



Department of
Education

www.deni.gov.uk

AN ROINN
Oideachais

MÁNNYSTRIE O
Lear



INVESTOR IN PEOPLE

PLANNING FOR A HUMAN INFLUENZA PANDEMIC

Guidance for Nursery Schools in Northern Ireland

September 2006

DEPARTMENT OF EDUCATION

INDEX

Executive Summary

1. General Introduction
2. Planning in the education sector
3. Advice and Communication – who does what before and during a pandemic
4. Communicating messages about possible closure (and re-opening) of schools
5. Situation Reports
6. Issues that DE will cover in further guidance

Check lists for schools

Annexes

- | | |
|---------|--|
| Annex A | Other published information, sources of guidance and useful contacts |
| Annex B | Phases of the Pandemic Response |
| Annex C | Main planning assumptions |

DEPARTMENT OF EDUCATION GUIDANCE FOR NURSERY SCHOOLS ON PLANNING FOR A HUMAN INFLUENZA PANDEMIC

Executive Summary

From the outset, the Department of Education wishes to stress that this guidance is part of the Government's co-ordinated efforts to encourage prudent planning across all sectors for a possible human influenza pandemic. At the time of the publication of this guidance, and until further notice, the international alert level for pandemic influenza, as advised by the World Health Organisation, remains at alert level 3 – human infections with a new sub-type but no new human-to-human spread.

This guidance aims to encourage and support nursery schools in planning for a human influenza (flu) pandemic. It provides brief background on pandemic flu and its implications for nursery schools. It outlines the role of Government and the local arrangements for responding to a pandemic, consistent with the NI Influenza Pandemic Contingency Plan.

All those responsible for planning or managing services should plan for pandemic flu as part of their normal planning for responding to any emergency – known as 'business continuity' planning (or some will know it as 'emergency response planning').

This guidance explains why, for medical and child welfare reasons, schools might be an exception to the general 'business as normal' message that underpins Government guidance to other sectors.

It recommends that schools should plan both for operating during a pandemic and for the possible closure to children of schools, if the Government proposes such closure for medical and child welfare reasons. Decisions about whether to close will be taken at a national level. When local circumstances meet the national criteria for closure, the Department of Health, Social Services & Public Safety (DHSSPS) will advise the Department of Education (DE), who will pass the message on to schools. The school principal would then consult with the (Chair of the) Board of Governors and inform the employing authority before deciding to close the school.

The guidance sets out the processes which DE would use to get information to nursery schools if the Department (based on medical advice) advised that they should close to children.

The guidance stresses the importance of reviewing plans regularly as there may be too little time immediately before the arrival of a pandemic to review plans and take necessary action.

Using this guidance

We recommend that you read this guidance and use the check lists provided to help you develop and implement your plans for a possible flu pandemic. You should also

take note of Annex A which provides links to a wide range of other sources of information and guidance which you may find useful.

We have also produced some brief advice for parents, which can be downloaded or copied by nursery schools for issue to parents, if required.

Wherever we use the term 'parents' in this guidance, this should be read as referring to everyone with parental responsibility for a child, including social workers of looked after children, as well as foster carers or other carers.

This guidance is for Northern Ireland only, although it has been produced in line with parallel guidance being issued by the Department for Education and Skills (DfES) in England, the Scottish Executive and the Welsh Assembly Government.

This guidance was produced by DE in consultation with DHSSPS, with other Government Departments in GB and NI and with education partners. DE has issued this guidance as part of our role in supporting DHSSPS as the Lead Department in preparing for a possible flu pandemic. We recognise that this initial guidance will need to be updated periodically to take account of ongoing planning and development and any improved intelligence about a human flu pandemic.

1. General Introduction

Why you should read this guidance

1.1 The Chief Medical Officer's publication 'Explaining Pandemic Flu' sets the context for this guidance:

The World Health Organisation (WHO) and other international organisations have recently warned that a flu pandemic is both 'inevitable' and 'imminent' ... The consequences of an influenza pandemic would be serious with the numbers of people falling ill and dying being far higher than with 'ordinary' winter flu outbreaks.

