London Resilience Partnership Pandemic Influenza Framework
Version 6.0 (February 2014)
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<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Change (owner)</th>
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<tbody>
<tr>
<td>1.0</td>
<td>May 2006</td>
<td>Approved by London Regional Resilience Forum</td>
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<tr>
<td>2.0</td>
<td>2007</td>
<td>Updated to reflect changes in command and control arrangements and updated guidance and planning assumptions</td>
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<td>3.0</td>
<td>2007</td>
<td>Took into consideration further guidance issued by the Department of Health and Cabinet Office</td>
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<td>4.0</td>
<td>March 2009</td>
<td>Incorporated recommendations following a national review of multi agency planning and was utilised in the 2009/10 pandemic</td>
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<td>5.0</td>
<td>July 2012</td>
<td>Approved by London Resilience Forum</td>
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<td>6.0</td>
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<td>Approved by London Resilience Forum following review.</td>
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**Critical Information**

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
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<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>This Framework has been designed for use by the London Resilience Partnership to enable a common understanding of the planning required to respond to an influenza pandemic in London. It aims to use existing plans and systems where possible and these have been duly signposted. Specific plans for Public Health England and the NHS are being developed to meet the health requirements of a pandemic response but all agencies should ensure that their business continuity plans can be scaled to meet the planning assumptions outlined in this Framework.</td>
</tr>
<tr>
<td><strong>Principles</strong></td>
<td>Given the uncertainty about the scale, severity and pattern of development of any future pandemic, three key principles underpin pandemic preparedness and response activity:</td>
</tr>
<tr>
<td></td>
<td>1. <strong>Precautionary</strong>: the response to any new virus should take into account the risk that it could be severe in nature. Plans must therefore be in place for an influenza pandemic with the potential to cause severe symptoms in individuals and widespread disruption to society.</td>
</tr>
<tr>
<td></td>
<td>2. <strong>Proportionality</strong>: the response to a pandemic should be no more and no less than that necessary in relation to the known risks. Plans therefore need to be in place not only for high impact pandemics, but also for milder scenarios, with the ability to adapt them as new evidence emerges.</td>
</tr>
<tr>
<td></td>
<td>3. <strong>Flexibility</strong>: there will need to be local flexibility and agility in the timing of transition from one phase of response to another to take account of local patterns of spread of infection, within a consistent UK-wide approach to the response to a new pandemic.</td>
</tr>
</tbody>
</table>
| **Further reading – key documents** | [https://www.gov.uk/pandemic-flu](https://www.gov.uk/pandemic-flu)  
[https://www.gov.uk/pandemic-flu#workplacebusiness-guidance](https://www.gov.uk/pandemic-flu#workplacebusiness-guidance) |
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1 Introduction

Aim of this document
1.1 The aim of this document is to provide the agencies that make up the London Resilience Partnership with a strategic framework to support their integrated preparedness and response to pandemic influenza. Planners should additionally read the further national guidance available at: https://www.gov.uk/pandemic-flu

Objectives of this document
1.2 To summarise and collate the key plans and procedures which would be activated in the event of an outbreak of pandemic influenza.
1.3 To ensure understanding within the London Resilience Partnership of a London-wide pandemic response.
1.4 To outline roles and responsibilities of partner agencies.

Security Classification
1.5 This document is UNCLASSIFIED.

Queries
1.6 For any comments or queries concerning this document, please contact the London Resilience Team on 0207 983 4000 or lrt@london.gov.uk.
2 Background

2.1 Influenza is an acute infectious viral illness that spreads rapidly from person to person when in close contact.

2.2 A future pandemic could occur at any time and originate anywhere in the world.

2.3 A pandemic may occur over one or more waves, each of around 15 weeks, some weeks or months apart. The second or a subsequent wave could be more severe than the first.

2.4 An influenza pandemic occurs when a novel influenza virus emerges against which the human population has little or no immunity; global spread is thus considered inevitable.

