

**PANDEMIC INFLUENZA PLAN**

Approved by: **Trust Executive Committee**

On: **30 May 2017**

Review Date: **April 2020**

Corporate / Directorate **Both**

Clinical / Non Clinical **Clinical & None Clinical**

Department Responsible for Review: **Emergency Preparedness Manager**

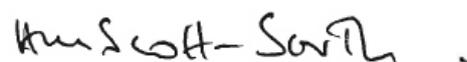
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**Chief Executive**

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## Burton Hospitals NHS Foundation Trust

### POLICY INDEX SHEET

<b>Title:</b>	<b>Pandemic Influenza Policy</b>
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<b>Reason for amendment:</b>	<b>Changes in NHS Organisational structure and revised National / Local guidelines</b>
<b>Responsibility:</b>	<b>Accountable Emergency Officer &amp; Emergency Preparedness Manager</b>
<b>Stored:</b>	<b>Intranet and Major Incident Box</b>
<b>Linked Trust Policies:</b>	<b>Major Incident Policy, Mass Casualty Policy, Infection Control Procedures, HR Absence, Estates Waste Management</b>
<b>E &amp; D Impact assessed</b>	<b>EIA 387</b>
<b>Consulted</b>	<b>Infection Control, ED, Mortuary, Labs, Bed Management, Media, HR, Waste Management, Equality &amp; Diversity</b>

## REVIEW AND AMENDMENT LOG

Version	Type of change	Date	Description of Change
DRAFT 2.0	Comprehensive review of Plan	May 2016	Pan Flu Plan has not been updated since 2009, during which there have been significant changes in NHS organisational structure and National / Regional arrangements.
DRAFT 2.1	Changes following first Pan Flu meeting Friday 3 <sup>rd</sup> June	June 2016	Numerous actions for key contributors.
3	Significant changes to plan based on feedback from subject matter experts.	November 2016	Numerous changes to plan and additions to Appendices and Action Cards.
3	Minor format changes	March 2017	Minor format changes

# PANDEMIC INFLUENZA POLICY

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## Burton Hospitals NHS Foundation Trust

### PANDEMIC INFLUENZA POLICY

#### 1. Introduction

- 1.1 Influenza pandemics are natural phenomena which have occurred three times in the last century. Their severity has ranged from something similar to seasonal influenza to a major threat, with many millions of people worldwide becoming ill and a proportion of these dying. No country can expect to escape the impact of a pandemic entirely, and when it arrives most people are likely to be exposed to an increased risk of catching the virus at some point. Influenza pandemics therefore pose a unique international and national challenge. As well as their potential to cause serious harm to human health, they threaten wider social and economic damage and disruption. Measures to prevent, detect and control them require coordinated international effort and cooperation, with one country's action – or inaction – potentially affecting many others.
- 1.2 The Civil Contingencies Act 2004 requires all public sector organisations to have in place plans for a coordinated response for events that threaten a significant business disruption. Experts predict a pandemic influenza event will happen in the future; therefore a strategic plan has been developed for this eventuality which will require continued updating to reflect any changes in capacity and resources for responding to a pandemic influenza.
- 1.3 In the event of influenza pandemic, health services will be severely disrupted in both Acute and Primary Care and these organisations will be required to be primary responders to the events. To ensure Burton Hospitals is adequately prepared a plan has been formulated, in conjunction with the NHS England Pandemic Flu Plan, **(Being extensively re-written by NHS England, release date TBD)** East Staffordshire Clinical Commissioning Group (ESCCG), network plans (Critical Care) and existing Trust policies such as Major Incident Plan, Bed Escalation Policy and Infection Control policies. (See Related Documents and Plans above)
- 1.4 The statutory responsibilities for the control of outbreaks and incidents lies with Public Health England (PHE), the Clinical Commissioning Groups (CCGs) and Directors of Public Health (DsPH) within local authorities (LA).
- 1.5 The Trust will face pressures to deal with large numbers of patients with pandemic influenza in addition to delivering 'routine' non-elective medical, surgical and maternity services. In addition it is necessary to incorporate plans for reduced levels of staffing through sickness.
- 1.6 The general principles regarding the investigation, management and control of pandemic influenza have been described in "*A national framework for responding to an influenza pandemic*" (Nov 2007) published by the Department of Health, and will apply throughout this plan.
- 1.7 The following key assumptions are currently included :
  - Clinical Commissioning Groups (CCGs) through Primary Health will be responsible for community issue of anti-viral drugs (i.e. for all patients not requiring admission to hospital)
  - Preferred treatment regime will be community based
  - According to PHE forecasts, up to 50% of the population will be affected - NHS clinical staff are expected to be vulnerable – made worse by the need for staff to care for children, elderly relatives and other dependants. It is likely that schools will be closed and public transport cancelled.

- Non urgent activities such as elective surgery and outpatients are likely to be suspended.

## **2. Definition/background to influenza**

2.1 Influenza pandemics occur only when a radically new or changed strain of virus emerges, for which the population has no immunity. It can occur at any time of year. A pandemic exists when the new virus has been confirmed to cause clinical illness at epidemic levels, involving the population of more than one country. However, they are rare (incidents in 1918, 1957 and 1968). The World Health Organisation (WHO) believes the risk of an influenza pandemic has increased recently.

2.2 Influenza pandemics can pose a severe risk to health and other services for many reasons, some of these include :

- Pandemics take hold quickly around the world
- Almost everyone will be 'non immune' and susceptible to the virus
- Likely to be high levels of person-to-person spread and a high attack rate
- Likely to be a lag in vaccine production and insufficient vaccine in the initial stages to protect all those susceptible
- The scale and potential severity means there is the possibility of a high death toll and a high degree of illness requiring hospitalisation
- There will be sudden and unprecedented demand on health services
- Due to the infectious nature of the illness, staff working and caring for patients would be at risk of developing the illness
- High levels of staff sickness in health, social care and essential services (up to 50% of all workers potentially taking 5-8 days off over the 3 month period)
- Depletion of informal carers and the secondary impact of anxiety and bereavement will compromise the capacity of services to cope with demand and may become overwhelmed. There will be :
  - i. Increased need for high dependency care and infection control facilities and equipment
  - ii. Delays in dealing with other medical conditions
  - iii. Logistics problems with interruption of supplies
  - iv. Pressure on mortuary facilities
- Influenza will spread rapidly in 'closed communities', e.g. residential homes, schools, prisons, etc

## **3 Responding to Pandemic – Integrated Approach**

3.1 When pandemic influenza arrives, the response will be tiered, with Acute and Primary Care delivering the operational response, overseen by NHS England.

3.2 Across the NHS and other Category 1 responders, the contingency plan has been built around the key headings :

- Leadership, organisation and co-ordination : the chain of command
- Communications
  - i. Strategic and operational communications and advice
  - ii. Professional information and guidance
  - iii. Communications with the public and media
- Surveillance, information gathering, situation reporting and risk assessment
  - i. Microbiology and virology

- The public health response : measures to reduce the health impact
  - i. Vaccination
  - ii. Antiviral agents and their use
  - iii. Other public health control measures
- The health service response
  - i. Investigation and management of cases and contacts
  - ii. Infection control
  - iii. Organisation and reinforcement of health services
- The civil contingency response : reducing societal disruption
- Workforce, education and training
- Essential preparatory work, research, legal and indemnity issues
- International issues

3.3 The Staffordshire Pandemic Flu plan is overseen by the Staffordshire Resilience Forum (SRF).

3.4 Within the NHS it is assumed the when UK Alert Level 3 is reached (Outbreaks in the UK) the following activation arrangements will be put into place.

- A Multi-Agency Strategic Coordination Group (SCG) will be established with senior representatives from Category 1 agencies. This will provide the strategic direction to the TCG and partner agencies and will meet at least weekly, supplemented by teleconference
- The detection of a single case or cluster of pandemic influenza in a local Health Economy will lead to the establishment of a Multi-Agency Tactical Coordination Group (TCG) with attendance by all Category 1 responders. This group will provide guidance across Staffordshire and will meet at least weekly supplemented by teleconference

4 The PHE will establish a single (local or regional) 'Scientific & Technical Advisory Cell' (STAC); this will be responsible for;

- Coordinating the investigation surveillance of the outbreak,
- Advise the NHS, and other agencies regarding ongoing risk reduction and containment strategies (especially investigation, treatment and prevention measures),
- Advise the public about the implications of the outbreak as it develops and any measures they can take to protect themselves.

5 The PHE is likely to have a direct input into the local NHS England Controls via the STAC

6 Within the Trust the pandemic flu co-ordinating group will be established and will meet at least weekly

### **Impact on Trust**

7 The main impact will be the potential increase in attendances and admissions for patients with influenza who cannot be treated by Primary Care. Up to 50% of the population may show clinical symptoms of influenza over the entire period of a pandemic, and up to 25% of these may develop complications, though this depends on the aetiology of the virus.

8 Key pressure periods are predicted to be weeks 5-9. However services may begin to be compromised from week 2, especially as similar infection rates can be expected in the workforce during wave 1.

- 9 In addition, it is likely that admissions for acute respiratory and related conditions will increase. Some estimates suggest this could be as much as 25%.
- 10 The ability to deliver services will be compromised by the Trust's own staff sickness and possible impact of school closures and other carer requirements.
- 11 Supplies and services provided to the Trust are likely to be disrupted during this period.

### **Initiation (escalation)**

- 12 If an influenza pandemic occurs, the build up will be gradual. Detailed below is a summary of the key tasks at each stage. Once the tasks have been completed it will be necessary to constantly review the situation/circumstances throughout the pandemic, i.e. the plan should be seen as a cumulative set of actions based on six scenarios:

### **Scenario 1 Inter-pandemic phase**

#### **Definition**

Influenza rates in the UK are at or below expected levels as indicated by the PHE and WHO. Hospitals are working normally. Human outbreaks outside the UK are included in this scenario but the Trust might maintain a state of heightened vigilance or move to the next level depending on the precise scenario.

#### **Aims**

- Rapid identification and notification of influenza cases
- Reducing the possibility of spread to other patients and staff
- To expand stocks of drugs and equipment to respond to an outbreak of moderate severity and duration
- Identification of surplus capacity that could be mobilised at the higher scenarios
- To review the literature and guidance and modify this plan if necessary
- To prepare for the next level

#### **Action**

- No dedicated Corporate Management Team is required. The Trust's normal bed management procedures should contain the situation
- Pandemic flu co-ordinating group is convened and meets regularly to review situation and actions required
- Expand stocks to cover an outbreak of moderate severity and duration
- Review register of priority staff groups
- Initiate infection control training for designated areas
- Creation of flu boxes for designated areas
- Review communication plans

### **Scenario 2 – First and Early cases**

#### **Definition**

Human cases are presenting locally or elsewhere in the UK. Influenza notifications are at, or slightly above, expected levels. There is no major requirement for hospital admissions and hospital activity can be maintained at normal levels. Significant outbreaks in the UK might raise the possibility of transmission of infection

### **Aims**

- Increased awareness and vigilance
- Maintenance of normal hospital activity
- Prepare for the next level

### **Actions**

- No dedicated Corporate Management Team is required. The Trust's normal bed management procedures should contain the situation
- Pandemic flu co-ordinating group meets on a weekly basis
- Emphasise guidance on clinical diagnosis
- Emphasise guidance on infection control measures
- Emphasise guidance on personal protection
- Emphasise guidance on hospitalisation criteria for community staff
- Enhance communication regarding awareness
- Review media arrangements
- Confirm essential/critical services
- Confirm pharmacy arrangements for distribution of antivirals
- Regular review of elective waiting times per speciality

## **Scenario 3 – No or Minimal Disruption**

### **Definition**

There is influenza in the local community and some hospital admissions. There is some staff absenteeism but not significantly above expected levels. This scenario is similar to that which pertains during the pressures the Trust experiences during the winter months when we experience higher rates of hospitalisation in patients with respiratory conditions. Some disruption to hospital functionality is anticipated but it can be mitigated with careful management.