Influenza pandemics are not new. Three flu pandemics caused public health emergencies during the last century and experts are predicting that another is due.

1.2 No-one knows exactly when a pandemic will occur. When it does, it may come in two or more waves several months apart. Each wave may last two to three months across the UK as a whole. If a pandemic flu strain emerges overseas, it will almost certainly reach the UK; while this may take around a month, planners cannot rely upon having that much forewarning. Once the pandemic arrives, it is likely to spread throughout the country in a matter of weeks.

World Health Organisation Phases

The WHO has set out the phases of a pandemic and these are often cited to refer to the different situations we may face. The WHO will announce the various phases as soon as they are confirmed. The meaning of the most relevant phases is summarised below:

Phase 3: the current position at the time of publication of this guidance - there is a new sub-type of virus, but no human-to-human transmission;

Phase 4: small clusters of infection, but limited human-to-human transmission;

Phase 5: large clusters of infection but human-to-human spread is localised; this suggests the virus is adapting to humans but may not yet be fully transmissible between humans.

Phase 6: pandemic phase; increased and sustained transmission between humans.

1.3 The Cabinet Office in Whitehall is taking the lead on the UK approach to dealing with an influenza pandemic and Northern Ireland will link into this national approach. DHSSPS is co-ordinating health consequences of the Northern Ireland response and has published a NI Influenza Pandemic Contingency Plan which is available on the DHSSPS website at <http://www.dhsspsni.gov.uk/index/phealth/pandemicflu/pandemic-contingency.htm>.

The Office of the First Minister and Deputy First Minister (OFMDFM) is co-ordinating efforts by other NI Departments to encourage planning across their sectors.

1.4 The Government recommends that organisations, including those in the public sector at local level, should be as prepared as possible now, so that plans can be activated when a pandemic arrives. DE has produced this guidance in consultation with other Education Departments across the UK, other NI Government Departments and our education partners as part of the Government's co-ordinated efforts to encourage prudent planning across all sectors. This guidance is to support planning for nursery schools in Northern Ireland; further guidance on specific issues will follow and the guidance will be reviewed on a regular basis.

1.5 Flu viruses change all the time. A vaccine closely matching the specific virus in a pandemic will not be available for the first wave of a pandemic. The Department of Health (DH) (England) is leading on purchasing and supplying a pandemic vaccine on behalf of the whole of the UK, liaising with the Devolved Administration Health Departments. The DH is procuring a stockpile of enough anti-viral drugs (Tamiflu) to treat 25% of the population, the scenario considered most likely, based on WHO advice, about the likely attack rate. This will be complete by September 2006: these will be used to treat those who fall ill (not to prevent illness).

1.6 Planning for a flu pandemic presents challenges because it is impossible to predict its characteristics in advance, eg. whether it will be relatively mild, or have minimal impact on children; or be severe across all age ranges, or have its highest impact on children. Health advice is that planning should be adaptable, to respond to different levels of infection and fatality. To put these levels into some context, the lowest likely levels of infection and fatality would mean around 54,000 deaths in excess of normal levels in the UK, the highest likely levels over 700,000, over the course of a pandemic, which may involve more than one wave.

1.7 The impact on children and young people will depend on the nature of the virus causing the pandemic. If the next flu pandemic were similar to those in the 1950s and 1960s, most of the additional deaths would be among the elderly, but the 1918-19 'Spanish' flu pandemic had a different profile, with young adults being most affected.

1.8 Current guidance from the Government is that people should try to continue their everyday (essential) activities as normally as possible during a pandemic, while taking personal responsibility for reducing their risk of exposure to the virus and social responsibility to lessen the spread of the virus.

2. Planning in the Education Sector

2.1 There are, however, some specific issues to consider concerning children. There is evidence from seasonal flu that children secrete larger quantities of the virus and for longer than adults, which can lead to a rapid spread of infection when they are together in school or other group settings. Evidence also shows that other infections, including seasonal flu, spread less rapidly during school holidays than in term-time. Indications are that closing schools could reduce the spread of pandemic

flu among children, though it may not reduce infection in the adult population as a whole.