2.5 The incubation period ranges from one to four days (typically two to three).

2.6 Adults are typically infectious for up to five days from the onset of symptoms. Longer periods have been found, particularly in those who are immunosuppressed. Children may be infectious for up to seven days. Some people can be infected, develop immunity, and have minimal or no symptoms, but may still be able to pass on the virus.

2.7 All ages are likely to be affected, but those with certain underlying medical conditions, pregnant women, children and otherwise fit younger adults could be at relatively greater risk. The exact pattern will only become apparent as the pandemic progresses.

2.8 As most people will have no immunity to the pandemic virus, infection and illness rates may be higher than during seasonal influenza epidemics.

2.9 There could be a cumulative clinical attack rate of 50% of the population, with the possibility of all cases occurring in a single wave. Up to 4% of those who are symptomatic may require hospital admission and up to 2.5% of those who are symptomatic may die.

2.10 The actual clinical attack rate of the virus will only become evident as person-to-person transmission develops however this number is likely to be higher in closed communities such as prisons, residential homes and boarding schools.

2.11 In addition to their potential to cause serious harm to human health, pandemics can cause wider societal and economic damage and disruption. Social disruption may be greatest when rates of absenteeism impair essential services.
3 Planning Assumptions

3.1 Preparing for Pandemic Influenza – Guidance for Local Planners (2013) lays out key planning assumptions. There are a number of issues raised within the assumptions which planners should note.

- The use of common assumptions across the resilience partnership is important to avoid confusion and facilitate an integrated approach to preparation. However, one of the main challenges faced by those planning for an influenza pandemic is that the nature and impact of the virus cannot be known until it emerges and has affected a significant number of people.
- All impact predictions are therefore estimates – not forecasts – made to manage the risks of a pandemic. The actual impact may be very different.
- Response arrangements must be flexible and able to deal with a range of possibilities and adaptable for a wide range of scenarios, not just the “reasonable worst case” detailed in the UK Pandemic Influenza Preparedness Strategy 2011 and National Resilience Planning Assumptions.

3.2 Planners should not assume that the 2009/10 is representative of future influenza pandemics. A more virulent strain of influenza virus, and therefore more severe pandemic, could still occur at any time.

- Modelling suggests that regardless of where or when an influenza pandemic emerges, it is likely to reach the UK very quickly. From the time of arrival in the UK, it will probably be a further one to two weeks until sporadic cases and small clusters of disease are occurring across the country.

3.3 As the 2009/10 pandemic showed, the demands of the pandemic are unlikely to be uniform, and different areas will be under pressure at different times, requiring flexibility of approach.

3.4 Local epidemics may be over faster and be more highly peaked than the national average.

3.5 Whilst there is likely to be local variability, local planners should plan to the peak of the wave, with between 10-12% of the local population becoming ill each week during the peak of the local epidemic and that could be sustained over 2-3 weeks.

3.6 Specific pandemic influenza guidance in respect of planning and response is available on Gov.UK for the following sectors:

- Telecommunications
- Energy
- Finance
- Food
- Transport
- Water

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1 The Scientific Pandemic Influenza Advisory Committee’s Modelling Sub-Group Summary (Annex 1). Available at: http://www.dh.gov.uk/ab/SPI/DH_095904
4 Planning and Preparedness

Business Continuity and Resilience Planning

4.1 Pandemic influenza presents a unique scenario in terms of prolonged pressures through a reduced workforce and potentially increased workload for some responders. Organisations are therefore expected to have business continuity and contingency plans to ensure that critical services and outputs continue to be delivered throughout an influenza pandemic.

4.2 Planning should take place at three levels – Pan-London, Borough and within individual organisations. The Guidance for Local Planners states that pandemic plans should be “based on existing systems and processes where possible, augmenting, adapting and complementing them as necessary to meet the unique challenges of a pandemic.”

4.3 Table 1 below illustrates how the planning requirements are addressed at each level and which existing plans, frameworks and protocols are utilised to meet these requirements.

