

Pandemic influenza

Guidance for ambulance services
and their staff in England



DH INFORMATION READER BOX

Policy HR/Workforce Management Planning Clinical	Estates Commissioning IM & T Finance Social Care/Partnership Working
Document purpose	For Information
Gateway ref	8956
Title	Pandemic influenza: Guidance for ambulance services and their staff in England
Author	DH
Publication date	November 2007
Target audience	PCT CEs, NHS Trust CEs, SHA CEs, Foundation Trust CEs , Medical Directors, CE's, ambulance service medical directors, ambulance service emergency planners
Circulation list	
Description	This document provides ambulance trusts with a clear and pragmatic guidance to assist with their planning and preparations for an influenza pandemic. Specifically, it advises on national strategy, clinical management (including infection control) and business continuity planning.
Cross reference	Pandemic flu: A national framework for responding to an influenza pandemic
Superseded documents	N/A
Action required	N/A
Timing	N/A
Contact details	The Pandemic Influenza Preparedness Team Department of Health 452C Skipton House 80 London Road London SE1 6LH Email: pandemicflu@dh.gsi.gov.uk
For recipient's use	

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Introduction

This document provides guidance for ambulance services in England to prepare for, respond to and recover from an influenza pandemic.

Their clinical expertise will be required to support the assessment, treatment and referral of influenza and non-influenza patients more broadly.

The purpose of this guidance is to support influenza pandemic contingency planning in ambulance services.

This guidance is a key supporting document to *Pandemic flu: A national framework for responding to an influenza pandemic*. Therefore, the *National framework* is essential reading for ambulance services, as are the other key supporting documents (including specific material on the primary, acute and social care sectors), all of which are available at www.dh.gov.uk/pandemicflu

A strategic approach to pandemic influenza planning

Underpinning principles

In developing this guidance, the following underpinning principles have formed its basis:

- As far as possible, planning for an influenza pandemic should build on arrangements that are already in place rather than develop a series of new, 'special' arrangements. The approach required is to be able to use the usual mechanisms and procedures for deployment of ambulance trust resources in order to respond to an unusual set of circumstances.
- However, during the course of a pandemic there will be some crucial differences in how services will be delivered. These include:
 - building on the existing close links with local primary care trusts (PCTs) to prepare for and respond to a pandemic
 - building on the existing close links with local acute trusts and other healthcare providers to ensure a consistent approach to prepare for and respond to a pandemic
 - the basis for the treatment of patients with pandemic influenza, which will be treatment at home and advice on how, when and where to seek medical direction. Ambulance responses (both in control rooms and in the field) will need to reflect this change by having in place appropriate procedures and protocols to enable successful assessment and treatment at home
 - local flexibility for planning and responding, given the uncertainty about the effects of a pandemic.

This document does not provide detailed guidance on what a local plan for ambulance trusts should include, but rather a framework for local planning and links to resources that ambulance services may find useful. Individual services will need to draw up plans in partnership with the local health community and agree these with PCTs.

Background

Pandemic influenza – what is it?

Influenza pandemics are naturally occurring biological phenomena that have emerged from time to time throughout history. The conditions that allow a new virus to develop and spread continue to exist, and some features of modern society, such as air travel, could accelerate the rate of spread. Experts therefore agree that there is a high probability of another pandemic occurring, although timing and impact are impossible to predict.

An influenza pandemic occurs when a new or re-emerging influenza virus subtype emerges that is:

- markedly different from recently circulating strains
- able to infect people
- readily transmissible from person to person
- capable of causing illness in a high proportion of those infected
- able to spread widely because few – if any – people have natural or acquired immunity to it.

Whilst such a virus could first emerge anywhere in the world – including the UK – South East Asia, the Middle East or Africa are considered to be the most likely potential sources. Rapid spread would be likely to cause an epidemic within the country, which could become a pandemic if it spreads between countries.

More detailed information on influenza viruses, the illness they can cause and the impact of past pandemics is available at www.dh.gov.uk/pandemicflu

Planning assumptions and presumptions

The precise characteristics and impact of an influenza pandemic will only become apparent as the virus emerges. Therefore, some assumptions about a pandemic's course – and presumptions as to the UK's likely response in a number of key areas – are necessary to describe the impact the UK Government is currently planning for. Given the uncertainties, these should be regarded as working estimates rather than predictions, and response arrangements must be flexible enough to deal with a range of possibilities and capable of adjustment as implemented. Provided that the origin of a pandemic is outside the UK, emerging surveillance data might also allow the use of real-time modelling to confirm and/or refine these assumptions and presumptions.