2.2 DE's first priority in a flu pandemic would be the welfare of children.

There may be circumstances in which the Government would advise the closure of schools during a pandemic. **We therefore recommend that all schools should plan for both staying open and for possible closure, for some or all of a pandemic.** Closure could either be very localised and brief – for example, a school with too few staff to operate safely – or more widespread and for a longer period, if **national** public health advice confirms that this will reduce the spread of infection among children. In the event of closure to pupils for medical and child welfare reasons, the employing authorities should still ask staff to work (if well); this is consistent with advice to employers in all sectors.

2.3 Experience has shown that organisations which prepare for emergencies are more likely to withstand or recover successfully from these disruptions than those which do not. DE has been working with our partners in the Education & Library Boards (ELBs) and the Council for Catholic Maintained Schools (CCMS) on planning for a flu pandemic. DE and the ELBs are taking forward contingency arrangements for the central services they provide, such as school meals, school transport, payment of grants to schools, payment of teachers' salaries and pensions etc.

2.4 Many schools across Northern Ireland will already have developed Emergency Management Plans with the assistance of the Health & Safety Advisers from their local ELB, who have issued, or will be issuing, guidelines for this purpose.

2.5 We recommend that all nursery schools should now develop contingency plans for pandemic influenza, which should be part of the school's overall emergency management planning arrangements.

2.6 While there **may** be a little time to review plans in the period between a pandemic being identified as imminent elsewhere and it reaching the UK, this is unlikely to be enough to develop robust plans from scratch, so most work should be done now and then reviewed regularly – at least annually – until a pandemic occurs.

2.7 The basic information you will need to draw up your contingency plan is contained below. Sources of further information are listed in Annex A. ELB Health & Safety Advisers will also be able to provide advice and guidance. Any further information will be placed on the DE website (www.deni.gov.uk), which will be updated regularly.

3. Advice and communication – who does what before and during a pandemic

3.1 The Government wants to give consistent messages to all services and to the public about pandemic flu. Until a pandemic arrives, and during a pandemic, core messages on public health matters will come from DHSSPS and DE will help to pass on these messages to the education sector. DE advice will focus on how schools can deal with the effects of a pandemic. We will communicate directly with nursery schools via letter/telephone. For those nursery schools with access to the internet,

the DHSSPS and DE websites will be updated regularly with key messages. ELBs will also have up-to-date advice for nursery schools. In certain circumstances, we will consider using other channels of communication in addition, eg issuing a statement to the news media.

4. Communicating messages about possible closure (and re-opening) of schools

4.1 As indicated in para 2.2 above, the Government may issue national advice that, in order to reduce the spread of infection among children, schools should close when the pandemic reaches their area. If such advice is issued, DE will assist DHSSPS in disseminating this advice to nursery schools across Northern Ireland. At this stage, the message to nursery schools would be not to close, but to prepare for closure when the pandemic reaches their area. We are investigating further with DHSSPS to confirm what the triggers for closure and re-opening should be and this will be set out in further advice.

4.2 When public health professionals confirm that local circumstances meet the national criteria for closure (or re-opening), DHSSPS will advise DE who will then pass the message on to nursery schools, who should implement closure.

4.3 We recommend that school principals and Boards of Governors should ensure that they are clear about who will take any decisions on school closures. Generally, the school principal would consult with the (Chair of the) Board of Governors and inform the employing authority before deciding to close the school.

4.4 If all schools in an area close during a pandemic, the situation would be reviewed after a period of time (probably 2-3 weeks) by DHSSPS and DE. It is possible that medical advice might then be to make some provision available (possibly only for children who have had pandemic flu and recovered). Alternatively, medical advice may be to remain closed, in which case schools would be told when the situation would next be reviewed.

4.5 We are undertaking further work on the criteria for advising schools to re-open and on the mechanics of local timing. When schools in an area can re-open, DHSSPS will advise DE who will inform schools. It is anticipated that the primary means of doing so will be via the media, the DE website and the ELBs. Any conditions to be attached to re-opening, or any specific measures to be taken would be communicated at that time.

Advice or obligation?