4.4 Relationships between different planning structures is illustrated in Figure 1.

Training and Exercising


4.6 Partners should consider what training and exercising should be undertaken within their organisation as these are likely to differ according to the size, functions and likely impacts upon each partner. The responsibility for undertaking this training and exercising within each organisation lies with that organisation.

4.7 Guidance on which to base training is available on the Pandemic Influenza Preparedness Section of the gov.uk website.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Regional level</th>
<th>Borough level</th>
<th>Organisation Level</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business Continuity</strong></td>
<td>Signpost link for Small to Medium Enterprises and Voluntary Organisations</td>
<td>Through relevant local for a (e.g. Borough Resilience Forums, Health and Wellbeing Boards, Influenza Pandemic Committees), work with local PHE, NHS and multi-agency partners to discuss, plan and share best practice, and address pandemic specific issues in respect of business continuity planning. (All)</td>
<td>Maintain effective business continuity plans to respond in a pandemic, identifying key issues, including which normal business functions are essential and which can be suspended or postponed (All)</td>
</tr>
<tr>
<td><strong>Coordination and Information Sharing</strong></td>
<td>Strategic Coordination Protocol (LRF)</td>
<td>Most agencies are represented at the BRFs, this feeds into the LRF Coordination and Information Sharing Protocol via LFB-EP Supported by agreed mechanisms for sharing information across BRF partners</td>
<td>All partners, sectors and organisations within the LRPB arrangements contribute to information coordination and sharing arrangements (All)</td>
</tr>
<tr>
<td></td>
<td>Local Authority Command and Control (LLACC and LLAG arrangements) (Local Authorities)</td>
<td>Local borough based coordination and information sharing arrangements in place. Feeds into the LLACC (when open) (LA &amp; LFB-EP)</td>
<td></td>
</tr>
<tr>
<td><strong>Communications with the Public</strong></td>
<td>LRF Communicating with the Public Protocol (LRF)</td>
<td>Local multi-agency Communications Plans and pathways to be agreed across all partners</td>
<td>Organisational Communications arrangements (All)</td>
</tr>
<tr>
<td><strong>Multi-agency communications</strong></td>
<td>London Comms Gold Group (LRF)</td>
<td>Local inter-agency communications arrangements</td>
<td>Internal communications channels</td>
</tr>
<tr>
<td><strong>Excess Deaths</strong></td>
<td>London Excess Deaths Framework (LRF)</td>
<td>Local Borough level Excess Deaths management Plans (LAs)</td>
<td>Individual organisations to maintain effective operational and</td>
</tr>
<tr>
<td>Activity</td>
<td>Regional level</td>
<td>Borough level</td>
<td>Organisation Level</td>
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<tr>
<td><strong>Owner of plan contained within brackets</strong></td>
<td></td>
<td></td>
<td>Business Continuity plans to maximise the capacity of death management process in line with existing duties. (All)</td>
</tr>
<tr>
<td><strong>Training &amp; Exercising</strong></td>
<td>LRPB Training &amp; Exercising Group (LRF)</td>
<td>Local BRF Training and Exercising Programmes (BRFs)</td>
<td>Organisational Training and Exercising Programmes</td>
</tr>
<tr>
<td></td>
<td>SRRF Training and Exercising Programme (LFB-EP &amp; LA)</td>
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<tr>
<td><strong>Recovery</strong></td>
<td>LRF Recovery Protocol (LRF)</td>
<td>Boroughs contribute to the LRF Recovery Protocol</td>
<td>Organisations to ensure recovery plans and processes are in place and preparations are made for subsequent waves.</td>
</tr>
<tr>
<td><strong>Situational Awareness</strong></td>
<td>Flucon Soc Con</td>
<td></td>
<td>For further Information see Section 8</td>
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<td>For further Information see</td>
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</table>
Fig. 1 London Pandemic Planning Structures

- **DCLG Resilience & Emergencies Division (RED)**
- **Other Govt Depts.**
- **Department of Health**
- **Public Health England (London)**
- **NHS England (London)**
- **LRF**
- **LHRP and Sub Regional LHRPs (NHS and PHE)**
- **SRRFs**
- **London Resilience Programme Board (LRPB)**