### **Aims**

- Maintenance of normal hospital activity
- Minimising morbidity and mortality
- Minimising nosocomial transmission
- Preparing for the next level

### **Actions**

- No dedicated Corporate Management Team is required. The Trust's normal bed management procedures should contain the situation
- The co-ordinating group briefs the Trust Directors who anticipate further developments and develop appropriate plans in response to emerging information
- Consider elective activity on a daily basis
- ITU guidance as required
- Confirm mortuary arrangements
- Confirm establishment of isolation facilities/side rooms
- Weekly update on staff absences from HR central reporting system
- Weekly update on elective waiting times per speciality
- Identify potential non-essential staff for redeployment

## **Scenario 4 – Significant Disruption**

### **Definition**

There are significant bed pressures and difficulties maintaining appropriate staffing levels. The Trust is operationally compromised but there are no civil, logistic or procurement problems. Hospital functionality will be compromised and there will be a reduction of elective capacity.

### **Aims**

- Maintenance of as much elective activity as possible
- Minimising morbidity and mortality
- Minimising nosocomial transmission
- Prepare for the next level
- Possible triage plans for hospitalisation and selection of cases for high dependency or critical care

### **Action**

- Corporate Management Team is established. This team takes an overview, coordinates the Trust response and liaises with external agencies. It comprises the Chief Executive, Medical Director, Director of Nursing and secretarial support. They will be based in Trust Headquarters
- Pandemic flu co-ordinating group continues to manage the operational delivery of the plans and meets on a daily basis
- Staff redeployments. Flexible staff deployment
- Daily update on staff absences via HR from a central reporting system
- Ward cascade isolation plans initiated
- Confirm oxygen delivery arrangements to ensure continuity of services
- Confirm supplies delivery arrangements
- Ensure additional infection control supplies on site

## **Scenario 5 – Major dislocation**

### **Definition**

There are large numbers of cases and reduced levels of appropriately trained staff. Community and hospital services are under severe pressure. There is civil breakdown with procurement and logistic difficulties. Normal hospital activity is almost suspended and the hospital is given over to managing influenza cases.

### **Aims**

- Minimising morbidity and mortality
- Minimising nosocomial transmission
- Prepare for the next level

### **Actions**

- Corporate Management Team in place
- Daily updates on staff absences via HR from central reporting system
- Staff redeployments. Flexible staff deployment. Possible use of voluntary sector.
- Possible triage plans for hospitalisation and selection of cases for high dependency or critical care
- Ward cascade isolation plans in place
- Assess deployment of staff infected who are now ready to return to duty and may be immune

## **Scenario 6 – Recovery**

### **Definition**

The outbreak is in decline. Staffing levels and capacity are recovering. Resources permit resumption of normal hospital activity.

### **Aims**

- Maintaining some influenza capacity
- Minimising nosocomial transmission
- Reintroduction of elective activity, stepping down through the levels
- Vigilance for re-emergence and escalation as appropriate

### **Actions**

- Corporate Management Team continues to take an oversight
- Reintroduce services which were suspended in reverse order
- Review the management of the outbreak
- Assess lessons learnt and revise plans as necessary
- Prepare for a second wave

13 Requests to suspend non essential functions and activities should be agreed within the Trust and notify the SCG for approval. This will ensure consistency of actions across the County

14 The principal of seeking SCG approval will add credibility to the decision to suspend and provide an audit trail post event

### **Non Essential Services**

15 Each agency should use the list of non essential services in priority order, so that any suspension can be achieved progressively.

## Critical & Essential Services

16 The agreed list of critical and essential services is shown in the table below

### Priority rating

<b>C</b>	<b>Critical</b> to the Health of the population
<b>E</b>	<b>Essential</b> to maintain minimum service to the community
<b>D</b>	<b>Desirable</b> to maintain service to the community
<b>L</b>	<b>Low</b> can manage without

Essential Service	Sub Group	Priority	
Accident & Emergency	Emergency Department	C	
	AAC	C	
	Emergency Assessment Unit	C	
	Ambulatory Care	C	
Critical Care	Intensive Care Unit	C	
	High Dependency Unit	C	
	Coronary Care Unit	C	
	Theatres – emergency/urgent	C	
	Theatres – elective	D	
Diagnostics	Radiology – Critical & Urgent only	C	
	Pathology (Part of C&W)	C	
	Endoscopy	D	
Other Clinical Areas	Maternity	C	
	Oncology	D	
	Radiotherapy	D	
	Chemotherapy	D	
	Therapies - outpatients	L	
	Therapies – urgent	E	
	Pharmacy	C	
	Pharmacy Manufacturing Unit (PMU)	C	
	Support Services	Estates	E
		Facilities	E
Finance		E	
HR department		D	
HSSU		E	
Materials Management		C	
Procurement			
Catering		E	
Training & Development		L	
Mortuary		E	
Wards	All Wards	E	

## National Response/Coordination with Local Partners

### 17 Local Coordination

- Tactical Coordination Group (TCG)
- The Trust is represented on the TCG by NHS England or by arrangement a nominated Trust lead or nominated deputy
- East Staffordshire Clinical Commissioning Group (CCG).

#### 17.1 Trust coordination

- The Trust's response will be coordinated through the Pandemic Flu co-ordinating group (see appendix 1)
- Day-to-day operational management will involve the creation of a 'manager of the day' role
- The Trust Pandemic flu group will oversee development of all plans
- Appendix 1 details members of the Trust team, as well as 'in hours' contact details for these individuals

#### 17.2.1 Reporting arrangements

The Pandemic Flu co-ordinating group (corporate management team during severe disruption) will take responsibility for:

- Most efficient use of hospital real estate
- Points of entry into trust.
- Pre-Triage arrangements.
- Minor Injuries Units arrangements of Pan Flu Patients.
- Co-ordinating and managing internal and external reporting mechanisms overseeing communication throughout the organisation on matters relating to pandemic flu
- Decision recording systems
- Clear recording of decisions taken will help avoid confusion and ensure consistency at a time of significant disruption. It is also important for Trusts to have an audit trail of their command and control judgements.

As a minimum, these ought to include:

- The nature of the decision
- The reason for the decision
- The date and time of the decision
- Who has taken the decision/authority designation
- The extent of consultation and advice from external stakeholders
- Who was notified of the decision made
- Any review date set for revocation of the decision(s) where relevant. (Where decisions may have a major impact, the Trust may wish to ensure that they are shared by at least two appropriate personnel.)

#### Information requirements:

The Team will utilise information made available to evidence base decision making

Likely Information requirements include:

- Staff availability and illness in staff and volunteers (by department or speciality)
- Number of patients admitted and discharged
- Case demographics and underlying disease profiles
- Assessment level of admitted patients
- Bed capacity, occupancy (including critical care)
- Length of stay
- Operational difficulties
- Deaths
- Core facilities status
- Consumables – stocks remaining/utilities available/supply chain issues

## **Capacity**

### 18 Assumptions :

- Elective activity is suspended when severe disruption to services.
- Suspension of Outpatients will be considered.
- Primary Care will manage most patients affected by influenza in the community
- Trust is able to plan discharges the day before to ensure the bed is available by 9am
- In assessing peak bed demand an assumption of 7 days average length of stay has been used (to account for variation between patients)
- Assumed rising growth through each week to the peak (week 6/7) and reduction in a similar way

19 The Trust consists of 3 hospitals, Queens at Burton (including the Treatment Centre), Sir Robert Peel at Tamworth and Samuel Johnson at Lichfield, the main site housing acute beds with Rehabilitation and 'step down' care of the elderly beds on a separate site across the road. The table below shows the bed compliment.

**Table 2 – Trust Bed Complement (As of Dec 2016) Charlotte Flatt**

Queens Hospital Burton		
Ward	Specialty	Number of beds
BH01	Paediatrics	11
BH02	Paediatrics	7
BH03 - SSU	General Medicine / Diabetes	32
BH04	Medicine/ Care of the Elderly	27
BH05	Respiratory Medicine	31
BH06	Cardiology	20
BH06 CCU	Cardiology	10
BH07	Acute Medicine	18
	Haematology	4
BH08	Stroke	27
BH11	Maternity	25
BH12	Maternity Assessment	13
BH14	Female Surgical	19
BH15	Male Surgical	21
BH16	Medicine Care of Elderly	27
BH19	Trauma & Orthopaedics	30
BH20	Trauma & Orthopaedics	29
BHAE AAC	General Medicine	28
BHITU (level 3)	Intensive Care	6
BHHDU (level 2)	High Dependency	4
BHNNU	Special Care	14
BHTCWARD03	Treatment Centre	3
BHTCWARD05	Treatment Centre	5
Inpatient Beds	Sub Total	411
BH30	Private Surgical	5
	NHS / Gynae	14
	Total Inpatients	420
BH16NEO	Neonates	27
	Total Cots	27
BHONCU	Medical Oncology	20
BHEND	Endoscopy Unit	8
BHHAEMDC	Haematology	4
BHMEDDC	Medical Day Case Unit	2
BHCATH	Cath Lab	6
	Total Day Beds	40
	Total	554

Treatment Centre		
Ward	Specialty	Number of beds
BHTC01	Treatment Centre (Male Ward)	8 Trolley Spaces
BHTC02	Treatment Centre (Female Ward)	8 Trolley Spaces
BHTC 03 + 05	Treatment Centre Overnight Stay.	8
	Total	24

Community Hospitals		
Ward	Specialty	Number of beds
Philip	Rehabilitation	24
Anna	Rehabilitation	23
Darwin	Rehabilitation	23
SJH Maternity	Maternity	6
Inpatient Beds	Sub Total	76
SRPSURGWD	Surgical Day Cases	15
	Total	91

### Influenza Bed Requirements

- 20 The activity assumptions use crude assumptions per 100,000 population and a 0.55% hospitalisation rate, the actual number of admissions could be lower or higher than this estimate.
- 21 However, in planning bed capacity this demand and distribution has been used. Appendix 2 shows the estimated daily breakdown of beds needed for influenza patients (along with a sensitivity analysis if average length of stay was between 5 and 10 days)
- 22 Using the 7 day estimate the peak bed requirement for influenza patients will be approximately 101 beds. As whole wards need to be identified, due to isolation requirements, this is the equivalent of 4 wards.

### Isolating Influenza Patients

- 23 Within the hospital there are effectively 2 distinct areas housing wards and departments :
- 'Phase 1' - there are two acute orthopaedic wards (+ the Private Patient ward) over 3 floors. This area of the Trust also houses 3 orthopaedic theatres
  - 'Phase 2' - all other Acute, Maternity and Paediatric wards are located:
    - Ground floor : 5 Medical Wards (including the Emergency assessment Ward and Coronary Care Unit), 1 surgical ward, 2 Paediatric Wards, the Emergency Department and Radiology
    - 1<sup>st</sup> Floor : 2 Maternity wards, 2 surgical wards, 1 gynaecology ward, ICU/HDU, Neonatal unit and the main theatre suite

### Creating Zones

- 24 In the early stages of the pandemic, infection control advice will be taken to provide bespoke isolation facilities for the small numbers of patients required. The designated flu wards in the early stages will be:
- Ward 3 due to the number of side rooms available for adult admissions
  - Designated paediatric ward - Admission of patients <18 will be made directly to the Paediatric ward
  - Designated maternity ward - Infected patients close to delivery, with complications, or for delivery will have to be cared for in the Maternity unit.