To ensure a common approach drawn from the best available evidence, ambulance services are strongly advised to build their plans on the UK's influenza pandemic planning assumptions and presumptions, which can be found in the *National framework* (section 3) available at www.dh.gov.uk/pandemicflu

Pandemic influenza phases and triggers

The World Health Organization (WHO) has defined phases in the evolution of a pandemic that allow for a step-wise escalation in planning and response which is proportionate to the risk from first emergence of a new influenza virus. WHO will inform its member states of any change in phase, and this classification is used internationally. If a pandemic were declared, action would depend on whether cases had been identified in the UK, and the extent of spread. For UK purposes, four additional alert levels have therefore been included within WHO Phase 6; these are consistent with those used for other communicable disease emergencies.

Further information on WHO international phases and UK alert levels can be found in the *National framework* (section 5) available at www.dh.gov.uk/pandemicflu

A key component of ambulance service plans should be the development of healthcare triggers aligned with WHO international phases and UK alert levels.

To facilitate consistency of approach, these triggers should be developed in partnership with the local health community and agreed with local PCTs.

These triggers will, for example, assist ambulance trusts in deciding when to:

- initiate 'assess and leave' procedures
- support the rapid discharge of patients from acute trusts.

Ethical considerations

At the request of the Department of Health, an independent committee with cross-UK representation has developed an ethical framework to inform the development and implementation of health and social care response policy. The systematic use of the principles it contains can act as a checklist to ensure that all the ethical aspects have been considered at all levels.

Responding to pandemic influenza: The ethical framework for policy and planning is available at www.dh.gov.uk/pandemicflu

Table 1: WHO international phases and UK alert levels

Phase	WHO international phases	Overarching public health goals
Inter-pandemic period		
1	No new influenza virus subtypes detected in humans	Strengthen influenza pandemic preparedness at global, regional, national and sub-national levels
2	Animal influenza virus subtype poses substantial risk	Minimise the risk of transmission to humans; detect and report such transmission rapidly if it occurs
Pandemic alert period		
3	Human infection(s) with a new subtype, but no (or rare) person-to-person spread to a close contact	Ensure rapid characterisation of the new virus subtype and early detection, notification and response to additional cases
4	Small cluster(s) with limited person-to-person transmission but spread is highly localised, suggesting that the virus is not well adapted to humans	Contain new virus or delay its spread to gain time to implement preparedness measures, including vaccine development
5	Large cluster(s) but person-to-person spread still localised, suggesting that the virus is becoming increasingly better adapted to humans	Maximise efforts to contain or delay spread, to possibly avert a pandemic and to gain time to implement response measures
Pandemic period		
6	Increased and sustained transmission in general population UK alert levels 1 Virus/cases only outside the UK 2 Virus isolated in the UK 3 Outbreak(s) in the UK 4 Widespread activity across the UK	Minimise the impact of the pandemic

The role of ambulance services during an influenza pandemic

Responding to this significant challenge will require each section of the health community to prepare and plan for this eventuality, but this planning must be integrated across and within all those organisations that deliver health and social care services to the population. Only through this whole-systems approach will robust and effective healthcare be maintained under extremely demanding conditions.

Adding value to the response

Thirteen NHS trusts provide ambulance services across England. They will need to maintain local planning and readiness for pandemic influenza based on a common response strategy, integrated with local health plans. This strategy will provide the framework for:

- prioritising effort
- ensuring resilience arrangements locally, regionally and nationally, including strategic command, control and coordination arrangements.

The demands likely to be placed on ambulance trusts will bring these organisations to such a critical level that normal and routine activity will not be able to continue in the same form. This will be from both a patient demand perspective and a business continuity angle, principally concerning the provision of resources.

In their planning with PCTs and local multi-agency partners, ambulance services should address the following key questions:

- During an influenza pandemic, what services can safely be curtailed or downgraded?
- What resources are released as a result of this action?
- What is the impact of releasing these resources?
- How can these resources be put to best use, primarily in the local health response, but also in the multi-agency response?
- How can ambulance personnel be appropriately supported (including training and clinical supervision) to work differently in order to facilitate the principle of 'assess, treat and leave at home' for the majority of cases, triaging only the most unwell and vulnerable patients for transportation to hospital?
- What is the trust's own capability to continue its critical functions during an influenza pandemic?

