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FREQUENTLY ASKED QUESTIONS¹

Avian Influenza in Birds

What is Avian Influenza?

The disease commonly referred to as “bird flu” is an animal infection caused by the H5N1 virus. The virus occurs naturally among birds. Wild birds carry the virus in their intestines, but usually they do not get sick. But some domesticated birds - like chickens, turkeys and ducks - get very sick and can die from the virus.

Which birds carry the virus?

Avian influenza can kill domesticated birds, including chickens, ducks, geese, and turkeys. Traditionally, wild waterfowl and shorebirds have been credited as the sources for the many strains of avian influenza, but rarely fell ill. The current H5N1 strain has caused mortality in 40 species of wild birds, including geese, storks, egrets, herons, and falcons, and some mammals.

How does it spread?

The virus can remain viable in droppings for long periods, spreading among birds and animals through ingestion or inhalation of the droppings. Virus can also be excreted from the eyes, nose and mouth of infected birds. Transmission from flock to flock is usually by humans -- avian influenza viruses can be spread by manure, equipment, vehicles, egg flats, crates, and people whose clothing or shoes have come in contact with the virus.

What are the control measures in birds?

The most common practice to contain the spread of the virus is culling of all infected or exposed birds, proper disposal of carcasses and the quarantining and rigorous disinfection of farms and poultry markets. Vaccination has also been used but is impractical outside commercial settings and the vaccine requires regular updating. The virus is killed by heat (56 degrees C for 3 hours or 60 degrees C for 30 minutes) and common disinfectants, such as formalin and iodine compounds. Thorough cooking of any poultry meat will destroy the virus, however, if poultry appears sick or is dead do *not prepare* it for cooking or consumption. Dispose of the poultry properly.

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How could avian influenza reach a country?

Despite any country's controls, avian influenza could be introduced to poultry through the migration of wild birds, the importation of dead chickens, the illegal importation of live birds or the entry of an infected person.

What should I do if I think my flock is infected with avian influenza?

Call the relevant authorities immediately. Because the signs of avian influenza are so variable, it is important to get the help of an expert for diagnosis. Keep children and pregnant women away from the birds. If you are instructed to handle or dispose of a dead or infected bird, you should wear protective equipment and clothes (including gloves) and place the dead birds into a bag. Dead birds should not be disposed of in a river or a pond, or left in the yard. Protective clothing or equipment should be kept away from other people and thoroughly disinfected after use.

Avian Influenza in People

Are people at risk for avian influenza?

To date, most human cases have been limited to people who have had contact with infected poultry or contaminated surfaces. Many of these human cases have occurred in rural or suburban areas where households keep small poultry flocks.

What can people do to reduce the risk of getting avian influenza?

There are several key behaviors people who come in close contact with poultry can adopt to reduce the risk of contracting the virus. These include protecting their healthy flocks from the introduction of new poultry by quarantining new poultry for 14 days; separating ducks from chickens; keeping poultry in a closed building, cleaning up yards and coops daily to remove droppings; washing their hands with soap before and after handling birds; and cleaning off their shoes before entering their homes.

If possible, children and pregnant women should be kept away from poultry and poultry parts, and should not handle eggs.

If poultry appears sick, people should not touch it or handle it, but rather call the local authorities. (Keep in mind that ducks often do not show symptoms of the virus.) If people must handle a dead bird, they should wear protective equipment and clothes (including gloves) and place the dead birds into a bag. Dead birds should not be disposed of in a river or a pond, or left in the yard.

Why is there so much concern about this virus?

Although the current outbreaks have been happening since mid-2003, beginning in Asia and spreading around the world, this is the first time that so many countries been affected at the same time by this virus. The animal and human health experts' concern is that the virus is crossing the species barrier and is infecting humans. Scientists are closely monitoring the virus to see if it will mutate, making it easier to spread from human to human.

What is the difference between regular, seasonal flu and avian influenza?

These are different viruses. The difference that makes the most distinction to the layman is that that avian influenza is transmitted from birds to birds and birds to humans, but at this point not human to human. That is one of the reasons it is being watched so carefully to see if the virus changes – or mutates – and can be transmitted from human to human. Unlike normal seasonal influenza, where infection causes mild respiratory symptoms in most people, H5N1 has been found to cause more severe symptoms and leads to faster deterioration in condition. In the present outbreak, many of those infected with the virus have died, and many cases have occurred in previously healthy children and young adults.