25 As numbers increase it will be necessary to make the whole of Ward 3 the designated flu ward

26 Further flu wards will be created as numbers increase as indicated below:

- 2<sup>nd</sup> Ward 4
- 3<sup>rd</sup> Ward 5
- 4<sup>th</sup> Ward 6

Non symptomatic - Upper floor initially:

- Wards 11/12 & 14
- Wards 19/20 become 'non infected surgical specialties'
- Use orthopaedic theatres for operating
- Burton clinic

27 Risks : insufficient capacity within Trust and local health economy, meaning potential transfers out of area

### **Critical Care capacity**

28 Current capacity is 8 beds – 4 at level 3 (ITU), 4 at level 2 (HDU).

29 Extending capacity within the Trust would mean utilising the Recovery area within the Theatres complex for additional patients at level 2. This would compromise the ability to deliver emergency operations and theatre contingency plans need to be in place.

30 If this option is implemented maximum capacity would be 10 beds at level 3 (in unit) and 6 beds at level 2 (in Recovery).

31 HDU staffing levels should maintain the level 3 beds, however staff would need to be deployed to run the level 2 beds. This could be theatre staff and medical staff who are available because of the reduced theatre activities.

32 **Risk** : The Trust only has a limited supply of ventilators. It is not yet known what the likely demand for ventilating patients will be or the availability of loan equipment.

33 The Trust is part of the Mid Trent Critical Care Network and is fully engaged in the development of the plan.

34 The Network plan is available within the Trust

### **Surge Capacity**

35 There are limited resources available for creating additional capacity if there is an unexpected surge in demand.

36 It may be possible to create additional beds within decommissioned clinical areas. These options will be formally assessed when escalating through the categories.

## **Managing patients in isolation facilities**

37 Appendix 4 contains specific Infection Control advice on the management of patients in isolation facilities.

## **End of Life Guidelines**

38 Staff to refer to the Trust End of Life Guidelines which are available on every ward together on the intranet site. They contain generic information on specific symptom control issues, use of the Individualised Care plans for the Dying patient and accessing out of hours advice. Should teams require specific advice on the management of the dying patient, then the Hospital Palliative Care Team should be contacted.

<http://bhftintranet.burtonft.nhs.uk/Departments/palliative-care/end-of-life-guidance.htm>

39 Appendix 6 contains specific Infection Control advice on the management of the dying patient.

## **Visitors to the Hospital**

40 Restrictions will be in place to control the spread of infection. Areas will be clearly marked and if necessary barriers in place to prevent access.

41 Signage will be put up to provide clear instructions for moving around the hospital and providing instructions about hand hygiene, some examples at Appendix 10.

42 The numbers of visitors will be strictly controlled and kept to a minimum. If the infection risk is too great, or there are issues regarding the safety of patients and staff visitors may be asked not to attend.

43 Family visitors

- On arrival to influenza segregated wards all visitors should report to the ward reception.
- Signage should be displayed informing visitors of the ward's current segregated status and procedures that need to be undertaken prior to entering the ward.
- Visitors entering a cohorted area must be instructed on hand hygiene practice and the wearing of protective clothing as appropriate.
- The use of family members and volunteers to assist in patient care during a pandemic may be considered if staff shortages are extreme.
- When visitors become carers they will need to be instructed on the use of PPE.

44 Others

- Only those persons who are essential to the running of the ward or the delivery of care to patients should be allowed entry into influenza segregated areas including patient waiting or reception areas designated for patients with symptoms of pandemic influenza.
- Works department technicians should not be allowed entry into influenza segregated areas unless undertaking essential maintenance work.
- PPE must be worn as detailed for healthcare workers.
- Entry into segregated areas will be controlled by a signing-in book, to allow Infection Control to manage contagion.

# Details of who constitutes 'non essential personnel' to be agreed

## Mortuary Provision **Mark Adams**

- 45 The Trust has limited mortuary provision which will be insufficient to cope with the increased mortality forecast during the pandemic.
- 46 Should additional capacity be sourced on site, temporary facilities would be set up in line with the excess deaths policy

## Blood products – availability **Jeby Jeyachandran**

- 47 Influenza is generally spread via the respiratory tract and transmission via hard and soft communal surfaces. It is currently considered that the risk of additional transmissions of influenza through blood itself or NHS Blood Transfusion associated activities is low.
- 48 There is an expectation that most, if not all, elective surgery and other less urgent clinical interventions will cease or be temporarily deferred during the worst periods of the pandemic.
- 49 It is anticipated that donors will be less likely to donate blood; in addition, normal donor selection requirements mean that **donors cannot give blood until two weeks after making a full recovery**; for this and other reasons it is likely that there will be less blood and blood products available.
- 50 In the event that insufficient blood can be collected and blood supplies are forecast to fall to dangerously low levels, the UK NHS integrated blood shortage plans will be deployed to help ensure that blood supplies are conserved and the available blood is prioritised towards those whose needs are most acute.
- 51 NHS Blood and Transplant and the UK Blood Services have pandemic plans in place and will do everything reasonable to maintain our services to match demand from healthcare organisations including a sufficient and safe blood supply.
- 52 The strategic intention of NHSBT is to endeavour to maintain the provision of critical products and services at or above the level demanded by the healthcare community throughout the pandemic, the recovery period and, if applicable, subsequent wave(s).
- 53 The Trust has an Emergency Blood Management Plan (EBMP) in place to ensure that any national shortage of blood or platelets are effectively managed, that the Trust continues operating and that patients requiring these products continue to receive them. To prepare for the possibility of a prolonged and or severe shortage of blood there must be a well outlined contingency plan.

<http://bhftintranet.burtonft.nhs.uk/Policies/emergency-blood-management-policy.htm>

- 54 The EBMP ensures that patients, who require blood products, do so, particularly at times of national shortages. It covers the three phases which represent the levels of stocks available i.e. Red, Amber and Green and gives recommendations for action to be taken to ensure best use of resources.

55 The Emergency Blood Management Group (EBMG) will meet on notification of a potential Pandemic Influenza outbreak and will meet as often as required during the pandemic and manage the response. Using information regarding current blood stocks at BHFT, the type and severity of the pandemic and the existing requests for blood and platelets, the EBMG will decide, in accordance with national guidance, which patients will be supported with transfusion.

56 Using agreed trigger points the nominated lead will communicate to all clinicians regarding the level of blood products available on a regular basis.

57 Further national information can be found at:

<http://bhftintranet.burtonft.nhs.uk/Policies/Emergency%20Blood%20Management%20Policy.pdf>

<http://hospital.blood.co.uk/media/2168/b74bb0cb-953c-440a-bbec-064fe93e2637.pdf>

### **Managing emergency admissions**

58 The local health economy planning is that where possible patients should be managed in their own homes. Therefore, management by primary care is covered by NHS Primary Care. Where a patient requires hospitalisation the Trust will manage emergency admissions as per the Emergency Department operational plan

59 Once clinical guidelines have been formalised/agreed a specific Trust admissions policy will be agreed for implementation.

60 If the number of attendances is consistent with the forecast there will be an increase of approximately 33% over usual volumes, during the peak period – up to an additional 60 patients per day.

61 On arrival in the Emergency Department, alternative approaches to triage and assessment will need to be undertaken to :

- Rapidly screen and identify persons who have symptoms of pandemic influenza upon their arrival
- Separate symptomatic patients from others to reduce the risk of disease transmission
- Determine as early as possible the type of care patients will require.
  
- Specific infection control advice is contained within Appendix 5

62 A Pre-triage system will be required, before patients are allowed into the Emergency Department, set up in temporary accommodation outside the A&E entrance, to filter patients into the following streams :

#### **62.2 Patients presenting with flu like symptoms**

- Only but not needing hospitalisation – *send home without intervention*
- With an injury (but not needing hospitalisation) – *treat injury and send home*
- And other medical conditions – *send to Ward 3/4 for further assessment*
- With an injury (and needing hospitalisation) – *admit to surgical isolation zone*
- Only and needing hospitalisation – *send to Ward 3/4 for further assessment*
- Requiring surgery – *admit to isolation zone*

### **62.3 Patient presenting without flu like symptoms**

- With an injury (but not needing hospitalisation) – *treat injury and send home*
- With other medical conditions – *review and if necessary admit to non-isolation zone*
- With an injury (and needing hospitalisation) – *admit to isolation zone*
- Requiring surgery – *admit to non-isolation zone*

63 Clinical Protocols/Guidelines are being developed; these will be used to develop local guidelines to support the triage process.

64 Attendances will rise significantly; it is likely this pressure will continue until week 11/12. This will need to be managed as per operational plan which will include the creation of a triage area

### **Ambulance (See WMAS & EMAS Pandemic Influenza Plan 2015)**

64.2 The same triage/filter protocols will be applied to these patients as normal arrangements.

- Influenza only symptoms will be admitted directly to the influenza zone, rather than the Emergency Department
- If patient has influenza and other injury they will be cohorted in the Emergency Department
- If the patient has influenza and another illness they will be admitted directly to the influenza zone

### **Planning Discharges**

65 Discharge planning will need to commence at the time of admission. There will be a daily review of all patients in hospital by a consultant.

66 Discharge plans will be in place for all symptomatic patients. These will be agreed with Social Services and Primary Care.

67 West Midlands Ambulance Service (WMAS), East Midlands Ambulance Service (EMAS) and all other providers such as NSL and St. John Ambulance will need to be included within these arrangements (including car services).

### **Pharmacy**

68 The pharmacy will provide advice and administration of drugs in line with the guidance available at the time of the pandemic.

69 Physical capacity and location are not currently identified as a risk. Though security of staff and medicines will need to be considered in the event of an outbreak.

70 The pharmacy department will stock a reduced range of medicines as agreed internally

71 The pharmacy will undertake as required the dispensing of antivirals until establishment of Antiviral Collection Points (ACP)

72 Patient Group Directives (PGDs) will be developed with associated training to reduce potential delays in commencement of antiviral treatment for inpatients. PGDs are difficult to do in advance, but if required urgently, some work can be done to develop PGDs without knowing the actual drug. It can sit in the PGD section of pharmacy and the Principal Pharmacist can make staff within pharmacy aware. The Principal Pharmacist is responsible for PGDs.

- 73 The Principal Pharmacist is developing a Pharmacy protocol for pandemic flu that flows on from the Pandemic Influenza Policy.
- 74 It is expected the first line of treatment during the pandemic will be an antiviral drug, as recommended by the Department of Health.
- 75 Antivirals will be distributed by the NHS England or Clinical Commissioning Groups (CCGs) for use within the hospital
- 76 Until a vaccine is available this will be the only treatment available. Therefore these drugs will not be available as a prophylaxis and can only be used when symptoms first appear.
- 77 Distribution to the population will be the responsibility of NHS Primary Care.

### **Vaccinations**

- 78 The pharmacy has a production unit and will be required to manufacture specific drugs during a pandemic. This will take precedence over normal production. Detailed operational plans in place
- 79 Mass vaccination plans will be developed and co-ordinated for all staff employed by the Trust by the Occupational Health Department
- 80 List of priority staff for vaccination will be developed and agreed with staff side
- 81 Additional staff to undertake vaccination process will be identified and training given where necessary
- 82 The Trust has a robust record of immunisations completed. Information sharing processes to be agreed between primary and secondary care
- 83 Detailed operational plans are developed and need to be referred to regarding the process to be undertaken

### **Infection Prevention and Control**

- 84 The Infection Prevention and Control Team will support wards in the operational management of pandemic influenza cases
- 85 The IPCT will advise on procurement of appropriate personal protective equipment for staff and sundry items for patients
- 86 The IPCT will assist wards in ensuring staff are appropriately fitted with respiratory protection
- 87 The IPCT will publish and update appropriate information on the Infection Prevention and Control pages of the Trust Intranet
- 88 Personal Protective Equipment (PPE)
- 89 Specific guidance on the use of PPE is included in staff training.