In answering these questions, local planners should bear in mind that other illnesses and injuries will continue to occur, and that ambulance response capability for other emergencies needs to be maintained as far as possible.

Whole-systems approach to healthcare – interfacing with the ambulance service response

Ambulance services, in partnership with PCTs and others providing access to NHS services, must develop a coordinated and consistent approach towards responding to patients. Linked to the coordination of methods of handling calls seeking help is the need for appropriate assessment that takes account of the patient's reported needs and the availability of resources according to the availability of care.

Overarching principles

- Ambulance trusts will play a vital role in acting as one of the main gateways to healthcare. For this to be effective, ambulance services must work in partnership with local PCTs, GPs, out-of-hours services, NHS Direct, emergency departments, minor injuries units, walk-in centres and others that provide access to NHS services, including the devolved administrations where appropriate. Pandemic-specific pre-hospital patient assessment and treatment protocols will need to recognise that hospital capacity will be extremely limited, emphasising treatment at home and ensuring that only patients with serious or life-threatening conditions are actually admitted into the acute sector. This work has been initiated nationally. Local response plans should also consider the extent to which the field assessment and treatment skills of ambulance staff could be utilised to support the wider delivery of home care.
- However, the process should not be viewed as starting with the ambulance professional arriving at the patient's location, but with the receipt of the call. Key, pre-prepared questions will need to be asked to ensure that the limited resources available are targeted to those most in need. A challenge in achieving this will be to ensure that the call prioritisation software used by ambulance trusts reflects these revised algorithms. This work has been initiated nationally, but will need to be completed as part of national influenza planning and preparedness.
- Effective communication strategies informing patients why their expectations may not be met are being developed nationally by the Department of Health's Pandemic Influenza Preparedness Team. In these scenarios, staff in ambulance service control centres will play a vital role in providing consistent and accurate advice and information. These messages must be consistent with advice provided by other health professionals and NHS Direct. Despite communication and education efforts, many patients and their relatives and carers may demand transport and it is acknowledged that this may increase call time significantly.
- Ambulance services have other experiences and resources that are vital when responding to pandemic influenza. Ambulance services, through their knowledge and understanding of command and control systems, are well placed, for

example, to assist PCTs in the provision of a local influenza coordination arrangement, if appropriate and agreed locally.

- Many vulnerable patients of all ages and those with long-term conditions who are being cared for in their home setting are likely to be well known to some ambulance and other local services. The scheduling systems used for non-emergency patient transport services may be one component that can provide assistance in the planning and scheduling of healthcare to vulnerable patients in the home setting.
- Ambulance trusts should explore the potential role of primary care and emergency care practitioners during an influenza pandemic in conjunction with local healthcare providers and Local Resilience Forums (LRFs).
- The aim should be to transport to hospital only those patients who are most critically ill, in parallel with maintaining services to other patients, for example those receiving life-sustaining outpatient treatment or those injured as a result of accidents, and those receiving maternity care. For those suffering the complications of influenza, hospital capacity should be utilised for the seriously ill most likely to benefit.
- Ambulance trusts will play a vital role in the safe transport of patients away from acute settings, especially those sites implementing a policy of increased discharge rates as a result of the pandemic.

Department of Health guidance documents on pandemic influenza arrangements in the acute and community settings are available at www.dh.gov.uk/pandemicflu

Children

For ambulance services during the influenza pandemic, the principles for managing children should be along the same pathways as for adults, whilst taking into account their different physiology and needs. The severity of a child's illness may be more difficult to assess than that of an adult. They should therefore be seen by someone with the appropriate training and experience to make that assessment in a timely manner. Ambulance trusts are advised to build this contingency into their pandemic influenza plans.

Strategic command, control and coordination arrangements

Ambulance trusts work regularly with the police and fire and rescue services. This experience places the ambulance service as a useful link between the wider healthcare system and the resilience community, including supporting PCTs at LRFs and, in the response phase, Strategic Coordination Groups (SCGs).

As the clinical attack rate increases, consideration must be given to reducing or ceasing certain service provision in order to pool and target resources effectively. During the pandemic period (WHO Phase 6, UK alert levels 2–4), this may require daily assessment of resource availability. When considering the whole-systems approach, any reduction or cessation of service will need to be agreed with PCTs and strategic health authorities (SHAs), as there will be a knock-on effect elsewhere in the healthcare system.