**Specialist Advice/multi-agency planning**

**Accountability Flow**

- Borough-based preparedness and assurance
- BRF, Health & Well Being board or Pandemic Planning Group
- Individual Agency Business Continuity Planning (PHE, NHS, LA, LFB, MPS, LAS, etc.)
- Clinical Commissioning Groups, NHS Provider Organisations, London Ambulance Service, Social Care and other service provider’s pandemic preparedness
5 Response

5.1 The overall strategy to the management of an influenza pandemic is to minimise, where possible,
- the potential health impact of a future influenza pandemic
- the potential impact of a pandemic on society and the economy and
- instil and maintain trust and confidence.

DATER

5.2 The 2011 UK Strategy recognises the need to disassociate the UK response from the global WHO Phases and instead refers to five stages named in the table, with further information below. Key agencies at each stage are detailed.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Lead Organisation</th>
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<tbody>
<tr>
<td>Detection</td>
<td>Public Health England</td>
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<tr>
<td>Assessment</td>
<td>Public Health England</td>
</tr>
<tr>
<td>Treatment</td>
<td>NHS England</td>
</tr>
<tr>
<td>Escalation</td>
<td>NHS England</td>
</tr>
<tr>
<td>Recovery</td>
<td>See London Recovery Management Protocol</td>
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</tbody>
</table>

5.3 The stages are not numbered as they are not linear, may not follow in strict order, and it is possible to move back and forth or jump stages. Transition between stages will be determined at the time, considering regional variation and epidemiological evidence.

Detection

5.4 The focus in this stage would be intelligence gathering from countries already affected, enhanced surveillance within the UK, developing diagnostics specific to the new virus, and providing information and communications to the public and professionals. The indicator for moving to the next stage would be the identification of the new influenza virus in patients in the UK.

Assessment

5.5 The focus of this stage would be collection of detailed clinical and epidemiological information on early cases on which to base early estimates of impact and severity in the UK. Additionally it will focus on reducing the risk of transmission and infection with the virus within the local community by actively finding cases, self-isolation of cases and suspected cases, treating cases/ suspected cases and using antiviral prophylaxis for close/ vulnerable contacts, based on a risk assessment of the possible impact of the disease. The indicator for moving from this stage would be evidence of sustained community transmission of the virus, i.e. cases not linked to any known or previously identified cases.
Detection and Assessment

5.6 These two stages together form the initial response. This may be relatively short and the stages may be combined depending on the speed with which the virus spreads, or the severity with which individuals and communities are affected. It will not be possible to halt the spread of a new pandemic influenza virus, and it would be a waste of public health resources and capacity to attempt to do so.

Treatment

5.7 The focus of this stage would be treatment of individual cases and population treatment via the national pandemic flu service (NPFS) (if necessary), enhancement of the health response to deal with increasing numbers of cases, considering enhancing public health measures to disrupt local transmission of the virus, such as localised school closures based on public health risk assessment. Depending on the development of the pandemic, this time should also be used to prepare for targeted vaccinations as the vaccine becomes available. Arrangements will be activated to ensure that necessary detailed surveillance activity continues in relation to samples of community cases, hospitalised cases and deaths. When demands for services start to exceed the available capacity, additional measures will need to be taken. This decision is likely to be made at a pan London or local level as not all parts of the UK will be affected at the same time or to the same degree of intensity.

Escalation

5.8 The focus of this stage would be escalation of surge management arrangements in health and other sectors, prioritisation and triage of service delivery with the aim to maintain essential services, resiliency measures, encompassing robust contingency plans, and consideration of de-escalation of response if the situation is judged to have improved sufficiently.

5.9 These two stages form the Treatment phase of the pandemic. Whilst escalation measures may not be needed in mild pandemics, it would be prudent to prepare for the implementation of the Escalation stage at an early point in the Treatment stage, if not before.