- 90 PPE will be worn by all staff to protect from contamination and reduce the risk of transmission to other patients.
- 91 Filtering Face Piece (FFP3) masks must be worn for all aerosol generating activities. These activities are defined in appendix two. Small stocks of FFP3 masks (2 boxes) should be obtained by every ward to ensure that in the event of a pandemic there are sufficient initial supplies available pending procurement and resupply.
- 92 Flu boxes containing the other required items for PPE should be prepared at the time of the pandemic and made available in the following areas:
- Designated acute ward
  - Designated maternity ward
  - Designated paediatric ward
  - Emergency department
  - Critical Care
- 93 More specific guidance is at Appendices 2 to 10
- 94 The IPCT will advise about what items of PPE should be purchased and when these purchases should be made. The cost code specific to pandemic flu supplies is 01-047-1153
- 95 Finance Department will provide cost code & Budget controls - [Steve Fowkes](#)**
- 96 Clinical and non-clinical waste – [Natalie Roddis](#)**
- 97 No special handling procedures beyond those for normally used for clinical waste are required for clinical and non-clinical waste that may be contaminated with influenza virus.
- 98 Provision will be made for the clinical and domestic waste contractors to supply additional waste receptacles during a pandemic influenza outbreak, to account for increased production of clinical and non-clinical waste– part of operational plan.

#### **Procurement & Materials Management – [Geoff Neild](#)**

- 99 It should be noted that NHS England (Regional) have a Pan Flu PPE Plan and stocks of PPE for use by NHS Organisations within Staffordshire, which are available dependant on clinical need.
- 100 Applications for additional PPE, should be made via the Emergency Preparedness Manger
- 101 Detailed lists of extra supplies required will be developed by the supplies team in conjunction with the infection control lead
- 102 Weekly monitoring of PPE usage will be undertaken by supplies team
- 103 Regular liaison with suppliers will take place regarding national situation
- 104 Further equipment needs will be identified by departments and communicated to supplies team
- 105 Detailed operational plans in place to maintain a level of service for the organisation

## Human Resources - Claire Rowe

### Staff availability

- 106 It is likely there will be high levels of staff absence, this will be for a variety of reasons, including:
- Having influenza
  - Caring for someone with influenza (children or other dependent)
  - Other sickness
  - Other carer needs, e.g. childcare because of school/nursery closures
  - Other reasons decided on by staff
- 107 Procedures will be developed in relation to the cancellation if necessary of all planned leave, such as study leave
- 108 Procedures will be developed in relation to the cancellation of annual leave
- 109 The Trust will develop a policy to cover for staff indemnity
- 110 Procedures will be developed in relation to flexible working appropriate to the area
- 111 There will be a central reporting system for all staff absence managed by the HR department
- 112 There will be a central point created during escalation level four for reallocation of staff to other areas of the Trust
- 113 Training programmes will be developed for non-clinical staff who might be redeployed to work within a clinical area
- 114 Skills analysis will be undertaken across the Trust to identify key skills within the workforce

### HR Attendance at Work Policy.

- 115 It is an employee's responsibility to fulfil their contract of employment and ensure that they are able to perform their duties at work. However, it is appreciated that there will be some times when staff may face difficulties in getting to work, most commonly in inclement weather but also in unforeseen circumstances, e.g. the fuel crisis.
- 116 The following guidelines should be adopted:-
- 117 Staff who do not arrive at work are expected to take annual leave, time off in lieu or flexi time where this arrangement exists.
- 118 If staff have exhausted their annual leave entitlement and have no lieu time or "credit" flexi time available, then they will be recorded as authorised absence and will not receive pay for the time they were due to work. Those departments operating flexi time may allow staff to go up to the normal "debit limits" as an alternative.
- 119 Staff who genuinely make every effort to get to work by alternative means, but who arrive late (i.e. after their shift or normal start time) will not be penalised. The actual hours that

they have been at work should be recorded, although full payment for the shift/day will be made.

- 120 Where it is feasible for somebody to work at home, this should be explored, as should the feasibility of changing shift patterns to fit in with public transport timetables.
- 121 Any queries from this guidance should be referred to your line manager. Line Managers may seek advice from a senior member of the Human Resources Department, or the Incident Room if this is in place.

### **Staff Illness**

- 122 Specific guidelines and advice will be issued to staff at the start of the pandemic.
- 123 Once a member of staff has symptoms they will be told to stay at home until they have been symptom free for 24 hours.

### **Staff Welfare**

- 124 A Flu Pandemic could put staff under considerable pressure. Conflicts may arise between staff members professional obligations and personal responsibilities. Support should also be available to individual staff to address ethical dilemmas that may arise.
- 125 DoH has provided a guidance document on psychosocial care for staff. DoH (July 2009) Psychosocial Care for NHS staff during an Influenza Pandemic. A copy of this is available at [http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_103168](http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_103168)
- 126 In the immediate aftermath of sudden events and after people's initial involvement in longer and more sustained emergencies such as pandemic influenza, a substantial proportion of survivors show a stunned reaction from which the vast majority recover given basic psychosocial support.

### **Infection Control Advice regarding staff deployment**

- 127 Healthcare workers assigned to care for patients with pandemic influenza or who work in areas of a facility segregated for patients with pandemic influenza should not be assigned to care for non-influenza patients or work in non-influenza areas. Exceptions to this include:
- Occupations with a limited number of staff; e.g., medical staff, Allied Health Professionals (AHP), although segregation of staff should be maintained as much as practically possible
  - Situations when the care and management of the patient would be compromised.
  - Staff who have fully recovered from pandemic influenza.
  - In hospitals, a healthcare worker from a non-influenza area can be redeployed to an area segregated for the care of influenza patients. However, once deployed a worker cannot return to their original non-influenza area for the duration of the pandemic.
- 128 Healthcare workers who have recovered from pandemic influenza or have received a full course of vaccination against the pandemic strain:
- Should be prioritised for the care of patients with pandemic influenza. In exceptional circumstances these workers can be moved within a period of duty.

- May also be placed in units where the introduction of influenza would have serious consequences for patients (e.g. critical care, special care baby unit) but should not be moved within a period of duty.

- 129 Bank and agency staff should follow the same deployment advice as permanent staff.
- 130 Healthcare workers who are at high risk for complications of pandemic influenza (e.g., pregnant women, immuno-compromised workers) should be considered for alternative work assignment, until vaccinated. At the very least they should not provide care to patients known to have influenza nor enter parts of the hospital segregated for the treatment of patients with influenza.
- 131 Domestic staff should be allocated to specific areas and not moved between influenza and non-influenza areas. They must be trained in the correct methods of wearing PPE and the precautions to be taken when cleaning cohorted areas. Domestic staff should wear gloves and aprons; in addition a surgical mask should be worn when cleaning in the immediate patient environment in cohorted areas.

### **Redeployment**

- 132 Where clinical activities contract, e.g. operating theatres, outpatients, etc it will mean there are additional clinical staff available for deployment into other ward/critical care areas
- 133 Clinical staff not currently working within the clinical environment will be redeployed to work in the clinical area
- 134 Staff in non priority support services, e.g. finance department, management support offices, can be trained and deployed into non clinical support functions, e.g. Portering, domestics, etc.
- 135 Given the whole NHS will be affected at the same time; there will be a limited pool of additional staff to call upon. The Trust's bank team will coordinate any requirements from our own bank.
- 136 Volunteers play an important role in the day-to-day running of the Trust. During a pandemic the role of volunteers will be critical in providing ongoing support services. It will be necessary to review their roles to ensure the risks to their health are not increased.

### **Crèche**

- 137 The human resources department works closely with the onsite crèche (Co-Op) and will ensure the facility is able to remain open for as long as possible during the pandemic.

### **Security - [Rasila Sarda](#)**

- 138 In the event of an influenza pandemic there could be security issues associated with the storage of consumables and drugs as well as controlling access to the hospital.
- 139 During a pandemic the Trust will consider implementing its lockdown policy.

## Communications - Nick Clowes

- 140 It should be remembered that Communications staff are as likely to be affected by Pan Flu as anyone else and that there may not be staff available.
- 141 Pan Flu by its very nature will affect the population on an international level so there will be Communications and Media advice from the World Health Organisation (WHO), Public Health England (PHE) and NHS England. In addition Pan Flu comes under the responsibility of the Director of Public Health within the Local Authority and they too will have a communications strategy which the trust will abide by.
- 142 The Staffordshire Resilience Forum (SRF) will convene a multi-agency Pan Flu response meeting structure, part of this will be a Communications sub-group and they will develop a communication strategy. The Trust will comply with their requirements.
- 143 Dedicated intranet page for the management of the pandemic with regular updates as required
- 144 Weekly staff newsletters to inform them on the latest position
- 145 All national guidance and information will be placed on the Trust intranet site for all staff to access
- 146 Develop standard messages for use on plasma screens across all patient areas
- 147 Develop FAQ page on the intranet for all staff to access
- 148 Posters will be displayed across all areas with national and/or local messages
- 149 The Trust will regularly update the local media and use online/social media channels to inform patients, visitors and the public.

### Related Documents and Plans.

Trust Major Incident Plan

Trust Infection Control Website

Trust Bed Escalation Policy

Civil Contingencies Unit (CCU) Body Storage Trailer Deployment Pack

<Z:\Civil Contingencies\CCU\Body Storage Trailer Deployment Pack & SLA.doc>

NHS England Operating Framework for Managing the Response to Pandemic Influenza 013

<https://www.england.nhs.uk/wp-content/uploads/2013/12/framework-pandemic-flu.pdf>

NHS England Regional Pan Flu Plan & Pan Flu PPE Plan.

(In progress)

GOV.UK Pandemic flu - Public safety and emergencies – guidance

<https://www.gov.uk/guidance/pandemic-flu>

PHE Pan Flu Guidance

<https://www.gov.uk/government/publications/pandemic-influenza-response-plan>

World Health Organisation (WHO) Pandemic Influenza Risk Management Interim Guidance  
[http://www.who.int/influenza/preparedness/pandemic/GIP\\_PandemicInfluenzaRiskManagementInterimGuidance\\_Jun2013.pdf](http://www.who.int/influenza/preparedness/pandemic/GIP_PandemicInfluenzaRiskManagementInterimGuidance_Jun2013.pdf)

[WMAS Pan Flu Plan](#)

[EMAS Pan Flu Plan](#)

HR Website for staff attendance

Psychosocial Care for NHS staff during an Influenza Pandemic

[http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_103168](http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_103168)

## Appendix 1

### Trust Contact/Coordination Details

All individuals listed below are members of the **Trust Pandemic Influenza Management Team**.

