw and ready-to-eat foods, thoroughly clean all surfaces and utensils that have been in contact with raw meat and eggs before using them again, and wash cutting boards with hot, soapy water, then sanitize with a solution of 1 teaspoon of chlorine bleach mixed into 1 quart of water. These are normal precautions that you should follow even in the absence of a pandemic.

**15. Can other animals besides birds get avian flu?**

There have been some cases of other types of animals contracting avian flu besides birds, including cats, ferrets and pigs.

**16. How do I protect my cats or dogs?**

While there have been some cases of house cats contracting H5N1 avian flu, this appears to be because they ate infected birds. Since there is no H5N1 avian flu in the U.S., it is not a risk at this time. Should avian flu arrive in birds in the U.S., it would be a good idea to keep house cats inside. There is no evidence that cats sick with avian influenza can spread the disease to people. There have been no recorded cases of avian flu in dogs.

**17. Are my pet birds safe from avian flu?**

A pet bird that stays inside all of the time is not likely to become infected or pose any threat. It is illegal to import pet birds into the U.S. from any regions that have experienced H5N1 avian flu.

**18. Is it safe to have a bird feeder in my backyard?**

There is no evidence of highly pathogenic H5N1 having caused disease in birds or people in the United States. At the present time, there is no risk of becoming infected with H5N1 virus from bird feeders. Generally, perching birds are the predominate type of birds at feeders. While there are documented cases of H5N1 causing death in some perching birds, none occurred in the U.S. and most of the wild birds that are traditionally associated with avian influenza viruses are waterfowl and shore birds. Hand washing and recommended handling practices will also help to reduce the risk associated with potentially contaminated birds or materials.

**19. Should I keep my children away from birds and chickens?**

Since there is no H5N1 avian flu in the U.S. at this time, there is no danger from birds. It is always a good idea, however, for anyone handling healthy domestic birds to wash their hands thoroughly afterward. People should avoid handling wild birds or dead or

sick birds. If handling is necessary, wear rubber or latex gloves or use plastic bags. Wash hands thoroughly afterward.

**20. What should I do about bird droppings?**

Avoid direct contact with bird droppings. If you touch bird droppings, you should immediately wash your hands or the affected area with soap and warm water. If you cannot avoid contact with bird droppings, take special precautions such as wearing a mask on your nose and mouth, wearing gloves on your hands, then discarding the gloves, washing your hands, and laundering your clothes afterwards.

**21. What should I do if I find a dead bird?**

You should put on gloves and place the dead bird in two plastic bags sealed tightly. Then call your local animal control officer or health officer at your town office, who will tell you what to do from there.

**22. Is it safe to swim in lakes where wild birds feed and nest?**

While there is limited information on this, and there are as yet no infected wild birds in New Hampshire, several studies show that the amount of virus from wild birds in a body of water would be too small to cause harm. However, it is important not to touch bird droppings and it is always a good idea to take a bath after swimming in rivers, lakes, and ponds to avoid any illness.

**23. Is it safe to go to fairs and other events where there are large numbers of birds?**

Yes. In New Hampshire, fairs require bird owners to be NPIP (national poultry improvement plan) certified to participate, which means that the flocks have been found free of low-pathogenic avian influenza and Salmonella pullorum during that year. At this time there is no H5N1 in the United States in birds or people, so that is not a risk.

**24. How will birds be culled in New Hampshire?**

Culling in New Hampshire, if it becomes necessary, will be in compliance with USDA and AVMA (American Veterinary Medical Association) standards. It will be a case-by-case decision. On a large scale, however, the most likely option is carbon dioxide infusion into the environment; this chemical has anesthetic properties in addition to acting as a euthanizing agent.

**25. Is it safe to use products made from bird feathers?**

There are no known cases of avian flu being spread to people by bird feather in items such as down comforters, coats, or pillows. To limit the possible risk of getting disease from feathers and other products derived from birds, the United States has banned the importation of birds and bird products from countries being affected by the H5N1 virus.

**26. If I see wild birds in my yard can I kill them?**

There is no reason related to disease control for anyone to kill wild birds. It is also prohibited in New Hampshire to kill wild birds without a permit through the NH Fish and Game Department.

**27. Is pet food that contains chicken or chicken products safe to give my pet?**

Yes. The H5N1 virus is killed by cooking at temperatures above 158°F (70°C). The high temperatures required to make commercial pet food eliminate the risk of infection in pets that eat these products. Pets, however, should never be fed raw or undercooked chicken or eggs.

