



UK Pandemic Preparedness and Swine Flu

Introduction

The lead for pandemic preparedness in the UK is taken by central government with the devolved administrations having their own contingency plans drawn up under a statutory duty emanating from the *Civil Contingencies Act 2004* and its predecessors. The World Health Organisation (WHO) monitors and assesses outbreaks of disease and offers advice and guidance on a global scale.

Latest information

- On 29 April 2009 the WHO level of alert rose to 5 (see *Section on WHO below*). The UK government is launching an awareness raising campaign including a leaflet which will be distributed to all households from 5 May 2009. It is already available on-line from the [Department of Health](#).
- Figures are changing constantly but at the time of writing, there are five confirmed cases of Swine flu in the UK: three in England and two in Scotland, all of whom have recently returned from holiday in Mexico. There are 76 cases being investigated in the UK. 27 patients have been under investigation in Wales, and Swine flu has been ruled out in 8 of these cases, leaving 19 still under investigation.
- Secretary of State for Health [Update](#) 29 April 2009.
- Welsh Assembly Government [Update](#) 30 April 2009.

UK Legislation

The [Civil Contingencies Act 2004](#) (the *2004 Act*) charges UK governments with a statutory duty to:

- Assess, plan and advise in relation to risks posed by potential emergencies, including a pandemic disease;
- Provide information and advice to the general public;
- Prevent, and reduce or control, the effects of an emergency;
- Take action in connection with such an emergency.

The Cabinet Office has produced a [guide](#) to the *2004 Act* which sets out the responsibilities of the devolved administrations and lists the Category 1 and 2 responders (core responders) who are charged with emergency planning and action. The Category 1 and 2 responders are also listed in Schedule 1 of the *2004 Act*.



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Category 1 responders are the Emergency Services (police, fire, ambulance and coastguard), local authorities and port health authorities, health bodies (NHS Trusts in Wales and more specifically, the National Public Health Service for Wales (NPHSW)) and the Environment Agencies of England and Wales and Scotland.

Category 2 responders are the utilities (gas, electric, water and telephones) and transport (rail, airport operators, harbour authorities, etc.) providers and the Health and Safety Executive.

UK government and COBRA

The UK government takes the lead in planning for pandemics for its constituent countries and for England. The mechanism by which UK countries are coordinated is through the UK civil contingencies committee, known as COBRA.

COBRA, an acronym for Cabinet Office Briefing Room A, the room where it first met, is convened whenever there is a perceived national threat from, for example, strikes with the potential to disrupt essential services, terror attacks and animal and human disease outbreaks. The membership of the committee changes in accordance with the nature of the threat and the threat of a swine flu pandemic means that the UK Secretary of State for Health, and Ministers for Health from the devolved administrations, are currently among the membership of COBRA along with the Prime Minister, Gordon Brown.

The UK government takes responsibility for stockpiling supplies of anti-viral drugs and other medicines and medical equipment for the UK as a whole. At present they have stockpiled enough anti-viral drugs to treat around 33 million people, about half the population. There is currently no vaccine although the Rt. Hon. Alan Johnson, Secretary of State for Health, said in his [statement](#) of Monday 27 April 2009, that scientists are currently assessing whether the current influenza vaccines might offer some protection against the swine flu virus until a specific vaccine can be developed. More details of the preparations already undertaken by the UK government are available in the statement.

Welsh government

In her [plenary statement](#) on Wednesday 29 April 2009 the Minister for Health and Social Services, Edwina Hart, AM, said that Wales has in place an effective framework for responding to a flu pandemic. An exercise was undertaken during the week commencing 20 April 2009 to test the plans at all levels across Wales. This was a planned exercise coordinated by the Cabinet Office and not a response to the current outbreak.

In Wales, the NPHSW has a key role to play on behalf of the Welsh government in ensuring that plans and procedures are in place for the management and support of the public health aspects of a major incident including a pandemic outbreak of influenza.



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The NPHSW has developed an Emergency Management (Major Incident) Plan and four, multidisciplinary Local Resilience Fora (LRFs), based on local police areas, have been set up in North and South Wales, Gwent and Dyfed Powys. Partners on the LRFs include the Welsh government, emergency services, local authorities, health authorities and other emergency planning organisations. A website, [Wales Prepared](#), has been set up which provides a central source of information for the LRFs and which contains some information for the public on the work being undertaken to strengthen resilience in Wales at the local, regional and all-Wales levels.

LRFs bring together all the organisations that have a duty to co-operate under the *2004 Act*, along with others who would be involved in the response to an emergency. The NPHSW is a Category 1 Responder under the *2004 Act*. As such they are required to work with other services within the LRF structure.