Director of Infection Prevention & Control	Dr James Paton (Part Time) Consultant Microbiologist Ext:4103 E-Mail: <a href="mailto:james.paton@burtonft.nhs.uk">james.paton@burtonft.nhs.uk</a>
Director Lead	Duncan Bedford - COO & AEO Ext: 5413 E-Mail: <a href="mailto:duncan.bedford@burtonft.nhs.uk">duncan.bedford@burtonft.nhs.uk</a>
Clinical Lead	Craig Stenhouse - Consultant Anaesthetist Ext: E-Mail: <a href="mailto:craig.stenhouse@burtonft.nhs.uk">craig.stenhouse@burtonft.nhs.uk</a>
Pharmacy Lead	Helen Bates – Senior Pharmacist Ext: 5111 E-Mail: <a href="mailto:helen.bates@burtonft.nhs.uk">helen.bates@burtonft.nhs.uk</a>
Infection Prevention & Control Lead	Steve Harding Ext: 4046 E-Mail: <a href="mailto:steve.harding@burtonft.nhs.uk">steve.harding@burtonft.nhs.uk</a>
Emergency Department Lead	Stacey Neal – ED Matron Ext: E-Mail: <a href="mailto:stacey.neal@burtonft.nhs.uk">stacey.neal@burtonft.nhs.uk</a>
Human Resources Lead	Roger Smith Ext: E-Mail: <a href="mailto:roger.smith@burtonft.nhs.uk">roger.smith@burtonft.nhs.uk</a>
Pathology Lead	Malcolm Webb Ext:5714 E-Mail:
Critical Care Lead (nursing)	Cathy Gavin Ext:4149 E-Mail: <a href="mailto:catherine.gavin@burtonft.nhs.uk">catherine.gavin@burtonft.nhs.uk</a>
Communications Lead	Louise Thompson Ext:5944 E-Mail: <a href="mailto:louise.thompson@burtonft.nhs.uk">louise.thompson@burtonft.nhs.uk</a>
Estates Department Lead	Peter Hunt Ext: 5603 E-Mail: <a href="mailto:peter.hunt@burtonft.nhs.uk">peter.hunt@burtonft.nhs.uk</a>
Associate Director of Estates and Facilities	Geoff Neild Ext: 5601 E-Mail: <a href="mailto:geoff.neild@burtonft.nhs.uk">geoff.neild@burtonft.nhs.uk</a>
Procurement	Steve Fowkes - Assistant Director of Finance Ext: 5824 E-Mail: <a href="mailto:stephen.fowkes@burtonft.nhs.uk">stephen.fowkes@burtonft.nhs.uk</a>
Finance Lead	Jon Sargeant Ext:4741 E-Mail: <a href="mailto:jon.sargeant@burtonft.nhs.uk">jon.sargeant@burtonft.nhs.uk</a>
Emergency Preparedness Lead	Mark Riley Ext:4392 E-Mail: <a href="mailto:mark.riley@burtonft.nhs.uk">mark.riley@burtonft.nhs.uk</a>
Out-of-hours	Executive and Manager on-call Via Trust Switchboard

## Appendix 2 - Steve Harding

### ACTIONS FOR WARDS DESIGNATED AS INFLUENZA AREAS

#### 1 Ward entry/exit

- To control entry, signage should be displayed warning of the segregated pandemic influenza area (See appendix 10).
- Entry procedures: Place a recording sheet at the entrance of the cohorted area. All healthcare workers and visitors should sign in so that if follow-up/contact tracing is required details are readily available.
- The number of personnel should be limited to those necessary for patient care and support.
- Place a sign at the entrance alerting all to the precautions to be adopted.
- Infection control precautions: Standard Infection Control Principles must be strictly applied in conjunction with Droplet Precautions.
- Droplet Precautions for all patients should be maintained in the segregated area.
- Patients should remain in the designated segregated area until discharged to the community and not allowed to be transferred to other areas purely for bed management purposes.

#### 2 Ward furnishings

- For 4 – 6 bedded bays, set up an equipment station outside the entrance to hold PPE.
- Remove all non-essential furniture, especially soft furnishings.
- Remaining furniture should be easy to clean and should not conceal or retain dirt/moisture.

#### 3 Management of the coughing and sneezing patient

- Patients, as well as staff, and visitors, should be encouraged to minimise potential influenza transmission through good hygienic measures as follows:
- Cover nose and mouth with disposable single-use tissues when sneezing, coughing, wiping and blowing noses
- dispose of used tissues in nearest waste bin
- wash hands after coughing, sneezing, using tissues, or contact with respiratory secretions and contaminated objects
- keep hands away from the mucous membranes of the eyes and nose
- certain patients (e.g., the elderly, children) may need assistance with containment of respiratory secretions; those who are immobile will need a receptacle (e.g., a plastic bag) readily at hand for immediate disposal of tissues and a supply of hand wipes and tissues.

#### 4 Patient masking:

- In common waiting areas.
- During transport from one area of the hospital to another; coughing/sneezing patients should wear surgical masks to assist in the containment of respiratory secretions and to reduce environmental contamination.

#### 5 Patient area:

- Beds should be separated, preferably by a physical barrier (e.g., curtain).
- Keep the patients' personal belongings to a minimum.

- Provide water jug and glass, tissue wipes and suitable disposable containers (e.g., plastic bags), and all other items necessary for personal hygiene within the patients reach.

## **6 Patient equipment:**

- Where feasible allocate each patient their own non-critical items of patient equipment (e.g., stethoscope, thermometer) or use disposable items.
- Clean re-usable equipment between patients.

## **7 Day rooms/lounges:**

Consider closing day rooms/lounges if there is a risk that these might be used by both influenza and non-influenza patients or if the location of these rooms presents a problem for limiting patient movements.

## **8 Cleaning**

Areas should be scrupulously cleaned as a minimum at least once a day. Close liaison with domestic services will be required.

## **9 Hospital transfers**

- Patients should not be automatically admitted to hospital if they have pandemic influenza.
- Patients should not be transferred from one hospital to another for routine care related to pandemic influenza, including mechanical ventilation. This may vary depending on available regional critical care facilities.
- Some patients may require transfer for specialist care arising out of complications or concurrent medical events (e.g., cardiac angioplasty, renal dialysis).
- If transfer is essential, the Infection Control Team and Bed Manager at the receiving hospital and the ambulance staff must be advised in advance.
- Patients with influenza should not be admitted or transferred to specialist units for vulnerable patients (e.g., transplant units) where if influenza is introduced; mortality is likely to be very high.

## **10 Intra-hospital transfers**

Patients with pandemic influenza should leave the segregated care area for only urgent and essential procedures. If a patient requires transfer to another department the following procedures must be followed:

- The department must be informed in advance
- The patient must be taken straight to and return from the department and must not wait in a communal area
- Patients should be placed at the end of a list to allow appropriate decontamination after any procedure. • in some settings (e.g., radiology departments) a separate room should be set aside for patients with influenza segregated areas of the hospital and this room should be cleaned regularly
- Influenza patients should wear a surgical mask while in transit to help prevent large droplets being expelled into the environment. If a surgical mask cannot be tolerated (e.g., due to the patient's age or deteriorating respiratory status) apply the most practical measures (e.g., tissues) to contain respiratory secretions.
- Where possible the patient should also perform hand hygiene before leaving their room or cohorted area.

## **11 INTENSIVE CARE**

The unit should be divided into two separate areas for care of patients with and without pandemic influenza. Whenever possible, staff teams should be dedicated to one area. Transfer of patients will be agreed via the established Critical care Network.

### **11.1 Respiratory care issues**

- Disposable patient respiratory equipment must be used wherever possible. Reusable equipment must be disinfected.
- Closed systems should be used wherever possible (e.g., suction, closed nebuliser delivery)
- All respiratory equipment used on patients must be protected with a filter
- The ventilatory circuit should not be broken unless absolutely necessary
- The use of open non-invasive positive pressure ventilation equipment should be avoided
- Water humidification should be avoided.

### **11.2 Respiratory procedures**

- Only essential staff should be in a patient's bed area when airway management, cough inducing activities or nebulisation of drugs is being carried out.
- The curtain between patients should be drawn to act as a barrier.
- PPE must be worn when giving care, especially during procedures involving airway management (See Table and explanatory notes Appendix 7)

## **12 PAEDIATRIC WARDS**

Children's wards present special challenges due to the difficulties experienced with younger children adhering to respiratory hygiene. In addition, children usually shed virus longer than most adults and in some settings shedding may be prolonged for weeks.

### **12.1 Patient placement**

The following points need to be taken into consideration when cohorting children:

- different age groups (e.g., infants, toddlers, adolescents)
- routine childhood vaccination status of children.
- presence of immunocompromising conditions
- co-infection with another pathogen (e.g. RSV); such children may be cohorted separately. However, this will be dependent upon the availability of rooms, staff and the number of patients who are infected with both influenza and another pathogen requiring isolation.

### **12.2 Respiratory hygiene**

It is important to educate and encourage children and their families to adopt good hygiene measures to minimise potential transmission including use of disposable tissues for wiping noses; covering nose and mouth when sneezing and coughing; washing hands after coughing, sneezing or using tissues; and keeping hands away from the mucous membranes of the eyes and mouth.

### **12.3 Personal protective equipment (PPE)**

- Gowns may be required when caring for babies and neonates due to the close contact required.
- PPE requirements are in the table below:

	Entry to Cohorted Area but NO contact with patients	Delivery of patient care	Aerosol Generating procedures
Hand Hygiene	✓	✓	✓
Gloves	X	✓	✓
Plastic Apron	X	✓	X
Gown	X	X	✓
Surgical Mask	✓	✓	X
FFP3 respirator	X	X	✓
Eye Protection	X		

**Notes:**

- a Wherever possible, aerosol-generating procedures should be performed in side rooms or other closed single-patient areas with minimal staff present (see section 5.4).
- b Gloves and apron should be worn during certain cleaning procedures (see section 6).
- c Gloves should be worn in accordance with standard infection control principles. If glove supplies become limited or come under pressure, this recommendation may need to be relaxed. Glove use should be prioritised for contact with blood and body fluids, invasive procedures and contact with sterile sites.
- d Consider a gown in place of an apron if extensive soiling of clothing or contact of skin with blood or other body fluids is anticipated (eg during intubation or when caring for babies).
- e If non-fluid-repellent gowns are used, a plastic apron should be worn underneath.
- f Surgical masks (fluid repellent) are recommended for use at all times in cohorted areas for practical purposes. If mask supplies become limited or come under pressure, then in cohorted areas their use should be limited to close contact with a symptomatic patient (within one metre).

**12.4 Environmental issues**

- Communal areas such as play rooms and schoolrooms should be closed.
- Toys should not be shared.
- All toys must be cleanable and should be cleaned regularly (preferably when the environment is cleaned).
- Cleaning of the environment should be increased.

## Appendix 3 - Steve Harding

### INFECTION PREVENTION AND CONTROL ADVICE – EMERGENCY DEPARTMENT

#### 1 Screening and triage

- Signage should be displayed prior to and on entry to the A&E Department instructing patients with respiratory symptoms to inform the reception immediately on their arrival.
- A triage practitioner should be based in the reception for managing patient flow, including deferral of patients who do not require emergency care.
- Screening for signs and symptoms of pandemic influenza in all persons entering the hospital may escalate from passive (e.g., signs at the entrance) to active (e.g., direct questioning) on the advice of the Department of Health and the PHE.

#### 2 Reception area/layout

- Patients with symptoms of pandemic influenza should be triaged to a segregated waiting and assessment area immediately.
- Patients should be instructed to stay in this waiting area and not wander around the department, hospital, or go to the public cafeteria. Signage and physical barriers should be used as appropriate.
- Patients who do not have symptoms of pandemic influenza but require acute care assessment promptly should be triaged to a specific waiting and examining area, physically separate from the influenza waiting and assessment area.
- Attention to respiratory hygiene should be reinforced by displays of posters and provision of hand washing facilities, tissues, and waste bins.
- All non-essential soft furnishings and items such as books and magazines and toys should be removed.