4.6 If the Government decides that closing schools for child welfare reasons is advisable, DE expects to issue advice to schools to this effect and does not expect to use legislative powers to oblige schools to close. We believe that all concerned will share the desire to safeguard children's health and will want to comply with advice based on children's welfare.

4.7 There may, of course, be situations where, even if there has been no national advice that schools in infected areas should close, principals and/or the Board of

Governors might decide to close a nursery school because insufficient staff are available to run the school safely. It would be helpful for the principal and the Board of Governors to agree in advance the minimum number of staff in different categories needed to continue operating and whether there are key staff whose absence might lead to closure.

4.8 The closure of schools during a pandemic will have a significant impact on working parents and therefore potentially affect essential services, such as health care and the emergency services. DE is working with other NI Government Departments to alert them to the possible closure of schools during a pandemic, so that this can be built into planning arrangements across the various sectors.

Subsequent waves of pandemic flu

4.9 There may be two or more waves in a pandemic, possibly weeks or months apart. Government advice on action to be taken in subsequent waves will depend on information that would not be available until after the first wave: for example, which groups were infected in the first wave and whether they would be subsequently immune; and whether a virus-specific vaccine could be developed and produced in time. Depending on such information, advice could be to remain open and operate normally; close to all pupils; or open for pupils who had been infected but recovered in the first wave. As before, normal channels of communication would be used to provide advice to schools and service providers.

General public health messages

4.10 The key public health messages in a pandemic will be:

If you do catch flu:

- Stay at home and rest.
- Take medicines such as aspirin, ibuprofen or paracetamol to relieve the symptoms (following the instructions with the medicines). Children under 16 must not be given aspirin or ready-made flu remedies containing aspirin.
- Drink plenty of fluids.

You can reduce, but not eliminate the risk of catching or spreading influenza during a pandemic by:

- Covering your nose and mouth when coughing or sneezing, using a tissue when possible.
- Disposing of dirty tissues promptly and carefully – bag and bin them.
- Avoiding non-essential travel and large crowds wherever possible.
- 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, or to other people.
- Cleaning hard surfaces (eg kitchen worktops, door handles) frequently, using a normal cleaning product.
- Making sure your children follow this advice.

These measures are for your own health and to avoid spreading the illness to others.
Department of Health, October 2005

5. Situation Reports

5.1 As the co-ordinators of the wider NI response to a flu pandemic, OFMDFM is likely to require daily situation reports from organisations during a pandemic situation. This information will help to assess how the pandemic is affecting various sectors, including, for example, schools and ELBs.

5.2 DE may therefore want to collate information on school closures and pupil and teacher absences during a flu pandemic. Nursery schools may be asked to provide information on a regular basis to DE, where composite reports would be compiled, analysed and sent to OFMDFM and from there to Whitehall Departments in London. To minimise the burden of reporting for schools, it may be agreed that nursery schools closing would only need to report on the day of closing and the day of re-opening.

5.3 However, the information to be collected and the mechanics for doing so will need to be investigated further. The Department will issue further information, if necessary, in due course.

6. Issues that DE will cover in further guidance

6.1 The purpose of this initial guidance is to enable nursery schools and others to start planning now and to understand the action DE is likely to recommend at later stages. DE will issue further guidance in due course which will cover:

- Infection control;
- Updates to the current guidance, building on feedback from educational partners;
- Any more practical information for schools which becomes available.

6.2 In addition, if the Government, in a pandemic, were to issue “advice to travel only if essential, encouraging remote working or the staggering of journeys to work using public transport” (Cabinet Office, February 2006) – **which is not currently recommended** as actions to take in a pandemic – then guidance would be issued on how to apply that to nursery schools, which could include:

- Where nursery schools were open to pupils, advising principals to consider whether travel for off-site visits, or travel by peripatetic staff was essential;
- Where nursery schools were closed to pupils, encouraging remote working by school staff who would otherwise travel to the school site.

