Independent Guide

What do I need to know about "Bird Flu" or Avian Influenza?



Independent workplace compliance

What is Bird Flu?

Avian influenza (bird flu/avian flu) is a contagious disease of animals caused by strains of the influenza virus that normally only infect birds and, less commonly, pigs and some other mammals. On rare occasions, they have also crossed the species barrier to cause infection in humans.

Two forms of Avian influenza are characterized these being High pathogenicity (HPAI) and low pathogenicity (LPAI) dependent on how severe the disease is when contracted by birds. There are also several different subtypes and strains which are expressed with the "H" and "N" subtype designation many people will be familiar with e.g. H1N1), but not all strains of are infectious in humans. Where Avian influenza occurs in captive birds and poultry, it is a notifiable animal disease in the UK.

The latest information on outbreaks of bird flu can be found on GOV.UK.

What are the implications for human health?

The first is the risk of direct infection when viruses pass from poultry to humans, resulting in a severe disease, which in some cases can be fatal. Unlike seasonal influenza epidemics where infection causes milder respiratory symptoms in most people, the viruses associated with bird flu (particularly HPAI) are unusually aggressive with a much higher fatality rate. In recent outbreaks more than half of those infected with the virus have died (most cases having occurred in previously healthy children and young adults).

The second, and far greater, risk is that given enough opportunities, an avian influenza virus will change its form (mutate) and instead of being rarely infectious in humans, will gain the ability to spread from person to person easily. Such a change could mark the start of a global outbreak or Bird flu pandemic.

Historically a number of specific strains have caused concern and infection in humans over recent decades, all are HPAI and include H5N1 (since the late 90's), H7N9, H5N6 and H5N8 (since the mid 2010's).

How does it cause infection?

In bird populations avian influenza is spread between birds through direct contact or contaminated body fluids and faeces. It can also be spread by contaminated feed and water, dirty vehicles, clothing and footwear.

People become infected either by direct contact with infected poultry or surfaces and objects (fomites) contaminated by their faeces.

Is it safe to eat poultry?

As always, provided the poultry remains disease-free and proper food safety practices and cooking are undertaken, no problems should arise from either the poultry or associated products such as eggs.

What is the risk of a pandemic?

For a pandemic to occur three criteria need to be met:

- A new influenza sub-type would need to emerge.
- It would need to be able to infect people, causing serious illness.
- It would need to be able to spread easily from person to person.

Various research has been ongoing into the transmission of Avian influenza viruses. To date no sustained human to human or airborne transmission has been identified in any of the outbreaks investigated, but in instances (an outbreak in China in 2016), for a very small number of cases it could not be ruled out.

What are the most important warning signals that a pandemic is about to start?

The most important warning signal will come when clusters of patients with clinical symptoms of influenza occur, closely related in time and place, which clearly suggest that there has been human to human transmission. This usually means that it will be the health care workers looking after those infected in the first wave that become infected, and thus suggest that human to human transmission is occurring.



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Pandemics have featured as an ongoing potential risk in government planning and the UK National Risk Register 2020 edition states, "The UK government is taking an evidence-based approach to prepare for the next influenza pandemic. Contingency plans exist for many emerging infectious diseases, and the UK government is continually learning the lessons from previous infectious disease outbreaks, including COVID-19, to inform preparation for future infectious disease outbreaks and pandemics."

Are there drugs available for treatment?

Currently, two drugs are available that are believed to reduce the severity and duration of the illness, if they are administered within 48 hours of the symptoms first occurring. These are known as tamiflu and relenza. The UK government usually has a stock of anti-viral drugs against the contingency of a Bird Flu pandemic. There are potential vaccines for protecting humans against infection from Bird Flu and these are at various stages of testing and production.

With the recent SARS-CoV-2 (COVID-19) pandemic, we have seen how quickly effective vaccines can be produced and it is likely, and hoped, that the same would be true in the event of similar situation with bird flu.

What can I do to reduce the risks personally?

As we have also seen with the SARS-CoV-2 (COVID-19) specific advice and information will be provided and updated during a pandemic. Historically, the advice given for reducing the risks of catching or spreading influenza, including Bird Flu, includes:

- When you sneeze or cough make sure that, if possible, you cover both your nose and mouth with a good quality tissue, and make sure that these tissues are then promptly and carefully placed in a bag before
- Wherever possible, avoid non-essential travel and contact with large crowds;
- Focus on maintaining good basic hygiene, for example washing your hands frequently with soap and water, to reduce the spread of the virus from your hands to your face, surfaces or other people (this means lathering the hands with the soap for at least 20 seconds before rinsing off);
- Make sure that any hard surfaces that people touch which may be contaminated, such as kitchen worktops, door handles, lift buttons, tap handles etc. are frequently and properly cleaned, using normal cleaning products and disinfectant;
- Make sure that your children also follow the above advice.
- If you do catch flu, and the main symptoms of Bird Flu in humans are respiratory problems, fever, muscle aches, chest pains, eye symptoms and headache: Stay at home and rest;
- Take medicine such as aspirin, ibuprofen or paracetamol to relieve the symptoms (following the instructions with the medicines, please note that children under 16 must not be given aspirin or readymade flu remedies containing aspirin.); and
- Drink plenty of fluids. The Department of Health has stated that in the event of a flu pandemic, including Bird Flu, more information will be made available to the public through leaflets, websites and the media.

An HPAI N5H1 outbreak occurred across the UK between October 2021 and March 2024 and continues to be found in our wild bird population. During the 2022 and 2023 seasons however, there were no human detections of influenza H5 in England.

This guide is of a general nature; specific advice can be obtained from Assurity Consulting. Assurity Consulting is the UK's leading independent compliance consultancy specialising in workplace health, safety and environmental solutions. We have over 35 years' experience of helping customers of all sizes, from across all sectors, manage their compliance responsibilities, making sure that their organisation is compliant, their employees are safe, their processes are cost effective and their management team is in control.

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