The NHS command, control and coordination arrangements have been reviewed and revised to take account of the changes made to the organisation of the NHS and also to the needs of the service during a pandemic. Details are available from the *National framework* (section 4) available at www.dh.gov.uk/pandemicflu

Recovery

Ambulance trusts will need to consider, as part of contingency planning, a recovery strategy for the post-pandemic phase. Although the objective is to return to pre-pandemic levels of functioning as soon as possible, the pace of recovery will depend on the residual impact of the pandemic, ongoing demands, backlogs, staff and organisational fatigue and continuing supply difficulties in most organisations. Therefore, a gradual return to normality should be anticipated and expectations shaped accordingly. Plans at all levels should recognise the potential need to prioritise the restoration of services and to phase the return to normal in a managed and sustainable way.

Ambulance services are likely to experience persistent secondary effects for some time, with increased demand for continuing care from:

- patients whose existing illnesses have been exacerbated by influenza
- those who may continue to suffer potential medium- or long-term health complications
- a backlog of work resulting from the postponement of treatment for less urgent conditions.

The re-introduction of performance targets and normal care standards also needs to recognise loss of staff and their experience, and that other staff will have been working under acute pressure for prolonged periods and are likely to require rest and continuing support. Human resource issues will need to be considered carefully.

Work is in progress at a national level to produce specific advice on human resource issues – *Pandemic influenza: Human Resources guidance for the NHS* and it has been published for comment.

Facilities and essential supplies may also be depleted, resupply difficulties might persist and critical physical assets are likely to be in need of backlog maintenance, refurbishment or replacement. Impact assessments will therefore be required.

Audit trails for both clinical and corporate governance purposes will need to be reviewed in preparation for any wider inquiry into the response, or for increased requests for information on the treatment provided to individuals. Any backlog of routine work that was put on hold, such as training and similar activity, may need to be prioritised to ensure that the service can continue to move forward.

Ambulance services should also consider developing arrangements for regrouping services between waves of the pandemic.

Clinical issues

Control of infection

Work is in progress at a national level to produce specific ambulance service infection control guidance particularly relating to pandemic influenza and it will be published as soon as it is available.

Parts of the pandemic influenza guidance document *Infection control in hospitals and primary care settings* are also applicable to the ambulance service and this is available at www.dh.gov.uk/pandemicflu

Generally, limiting the transmission of pandemic influenza requires the application of tried, tested and proportionate basic infection control measures such as:

- staff education
- local risk assessments to inform decisions on control and protective measures, as required by the Control of Substances Hazardous to Health Regulations 2002
- documenting proportionate procedures, operational protocols and checklists
- the consistent application of basic hygiene and infection control measures
- timely recognition of symptomatic patients
- ensuring that staff are well informed about and adhere to procedures for the prevention of influenza transmission
- providing personal protective equipment (PPE) if occupational risk assessments have indicated that to be necessary and ensuring that staff are trained in its correct wear, limitations and use
- implementing enhanced cleaning routines to minimise the risk from contact with hard surfaces.

Further guidance on infection control measures is available from the Department of Health website at www.dh.gov.uk/pandemicflu or the Health Protection Agency website at www.hpa.org.uk/infections/topics_az/influenza/pandemic/fluplan.htm.

The use of face masks and respirators

Various types of surgical face masks and respirators are available, offering differing levels of protection and meeting agreed European and/or international normative standards. WHO recommends the use of surgical masks and particulate respirators at 95% efficiency by healthcare workers during a pandemic, and that symptomatic patients could themselves wear surgical masks to protect others, if circumstances make it absolutely necessary for them to leave home and logistical arrangements allow. However, standard Health and Safety Executive (HSE) guidance calls for higher specification FFP3 respirators for healthcare workers whenever respiratory protection

is indicated in the UK, although it recognises that this may not be sustainable in the special circumstances of an influenza pandemic. Based on available evidence and current UK pandemic influenza infection control guidance:

- fluid-repellent surgical masks should be worn by healthcare workers who may be in close (within one metre) and/or frequent contact with symptomatic patients
- FFP3 standard disposable respirators should be worn when carrying out clinical procedures likely to generate aerosols of respiratory secretions from infected patients (eg dental drilling, intubation, aspiration), although such procedures should be avoided as far as possible. It should particularly be noted that fit testing of respirators and specific training on their use are essential.

Assessment

The assessment of patients can be divided into two broad elements: telephone assessment and face-to-face assessment. Work is being undertaken at a national level to develop appropriate changes to the prioritisation software used by NHS services. The intention is to help support the delivery of a consistent service across the NHS.

