

Bird flu (avian flu)

Introduction

Bird flu, or avian flu, is an infectious viral illness that spreads among birds. In rare cases, it can affect humans.

There are many types of bird flu, most of which are harmless to humans. However, two types have caused serious concern in recent years. These are the H5N1 (since 1997) and H7N9 (since 2013) viruses. Although these viruses don't infect people easily and are usually not transmitted from human to human, several people have been infected around the world leading to a number of deaths.

Other bird flu viruses (particularly H7N7 and H9N2) have also infected people, but these have rarely caused severe illness.

Bird flu affects many species of birds, including chickens, ducks, turkeys and geese. It can be passed between commercial, wild and pet birds. Birds do not always get sick from infection, so seemingly healthy birds may still pose a risk to people who come into contact with them.

Signs and symptoms

Like other types of flu, bird flu symptoms often include a high temperature, aching muscles, headache and respiratory symptoms (such as a cough or runny nose). Most people with the condition rapidly develop more severe respiratory problems. Diarrhoea, vomiting, abdominal (tummy) pain, chest pain, and bleeding from the nose and gums have also been reported as early symptoms in some people.

Within days, potentially fatal complications such as acute respiratory distress syndrome and multiple organ failure may develop.

Having flu-like symptoms is extremely unlikely to mean you have bird flu unless you have been in recent close contact with birds in an area where outbreaks have been reported (see below).

Human cases

The World Health Organisation (WHO) has confirmed that by July 2013, 633 people had been infected with the H5N1 virus and 377 had died. These cases occurred in Azerbaijan, Bangladesh, Cambodia, China, Djibouti, Egypt, Indonesia, Iraq, Laos, Myanmar, Nigeria, Pakistan, Thailand, Turkey and Vietnam. Indonesia, Egypt and Vietnam experienced most cases and fatalities.

Since March 2013, there have been reports of people being infected with the H7N9 virus in eastern China. By July 2013, there were 134 confirmed cases and 43 deaths. Most cases were among middle-age to elderly men. With the exception of one person who travelled to Taiwan while infected, there have been no reports of human infections outside mainland China.

For both viruses, there have been some reports of limited human to human transmission, usually as a result of very close contact between family members.

People who have had bird flu generally developed the virus after coming into close and prolonged contact with infected birds. Millions of birds have been killed during outbreaks to prevent the disease spreading and being passed on to people.

How bird flu spreads to humans

Bird flu is spread through direct contact with infected birds (dead or alive), an infected bird's droppings or secretions from their eyes or respiratory tract.

Close and prolonged contact with an infected bird is generally required for the infection to spread to humans. For example:

touching infected birds that are dead or alive

inhaling or being in contact with dried dust from the droppings or bedding of infected birds

inhaling or being in contact with droplets sneezed by infected birds

culling, slaughtering, butchering or preparing infected poultry for cooking

Bird flu is not transmitted through cooked food. In areas that have experienced outbreaks of bird flu, poultry and eggs can be safely eaten.

There have been few reports of bird flu passing from person to person.

Preventing bird flu

Although it is difficult to prevent the spread of bird flu between birds, there are a number of things you can do to reduce your risk when you visit areas where outbreaks have been reported, such as:

Avoid visiting live animal markets and poultry farms.

Avoid contact with surfaces that are contaminated with bird droppings.

Don't pick up or touch birds (dead or alive).

Don't eat or handle undercooked or raw poultry, egg or duck dishes.

Don't bring any live poultry products back to the UK, including feathers.

Always practise good personal hygiene, such as washing your hands regularly.

There are no restrictions on travel to countries that have been or are currently affected by bird flu.

Symptoms of bird flu

The symptoms of bird flu (avian flu) in humans are similar to those of other types of flu.

Symptoms include:

a sudden high temperature (fever) of 38C (100.4F) or above

a dry, chesty cough

headache

tiredness

chills

aching muscles

limb or joint pain

diarrhoea or stomach upset

sore throat

runny or blocked nose

sneezing

loss of appetite

difficulty sleeping (insomnia)

These symptoms can come on suddenly. The time from infection to the start of symptoms (incubation period) is usually three to five days, although in some cases it can be up to seven days.

Complications

In many cases, bird flu can cause rapid deterioration, pneumonia (inflammation of the tissue of one or both lungs), acute respiratory distress syndrome (where the lungs cannot provide enough oxygen for the rest of the body) and multiple organ failure, all of which can be fatal.

Prompt treatment with antiviral medication may help prevent complications and reduce the risk of death. Read more about treating bird flu.

When to seek medical advice

As the symptoms of bird flu are similar to more common types of flu, any flu-like symptoms you experience are unlikely to be signs of bird flu unless you have been in close contact with birds in an area where an outbreak has been reported (see causes of bird flu for more information).

If you experience these symptoms and you have visited an area affected by bird flu in the last two weeks, you should immediately contact your DOCTOR

How bird flu spreads

Can it spread between people?

There have been isolated cases of bird flu spreading between people, but this is very rare.

In the few cases where it has happened, the infection most often spread after close, prolonged contact between an infected person and an uninfected person.

It's possible for humans to catch bird flu (avian flu) during close contact with infected birds. Generally, prolonged contact is required for the infection to spread.

The bird flu virus is spread through the droppings of infected birds, as well as secretions from the eyes and respiratory tract. Infected droppings or secretions can contaminate dust, soil, water, feed, equipment, vehicles, clothing and shoes. The virus can also be carried on the feet and bodies of animals.