#### 3 Infection control measures for waiting rooms

Patients, staff, and visitors should be encouraged to minimise potential transmission of influenza through good hygienic measures as follows:

- Cover nose and mouth disposable one-use tissues when sneezing, coughing, wiping and blowing noses
- Dispose of used tissues in nearest waste bin
- Wash hands after coughing, sneezing using tissues or contact with respiratory secretions and contaminated objects
- Keep hands away from the mucous membranes of the eyes and nose
- Certain patients (e.g., the elderly, children) may need assistance with containment of respiratory secretions; those who are immobile will need a receptacle (e.g., a plastic bag) readily at hand for immediate disposal of tissues.
- Patient masking: As waiting rooms can become crowded, it is preferable that symptomatic persons wear surgical masks.

***Algorithms for the management of flu patients will be located on the Trust's Intranet Page under Infection Prevention and Control***

**Appendix 4 - Patients at high-risk of influenza-related complications\* Sarah Duckworth**

<b>CLINICAL RISK CATEGORY</b>	<b>EXAMPLES</b>
<b>Aged 65 or older</b>	Self-Explanatory
<b>Pregnancy</b>	Self-Explanatory
<b>Chronic respiratory disease, including asthma</b>	This includes chronic obstructive pulmonary disease (COPD) including chronic bronchitis and emphysema, and such conditions as bronchiectasis, cystic fibrosis, interstitial lung fibrosis, pneumoconiosis and bronchopulmonary dysplasia (BPD). Asthma requiring continuous or repeated use of inhaled or systemic steroids or with previous exacerbations requiring hospital admission. Children who have previously been admitted to hospital for lower respiratory tract disease.
<b>Chronic heart disease</b>	This includes congenital heart disease, hypertension with cardiac complications, chronic heart failure, and individuals requiring regular medication and/or follow up for ischaemic heart disease.
<b>Chronic renal disease</b>	Including nephritic syndrome, chronic renal disease, renal transplantation
<b>Chronic liver disease</b>	Including cirrhosis
<b>Chronic neurological conditions</b>	Including Parkinson's disease, Motor Neurone Disease
<b>Diabetes</b>	Diabetes mellitus requiring insulin or oral hypoglycaemic drugs.
<b>Immunosuppression</b>	Due to disease or treatment. Including asplenia or splenic dysfunction, HIV infection at all stages, malignancy. Patients undergoing chemotherapy leading to immunosuppression. Individuals on or likely to be on systemic steroids for more than one month at a dose equivalent to prednisolone at 20mg or more per day (any age) or for children under 20kg a dose of 1mg or more per kg per day. <i>However some immunocompromised patients may have a suboptimal immunological response to the vaccine.</i>
<b>Long-stay residential care homes residents</b>	This does <i>not</i> include prisons, young prisons, young offender institutions, university halls of residence.
<b>Others</b>	Doctors retain discretion in identifying additional individual patients who they recognise as at high risk of complication should they develop influenza; for example children on long term aspirin who are at increased risk of Reye's syndrome.

\* The high risk groups described in this Appendix are largely based on data from inter-pandemic influenza. During the course of the pandemic, the definition of 'high risk groups' may differ. If so, details of the 'high risk' patient group will be altered according to relevant clinico-epidemiological data. Users are strongly advised to refer to the latest version of these guidelines at all times.

## **Appendix 5 -**

### **INFECTION CONTROL ADVICE - THE DYING/DECEASED PATIENT**

#### **Ministers of religion**

Ministers of religion wear PPE as per standard infection control practices and droplet precautions.

#### **Last offices**

When performing last offices for deceased patients:

- Healthcare workers must follow Standard Infection Control Principles
- Surgical masks should be considered if there is a risk of splashes of blood and body fluids, secretions (including respiratory secretions), and excretions onto the facial mucosa.
- The body should be fully wrapped in a sheet.
- Transfer to the mortuary should occur as soon as possible after death.
- If the family wishes to view the body, they may be allowed to do so and instructed to wear PPE as per standard infection control practices

#### **Post mortem examinations**

During a pandemic questions may arise about the need for post-mortem examinations. Where clinically indicated, such exams will yield vital clinico-pathological information which may be of vital importance in refining recommendations related to prevention and treatment of infection. The post-mortem should be conducted in a high risk post-mortem room and a powered respirator and full PPE should be worn.

## Appendix 6 **Mark Abbott**

### **MORTUARY PROVISION**

- It should be noted that normal seasonal influenza and winter pressures require the addition of body storage trailers; Pan Flu would place far greater strain on the trust mortuary arrangements.

Queens Hospital Mortuary Provision		
Type	Capacity	Comments
Body Storage	40 trays	Max Capacity
Bariatric Storage	4 Trays	Only 3 Bariatric Bodies can be accommodated at one time.
Total	44 Trays	

- Guidance on temporary body storage is available from the Human Tissue Authority (HTA) which is the regulator for human tissue and organs.
- Emergency temporary storage facilities that are set up to relieve undertakers are not subject to licensing. This is because the bodies of the deceased are being stored prior to being buried or cremated and are not being stored for a scheduled purpose.
- In cases where there is doubt about the cause of death and post-mortem examination is authorised, the bodies may be stored for up to seven days in the emergency temporary storage facility before being moved to the licensed premises where the post-mortem examination will take place. This is permissible under the Part 2 Section 16(7) incidental to transportation exemption.
- In the case of a pandemic, there may be an increase in the number of people dying at home, which may in turn lead to a greater number of post-mortem examinations having to be authorised by the coroner. This will put added strain on mortuaries carrying out post-mortem examinations and may result in bodies being stored for longer than seven days in temporary facilities prior to an examination; these facilities will be subject to licensing. In some cases, it may be that the temporary facilities can be a satellite of existing licensed premises. The HTA will be able to advise on this.
- Mass fatality planning groups should seek advice from the HTA if they are uncertain about whether their arrangements would require premises to be licensed for the activities of storage and post-mortem examination in the event of a pandemic situation.
- If emergency temporary facilities are set up for the performance of post-mortem examinations, these will always be subject to licensing

#### **Mortuary and funeral staff**

- The mortuary staff or funeral director should be informed that the deceased had pandemic influenza. Standard infection control practices should be followed, there is no further risk of droplet spread.
- Extra mortuary space will be required for appropriate care of deceased persons.

### Body Storage Trailers.

- The Civil Contingencies Unit has two temporary body storage trailers that can be requested for additional hospital mortuary storage. The request would normally be made through the Mortuary Operational Manager or Emergency Preparedness Manager as there is a specific procedure that needs to be followed. There will be a cost to this request. [Z:\Civil Contingencies\CCU\Body Storage Trailer Deployment Pack & SLA.doc](#)

CCU Body Storage Trailers		
Type of Storage	Capacity	Comments
Coffins	50 bodies (in coffins)	Normal Use (Due to H&S restrictions this is closer to 30 bodies).
Body Bags	100 bodies	Placed in individual body bags and stored head to toe, two per position

### Additional Hospital Body Storage.

- Should the body storage space within the hospital mortuary be insufficient, then consideration should be given to utilising the Occupational Therapy Gymnasium. Portable cooling units will be required and the gymnasium walls insulated. The gymnasium has external double doors, which give access to a car parking area, making body movement more straightforward.
- It should be noted that depending on the weather and outside temperature, this solution may not be realistic for extended periods of body storage.

### National Emergency Mortuary Arrangements (NEMA)

- If the demands of a mass fatality incident exceed the capabilities of the local or regional arrangements, the Coroner can request that NEMA be deployed.
- NEMA forms the basis of HM Government's programme of central assistance to supplement local and regional plans, and may be configured in various ways.
- NEMA is flexible, and can provide:
  - Temporary structure(s) to form an emergency mortuary
  - Stockpiles of general mortuary equipment
  - Chilled storage for use at an incident site
  - Specialist radiographic equipment.

NEMA activation will normally be requested via the Civil Contingencies Unit (CCU).

## Appendix 7 - Steve Harding

### INFECTION CONTROL ADVICE – GENERAL INFORMATION FOR STAFF

#### Clinical features of influenza

- Fever, dry cough, and abrupt onset
- Headache, sore throat, runny or stuffy nose, aching muscles and joints, and extreme tiredness also possible
- Adults can be infectious from a day before symptoms begin through about 5 days after illness onset.
- Children can be infectious for about 7 days; young children can shed virus for several days before becoming ill

#### How influenza is spread

- Transmitted from person-to-person through close contact. Balance of evidence points to large droplet and direct and indirect contact transmission as the most important routes
- Airborne or fine droplet transmission may also occur, especially during aerosol generating procedures

#### Prevention of influenza transmission

- Strict adherence to infection control practices especially hand hygiene
- Containment of respiratory secretions and the use of personal protective equipment (PPE)
- Adherence to Standard Infection Control Principles and Droplet Precautions

#### Staff who contract symptoms

- Before commencing duty all staff must report any symptoms of pandemic influenza to their line manager who will then advise accordingly.
- If a member of staff develops symptoms whilst on duty he/she must report to their line manager immediately.
- As a general principle, all healthcare workers who have symptoms of pandemic influenza should be excluded from work to avoid infecting others.
- In exceptional circumstances where staff shortages are extreme, line managers may allow symptomatic staff to work.
- Healthcare workers who feel well enough to work and are beginning to experience symptoms of pandemic influenza or are recovering and have residual symptoms may do so provided they work in parts of the facility segregated for the care of influenza patients and avoid contact with non-influenza patients and staff who remain well. *This means for example that staff must stay in the segregated patient area of the facility throughout their shift (including rest periods).*
- All healthcare workers who have recovered from pandemic influenza should report to their line manager before resuming clinical duties because their illness needs to be recorded and it may also affect future deployment. This group of healthcare workers can care for people with influenza.
- Line managers, in turn, should ensure that sickness/absence is recorded and this information is sent to the local Occupational Health Department.

#### Uniforms

The appropriate use of PPE will protect uniforms from contamination in most circumstances.

- During a pandemic, healthcare workers should not travel to and from work or between hospital residences and place of duty in uniform.
- If there are no laundry facilities available then uniforms should be laundered in a domestic washing machine in water as hot as the fabric will tolerate, then ironed or tumbled-dried.

- Uniforms should be transported home in a sealed plastic bag, washed separately from other linen, in a load not more than half the machine capacity, in order to ensure adequate rinsing and dilution.

## **HAND HYGIENE**

Hand hygiene is the single most important practice to reduce the transmission of infectious agents in healthcare settings. The term “hand hygiene” includes hand washing, and the use of alcohol-based products (i.e. Spirigel) that contains an emollient that does not require the use of water.

### **Key points in relation to an influenza pandemic**

- If hands are visibly soiled or contaminated (for example, contaminated with respiratory secretions), they should be washed with soap and water and dried.
- When decontaminating hands using Spirigel, hands should be free of dirt and organic material. Spirigel must come into contact with all surfaces of the hand.
- Hands should be decontaminated before and after all contact with an infected patient or their bed area, removal of protective clothing, and cleaning of equipment
- Following hand washing, hands should be dried thoroughly using paper towels that are then discarded in the nearest waste receptacle.
- Waste bins with foot-operated lids should be used whenever possible.
- All staff, patients and visitors entering and leaving areas where care is delivered should perform hand hygiene with either soap & water followed by drying or alcohol hand rub.

## USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 1 Appropriate PPE for care of patients with pandemic influenza is summarised in the table below. Care in the correct donning and removal of PPE is essential to avoid inadvertent contamination. All contaminated clothing must be removed before leaving a patient care area, disposable or surgical masks being removed last.

