

Pandemic pandemonium?

Experts say it is not a matter of if, but when. Up to 50% of the UK population could be affected with excess deaths of approximately 750,000 people. Health and social services will be strained. Schools shut. Shortages of fuel and food supplies ensue. A wave could last 15 weeks and there may only be weeks or months between each wave. This is not a flood scenario. This is an influenza pandemic, writes Catherine Hefferman.

A pandemic is a worldwide spread of a disease with outbreaks or epidemics occurring in most regions of the world. Influenza ('flu') pandemics arise when a new flu virus emerges that is very different to existing strains and is capable of spreading throughout the worldwide population. Spread is rapid because there is insufficient time to develop an effective vaccine and there is no immunity in the population.

Influenza pandemics are natural phenomena that tend to occur two or three times each century. In the last 20th century, there were three flu pandemics: 'Spanish flu' of 1918/19, the 'Asian flu' of 1957/58 and the 'Hong Kong flu' of 1968/69. The severity of the pandemics varied with estimates of 20 to 40 million deaths globally from the 'Spanish flu' and an estimated 1 to 4 million deaths worldwide due to the other two pandemics.

Flu is a respiratory illness caused by the influenza virus. Symptoms include fever, headache, cough, sore throat and aching muscles and/or joints. The virus is spread through airborne droplets and this most commonly happens in crowded populations in enclosed spaces. Typically, a form of flu circulates each winter. This is known as seasonal influenza and it is usually self-limiting but it can be potentially fatal in vulnerable groups, particularly the elderly. About 12,000 people die each year and seasonal influenza attacks about 5 to 15% of the population. However, unlike ordinary seasonal influenza, pandemic flu can occur at any time of the year and it will have a much higher clinical attack rate (between 25% and 50%), affecting those of working age as well as the very young and old.

Flu pandemic is also different from avian influenza or 'bird flu'. Avian influenza is a disease of birds. It can be transmitted to humans in close contact with poultry or other birds. However, this occurs rarely and only with some strains of avian influenza. Recently, a strain of avian influenza, H5N1, has caused concern because it may be possible that the virus could mutate to become transmissible between humans. An important requisite for a flu pandemic is that there is human-to-human spread. The flu pandemic may or may not result from H5N1. It could be caused by a different new strain of influenza to which the population has little or no immunity.

Picture by: /AP/PA Photos



Danes suffering from influenza occupy beds in temporary sick quarters set up in a gymnasium at Copenhagen's navy shipyard to handle the large amount of patients in October 1957.

Another pandemic is highly likely to occur. However, there is uncertainty about the timing and the impact. Until it happens, we cannot predict the extent of illness in the UK. The effects of a pandemic will depend on a number of factors, including the characteristics of the virus, the severity of the illness it causes and its clinical attack rate. Additionally, it may take six months to develop a vaccine and the effect of antivirals as a treatment on an unknown influenza virus is not evident. This uncertainty poses a challenge to service planners such as the NHS and local authorities, but by planning in advance the impact of a pandemic can be reduced.

There are two things people can do. First, develop business contingency plans and secondly, heed the Department of Health's messages on self-care and prevention. Flu pandemic is unlike other crises, in that it is likely to have an intense sustained impact on demand that will affect areas simultaneously for at least 15 weeks. Business continuity plans should identify the core or essential services well in advance of a pandemic and

plans should be regularly tested. The plans should also incorporate that up to 50% of the workforce may require time off at some stage over the course of the pandemic. Individuals are likely to be absent for seven to ten working days.

Healthcare for flu will be performed in the community. Access to antiviral treatment and pandemic influenza information will be done via a flu phone line. Hospitals will be reserved for those who are most seriously ill and most likely to benefit. Because the effect of treatment is unknown, antivaccines may be unavailable for some time, people should take precautions to protect themselves against flu:

- If you have the flu, stay at home!
- Have a friend or relative you can call
- Wash your hands!
- Have a supply of tissues, use and dispose of them safely in bins.

For further information see the Department of Health's national guidance on planning for pandemic influenza www.dh.gov.uk/pandemicinfluenza. 