Telephone assessment

Existing telephone assessment systems used in ambulance services in the UK recognise that not all patients accessing 999 require an emergency ambulance response. A significant proportion of 999 calls are dealt with using alternate end dispositions (Category C), with either advice or an alternative arrangement for care being provided.

Face-to-face assessment

Although the majority of cases may be adequately dealt with through telephone assessment, there will remain a need for protocols to enable staff working in primary care, including ambulance staff, to assess and prioritise patients in order to decide who can reasonably be left at home. Such protocols would recognise the pressures that the local health service was experiencing and would be applicable to patients with complications of influenza as well as to those with unrelated illnesses or injury.

Access to accident and emergency departments and admission to critical care units

The demand for hospital admission can be expected to increase up to 440 new cases per 100,000 population per week at the peak of a pandemic, given a 50% clinical attack rate, and it is likely that demand for hospital admission will exceed available capacity.

In such circumstances, referral and assessment decisions will have to differ from normal expectations. To do this effectively there must be clear, locally agreed methods in place, taking account of any national advice, to support staff charged with the responsibility for such decisions. The extent to which support may be required will vary with the clinical attack rate and the resulting clinical pressures.

The priority is to reduce illness and save most lives in a way that is fair. During the course of an influenza pandemic and the follow-on period, it is essential that ambulance trusts formulate and agree with other responding organisations (primarily primary and acute sector NHS trusts) explicit plans to maximise efficient use of these limited resources and that, during the pandemic, daily dialogue is maintained with these same organisations.

Further information on pandemic influenza guidance for the acute and primary care sectors is available at www.dh.gov.uk/pandemicflu

Treatment

During a pandemic, any patient who is ill with influenza-like symptoms will be advised to stay at home and contact the National Flu Line service by telephone for initial assessment and access to antiviral medicines, if that is indicated.

Detailed guidance on the provision of healthcare in a community setting in England is available at www.dh.gov.uk/pandemicflu

Ambulance trusts will need to give advance consideration to the care and management of anxious or distressed friends and relatives.

Mass fatalities

Local authorities are responsible for producing local multi-agency plans for managing excess deaths in conjunction with other partners, agencies and groups. Ambulance trusts must ensure that they are engaged in this planning process.

Business continuity

The guidance provided within this section aims to focus the attention of planners upon issues that may need to be specifically addressed in preparation for managing an influenza pandemic. Ambulance trusts are reminded that these pandemic-related areas should be included within, and as an extension of, trusts' business continuity management arrangements as required by *NHS Emergency Planning Guidance 2005* (section 1.6, page 8) and the Civil Contingencies Act 2004.

NHS Emergency Planning Guidance 2005 is available at www.dh.gov.uk/emergencyplanning

Further information on generic business continuity planning in relation to the Civil Contingencies Act 2004 is available at www.ukresilience.info/preparedness/businesscontinuity/index.shtm

The Cabinet Office has also produced specific contingency planning material in relation to pandemic influenza and this is available at www.ukresilience.info/publications/060710_revised_pandemic.pdf

In addition, ambulance trusts may wish to assess themselves against the new British Standard for business continuity management (BS 25999). Details are available at www.thebci.org/pas56.htm

Ambulance trusts are encouraged to review their business continuity plans to deal with the effect of disruption to essential utilities. The Estates and Facilities Division of the Department of Health has produced guidance to assist planners in this regard (HTM00) and this is available from the NHS Knowledge and Information Portal at www.knowledge.nhsestates.gov.uk

The following sections are a summary of some key considerations.

Workforce

The Department of Health is working with NHS Employers on the delivery of specific guidance on pandemic influenza-related workforce and human resource issues – *Pandemic influenza: Human Resources guidance for the NHS*, including staff indemnity, and has been published for comment.

Ambulance trusts should develop contingency plans for maintaining and expanding the workforce available to support additional ambulance service capacity, working jointly with trade unions and staff organisations. Ambulance trusts should place strong emphasis on the importance of maintaining staff safety, confidence and morale. Experience from previous events suggests that these are crucial issues in preserving workforce commitment and availability, and that staff absence is likely to increase if staff have concerns about their safety or the safety of their families.