CHECK LISTS FOR SCHOOLS

We recommend that **all** nursery schools:

- A. now: put in place outline plans for a pandemic, planning both to keep services open and for possible closure;
- B. now: respond promptly to any request from DE or your local ELB for up-to-date contact details for your school, so that you are able to receive information from us reliably and quickly;
- C. between now and when a pandemic is imminent (World Health Organisation (WHO) Phase 4 [see explanation in Introduction]); take note of any new guidance, review plans regularly, ensure contact lists are kept up to date;
- D. when a pandemic is imminent (at WHO Phase 4, and, if time permits, at Phase 5): check, refine and prepare to activate these plans;
- E. during a pandemic: if there is no national advice to close schools on medical and child welfare grounds, remain open as long as sufficient staff are available, provide as near to normal services as resources permit; also to follow advice to minimise the spread of infection among children and staff, and seek health protection advice as and when appropriate;
- F. after the first few weeks of the pandemic: if schools have closed to pupils, be prepared to respond to advice from national and local health professionals, which might be to re-open some or all schools.

The following sections set out roles and responsibilities in more detail. They set out action to be taken now and during a pandemic. Much of the action to be taken now would come under the general heading of planning. It is vital that the plans you develop now are reviewed, and revised if necessary, regularly – at least once a year, perhaps twice, and whenever we issue any substantive changes to this guidance.

DE will inform nursery schools and the education sector in general (via email/letter/on our website) when WHO Phase 4 is reached, and again at Phase 5. These announcements should prompt you to revise plans and be ready to put them into action. You should not leave this until the last minute as there may be little time between reaching Phase 5 and the pandemic reaching the UK. It will be for you to decide which activities to prioritise at this stage, but in most cases we would advise a final check of contact details and reminding staff of procedures to be followed.

What you should do now

- Familiarise yourself with the overall UK Government advice on pandemic flu planning and the current WHO phase of alert – at the time of writing, alert phase 3. (see UK/WHO details in Annexes A & B);
- Develop contingency plans for pandemic influenza and promote the key messages to staff. The contingency plans should be part of the school's overall emergency management planning arrangements. Your local ELB has generic guidance on emergency planning which includes draft school emergency management guidelines. The plan should include procedures for:
 - emergency arrangements to care for children or send them home if in a pandemic you were to decide to close the school to children in the middle of the day – though such closure would be unusual;
 - ensuring back-up arrangements for premises officers/key holders, bearing in mind requirements of insurance cover and health and safety of staff and pupils;
 - heating of buildings if premises officer absent;
 - maintaining health and safety and hygiene arrangements to a high standard eg. cleaning toilets and prompt disposal of waste, at a time when improved hygiene is important;
 - continuity of school meals provision/advising parents of alternatives;
 - arrangements for rapid access to medical help for use when a pupil suddenly becomes very ill. (Guidance on first aid in schools is contained in the schools safety manual and there may be staff trained to First Aid at Work standard – see <http://www.belb.org.uk/healthandsafety/belb.asp>
You may also wish to contact your local health organisation as arrangements may vary during a pandemic;
 - plan where, if your school is open during a pandemic, you would isolate an ill child if their parent cannot immediately collect them;
 - managing any significant new risks to safety arising from staff undertaking unfamiliar tasks, including keeping order with more challenging pupils.
- Familiarise yourself with government advice on personal hygiene education (see Annex A) and ensure that school staff are aware of general advice for children and general advice on infection control. New guidance will be added as it becomes available;

- Make plans to ensure that your school is suitably equipped with materials needed to implement infection control measures (eg. tissues and tissue-disposal; hot water and soap), in time to cope with any imminent pandemic;
- Remind staff of your policies for supporting those who need time off short-term to care for dependents and/or sick family members; and support for any staff or pupils who are bereaved;
- Provide staff with, or help staff to access, information relevant to their own health in a pandemic e.g. published NHS information;
- Ensure that you have accurate records of contact names, addresses and phone numbers (including mobile numbers and e-mail addresses where possible) for parents and staff;
- Confirm the means of communicating messages on closures/re-opening to parents.