Recovery

5.10 The indicator for this stage would be when influenza activity is either significantly reduced compared to the peak or when the activity is considered to be within acceptable parameters. An overview of how services’ capacities are able to meet demand will also inform this decision.

5.11 The focus of this stage would be normalisation of services, perhaps to a new definition of what constitutes normal service. This would include, but not be limited to:

- restoration of business as usual services, including an element of catching-up with activity that may have been scaled-down as part of the pandemic response
- post-incident review of response.
- sharing information on what went well, what could be improved and lessons learnt.
- taking steps to address staff exhaustion; planning and preparing for a resurgence of influenza, including activities carried out in the Detection stage
- continuing to consider targeted vaccination, when available; and preparing for post-pandemic seasonal influenza.
6 Pandemic specific response arrangements

Antiviral Collection Points (ACPs) and Vaccination arrangements

6.1 NHS England is responsible for leading the delivery of antiviral collection points and public pandemic influenza vaccination campaigns in partnership with the wider NHS. Specific information will be shared as it is developed and finalised.

Infection Control

6.2 Advice on infection control in the workplace, in hospitals and healthcare facilities and laboratories is available on the Health and Safety Executive website at: http://www.hse.gov.uk/biosafety/diseases/pandemic.htm

6.3 HSE’s general advice is to encourage each individual employee to adopt a common sense approach. If you are feeling unwell with flu-like symptoms and particularly if you are coughing and sneezing – then stay at home. This will help to prevent the disease being passed on to colleagues (and also fellow passengers on your way to and from work, if you travel by public transport). In the workplace, practice good personal hygiene measures – use a disposable tissue to control coughs/sneezes, dispose of it appropriately and wash your hands before eating, drinking etc.

6.4 Further advice is given regarding what employers should consider in respect of sending staff home, working with the public, whether masks should be worn and adopting alternative ways of working.

6.5 Specific infection control guidance is available for those working in healthcare settings.

NHS Surge Capacity Management

6.6 NHS surge capacity management is undertaken at the local level by Clinical Commissioning Groups and Commissioning Support Units and at the pan-London level by NHS England. During an influenza pandemic, a whole system approach to the surge would become even more important. NHS providers, LAS, primary care contractors and social care will need to ensure that all capacity is maximised and elective work is prioritised.

6.7 Existing surge capacity plans would be scaled up to meet the expected demand and NHS England (London) would assume strategic control of London’s NHS.

Health and social care personal protective equipment

6.8 The Department of Health has built stockpiles of appropriate personal protective equipment for health and social care providers to use when caring for patients and service users with pandemic flu. Distribution arrangements of these will be shared as it is developed and finalised.

Excess Deaths

6.9 A framework for planners preparing to manage deaths and guidance on the management of death certification and cremation certification is available at: https://www.gov.uk/pandemic-flu#guidance-for-local-planners

6.10 Additional work is being undertaken by London Boroughs in respect of planning for excess deaths which will be included here when available.
7  **London Coordination arrangements**

7.1 Responding to the health, social care and wider challenges of an influenza pandemic requires the combined and coordinated effort, experience and expertise of all levels of government, public authorities/agencies and a wide range of private and voluntary organisations.

7.2 To ensure an effective response, each organisation needs to understand its responsibilities and how its activities feed into and relate to the work being undertaken by other organisations contributing to the response.

7.3 The 2009/10 pandemic response in London was triggered by a tripartite meeting between LRT, NHS London and Health Protection Agency. This worked well and proved appropriate for key organisations to make coordinated assessment and informed judgement of the situation. At this point, and at a time mutually agreed by the tripartite group, a Strategic Coordination Group meeting will be convened.

7.4 A Strategic Coordination Group (SCG) meeting would normally be chaired by the Greater London Authority (GLA) or most appropriate agency.

