Frequently Asked Questions About Pandemic Influenza

What is an influenza pandemic?

A *pandemic* refers to the worldwide spread of a disease, with epidemics in many countries and most regions of the world. Pandemics of influenza occur when a new influenza virus strain emerges which is markedly different from recently circulating strains and which is able to:

- infect humans,
- spread from person to person
- cause illness in a high proportion of cases
- spread widely, because a high proportion of the population is susceptible, with little or no immunity to the virus (immunity comes from previous infection, or immunisation, with that or a very similar virus).

A worldwide influenza epidemic (a pandemic) will result from emergence of a new viral strain against which a high proportion of the population have no immunity. Typically such strains can appear at any time of the year and spread worldwide from their original source in, on average, approximately 6 months. However, with the ease of global travel, a new virus has the potential to spread much more rapidly than this across countries and continents. Intervals between previous pandemics have varied from 11 to 42 years with no recognisable pattern. It is not possible to predict when the next pandemic will occur.

Have there been any influenza pandemics in the past?

Three influenza pandemics occurred in the last century – in 1918/19 ('Spanish' flu), 1957/58 ('Asian' flu) and 1968/69 ('Hong Kong' flu). Up to a quarter of the UK population developed illness each time with high mortality and consequent huge economic and social disruption.

What are the symptoms of influenza?

Influenza is an acute viral infection characterised by the sudden onset of fever, chills, headache, muscle pains, extreme exhaustion, and usually cough, with or without a sore throat or other breathing difficulties.

How infectious is influenza?

People are highly infectious from the onset of symptoms for 4-5 days (longer in children and people who have a weakened immune system). 10% of people are likely to be infectious just before the onset of symptoms. Children have been shown to spread the virus from 6 days before to 21 days after the onset of symptoms.

People with influenza but without symptoms can spread the virus and are therefore also likely to be infectious to some extent and pass the infection on, although they are unlikely to be the source of an outbreak.

The incubation period is 1-3 days.

Without intervention one person infects on average about 1.4 people (the Ro or 'basic reproduction number'). This is, however, likely to be higher in closed communities.

How do you get influenza?
Influenza is mainly spread through large respiratory droplets (as is SARS) but also by fine respiratory droplets which stay in the air for longer (and are therefore more effective at spreading infection) and by hand/face contact.

What are the risks from influenza?
In the non-pandemic situation, most otherwise healthy people recover from influenza without complication after about a week, although they may feel tired for longer.

Complications are mainly respiratory, due to secondary bacterial infections such as bronchitis and pneumonia, which may require admission to hospital and may result in death. Influenza may also exacerbate underlying diseases such as asthma, diabetes or heart disease. Primary viral pneumonia occurs more rarely but can be rapidly overwhelming and fatal.

Those at higher risk of more serious illness should they catch flu include:

- Older people (generally taken as those aged 65 and over) and the very young
- People with chronic chest, heart or kidney disease, diabetes, or reduced immunity due to disease or treatment

Is there a vaccine for influenza?
No, a vaccine is not available at present. Even with advance work to improve our preparedness for vaccine production, the lead-time before a new vaccine becomes available is likely to be at least six months. There may be no vaccine initially and then availability will be limited by production capacity. At the same time, international demand for vaccine will be high. Vaccine will have to be distributed equitably and administered to pre-determined priority groups first.

How can I prevent myself from getting influenza?
Hand washing, high levels of respiratory hygiene, staying at home, avoiding public gatherings and reducing unnecessary, especially long distance, travel may help prevent you getting influenza.

What can I do if I get influenza?
Stay at home, keep warm, rest, drink plenty of fluids and take analgesics (paracetamol for all ages, aspirin may be taken by adults). Consult your GP if symptoms worsen.