What you should do during a pandemic

- Put plans into practice. You will receive information from DE on whether the Government nationally has advised that schools should close when the pandemic reaches their area and from DE/ELBs on whether that now applies to your school.
- If your school remains open during a pandemic, you should activate contingency plans for dealing with likely staff absence. In these circumstances, it is important that you give very high priority to rigorous infection control measures and ask parents to collect and take home any child who becomes ill – though you may need arrangements to look after such children until a parent can collect them.
- Keep up-to-date with advice from the Government on any other social issues that it might propose, which are likely to be announced in the national media and may be replicated on the DHSSPS and DE websites.
- The most important decisions that the principal or Board of Governors will take will be whether and when to close your school, and when to re-open if you do. The school principal will generally consult with the (Chair of the) Board of Governors and inform the employing authority before deciding to close the school. You may decide to close the school for two main reasons:
 - even if there has been no national advice that schools in infected areas should close, you may consider it necessary to do so because staff absences make it impossible to operate safely; or
 - the Government may issue general advice UK-wide to all schools to close to pupils when pandemic flu reaches an area. If this happens, DHSSPS will advise DE when an area is affected and DE will pass the message on to schools to close. (see Section 4 for communication channels).
- Support staff who are ill, or bereaved and deal sympathetically with requests for leave to care for sick dependents. Ensure that health and safety responsibilities to staff continue to be fully discharged.
- Positively encourage staff who are ill, or think they are ill during a pandemic, not to come into work, whether the school is open or closed to children.
- Ensure arrangements are in place for the employing authorities to be able to contact the principal, or a suitable deputy, on any working day during the pandemic.
- You will receive advice from DE/ELBs on when to re-open all or part of the school and whether the school should re-open for all children or only for those who have had pandemic flu and recovered.

- If your school closes because of staff absences, you should ensure you have contact details that will enable you to tell parents when you are able to re-open.

Other published information, sources of guidance & useful contacts

If you do not have access to internet facilities, hard copies of these documents can be obtained from Information Management & Services Branch, DE.
Telephone: 028 9127 9651

Overall Government advice on pandemic flu planning is at
www.ukresilience.info/emergencies/health.shtm#guidance.

DHSSPS is co-ordinating the Northern Ireland response and has published a NI Pandemic Influenza Contingency Plan which is available on the DHSSPS website at <http://www.dhsspsni.gov.uk/index/phealth/pandemicflu/pandemic-contingency.htm>

The current WHO phase of alert, at the time of writing, is phase 3 (since 2004); a pandemic will be phase 6, see:
www.who.int/csr/disease/avian_influenza/phase/en/index.html .

DE defines the period “when a pandemic is imminent” as when the WHO announces [see previous item] WHO alert level 6, UK Alert Level 1 – pandemic overseas, no virus yet in the UK: the last level before UK Alert Level 2 - sporadic cases in UK. At UK Alert Level 2, employers and schools will have 2-4 weeks before the virus is established in the UK; 7-9 weeks before it peaks in the UK.

Government advice on personal hygiene education and general advice for young people: www.wiredforhealth.gov.uk/cat.php?catid=838 . General guidance on infection control, including personal hygiene and seasonal influenza: www.wiredforhealth.gov.uk/cat.php?catid=917 .

Guidance on first aid in schools is contained in the schools safety manual and there may be staff trained to First Aid at Work standard – see <http://www.belb.org.uk/healthandsafety/belb.asp>. You may also wish to contact your local health organisation as arrangements may vary during a pandemic.

Infection control guidance for contractors or managers of cleaning and catering staff: good practice recommended by HSE:
www.hse.gov.uk/biosafety/diseases/pandemic.htm;

The Health Protection Agency website contains more information on relevant issues:

- Explaining the difference between avian, pandemic and seasonal flu
http://www.hpa.org.uk/infections/topics_az/influenza/default.htm
- More detail
http://www.hpa.org.uk/infections/topics_az/influenza/avian/default.htm
- Influenza Pandemic contingency plan
http://www.hpa.org.uk/infections/topics_az/influenza/pandemic/fluplan.htm

For more information on avian flu see the Department of Agriculture and Rural Development's website at www.dardni.gov.uk.