7.5 The role of a SCG meeting is to:
   - Develop a shared understanding of the evolving situation;
   - Assess the incidents actual and/or potential impact;
   - Review the steps being taken to manage the situation, and any assistance that may be needed/ provided;
   - Identify any issues which cannot be resolved at local or pan London level and need to be raised at national level (e.g. niche capability gaps)

7.6 When convened, the SCG will decide upon the issue(s) before them and how they wish to proceed. Should they decide that pan London monitoring and or strategic co-ordination is necessary they will agree how this is to be achieved.

7.7 The London Resilience Team would arrange the meeting including inviting attendees. They would also be responsible for drawing up the agenda, circulating papers and other relevant information to group members as necessary and provide the formal record of discussions and decisions. Depending on the situation, further meetings may be convened.

7.8 Should the SCG consider it necessary to continue meeting, then the meeting/group should be designated with a title that reflects the issue(s) and purpose of the meetings/group (i.e. ‘SCG Pandemic Flu Committee ’). This will ensure that should it become necessary to convene additional meetings of the partnership or to establish more than one Partnership meeting in relation to unrelated concurrent emergencies, the purpose of each can be clearly differentiated.

7.9 The possible impact of the pandemic on critical staffing means that resilience measures such as nominated deputy committee members and the utilisation of remote meetings may be required.

7.10 The LRF Strategic Coordination Protocol, which can be accessed at www.londonprepared.gov.uk and provides the strategic arrangements for coordinated response and recovery to any emergency, as defined by the Civil Contingencies Act 2004, in London; including an influenza pandemic.
Fig. 2 London Pandemic Response Structures

- COBR
- Accountability/coordination & reporting
- Specialist Advice/information exchange/liaison
- Wider impact reporting

- Department of Health
- Public Health England (National)
- NHS England (National)
- Public Health England (London)
- NHS England (London)

- Strategic Coordination Group (Multi-agency – LFB, LAS, MPS, CoLP, BTP, NHS, PHE, EA and sectors)

- Other Govt Depts.
- DCLG Resilience & Emergencies Division (RED)
- London Local Authority Gold (LLAG)
- London Local Authority Control Centre (LLACC)

- London Boroughs Borough Emergency Control Centres x 33 (BECC)
- Clinical Commissioning Groups, London Ambulance Service, NHS Provider Organisations

- All BRF based organisations coordinated information sharing for local situational awareness.
- Formal reporting conducted intra-agency to the SCG.
8 Situational Awareness

8.1 Information is crucial to the understanding and response to any major incident. For pandemic flu this is particularly important, as the inter-dependencies of agencies on each others’ continued resilience over potentially several months will become crucial.

8.2 During a pandemic, each organisation will be required to supply situation reports to their host Government Department which will be fed to COBR. Additionally, each organisation will provide reports to LRT, as secretariat to the London Partnership Meeting, to produce an overall London picture. The London Common Recognised Information Picture (CRIP) will provide key information and data on the present situation in London.

8.3 Certain reporting templates or tools may be put in place as was the case in the 2009/10 pandemic, such as:
- FluCon – used by the NHS to report pandemic impact on local organisations
- CritCon – similar to FluCon but relates to pressures in intensive care units, currently used across the NHS as a capacity management tool.
- SocCon - designed to give directors of children’s and adult social services a local view of staffing pressures and allow national government assessment of the impact of flu on social care services

8.4 Examples of reportable intelligence are detailed below. Frequencies (or battle rhythm) will be determined by
- the severity of the pandemic,
- the scale of the challenges arising, and
- available resources