## ***AVIAN FLU AND HUMANS***

**28. How do people get H5N1 avian flu?**

It is important to remember that while millions of birds have become infected with H5N1 avian flu, it is very difficult for people to become infected. To date, there have been only about 200 confirmed human cases worldwide. In order for people to get avian flu, they need very close contact with infected birds, such as raising, plucking, or slaughtering them without taking precautions, such as wearing a mask and gloves.

**29. Why do some people recover and some don't?**

No one knows for sure. Most people infected with H5N1 have been previously healthy young children and adults. Scientists are working to find the answers.

**30. What can I do to prevent becoming ill with avian flu?**

While there is currently no risk of someone becoming ill with avian flu in the U.S., there are some healthy habits that people should develop. For example, covering your mouth with a tissue when you cough or sneeze and then washing your hands may prevent transmitting many kinds of illnesses. Regularly washing your hands may prevent some disease, specially in situations such as after using the bathroom, after changing diapers, before eating or preparing any food, and whenever they are dirty or soiled. Regularly wash frequently touched surfaces such as keyboards, phones, doorknobs and elevator buttons. Do not share food, cups, or eating utensils. Eat a healthy diet including fruits and vegetables and get plenty of sleep.

**31. Is there a vaccine against H5N1 avian flu for people?**

Scientists are working on developing a vaccine against the current H5N1 flu strain, but availability of a safe and effective vaccine is at least a year away.

**32. Does the regular seasonal flu vaccine help against avian flu?**

The yearly flu vaccine that people receive beginning in October or November will not provide protection against avian flu, but it is important to be vaccinated every year for protection against seasonal flu, especially for people in high-risk groups. If a pandemic does occur, it will also be important to get seasonal flu vaccine because it will help doctors know better who has seasonal flu and who may have pandemic flu.

**33. Is there a cure for avian flu?**

There is no cure for avian flu or any form of influenza. The best medications available are called antivirals, of which there are several different types.

**34. How do doctors know if someone has avian flu?**

Doctors will look at clinical symptoms of the patient as well as to information about the spread of this disease around the world or in the United States; if it is found in this country, and based on those elements make a preliminary diagnosis. Doctors should immediately contact the DHHS if they are suspicious of avian flu in a person. While the DHHS Public Health Laboratories has the ability to run preliminary tests for H5N1 in people, definitive testing must at this time be done at the Centers for Disease Control and Prevention in Atlanta.

**35. Should I avoid going to countries that have outbreaks of avian flu?**

Travel to countries with avian flu outbreaks is not restricted at this time. However, contact with sick or dead poultry, as well as with poultry that have no apparent symptoms, should be avoided. Contact with surfaces that may have been contaminated by poultry feces or secretions should also be avoided. Uncooked poultry or poultry products, including blood, should not be consumed because of health risks, including potential exposure to H5N1 avian flu virus.

**36. Are “surgical” masks helpful in preventing the avian flu?**

“Surgical” masks, used along with cough hygiene (covering your mouth with a tissue when you cough or sneeze and then washing your hands), may help protect people from H5N1 avian flu once the virus can spread from person-to-person. It is not recommended that the public purchase other types of masks, such as N95 masks.

***PANDEMIC PREPAREDNESS***

**37. Is New Hampshire preparing for a possible flu pandemic?**

New Hampshire has had a state pandemic plan in place since 2001 and the plan was recently updated. The Department of Health and Human Services (DHHS) and the Department of Safety held a pandemic flu drill in November 2005 in coordination with hospitals and local communities. The DHHS Division of Public Health Services has been holding meetings with local public health officials, town officials, the public, faith-based groups, and partner agencies to begin planning for a pandemic in our State. The NH pandemic plan and other information can be found on the DHHS website at [www.dhhs.nh.gov](http://www.dhhs.nh.gov).

**38. How will a flu pandemic impact my community?**

Most people will be susceptible to a pandemic influenza virus, and local rates of illness could become high very quickly. Large numbers of people will likely seek medical care, temporarily overwhelming health care services. High rates of worker absence could also interrupt other essential services, such as transportation, food, fuel, and mail delivery, and communications.

**39. Will there still be electricity if there is a pandemic?**

It is hoped that all utilities will still be operating in a pandemic. However, these services may be impacted due to large numbers of people who are ill and cannot work or are unable to work because they are caring for dependents.

#### **40. How long will an influenza pandemic last?**

Influenza pandemics often come in two or more waves several months apart, and each wave can last 6 to 8 weeks in a particular location. It is difficult to predict how far apart the pandemic waves will be or how long a pandemic will last.