Can we treat avian influenza?

There is some evidence that recent H5N1 viruses are susceptible to a class of antiviral drugs called neuraminidase inhibitors -- oseltamivir (also known as Tamiflu) and zanamivir (also known as Relenza). H5N1 appears to be resistant to the alternative M2 inhibitors -- amantadine and rimantadine. Most experts agree that neuraminidase inhibitors will be vital in controlling a future pandemic. However, flu viruses can become resistant to drugs.

Is there an avian influenza vaccine for people?

Not yet. There are several potential vaccines for protecting humans from infection with bird flu, at various stages of testing. Whether they would be suitable for use against a new pandemic flu strain depends on how much that strain may have mutated from the original H5N1 virus strain. In addition, due to production issues, it is not likely that an effective vaccine would be widely available until several months after the start of a pandemic.

Will a regular flu shot protect against avian influenza?

No. The annual flu vaccination will not provide protection against avian influenza. Current vaccines protect only against circulating human strains.

What are the symptoms of avian influenza in people?

The symptoms are similar to those of other forms of influenza, including fever, sore throat, cough, headache and muscle aches and pains. These symptoms may vary in severity.

What should I do if I think I have avian influenza?

Keep in mind that people get respiratory infections quite regularly, and that the chances that your symptoms are from avian influenza are extremely low. If you have recently returned from Asia (or another area where avian influenza in humans has been reported) and you are experiencing any of the symptoms outlined above, you should seek medical advice and tell your health care provider of your recent travel and activities, including any visits to farms or markets in Asia.

I'm traveling to a region where avian influenza has been reported. What should I do to protect myself from the virus?

Although the risk of infection to travelers to areas affected by avian influenza is currently considered low, people can reduce their risk of infection by avoiding situations where they may have contact with farms and live bird markets, and by ensuring that all uncooked poultry and eggs are handled hygienically with careful attention to hand washing after handling. Proper cooking destroys the virus in poultry and eggs. You can also discuss the risk of avian influenza with your health care provider as part of your routine pre-travel health checks.

Travelers who stay in an avian-influenza affected area for extended periods should consider, as a precautionary measure, having access to influenza antiviral medicine for treatment. This is because long-term residents are at greater risk of exposure to avian influenza over time and, in the event of a more widespread outbreak amongst humans, there may be difficulties encountered in accessing appropriate medicines. Medical advice should be sought before antiviral medicines are used, however.

Is it safe to buy and eat chicken?

Yes, as long as import controls are strictly enforced. In countries where avian influenza has been reported, poultry and poultry products should be properly cooked and handled during food preparation. Normal temperatures used for cooking (70 degrees C for at least 30 minutes) will kill the virus. Consumers need to be sure that all parts of the poultry are fully cooked (no "pink" parts) and that eggs are also properly cooked (no "runny" yolks).

Pandemic Risk

What are the chances that avian influenza could cause a human pandemic?

Not likely. There are several critical steps that must occur before a human pandemic can happen. These include: a new influenza virus subtype emerges; it infects humans, causing serious illness; and it spreads easily and sustainably among humans. The H5N1 virus has met the first two criteria, but it has not yet efficiently and sustainably infected humans. The risk that the H5N1 virus will acquire this ability remains as long as there are opportunities for human infection; however, control measures that are being undertaken worldwide continue to minimize these risks.

Can a pandemic be averted?

Yes. That is why so much attention by governments and the health professionals is being placed on how to prevent and control the virus. The first priority is to reduce opportunities for human exposure to infected or potentially-infected poultry. Computer modeling has suggested that a human pandemic could be stopped or slowed with concerted action such as washing your hands with soap and water before and after handling poultry, separating ducks and chickens, keeping poultry fenced or penned in, and keeping new poultry separated from existing flocks for 14 days.

This is a compilation of information from sources including U.S. Department of Health and Human Services' Centers for Disease Control and Prevention; World Health Organization; and writers for the Telegraph and South China Morning Post. For further information go to: www.fao.org and www.cdc.gov

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