<table>
<thead>
<tr>
<th>Agency</th>
<th>Examples of possible reporting lines:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHE</td>
<td>• Enhanced surveillance and epidemiology</td>
</tr>
<tr>
<td></td>
<td>• Transmission and spread, e.g. circulating strain and severity</td>
</tr>
<tr>
<td>NHS</td>
<td>• surge, including primary care</td>
</tr>
<tr>
<td></td>
<td>• impacts on elective work</td>
</tr>
<tr>
<td></td>
<td>• critical care capacity</td>
</tr>
<tr>
<td></td>
<td>• mortality and morbidity data</td>
</tr>
<tr>
<td>Local authorities</td>
<td>• impacts on local critical services</td>
</tr>
<tr>
<td></td>
<td>• social care provision;</td>
</tr>
<tr>
<td></td>
<td>• impacts on cremation and burial services;</td>
</tr>
<tr>
<td></td>
<td>• community concerns;</td>
</tr>
<tr>
<td></td>
<td>• business issues;</td>
</tr>
<tr>
<td></td>
<td>• local support to the health service/voluntary and community inputs and mutual aid issues and solutions;</td>
</tr>
<tr>
<td></td>
<td>• public communication activity and media coverage;</td>
</tr>
<tr>
<td></td>
<td>• requests for assistance</td>
</tr>
<tr>
<td>Other agencies</td>
<td>• impacts on service delivery</td>
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<tr>
<td></td>
<td>• staff absenteeism</td>
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<tr>
<td></td>
<td>• public communication and media coverage</td>
</tr>
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<td>• requests for assistance</td>
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</table>
9 **Recovery**

9.1 The Recovery phase in the Department of Health (DH) Strategy encompasses normalisation of services, restoration of business as usual services, evaluation of the pandemic, planning and preparation for a resurge in activity, and Targeted vaccination, when available. Recovery may occur between waves or at the end of the pandemic.

9.2 DH will issue information to inform plans following a review of the first wave and the availability of countermeasures.

9.3 Health and social care services may 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.

9.4 The pace of recovery will depend on the residual impact of the pandemic, on-going demands, backlogs, staff and organisational fatigue and continuing supply difficulties in most organisations.

9.5 Plans will have to recognise the potential need to prioritise the restoration of services and to phase the return to ‘new-normal’ in a managed and sustained way.

9.6 The London Resilience Partnership will adopt the structures and strategies laid down in the [London Resilience Partnership Recovery Strategy](#).

9.7 A pan-London debrief will be established to report back to the public, the LRF and Central Government.
ANNEX 1 - Pandemic Influenza - Case Studies

Swine Influenza (A/H1N1)

A1.1 The world first became aware of cases caused by a novel A/H1N1 influenza virus at the end of April 2009. The World Health Organisation (WHO) raised the global pandemic alert level from WHO Phase 3 to WHO Phase 5 over five days in late April 2009. Phase 6 was declared by WHO on 11 June 2009 and signalled the start of the first pandemic of the 21st century.

A1.2 The first UK cases were reported in Scotland on 27 April 2009, and the first London case on 30 April 2009. Initially the pandemic was managed through containment measures such as treating cases and some school closures. As case numbers increased, this was followed by outbreak management (limited prophylaxis and contact tracing) before the UK entered the treatment phase (no prophylaxis or contact tracing).

A1.3 Most people who contracted the virus were mildly affected and were treated with antivirals, over the counter medicines, bed rest and fluids. However some cases were more serious and required acute hospital care.

A1.4 The majority of cases were in younger age groups than those usually affected by seasonal flu. Pregnant women and morbidly obese people were unanticipated risk groups. A number of cases and deaths were of people with no previously identified underlying condition. There were less than 100 deaths as a result of this virus recorded in London during the pandemic.

A1.5 Cases in London peaked in July 2009. A second wave started in autumn 2009 and peaked in November, coinciding with the usual winter pressures of cold weather and seasonal illness. The 2010/11 winter season in the UK was dominated by the A/H1N1v virus as part of the range of influenza viruses circulating that winter. It is likely to continue to circulate and cause seasonal outbreaks until replaced by another dominant strain.

A1.6 Other influenza viruses of swine origin have been detected in humans following the 2009/10 pandemic.

Avian Influenza (A/H5N1 and A/H7N9)

A1.7 Avian influenza ("bird flu") is an infectious disease of birds caused by influenza A viruses. It is spread between birds (and occasionally to humans) mainly through contact with contaminated faeces but also via respiratory secretions or contaminated blood. Although they do not readily infect other species, scientists believe that human-adapted avian viruses were the most likely origin of at least two of the last four human influenza pandemics.