Department for Education & Skills website

<http://www.teachernet.gov.uk/emergencies/planning/flupandemic/>

Scottish Executive website is at

<http://www.scotland.gov.uk/Resource/Doc/135144/0033447.pdf>

Welsh Assembly Government website is at

http://new.wales.gov.uk/topics/educationandskills/publications/guidance_and_information/pandemic_influenza?lang=en

Contacts

Health & Safety Adviser

**Belfast Education and Library Board
40 Academy Street
BELFAST
BT1 2NQ**

Health and Safety Adviser

**Western Education and Library Board
1 Hospital Road
OMAGH
Co Tyrone
BT79 0AW**

Health and Safety Adviser

**North-Eastern Education and Library Board
Property Services
52-56 Ballymoney Street
BALLYMENA
Co Antrim
BT43 1AN**

Health and Safety Adviser

**South-Eastern Education and Library Board
Grahamsbridge Road
Dundonald
BELFAST
BT16 0HS**

Health and Safety Adviser

**Southern Education and Library Board
3 Charlemont Place
ARMAGH
BT61 9AZ**

**Health and Safety Adviser
Council for Catholic Maintained Schools
160 High Street
HOLYWOOD
Co Down
BT18 9HT**

PHASES OF THE PANDEMIC RESPONSE

The World Health Organisation has defined phases in the progression of an influenza pandemic from the 'interpandemic period', through the first emergence of a novel influenza virus, to wide international spread, to facilitate a step wise escalating approach to preparedness planning. The phases, which were revised in April 2005, are now used internationally for pandemic influenza planning purposes. They are the framework on which a response is based.

The response to an influenza pandemic requires actions before, during and after the pandemic.

Interpandemic Period

Phase 1

No new influenza subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals, the risk of human infection or disease is considered to be low.

Phase 2

No new influenza subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human diseases.

Pandemic Alert Period

Phase 3

Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.

Phase 4

Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.

Phase 5

Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).

Pandemic Period

Phase 6

Increased and sustained transmission in general population. Past experience suggests that a second, and possibly further, waves of illness caused by the new virus are likely 3-9 months after the first wave has subsided. The second wave may be as, or more, intense than the first.

Post-Pandemic Period

Return to Interpandemic period.

Transition between phases

Transition between phases may be rapid and the distinction blurred. The crucial interval is between WHO Phases 5 and 6, which will determine to a large extent whether vaccine can be developed in time for the first wave of illness in the UK.

MAIN PLANNING ASSUMPTIONS ABOUT A HUMAN FLU PANDEMIC (from *UK Influenza Pandemic Contingency Plan*)

- A new pandemic will be due to a new sub-type of influenza A;
- A pandemic strain could emerge anywhere, including the UK, but is most likely to emerge in China or the Far East; spread from an origin in Asia is likely to follow the main routes of travel and trade;
- In the event of a novel influenza virus causing significant outbreaks of human illness elsewhere in the world, it is unlikely that the UK could prevent importation (except by closing all borders); even a 99.9% restriction on travel into the country would only be expected to delay importation of the virus by up to two months;
- Spread from the source country to the UK is likely to take around a month. Modern travel may result in wide international spread even more rapidly than this;
- Following arrival in the country it will take a further 2-3 weeks until cases are occurring across the whole country;
- Once influenza levels exceed the baseline threshold, influenza activity in the UK may last for 3-5 months, depending on the season, and there may be subsequent waves, weeks or months apart;
- All ages will be affected, but children and otherwise fit adults could be at relatively greater risk, particularly should elderly people have some residual immunity from exposure to a similar virus earlier in their lifetime;
- For planning purposes the base scenario, based on previous pandemics in the 20th century, is a cumulative clinical attack rate of 25% of the population (the figure advised by the WHO) over one or more waves of around 15 weeks each, weeks or months apart. The second wave may also be the more severe. 10% and 50% attack rates have also been considered;
- The impact of overall case fatality rates between 0.37% and 2.5% have also been considered. See the table below

Range of possible excess deaths, UK population

Case Fatality Rate (CFR)	10% attack rate	25% attack rate	50% attack rate
0.37%	21,500	53,700	107,500
1.00%	56,700	141,800	283,700
2.50%	141,800	354,600	709,300