	Entry to Cohorted Area but NO contact with patients	Delivery of patient care	Aerosol Generating procedures
Hand Hygiene	✓	✓	✓
Gloves	X	✓	✓
Plastic Apron	X	✓	X
Gown	X	X	✓
Surgical Mask	✓	✓	X
FFP3 respirator	X	X	✓
Eye Protection	X		

### Notes:

1. Aerosol generating procedures are defined as:

- Intubation, extubation and related procedures for example manual ventilation and open suctioning
  - Cardiopulmonary resuscitation
  - Bronchoscopy
  - Surgery and post-mortem procedures in which high speed devices are used.
  - Dental procedures
  - Non-invasive ventilation (NIV) for example Bilevel Positive Airway Pressure ventilation (BiPAP) and continuous Positive Airway Pressure Ventilation (CPAP), high-frequency oscillating ventilation (HFOV)
  - Induction of sputum
2. If the supply of gloves becomes limited then use should be prioritised for contact with blood or body fluids, invasive procedures and contact with sterile sites
3. Use a gown if extensive soiling of clothing or skin with blood or other body fluids is anticipated
3. If non-fluid-repellent gowns are used, a plastic apron should be worn underneath
4. Fluid repellent surgical masks are recommended for use at all times in cohorted areas for practical purpose. If stock becomes limited use should be prioritised to delivery of patient care.

### **Surgical masks should:**

- Be worn by health care workers for delivery of patient care
- Cover both the nose and the mouth, and not be allowed to dangle around the neck after usage
- Not be touched once put on
- Be changed when they become moist
- Be worn once and discarded in an appropriate receptacle as clinical waste
  
- Hand hygiene must be performed after disposal is complete.
- If pandemic influenza patients are cohorted in one area and multiple patients must be visited over a short time or in rapid sequence it may be practical to wear a single surgical mask upon entry to the area and to keep it on for the duration of the activity or until the surgical mask requires replacement.
  
- Other PPE (e.g. gloves, gown) must be removed between patients and hand hygiene performed. All contaminated PPE must be removed before leaving a patient care area.
- **Surgical masks or FFP3 respirators should be removed last, followed by thorough hand hygiene.**

### **3 Respirators (EN149:2001 FFP3 disposable respirator) should be:**

- Worn by health care workers when performing procedures which have the potential to generate aerosols (**see note 1 under table above**).
- Changed immediately in a safe area if breathing becomes difficult, the respirator becomes damaged or distorted or contaminated by body fluids, or if a proper face fit cannot be maintained.
- Replaced if, during the process of providing care, respirators become contaminated with a patient's respiratory secretions
- Replaced after each use and disposed of as clinical waste

### **4 Fit testing of respirators**

In accordance with Health and Safety executive (HSE) requirements, every potential user should be fit tested and trained in the use of the respirator. Primarily these will be staff most likely to carry out aerosol generating procedures (**see note 1 under table above**).

- Fit is critically important and a fit check should be carried each time a respirator is worn.
- The respirator must seal tightly to the face or air will enter from the sides.
- A good fit can only be achieved if the area where the respirator seals against the skin is clean-shaven. Beards, long moustaches, and stubble may cause leaks around the respirator.
- Other types of respiratory protective equipment (e.g., hoods/helmets) are available if the local risk assessment indicates that they would also reduce the risk of exposure.
- This is particularly important if the wearer is not suitable for a half-mask respirator because of fit issues and also when the respiratory protective equipment must be compatible with other PPE (e.g., safety glasses) required for a procedure/process.

### **5 Aerosol-generating procedures:**

- The performance of aerosol-generating procedures should be minimized as is feasible without compromising patient care.
- Only those health care workers needed to perform the procedure should be present.
- In addition to respirators, eye protection must be worn to prevent eye contact with infectious material during such procedures.

### **6 Gloves**

- Are not required for the routine care of patients with pandemic influenza *per se*.

- Are required to be worn for invasive procedures, contact with sterile sites, non-intact skin, and mucous membranes, during all activities that carry a risk of exposure to blood, body fluids, secretions (including respiratory secretions) and excretions, and when handling sharp or contaminated instruments.
- Should be removed immediately after use, disposed of as clinical waste, and hand hygiene performed.
- **No attempt should be made to wash gloves for subsequent reuse.**
- If glove supplies become limited during a pandemic gloves should always be prioritised for contact with blood and body fluids, invasive procedures, and contact with sterile sites.

## 7 Aprons should be worn:

- Whenever there is a risk of personal clothes or uniform coming into contact with a patient's blood, body fluids, secretions (including respiratory secretions) and excretions.
- During activities that involve close contact with the patient (e.g., examining the patient).
- As single use items for one procedure or episode of patient care and then discarded and disposed as clinical waste.
- In cohorted areas, and must be changed between patients.

## 8 Gowns

Are not required for the routine care of patients with influenza but should be worn if:

- Extensive soiling of personal clothing or uniform with respiratory secretions is anticipated
- There is risk of extensive splashing of blood, body fluids, secretions, and excretions onto the skin of the healthcare worker.

*Procedures such as intubation and activities that involve holding the patient close (e.g. in paediatric settings) are examples of when a gown may be needed.*

## 9 Gowns should:

- Be fluid-repellent, but if non fluid-repellent gowns are used a plastic apron should be worn beneath.
- fully cover the area to be protected
- Be worn only once and then placed in a waste or laundry receptacle as appropriate, and hand hygiene performed immediately after removal.

## 10 Eye protection

The use of eye protection should be considered when there is a risk of contamination of the eyes by splashes and droplets e.g., blood, body fluids, secretions, and excretions generated through patient care. This should be an individual risk-assessment at the time of providing care. **Eye protection should always be worn during aerosol-generating procedures.**

Eye protection can be achieved by the use of any one of the following:

- surgical mask with integrated visor
- full face visors
- Polycarbonate safety spectacles or equivalent.

Non-disposable eye protective equipment (e.g., polycarbonate safety spectacles issued as personal equipment to staff on a long-term basis) pose a potential cross-infection risk. It is important that any such items are decontaminated after soiling using agents recommended by the manufacturer, and when leaving an influenza patient segregated area prior to performing final hand hygiene.

## Appendix 9 – Natalie Roddis

### INFECTION CONTROL ADVICE – WASTE AND ENVIRONMENT

#### Clinical and non-clinical waste

**No special handling procedures beyond those for normally used for clinical waste are required for clinical and non-clinical waste that may be contaminated with influenza virus.**

Gloves should be worn when handling ALL waste and hand hygiene performed after removal of gloves.

#### Linen and laundry

Both “Used” and “Infected” linen must be handled, transported and processed in a manner that prevents skin and mucous membrane exposures to staff, contamination of their clothing and the environment.

- Linen should be placed in appropriate receptacles immediately after use and bagged at the point of use
- Linen bags must be tied and sealed before removal from the influenza patient care area
- Gloves and aprons should be worn for handling all contaminated linen
- Hand hygiene should be performed after removing gloves that have been in contact with soiled linen and laundry.

**Bed curtains should be changed following patient discharge.**

#### Crockery and utensils

No additional precautions are required.

#### Environmental cleaning and disinfection

- Patient cohorted areas must be cleaned daily and after patient discharge.
- Frequently touched surfaces (e.g., medical equipment, door knobs): at least twice daily and when known to be contaminated with secretions, excretions or body fluids.
- Freshly prepared neutral detergent and hot water should be used.
- Damp rather than dry dusting should be performed to avoid generating dust particles. During wet cleaning a routine should be adopted that does not redistribute micro-organisms. This may be accomplished by cleaning less heavily contaminated areas first and by changing cleaning solutions and cloths frequently.
- The use of vacuum cleaners should be avoided. Dedicated or single-use/disposable equipment should be used. Non-disposable equipment, including mop heads, should be laundered after use.
- Any spillage or contamination of the environment with secretions, excretions or body fluids should be treated in line with the local spillage policy.

#### Equipment

Standard practices for handling and reprocessing used and soiled patient-care equipment, including re-usable medical devices, should be followed for both influenza and non-influenza areas of hospital.

- Prevent exposure of the skin and mucous membranes and contamination of clothing and the environment. Gloves should be worn when handling and transporting used patient-care equipment

- Clean heavily soiled equipment with neutral detergent and hot water before removing from the patient's room or consulting room
- Reusable equipment (e.g., stethoscopes, patient couch in treatment and consulting rooms) must be scrupulously decontaminated between each patient; equipment that is visibly soiled should be cleaned promptly.
- Wipe external surfaces of portable equipment for performing x-rays and other procedures in the patient's room with neutral detergent and hot water upon removal from the patient's room or consulting room.
- Whenever possible, non-critical patient equipment should be dedicated for use by pandemic influenza patients only.
- **Use of equipment that recirculates air (e.g. fans,) should be avoided.**

### **Furnishings**

Remove all non-essential furniture, especially soft furnishings from reception and waiting areas. The remaining furniture should be easy to clean and should not conceal or retain dirt and moisture. Toys, books newspapers, and magazines should be removed from the waiting area.

## STAFF

Hand Sanitiser



Wear Gloves



Wear Apron



Wear Face Mask



Keep Door Closed



# INFLUENZA PRECAUTIONS IN FORCE

## VISITORS

Hand Sanitiser



Wear Gloves



Wear Apron



Wear Face Mask



Keep Door Closed



All  
Staff and Visitors:  
Please follow entry  
instructions

AND

Please wash your hands  
before leaving  
the room or area

Infection Prevention and Control



**NOTICE FOR PATIENTS**

**INFLUENZA PRECAUTIONS**

**WAITING AND ASSESSMENT AREA**

Infection Prevention and Control



## NOTICE FOR PATIENTS

### INFLUENZA PRECAUTIONS

**Please:**

- **Do not leave this area unless asked to do so by a member of staff**

Infection Prevention and Control



Pan Flu Considerations - Exec/Gold/Silver	
1.	Liaison with NHS England – Gold Only
2.	Liaison with East Staffs CCG – Gold Only
3.	Liaison with Staffordshire Resilience Forum (SRF) – Gold Only
4.	Liaison with Director of Public Health – Gold Only
5.	Setting up Trust Pandemic Influenza Management Team – See page 29 Appendix 1
6.	Requesting ED set up alternative triage / ED reception arrangements such as possible use of AAC Entrance to prevent spread of infection.
7.	Consider setting up Emergency Blood Management Group & Plan – Page 21
8.	Consider that ED admissions are likely to rise by 33% or 60 patients a day.
9.	Ops Room may have to open for longer hours
10.	Bed Management Staff may need to work longer or different hours.
11.	Staff will be affected by Pan Flu as much as the public:
12.	Increased sickness levels.
13.	Difficulty in travelling to work.
14.	Staff absence due to dependants, children, elderly relatives etc.
15.	Consider alternative Pre-Triage arrangements for ED – Page 21
16.	Pharmacy and anti-virals – Page 22
17.	Consider increased use of PPE for staff – Page 24
18.	Finance considerations – Page 24
19.	HR considerations – Page 25 & 26
20.	<p>Maintaining business as usual for as long as is possible:</p> <ul style="list-style-type: none"> <li>• Flexing beds as necessary to maintain normal service provision and accommodate patients who are diagnosed with pandemic influenza.</li> <li>• Isolating patients in single rooms.</li> <li>• Co-horting patients.</li> <li>• Reinforcing control of infection measures.</li> <li>• Monitoring the overall impact on service delivery.</li> <li>• Consider the actions that will need to be made to meet increased demand.</li> </ul>
21.	<p>Be mindful of the ethical principles around possible rationalisation of treatment. Ethical Aspects of Pandemic Influenza (CEAPI) 2007 developed an ethical framework based on the principle of ‘the three wise men’.</p> <ul style="list-style-type: none"> <li>• Everyone matters</li> <li>• Everyone matters equally, but this does not mean that everyone is treated the same</li> <li>• The interests of each person as the concern of all of us, and society</li> <li>• The harm that might be suffered by every person matters, and so minimising the harm that a pandemic might cause is a central concern.</li> </ul>
22.	<p>The Framework goes on to describe eight core principles:</p> <ul style="list-style-type: none"> <li>• Respect</li> <li>• Minimising the harm that a pandemic could cause</li> <li>• Fairness</li> <li>• Working together</li> <li>• Reciprocity</li> <li>• Keeping things in proportion</li> <li>• Flexibility</li> </ul>