The advice leaflet referred to on page 1 will be bilingual. More details of the actions being taken by the Welsh government are in the update on page 1.

World Health Organisation (WHO)

The WHO has developed an emergency alert system comprising six phases of alert and the action to be taken at each of these. Phases 1–3 correlate with preparedness, including capacity development and response planning activities, while Phases 4–6 are intended to clearly signal the need for response and mitigation efforts. Furthermore, periods after the first pandemic wave are elaborated to facilitate post pandemic recovery activities.

The [WHO](#) upgraded the alert from level 3 to 4 on Monday 27 April 2009 and again on Wednesday 29 April 2009 to level 5. The WHO instructs that all countries should immediately activate their pandemic preparedness plans and stated:

At this stage (5), effective and essential measures include heightened surveillance, early detection and treatment of cases, and infection control in all health facilities.

Facts about Swine flu

The following facts have been compiled from the websites of the [Center for Disease Control](#) (CDC), Atlanta, Georgia and the WHO.

Aetiology

Swine flu is a respiratory disease of pigs caused by a type A influenza virus that regularly causes outbreaks of influenza in pigs. Swine flu viruses cause high levels of illness and low death rates in pigs. The classical swine flu virus (an influenza type A H1N1 virus) was first isolated from a pig in 1930 and this is the virus that so far appears to be responsible for the outbreak.

This H1N1 virus contains genetic elements from North American swine flu, North American avian (bird) flu, and human and swine flu strains normally found in Asia and



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Europe. The WHO states that, according to the CDC, it is "an unusually mongrelised mix of genetic sequences". The NPHS Wales in its latest communication (30 April 2009) states that "more investigations and testing are needed to determine the severity of this disease outbreak and the ease with which it can spread".

A swine flu strain was also responsible for the 1918-19 Spanish flu outbreak where one billion people are thought to have contracted the disease with deaths of around 50 million - although the death toll could have been much higher.

Transmission

Swine influenza viruses have been shown to transmit from pigs to humans. They are not, however, transmitted by eating cooked pork or pork products such as sausages and pies.

At present it is yet to be established whether and how human-to-human transmission occurs, but it is thought it can be transmitted in the same way as seasonal flu, through coughing or sneezing of infected people or by touching something with flu viruses on it and then touching the mouth or nose.

Studies from a 1988 American outbreak following a swine fair have shown that 76 per cent of swine exhibitors tested had antibody evidence of swine flu infection but no serious illnesses were detected among the group. Additional studies suggest that one to three health care personnel who had contact with the patient developed mild influenza-like illnesses with antibody evidence of swine flu infection.

Symptoms

The symptoms of swine flu in people are similar to those of human seasonal flu. They include fever, aching muscles, extreme tiredness, lack of appetite and coughing. Some people have also reported vomiting and diarrhoea.

As with seasonal flu, the dangers to human health can come through the development of secondary infections such as pneumonia. Seasonal flu viruses (which mutate every year) kill between 250,000 and 500,000 people a year worldwide.

Diagnosis

Diagnosis of swine flu infection is usually through a respiratory specimen which is sent to a laboratory within the first 4 to 5 days of illness (when an infected person is most likely to be shedding virus). However, some persons, especially children, may shed virus for 10 days or longer.

Treatment

Those who are infected can be treated with an anti-viral such as Tamiflu or Relenza which work by inhibiting the development of the virus and have been shown to be effective in combating Type A viruses and strains of H1N1. If secondary bacterial infections develop,



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these can be treated with antibiotics. According to current knowledge, the seasonal flu vaccine available in the UK does not offer protection against H1N1. This is because the H1N1 swine flu viruses are very different in their composition from human H1N1 viruses and, therefore, vaccines for human seasonal flu would not provide protection from H1N1 swine flu viruses.

The UK [Health Protection Agency](#) (HPA) states that anti-viral drugs are also being given as a preventive measure to those who have come into close contact with infected people. HPA guidance defines close contact as:

Individuals exposed to a probable or confirmed case within a distance of one metre or less and for longer than one hour should be offered antivirals as a precautionary measure.

Sources of Information

In addition to the [WHO](#), which has specific web-pages on the outbreak, and the CDC, British and Welsh sources are as follows:

[Health Protection Agency](#)

[Department of Health](#)

[Welsh Assembly Government](#)

[National Public Health Service for Wales](#)

[NHS Direct Wales](#) Tel: 0845 4647

[BBC](#)

[Wales Online](#)

National Swine Flu Information line, tel: 0800 1513513. (This is a recorded information line.)