



This article was produced in collaboration with the Public Health Agency of Canada.

## AVIAN INFLUENZA (BIRD FLU)

For most Canadians, the risk of getting avian influenza (bird flu) is extremely low. However, it is important to know how to minimize your risks, especially if you are traveling to an area affected by avian flu.

### Background

Avian influenza is a viral infection that can spread easily and quickly among birds. There are at least 15 types of avian flu. They are all caused by various strains of type A influenza virus.

Birds spread avian flu virus to one another through secretions and droppings. Some species of wild birds, such as ducks, can carry the virus and infect other birds without getting sick themselves. Other bird species, including domestic poultry (e.g., chickens and turkeys), are more likely to become severely ill and die when infected.

Health officials around the world are keeping a close watch on a serious outbreak of avian flu that spread throughout a number of Asian countries in 2004. The outbreak was caused by a strain of avian influenza virus called H5N1, and it has affected millions of chickens and other birds. There have also been a small number of human cases of avian flu, and some of the people infected with H5N1 have died.

### How Avian Flu Spreads from Birds to People

It is important not to confuse human cases of avian influenza with cases of human influenza. Human influenza ("the flu") is a common respiratory disease that spreads easily and rapidly from person to person. Although different strains of avian flu virus circulate year-round among birds, the virus does not usually spread to people.

In rare instances, however, people do contract avian flu. The exact mode of transmission from birds to people is not known, but most human cases of avian flu have been traced to direct contact with live infected birds or their droppings. The scientific evidence to date shows that avian flu virus does not spread easily or rapidly from one person to another.

### The Human Health Effects of Avian Flu

Although human cases of avian flu are rare, people who become infected with the H5N1 virus can become seriously ill and may die. The symptoms can resemble those of human influenza, including fever, cough, aching muscles and a sore throat. The human health effects of avian flu can also include eye infections and serious respiratory infections, including pneumonia.

At this time, there is no vaccine to provide people with specific protection against avian flu. Studies suggest that certain anti-viral drugs designed to fight human influenza may also help prevent serious illness in people who become infected with the avian flu virus.

### Concerns about a Possible Influenza Pandemic related to Avian Flu

As noted earlier, the avian flu virus does not spread easily or rapidly among humans. However, flu viruses have the capacity to mingle with one another and morph into a new strain. This is one of the reasons that health officials keep such a close watch on outbreaks of avian flu. If someone with human influenza also becomes infected with avian influenza, there is a chance that the viruses could mingle and turn into a new virus that spreads easily from person to person. This could lead to a worldwide epidemic (or pandemic) of influenza. No one would have immunity to the new virus, and it would take four to six months to develop a new vaccine.

The World Health Organization (WHO) has alerted countries about the need to intensify surveillance and implement control measures to contain outbreaks of avian flu. A standard control measure is to kill flocks of poultry that are infected or may have been exposed to avian flu. As a precautionary measure, the WHO has selected H5N1 prototype strains for influenza H5N1 pandemic vaccine development. Vaccine manufacturers and



researchers are doing the foundation work that is necessary to develop a pandemic vaccine, but an actual vaccine against a pandemic cannot be manufactured until the virus has emerged. The WHO and has encouraged vaccine manufacturers around the world to work with vaccine seed strains from pandemic-like influenza viruses, such as H5N1.

## Minimizing Your Risks

Keep things in perspective. For most Canadians, the risk of avian flu is extremely low. The risk of health effects from human influenza is far greater. The best way to protect yourself and others from influenza is to:

- Get a flu shot.
- Wash your hands regularly and with thorough use of soap and warm water.
- Stay home if you are sick.

For more information on minimizing your risks, see the avian flu travel advisory on the Public Health Agency of Canada website in the Need More Info section below.

There is no evidence to suggest that the consumption of cooked poultry or eggs could transmit the avian flu to humans. All the evidence to date indicates that thorough cooking will kill the virus.

While unlikely, transmission of the virus to humans from consumption of uncooked or undercooked eggs or poultry cannot be completely ruled out. To limit potential risks, poultry and eggs should be thoroughly cooked to kill any possible viruses or bacteria. Proper safe food handling practices such as hand-washing and keeping poultry and egg products separate from other food products to avoid cross contamination should be followed. This is consistent with long standing advice from Health Canada and other health authorities through out the world.

## Government of Canada's Role

The Public Health Agency of Canada continues to monitor the domestic and global flu situation, and also coordinates national activities on the prevention and control of flu. Since the SARS outbreak in March 2003, the Public Health Agency of Canada has worked with many partners, including provincial and territorial health officials as well as national and international experts, to strengthen its capacity to respond to future outbreaks of infectious diseases. For example, PHAC has developed a new and comprehensive pandemic preparedness plan, which sets out standards and guidelines for such matters as local response, priority access to anti-viral drugs and the rapid production of new vaccine to protect Canadians.

Health Canada, the Public Health Agency of Canada and the Canadian Food Inspection Agency are working collaboratively in consultation with our international partners such as the World Health Organization and the European Centre for Disease Prevention and Control, to monitor the safety of poultry products as it relates to avian flu.

Health Canada regulates vaccines in Canada through a rigorous licensing process. This includes an extensive pre-market review of information about a vaccine's safety and effectiveness, and a lot release program which provides an additional check on biologic drugs to help assure their safety for human use. Within this role as a regulator, Health Canada plays an integral part in the Pandemic Vaccine Program, which aims to provide a safe and effective vaccine to all Canadians, as soon as possible, in the event of a pandemic outbreak. In addition, Health Canada continues to contribute to national pandemic preparedness by working with international players, other regulatory agencies, and vaccine manufacturers.

## Need More Info?

For more information contact:

The Public Health Agency of Canada's Avian Influenza Web site at:  
[http://www.phac-aspc.gc.ca/influenza/avian\\_e.html](http://www.phac-aspc.gc.ca/influenza/avian_e.html)

You can also find detailed information about avian flu on the following Web sites:

The Public Health Agency of Canada's Flu Watch at:  
<http://www.phac-aspc.gc.ca/fluwatch/index.html>

The Public Health Agency of Canada's Immunization and Respiratory Infections Division: Division at:  
<http://www.phac-aspc.gc.ca/im/index.html>

The Public Health Agency of Canada's Travel Medicine Program at:  
<http://www.phac-aspc.gc.ca/tmp-pmv/index.html>

The Public Health Agency of Canada's Centre for Infectious Disease Prevention and Control at:  
[http://www.phac-aspc.gc.ca/centres\\_e.html#cidpc](http://www.phac-aspc.gc.ca/centres_e.html#cidpc)

The Canadian Food Inspection Agency at:  
<http://www.inspection.gc.ca/english/anim/heasan/disemala/avflu/avflufse.shtml>

The World Health Organization (WHO) at:  
<http://www.who.int/csr/disease/influenza/en/>

The It's Your Health article Influenza at:  
[http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/flu-grippe\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/diseases-maladies/flu-grippe_e.html)

For additional articles on health and safety issues go to the It's Your Health Web site at:  
[http://www.hc-sc.gc.ca/iyh-vsv/index\\_e.html](http://www.hc-sc.gc.ca/iyh-vsv/index_e.html)  
You can also call toll free at 1-866-225-0709 or TTY at 1-800-267-1245\*