These preparations should include:

- identifying the skill base of existing staff and the areas in which they might reasonably be asked to work in the event of a pandemic. These staff may be:
 - working in existing ambulance trusts
 - working in other related areas, eg in hospitals
 - recently left, eg retired, reallocated or seconded
 - working off site
- identifying staff who have responsibilities as carers (for children, relatives, etc) that may impact on availability and affect rota planning, and making an assessment of the impact of the closure of schools, nurseries, day hospitals, etc on contingency arrangements for staffing
- considering the circumstances under which staff may be asked to undertake responsibilities that exceed their normal capacity and skill levels, and identifying what additional resources may be required, eg training, clinical supervision, debriefing, psychological support for staff and their families
- establishing mutual aid arrangements with neighbouring NHS and other organisations, eg by making arrangements for staff unable to travel to work who may be more easily able to attend facilities nearer to their homes and taking into consideration the distances travelled and methods of travel used by staff
- reassessing and restructuring staff rotas and reviewing minimum staffing levels
- making arrangements for residential accommodation for those staff unable to travel home
- establishing procedures, protocols and residential facilities for the accommodation of staff whilst working and for those who might be reluctant to attend work unless facilities are available to prevent the need to return home (because of concerns about disease transmission to their family)
- developing strategies for return to normality as the pandemic subsides. These should include the progressive, planned release and support of staff who may have been working under stress, and possibly continuously for a prolonged period.

Training and support

Additional training and support may be required for existing ambulance personnel to enable them to respond appropriately to the demands of the pandemic. In addition to pandemic-specific programmes, this may include education on generic issues to enable the maintenance of services.

Standard infection control protocols and procedures should be reviewed and reinforced, and training should be provided where gaps are identified. During WHO Phase 5, ambulance services are advised to provide infection control refresher courses to their staff.

The HSE has produced pandemic-specific infection control guidance for the occupational setting and this is available at www.hse.gov.uk/biosafety/diseases/influenza.htm

Support and training programmes must be developed for those members of staff who may be reallocated to other roles in support of pandemic influenza operations.

Training programmes must contain infection control advice for those ancillary workers (eg cleaners, vehicle workshop staff, technical and IT staff) who interact with emergency ambulance staff and vehicles, and thus are at risk.

Ideally, staff should be seconded to such courses on a rolling, regular-update basis in order to produce and maintain a high level of preparedness. However, it is also recognised that it may be essential to provide 'off-the-shelf' training at short notice.

Maintenance of the fleet and other services

The resilience of fleet support arrangements is essential during a pandemic. Ambulance trusts should assure themselves that both in-house and contracted services are resilient and, if required, additional arrangements should be put in place with alternative providers in the preparatory phase to strengthen these provisions. The following areas should be included:

- main dealer support
- in-house maintenance
- auto-electrical support
- tyre supply and fitting.

Specifically, agreements should be reached with vehicle manufacturers regarding work undertaken during an influenza pandemic which may need to be undertaken by non-approved contractors to prevent the infringement of vehicle warranties, which may have long-term financial consequences.

The role of the voluntary and independent sector

The demand on voluntary and independent resources should not be underestimated. Unlike conventional, short-lived periods of increased demand where such resources may be deployed, support during a pandemic is likely to be required for approximately 12 to 16 weeks at a time. Trusts, along with the local health community, should therefore engage with voluntary providers, voluntary aid societies and the independent sector early in order to ascertain their capacity and resilience for such prolonged engagement. The engagement of other voluntary and independent providers not routinely used by ambulance trusts should also be considered. A collective approach with the health community, LRFs and Regional Resilience Forums is encouraged, to ensure the most effective use of these important resources and to prevent 'double counting'.

Financial controls

The response to a pandemic will place particular challenges upon trusts' financial procedures due to the demand for urgent resupply and possible stockpiling of resources. Whilst it is important to deal with the unusual demand by using normal systems, it is essential that trusts ensure that finance, and particularly procurement systems (and the staffing to support these), are robust. Engagement with trust bankers should identify fall-back arrangements to ensure continued access to funds in order to continue paying staff and essential suppliers throughout the pandemic period.

Mutual aid

Ambulance services should review their existing arrangements for mutual aid. However, it is unlikely that support will be available from neighbouring services, which in all probability will be experiencing the same levels of high demand and staff absence.

Data collection and transmission – focused data collection systems

Discussions are being conducted nationally to agree what information will be required from situation reports, and the method and likely frequency of collection. Once this information is available, ambulance trusts should ensure that appropriate support systems are in place to facilitate the effective linkage to these arrangements both locally and nationally. Time will need to be factored in to plans for the required data collection and reporting.

Equipment and supplies

Ambulance trusts should review their inventory of resources in order to facilitate access in abnormal circumstances and to assist in determining priorities during the pandemic.