#### **41. What should I do to prepare?**

People should not only prepare for an eventual pandemic but also other emergencies that occur frequently, such as power failures, blizzards, floods, and ice storms. It is recommended that people have enough food and water on hand to last seven days in case they cannot leave their homes. It is also important to have extra medication, batteries, and paper goods on hand. The brochure developed by DHHS, "Seven Makes Sense," is a guide to how to prepare for an emergency. This guide can be found on the DHHS website at [www.avianflu.nh.gov](http://www.avianflu.nh.gov) (click on Public-Citizens then "Seven Makes Sense, a Guide to Disaster Planning").

#### **42. If there is not pandemic at this time, why is there all this discussion causing people to be worried and why should we prepare?**

Scientists and public health officials know that eventually there will be another flu pandemic. They are concerned the H5N1 virus could mutate and result in a pandemic. Therefore, it is important that everyone make preparations now to better handle it and to lessen the impact if and when it does occur. The NH Department of Health and Human Services' intent is certainly not to cause anxiety, but to calm people's concerns with information and to help them prepare ahead of time for this and other emergencies.

#### **43. Should I buy antivirals?**

It is not recommended that individuals try to keep a stockpile of antivirals at home. The effectiveness of different antivirals against H5N1 avian flu has not yet been fully determined. Antivirals do not last forever when stored and, as with other medications, should be taken under supervision of your healthcare provider. During a pandemic, treatment of those already infected may help stop the virus from spreading. The U.S. government is storing antivirals for this purpose.

#### **44. Towns are planning for distribution of medication for a pandemic, but what will the medication be?**

If there is a pandemic and if and when a vaccine becomes available, it will be distributed on the local level. Therefore, communities are working together throughout the State to plan for how to get thousands of doses to people as quickly as possible. There also may be effective antiviral medications that would need to be given to citizens. This preparation by communities may also be used to respond to emergencies other than a flu pandemic.

#### **45. Is the U.S. Government buying other medication besides vaccine?**

The U.S. Department of Health and Human Services is stockpiling enough antivirals to treat 25% of the U.S. population should a pandemic occur in the U.S. This figure is based on historical data from past pandemics indicating that roughly 25% of the population would get sick in a pandemic and might benefit from antiviral treatment if it

was given early in the course of illness. The U.S. government expects to have 26 million antiviral treatment courses by the end of 2006 and expects to have a total of 81 million courses by the end of 2008.

**46. How will public health officials recognize when a pandemic begins?**

Public health officials around the world are always looking for signs of a pandemic or other unusual illness through systems that have been in place for years. SARS was detected this way. There will be signs when a pandemic begins, such as large numbers of people in one area becoming ill.

**47. If there is a pandemic how many people will be affected?**

Pandemic strains of flu vary in their severity and there is no way to know exactly how many people will be affected. Estimates from other pandemics, however, are that approximately 30-40% of people will become ill and 1-2% of people will die.

**48. Will schools be closed during a pandemic?**

It is possible that in the early phase of a pandemic that a measure to contain the illness will be to close schools or cancel events like concerts or meetings. Those actions will be taken at the direction of the Governor and the Commissioner of Health and Human Services and would only be taken to protect the public's health.

**49. How will I know if a pandemic starts?**

H5N1 infection of people from contact with birds does not indicate that a pandemic is occurring. A pandemic will not occur until the virus is easily spread from person to person. The federal and state governments will let citizens know if a pandemic has started, and will provide guidelines on what they should be doing.

**50. Can a pandemic be prevented?**

No one knows for sure. The best way to prevent a pandemic caused by H5N1 would be to eliminate the virus in birds. However, despite concerted efforts on the part of many nations, it has become increasingly doubtful that this can be achieved within the near future.

**51. Is there a way to stop a pandemic once it starts?**

Recent studies based on statistical modeling suggest that antivirals could be used to possibly prevent illness in people exposed to the virus, thus preventing or at least delaying the international spread of the disease. This would provide additional time to increase vaccine supplies. The best way to stop a pandemic is with a vaccine, but once a pandemic begins, large quantities of vaccine will have to be made to specifically match the virus strain that is causing the pandemic. This process will take months.

**52. Should I buy masks for my family?**

It is a good idea to have "surgical" masks in a family emergency kit. These masks may be useful for many emergency situations, such as fires and diseases spread by particles in air. "Surgical" masks can be purchased at home improvement stores and on-line.