	<ul style="list-style-type: none"> <li>• Good decision making</li> </ul>
23.	In a low impact pandemic, there may be no significant deferral of normal activities. However, some small or specialist services, such as intensive care, may still come under pressure dependent upon the disease characteristics and the emerging at risk groups. In hotspot areas, increased referrals to primary care services are likely to cause result in consequential effects to ED services.
24.	There will be a requirement for effective coordination between partners so that members of the public understand where to find advice and assistance on influenza, so that capacity still remains for non-flu patients. This will be part of the overall local health and social care communications strategy, with posters, advice through social media and other methods of getting clear messages to the public.
25.	In a pandemic of moderate impact, the Trust will likely be responding to increasing referrals of patients with exacerbation of respiratory conditions, which may require higher levels of care.
26.	As more patients are assessed and diagnosed with pandemic influenza, and require admission to medical wards and intensive care, consideration will be given to expanding capacity by cancelling all but urgent activity, using other environments to run admission facilities such as, increasing ITU capacity by using theatre and recovery capacity; considering early discharge and redeployment of staff to areas where flu patients are being cared for.
27.	Suspension of NHS targets cannot be undertaken without discussion and agreement with East Staffs CCG and early discharges needs to be discussed and agreed with local authorities and providers of district nursing services.
28.	In a high impact pandemic, staff absences are likely to add to these difficulties. A key challenge for the Trust in sustaining essential care will be the ability to use available staff flexibly and cooperatively when necessary between services.
29.	A high impact pandemic may also result in increased numbers of deaths. It will be important to plan appropriately so that death and cremation certification can be managed as effectively as possible.
30.	The trust Mortuary has contingency plans for dealing with excess deaths.
31.	If the situation develops to the point where capacity and resources become scarce, e.g. admission and ITU beds, the next phase it to consider the introduction of prioritisation criteria and restrictions on treatment options. This can only be instituted with health and social care partners.
32.	The guidance recommends setting up a Service Prioritisation group to ensure any actions taken are appropriately balanced to minimise harm. The Trust would set this up as a stand-a-lone meeting structure.
33.	Vulnerable Patients - These patients may be undergoing a range of regular treatment, such as chemotherapy and renal dialysis or their vulnerability may lie with end of life care. It is the responsibility of the Care Groups to identify those patients who are on specific care pathways and at an early stage in the planning process, consider how or where they could continue to run that service and how they will communicate with patients and their carers. In order to manage this group of patients, Care Groups will be required to work closely with multiagency partners to ensure they are managed appropriately and safely.

Reference Doncaster & Bassetlaw NHS Foundation Trust

A Pan Flu outbreak will result in the Staffordshire Resilience Forum, Local Health Resilience Partnership (LHRP) and NHS England setting up a series of Strategic meetings.

## Pan Flu Action Card- Head of Capacity & Bed Management Team

No.	Consider	Action	
1.	Consider	Requesting ED set up alternative triage / ED reception arrangements such as possible use of AAC Entrance to prevent spread of infection.	
2.	Consider	Consider that ED admissions are likely to rise by 33% or 60 patients a day.	
3.	Consider	Ops Room may have to open for longer hours	
4.	Consider	Bed Management Staff may need to work longer or different hours.	
5.	Consider	Staff will be affected by Pan Flu as much as the public: <ul style="list-style-type: none"> <li>• Increased sickness levels.</li> <li>• Difficulty in travelling to work.</li> <li>• Staff absence due to dependants, children, elderly relatives etc.</li> <li>• Worried well.</li> </ul>	
6.	Consider	Bed space may need to be used differently.	
7.	Consider	Visitors to the hospital may need to be restricted.	
8.	Consider	Lock-down or partial lock-down may need to be implemented.	
9.	Consider	Consider alternative Pre-Triage arrangements for ED – Page 21	
10.	Consider	Pharmacy and anti-virals – Page 22	
11.	Consider	Consider increased use of PPE for staff – Page 24	
12.	Consider	Maintaining business as usual for as long as is possible:	
13.	Consider	Flexing beds as necessary to maintain normal service provision and accommodate patients who are diagnosed with pandemic influenza.	
14.	Consider	Isolating patients in single rooms.	
15.	Consider	Co-horting patients.	
16.	Consider	Reinforcing control of infection measures.	
17.	Consider	Monitoring the overall impact on service delivery.	
18.	Consider	Consider the actions that will need to be made to meet increased demand.	
19.	Consider	Be mindful of the ethical principles around possible rationalisation of treatment.	
20.	Consider	Everyone matters equally, but this does not mean that everyone is treated the same	

## Pan Flu Action Card- Housekeeping / Cleaning

No.	Action	Comments
1.	Seek guidance from Infection Control / Clinical Nurses	
2.	Speak with the staff on duty. If out of hours contact the Clinical Site Practitioner (CSP)	
3.	Communicate with clinical departments and Ward Matrons to establish importance / urgency	
4.	Hospital Lockdown may be implemented to prevent spread on contamination. Visitors and staff may be restricted in their movements	
5.	Be aware of possible staff shortages, additional pressure on remaining staff	
6.	If any Domestic staff are affected by Pandemic Flu: <ul style="list-style-type: none"> <li>• Contact staff for overtime including all bank staff and agencies for Emergency Cover</li> </ul>	
7.	Reserve supply of Cleaning products stock levels to be stored in the basement on a rotational basis: <ul style="list-style-type: none"> <li>• Cleaning products are stored in receipt and distribution</li> <li>• General detergent</li> <li>• Clor-Clean (Chlorine Tablets)</li> <li>• Virusolve</li> <li>• Decontamination Fogging Solution</li> <li>• Disposable mops and cloths</li> <li>• Dust control strips to be used</li> </ul>	
8.	In extreme cases of increased usage, alternative suppliers will be sourced	
9.	Orange bags for infected waste, liaise with Waste Manager for correct disposal	
10.	Increase frequency of cleaning times especially touch points following guidance from infection control: <ul style="list-style-type: none"> <li>• Light switches                      Chairs</li> <li>• Door handles                         Taps</li> </ul>	

	<ul style="list-style-type: none"> <li>• Pull Cords</li> <li>• Toilet flushes</li> <li>• Nurses call bells</li> </ul>	<ul style="list-style-type: none"> <li>Soap Dispensers</li> <li>Hand towel dispenser</li> <li>Bed rails</li> </ul>	
11.	Basic duties provided in non-affected areas releasing more staff		
12.	Guidance to be sought from Infection Control before using the Hydrogen Peroxide Fogging Machine		
13.	No cleaning service to office areas		
14.	Trolleys to be cleaned after use in affected area before moving on to the next.		
15.	<p>Additional PPE required:</p> <ul style="list-style-type: none"> <li>• Including purchasing of face visors (if not available eye goggles may be used)</li> <li>• Disposable gloves / aprons</li> <li>• Overshoes to be worn dependent on suitability of floor (if wet do not use)</li> <li>• Additional PPE stored in Linen Services (scrub suits)</li> </ul>		
16.	<p>The disposal of contaminated linen:</p> <ul style="list-style-type: none"> <li>• Infected linen to be placed in a red alginate bag (dissolvable) and then in a second red bag this may possibly destroyed by the laundry provider.</li> </ul>		
17.	Be aware that Schools may close and public transport suspended to prevent spread on infection in community		
18.	Domestic staff will also be affected by the spread of Pan Flu		
19.	Staff may have children, elderly parents or other dependants which may require looking after.		
20.	Be aware that a Pan Flu outbreak may last for several months, so plan for this		

Mark Abella

Pan Flu Action Card- Porters / Agile Workers / Security			
No.	Essential/Consider	Action	
1	Consider	Assist in the security of the hospital site, taking into account that additional restrictions may be placed on staff, patient and visitor movement.	
2	Consider	Porters may be required to wear additional PPE to prevent the spread of infection. Face Masks, Gloves, Aprons etc.	
3	Consider	Certain portering procedures may have to change to prevent the spread of infection.	
4	Consider	Waste bags may require collection and disposal on a more regular basis.	
5	Consider	Greater staffing may be required for additional removal of contaminated linen or equipment.	

# Pan Flu Action Card – Mortuary

No.	Action
1.	The normal Mortuary provision at Queens Hospital would be unable to cope with the increased mortality rate from both with the hospital and coronal deaths in the community.
2.	Guidance on temporary body storage is available from the Human Tissue Authority (HTA) which is the regulator for human tissue and organs.
3.	Emergency temporary storage facilities that are set up to relieve undertakers are not subject to licensing. This is because the bodies of the deceased are being stored prior to being buried or cremated and are not being stored for a scheduled purpose.
4.	Mass fatality planning groups should seek advice from the HTA if they are uncertain about whether their arrangements would require premises to be licensed for the activities of storage and post-mortem examination in the event of a pandemic situation.
5.	The mortuary staff or funeral director should be informed that the deceased had pandemic influenza. Standard infection control practices should be followed, there is no further risk of droplet spread.
6.	Extra mortuary space will be required for appropriate care of deceased persons.
7.	<p>The Civil Contingencies Unit has two temporary body storage trailers that can be requested for additional hospital mortuary storage. The request would normally be made through the Mortuary Operational Manager or Emergency Preparedness Manager as there is a specific procedure that needs to be followed. There will be a cost to this request.</p> <p>Z:\Civil Contingencies\CCU\Body Storage Trailer Deployment Pack &amp; SLA.doc</p>
8.	Should the body storage space within the hospital mortuary be insufficient, then consideration should be given to utilising the Occupational Therapy Gymnasium. Portable cooling units will be required and the gymnasium walls insulated. The gymnasium has external double doors, which give access to a car parking area, making body movement more straightforward.

9.	It should be noted that depending on the weather and outside temperature, this solution may not be realistic for extended periods of body storage.
10.	If the demands of a mass fatality incident exceed the capabilities of the local or regional arrangements, the Coroner can request that NEMA be deployed.
11.	NEMA forms the basis of HM Government's programme of central assistance to supplement local and regional plans, and may be configured in various ways.
12.	NEMA is flexible, and can provide: <ul style="list-style-type: none"> <li>• Temporary structure(s) to form an emergency mortuary</li> <li>• Stockpiles of general mortuary equipment</li> <li>• Chilled storage for use at an incident site</li> <li>• Specialist radiographic equipment.</li> </ul>
13.	NEMA activation will normally be requested via the Civil Contingencies Unit (CCU).

### Queens Hospital Mortuary Provision

Type	Capacity	Comments
Body Storage	40 trays	Max Capacity
Bariatric Storage	4 Trays	Only 3 Bariatric Bodies can be accommodated at one time.
Total	44 Trays	

### CCU Body Storage Trailers

Type of Storage	Capacity	Comments
Coffins	50 bodies (in coffins)	Normal Use (Due to H&S restrictions this is closer to 30 bodies).
Body Bags	100 bodies	Placed in individual body bags and stored head to toe, two per position