A1.8 The highly pathogenic avian influenza A/H5N1 virus has caused concern for over a decade due to its highly contagious nature amongst domestic poultry species. Whilst the virus has also infected humans, such infections have only been detected in a small proportion of those who have been exposed to infected birds. To date, there has only been limited evidence of person-to-person transmission and, even where that has occurred; it has been with difficulty and has not been sustained. Human infections are typically severe, with few asymptomatic or mild cases detected.

A1.9 A growing reservoir of A/H5N1 infection in birds (the virus is recognised as being endemic in a number of countries including Egypt, India, Bangladesh, Viet Nam, China, and Indonesia), combined with transmission to more people over time, increases the opportunities for the A/H5N1 virus to adapt to give it greater affinity to humans or to exchange genes with a human influenza virus to produce a completely novel virus capable of spreading easily
between people and causing a pandemic. However, the likelihood and time span required for such mutations are not possible to predict.

A1.10 Experts agree that A/H5N1 is not necessarily the most likely virus to develop pandemic potential. However, due to the potential severity of a pandemic originating from an A/H5N1 virus, this possibility cannot be discounted and the virus remains a key concern.

A1.11 Since early 2013, cases of a further novel avian influenza virus (A/H7N9) have been reported in humans across northern China. This virus does not appear to be highly pathogenic in poultry, indeed the animal reservoir is unknown at time of writing (October 2013). As with A/H5N1, human infections are typically severe, with few asymptomatic or mild cases detected.
ANNEX 2 Guidance for Borough Resilience Forums – Local planning guidance

Multi-agency Planning Group

A2.1 Establish a Multi-agency group to address pandemic influenza preparedness planning and preparedness testing at Borough Resilience Forum (BRF) Level.

A2.2 This can be either done through the BRF or by another subcommittee under local determination, with appropriately approved Terms of Reference and Governance.

A2.3 Suggested representation for the group as follows:
- Clinical Commissioning Group
- NHS England (London)
- Acute Trust(s)
- Community Healthcare Provider(s)
- Mental Health Trust(s)
- Independent Health Sector
- Public Health England
- Local Authority (Director of Public Health, social services, children’s services, emergency planning, environmental health)
- Ambulance service
- Police
- Fire Service
- Prisons (if applicable)
- Voluntary Sector

A2.4 BRF planning activity and plans (multi-agency and single agency) should be aligned to the planning assumptions detailed in 'London Resilience Forum Pandemic Influenza Framework” and based on the planning guidance located on the Pandemic Preparedness Section of the gov.uk website

A2.5 Individual agency/organisation Business Continuity Plans should be aligned with the planning assumptions contained in the “London Resilience Forum Pandemic Influenza Framework” and based on the planning guidance located on the Pandemic Preparedness Section of the gov.uk website

BRF Communications

A2.6 BRF should ensure that they hold contact details for locally delivered health and social care.

A2.7 BRF should put in place a mechanism to share local situational awareness amongst partners to ensure an understanding of the impacts of a pandemic are understood within their locality.

A2.8 Local arrangements to support central and regional Government in communicating advice to the local population and public messages should be established in line with “London Gold Communication Strategy”.

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A2.9 Arrangements for communicating with vulnerable people (including deaf and disabled people) should be established (e.g. all communications are available and/or accessible in a variety of formats).

A2.10 Local Authorities should ensure the following:
- They hold collated contact details for school, early years and childcare settings.
- Have assurance that robust plans for communicating with parents to inform of closures and opening of schools are in place.
- Have plans and arrangements in place to support schools with remote learning.

Social Measures

A2.11 Local arrangements are in place to support the implementation of possible social measures or to reduce social impacts, including:
- Closure of schools and group early years and childcare settings
- Voluntary isolation/quarantine
- Support to prisoner handling and the judicial process, if there is a prison in your BRF.
- Maintenance of public order

A2.12 Plans are established to sustain patients in the community, including community care such as:
- Delivery of medicines
- Meals on wheels
- Community Nursing