Ambulance trusts should give consideration to what additional equipment and supplies – including masks, gowns and other PPE, respiratory circuit filters and other essential respiratory support apparatus, and core pharmaceuticals/oxygen/disposables – might be needed to sustain their response during an influenza pandemic.

The potential for disruption to the supply chain due to staff absence or fuel shortages should be considered. Trusts may wish to increase stock levels of equipment and supplies that are normally maintained on a 'just-in-time' resupply basis, such as medical and PPE consumables, medical gases and vehicle fuel and parts.

Consideration should be given to plans for the storage of equipment to support an influenza pandemic response, how such equipment will be accessed, and to the maintenance of critical supply and delivery chains. Ambulance trusts are encouraged to engage in discussions with other healthcare partners on this issue to ensure consistency of approach in the local health economy.

Advance planning will enable ambulance services to make the most efficient use of limited resources in an escalation setting. This could include collaborative agreements with neighbouring healthcare services on the use of combined storage and stockpiling of agreed resources. Similar agreements could be undertaken relating to disposable equipment and PPE. The use of memoranda of understanding between trusts should be considered to ensure that there is clarity about what equipment, supplies and other resources are being held and the basis for access and use.

It is essential that critical logistic and supply chain arrangements are robust. Trusts are encouraged to be fully conversant with their suppliers' (influenza pandemic) business continuity arrangements and, if required, consider alternative arrangements for supply chain requirements.

Leadership

Chief executive and the board

The chief executive and the board of each ambulance trust should take overall control of the preparations being made to respond to an influenza pandemic. Whilst it may be appropriate to delegate the task of preparation planning, the chief executive and the board should retain an active interest in progress, and should be represented at director level at NHS influenza pandemic preparedness planning group meetings.

The chief executive should:

- set up an influenza pandemic planning group
- nominate an influenza pandemic coordinator
- routinely monitor the progress of pandemic arrangements
- require routine exception reports on outstanding issues
- ensure that appropriate arrangements are in place to test and exercise plans
- ensure that plans are fully integrated with the local health community and multi-agency partners and agreed with local PCTs
- ensure that appropriate arrangements are in place to support and train staff
- ensure that arrangements are in place to keep staff fully informed about planning and preparing for a pandemic.

The influenza pandemic coordinator should:

- develop, test and review plans
- seek out examples of best practice in pandemic influenza planning
- keep staff informed
- liaise with PCTs, acute trusts, SHAs and the Health Protection Agency
- communicate with the private and voluntary sector
- liaise with primary care services so that GPs are aware of likely restrictions on ambulance response, and hence may encourage care of patients in the home environment
- raise awareness of problems and direct people towards relevant information
- keep the Department of Health and other ambulance services informed about the local response so that regional and national plans can be adjusted accordingly (eg pass on evidence obtained during a disease epidemic which provides information on its likely peak, duration, infectivity and mortality rates).

Annex: Resources and information

Strategy and planning

The UK national framework – *Pandemic flu: A national framework for responding to an influenza pandemic* – is available at www.dh.gov.uk/pandemicflu

Other Department of Health guidance on planning and preparing for an influenza pandemic, including material specific to the acute, primary and social care sectors is also available at www.dh.gov.uk/pandemicflu

Further information on the Civil Contingencies Act and Regional and Local Resilience Forum arrangements is available at www.ukresilience.info/preparedness/ccact.aspx

Further information on the care of influenza patients in the acute, primary and community and social care settings is available at www.dh.gov.uk/pandemicflu

As part of its role in supporting the Department of Health in preparing and planning for a possible influenza pandemic, the Cabinet Office has issued advice to assist business continuity planning – *Guidance on contingency planning for a possible influenza pandemic*, *Pandemic influenza checklist for businesses* and *Introductory advice to staff on planning for pandemic influenza* – which are available at www.ukresilience.info/publications and www.preparingforemergencies.gov.uk

The World Health Organization (WHO) has produced a planning framework through its *WHO global influenza preparedness plan* (2005) and a planning checklist, which are available at www.who.int/csr/resources/publications/influenza/GIP_2005_5Eweb.pdf and www.who.int/csr/resources/publications/influenza/FluCheck6web.pdf

The *NHS Emergency Planning Guidance 2005* is available at www.dh.gov.uk/emergencyplanning

Clinical information

More detailed information on influenza viruses, the illness they can cause and the impact of past pandemics is available at www.dh.gov.uk/pandemicflu