Therefore, you may become infected by:

touching infected birds that are dead or alive

inhaling or being in contact with dried dust from the droppings or bedding of infected birds

inhaling droplets sneezed by infected birds

slaughtering, butchering or preparing infected poultry for cooking

Another possible source of bird flu can be live markets, where birds are sold in crowded and sometimes unsanitary conditions. Avoid visiting these markets if you're travelling in countries that have had an outbreak of bird flu.

Bird flu is not transmitted through cooked food. In areas that have experienced outbreaks of bird flu, poultry and eggs can be safely eaten.

Diagnosing bird flu

To date, there have been no cases of people with bird flu (avian flu) in the UK. However, plans are in place to manage any suspected cases that may arise.

Initial assessment

An initial assessment will be made over the phone, at a DOCTOR surgery, at home or in a side room at a hospital.

Bird flu will be diagnosed based on your symptoms and the likelihood that you have been exposed to an infected bird. The doctor will ask you whether you have:

recently travelled to an area affected by bird flu and if you have been close (within one metre) to live or dead domestic fowl or wild birds, including those at bird markets

had close contact (touching or speaking distance) with anyone who has a severe respiratory illness

had contact with anyone who died unexpectedly and who was from an area that had an outbreak

Tests

If bird flu is suspected, the following tests will be carried out to establish whether you have the infection:

chest X-ray

nose and throat swab

blood tests

gram stain (a process that detects different bacteria)

If the laboratory tests and chest X-ray results are normal, it is unlikely that you have bird flu.

Treating avian flu

People with suspected symptoms of bird flu (avian flu) will be advised to stay at home or will be cared for in hospital (in isolation from other patients).

Depending on the type of flu they have, the patient may be kept in isolation for up to 10 days. The main recommendations are:

rest

drinking plenty of fluids and eating healthily

medications to help treat fever and pain, such as aspirin and paracetamol (aspirin should not be taken by children under the age of 16)

Antiviral medication

These medications work by stopping the virus from multiplying in your body.

Oseltamivir (Tamiflu), Zanamivir (Relenza) and Peramivir (Actrapid) may help reduce the severity of the condition, prevent complications and help improve the chances of survival.

In regular flu, these medications are most effective if given within 48 hours of symptoms developing, but it is not clear if this is the case for bird flu. Nevertheless, they should be given as soon as possible to people suspected or proven to be infected, even if it's more than 48 hours after the onset of symptoms.

These medications may also be given as a preventative measure to people who could have been exposed to bird flu viruses – for example other household members, healthcare workers or people who have had close contact with infected birds.

In these cases, the course of medication should begin as soon as possible after exposure to the virus and continue for 7 to 10 days after last known exposure.

Treating complications

Complications, such as bacterial pneumonia, may develop in some people and can be treated with regular antibiotics.

People who are severely affected may need to be given extra oxygen to help them breathe, for example, through a ventilator (a machine that assists with breathing).

Preventing bird flu

As the bird flu (avian flu) virus is carried by birds, it is very difficult to prevent it from spreading. However, there are some things you can do to reduce your chances of developing a viral infection.

General precautions

To reduce your risk of developing and passing on viral infections, such as flu, always ensure that you:

Wash your hands regularly, particularly after going to the toilet and before handling food.

Turn away from other people and cover your mouth with tissues when you cough or sneeze.

Dispose of tissues immediately after use and wash your hands with soap and warm water.

If you are ill, avoid public places.

Tell the receptionist at your DOCTOR surgery (when you visit) about your symptoms so that you can be seated away from other people and given a surgical mask if necessary.

Make sure that you maintain a good level of general health and that you have any recommended vaccinations, such as the pneumococcal vaccination and seasonal flu vaccine, if you are in a high-risk group (for example, if you have a long-term illness such as asthma or you are 65 or over).

Contact with birds

You can feed wild birds and ducks, but it is important to ensure that you wash your hands thoroughly afterwards. Do not go near sick or dead birds.

Keep away from bird droppings if possible and wash your hands thoroughly if you accidentally touch any.

If you come across between one and four dead birds, Defra advises leaving them alone or disposing of them carefully. See the Defra website for guidelines for disposing of dead birds.

Pets

In general, you don't need to change the way you look after your pets. If you have a dog that sometimes catches wild birds, try to avoid areas where this is likely to happen. In theory, the H5N1 bird flu strain can be passed on to other animals, but it is very unlikely.

If you have a pet bird, you should avoid letting your pet bird have any contact with wild birds or wild bird droppings.

Travel

If you are travelling in a country that has had an outbreak of bird flu, don't go to live animal markets or poultry farms.

Preparing meat

Bird flu is not transmitted through cooked food. It is safe to eat poultry and eggs in areas that have had outbreaks of bird flu.

As a precaution, always ensure good hygiene standards when preparing and cooking meat. For example:

Use different utensils for cooked and raw meat.

Wash your hands thoroughly with soap and warm water before and after handling meat.

Ensure that meat is thoroughly cooked and piping hot before serving.

Bird flu vaccination

A vaccine that offers protection against the H5N1 bird flu strain does exist, but supplies are limited so it's unlikely to be widely available unless there is a serious outbreak.

The seasonal flu vaccine does not provide protection against the strains of bird flu that can affect humans.