Further information on the human and animal health aspects of avian influenza is available from the Department for Environment, Food and Rural Affairs at www.defra.gov.uk, the Department of Health at www.dh.gov.uk/pandemicflu, the Health Protection Agency at www.hpa.org.uk, WHO at www.who.int/csr/en and the World Organisation for Animal Health at www.oie.int/eng/en_index.htm

Further information on clinical guidelines and infection control can be found at www.dh.gov.uk/pandemicflu

Guidance to employers is available via the Health and Safety Executive website at www.hse.gov.uk/biosafety/diseases/pandemic.pdf

Guidance on the clinical management of patients with influenza-like symptoms during a pandemic is available from the following websites:

British Thoracic Society – www.brit-thoracic.org.uk/PandemicFlu.html

Department of Health – www.dh.gov.uk/pandemicflu

British Infection Society – www.britishinfectionsociety.org

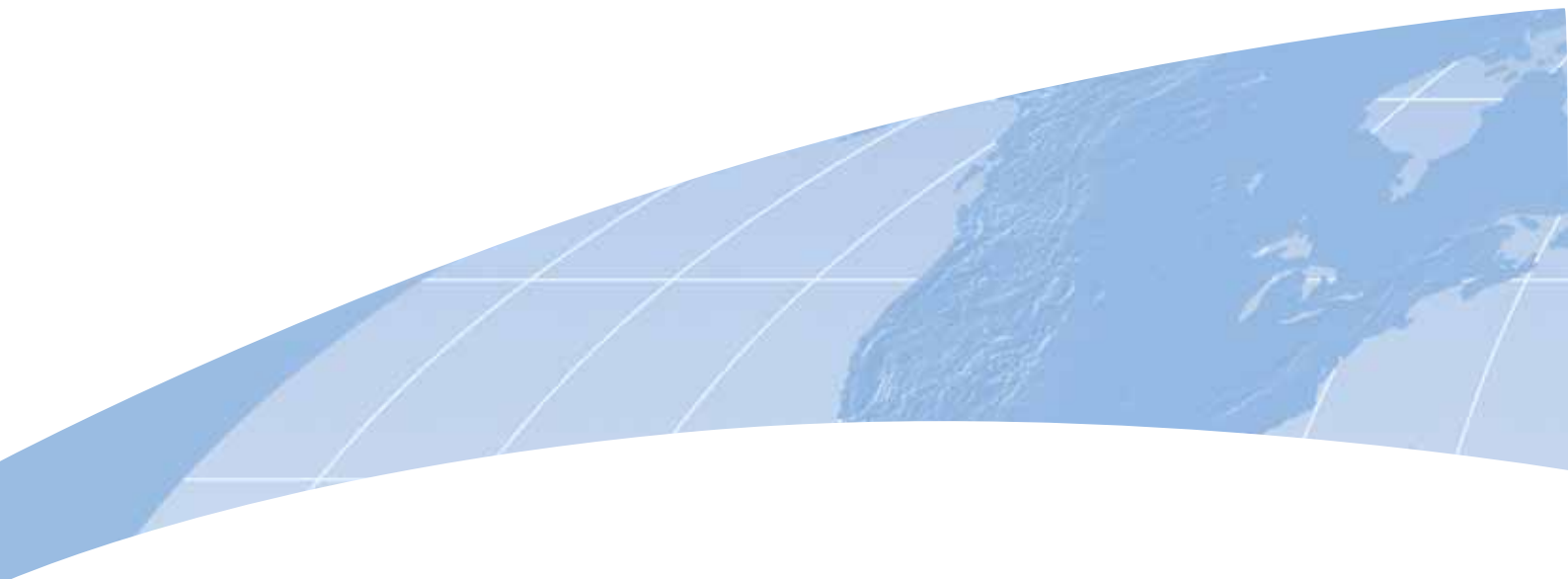
Health Protection Agency –
www.hpa.org.uk/infections/topics_az/influenza/pandemic/default.htm

Further guidance on infection control measures is available from the Department of Health at www.dh.gov.uk/pandemicflu and the Health Protection Agency at www.hpa.org.uk/infections/topics_az/influenza/pandemic/fluplan.htm

Business continuity

Further advice on business continuity aspects is available on the UK Resilience website at www.ukresilience.info/ccact/ep_chap_06.pdf

Further advice on the new British Standard for business continuity management (BS 25999) is available from the Business Continuity Institute's website at www.thebci.org



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Produced by COI for the Department of Health
November 2007