Seasonal Influenza Management Policy
2018/19

Post holder responsible for Procedural Document
Robert Porter, Infection Control Doctor/Consultant Microbiologist

Author of Policy
Judy Potter, Joint Director of Infection Prevention & Control

Division/ Department responsible for Procedural Document
Specialist Services, Infection Prevention & Control

Contact details
x2961

Date of original document
September 2011

Impact Assessment performed
Yes/ No

Ratifying body and date ratified
Infection Control & Decontamination Assurance Group: 17th October 2018

Review date (and frequency of further reviews)
August 2019 (Annually)

Expiry date
December 2019

Date document becomes live
3 January 2019

Please specify standard/criterion numbers and tick ✓ other boxes as appropriate

<table>
<thead>
<tr>
<th>Monitoring Information</th>
<th>Strategic Directions – Key Milestones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Experience</td>
<td>Maintain Operational Service delivery</td>
</tr>
<tr>
<td>Assurance Framework</td>
<td>Integrated Community Pathways</td>
</tr>
<tr>
<td>Monitor/Finance/Performance</td>
<td>Develop Acute Services</td>
</tr>
<tr>
<td>CQC Fundamental Standards Regulation No.:</td>
<td>12</td>
</tr>
</tbody>
</table>

Other (please specify): 

Note: This policy has been assessed for any equality, diversity or human rights implications

Controlled document
This document has been created following the Royal Devon and Exeter NHS Foundation Trust Development, Ratification & Management of Procedural Documents Policy. It should not be altered in any way without the express permission of the author or their representative.
Full History

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Author (Title not name)</th>
<th>Reason</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>Sept 2011</td>
<td>Infection Control Doctor</td>
<td>New Guidance</td>
</tr>
<tr>
<td>2.0</td>
<td>Sept 2012</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>3.0</td>
<td>Sept 2013</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>4.0</td>
<td>Sept 2014</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>5.0</td>
<td>Sept 2015</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>6.0</td>
<td>Sept 2016</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>7.0</td>
<td>Aug 2017</td>
<td>Infection Control Doctor</td>
<td>Routine Revision</td>
</tr>
<tr>
<td>8.0</td>
<td>Aug 2018</td>
<td>Infection Control Doctor</td>
<td>Routine Review no changes required</td>
</tr>
</tbody>
</table>

Associated Trust Policies/ procedural documents:
- Infection Prevention and Control Policy
- Outbreak Control Policy
- Adult Community Acquired Pneumonia (CAP)
- Severity Assessment and Empirical Antimicrobial Treatment Guidelines
- Guidance for the Management of Suspected Cases of Severe & Imported Respiratory Virus Infections Including Avian Influenza and MERS Cov
- Pandemic Flu Contingency Plan

Key Words:
- Influenza, Flu

In consultation with and date:

Full membership of the Infection Control and Decontamination Assurance Group which includes representation from the executive team, divisional management teams (including community services), nursing and medical staff, therapists, facilities, operations support, estates and Public Health England’s Devon/Cornwall and Somerset Local Team: 17th October 2018.

Contact for Review:
- Infection Control Doctor

Executive Lead Signature:
- Medical Director
CONTENTS

1. INTRODUCTION ......................................................................................................................... 4
2. PURPOSE ....................................................................................................................................... 4
3. DEFINITIONS .............................................................................................................................. 5
4. DUTIES AND RESPONSIBILITIES .............................................................................................. 5
5. ARCHIVING ARRANGEMENTS .................................................................................................... 5
6. PROCESS FOR MONITORING COMPLIANCE WITH AND EFFECTIVENESS OF THE POLICY................................................................................................................................. 6
7. STANDARDS/KEY PERFORMANCE INDICATORS ....................................................................... 6
8. REFERENCES ............................................................................................................................... 6

APPENDIX 1 - STAGED RESPONSE ................................................................................................. 7
APPENDIX 2 - RD&E PLAN IMPLEMENTATION .............................................................................. 9
ANNEX A to APPENDIX 2 - IDENTIFICATION OF POTENTIAL CASES ......................................... 12
ANNEX C to APPENDIX 2 - DIAGNOSTIC INVESTIGATIONS ....................................................... 17
ANNEX D to APPENDIX 2 - TREATMENT AND PROPHYLAXIS .................................................. 19
ANNEX E to APPENDIX 2 - INFECTION CONTROL ....................................................................... 21
ANNEX F to APPENDIX 2 - MANAGEMENT OF CONTACTS, INCLUDING CONTACT TRACING ................................................................................................................................. 26
ANNEX G to APPENDIX 2 - CARE OF THE DECEASED .................................................................. 30
APPENDIX 3 - ARRANGEMENTS FOR ADMISSION OF SUSPECTED AND CONFIRMED FLU PATIENTS .......................................................................................................................... 31
APPENDIX 4 - MANAGEMENT OF SUSPECTED FLU PATIENTS ATTENDING THE EMERGENCY DEPARTMENT (ED) .................................................................................................................. 33
APPENDIX 5 - RISK ASSESSMENT AND MANAGEMENT FOR PAEDIATRIC AND ADULT PATIENTS ATTENDING HAEMATOLOGY/ONCOLOGY ........................................................................ 34
APPENDIX 6 - EXTRA CORPOREAL MEMBRANE OXYGENATION (ECMO) ............................. 36
APPENDIX 7 - INFORMATION FOR PATIENTS IN THE COMMUNITY ...................................... 37
APPENDIX 8 - USEFUL CONTACTS ............................................................................................... 42
APPENDIX 9 - COMMUNICATION PLAN ......................................................................................... 43
APPENDIX 10: EQUALITY IMPACT ASSESSMENT TOOL ............................................................... 46
1. **INTRODUCTION**

1.1 Influenza or ‘flu' is a respiratory illness caused by influenza A or B virus. Symptoms frequently include headache, fever, cough, sore throat, aching muscles and joints.

1.2 Influenza is a highly infectious illness transmitted through the respiratory route by aerosols or contact.

1.3 Influenza occurs most often in winter and usually peaks between December and March in the northern hemisphere. Illness resembling influenza may be caused by several different viruses, therefore national surveillance schemes are in place to detect circulation of influenza viruses.

1.4 The influenza virus is unstable and new strains and variants are constantly emerging. For this reason flu vaccine is reformulated each year to match circulating strains, and a booster should be given each year to those qualifying for influenza vaccination. Vaccine is recommended for those with chronic illnesses including respiratory conditions such as chronic obstructive pulmonary disease (COPD) and asthma, renal and heart failure. Pregnant women are also recognised as being at special risk. Health and social care workers are strongly encouraged to be vaccinated against ‘flu for their own and their vulnerable patients’ protection, and national targets for vaccination of healthcare staff are set each year by the Department of Health.

1.5 For most people influenza infection is just a nasty experience, but for some it can lead to more serious illnesses. The most common complications of influenza are bronchitis and secondary bacterial pneumonia. These illnesses may require treatment in hospital and can be life threatening especially in the elderly, people with chronic illness or immunosuppression.

1.6 **Failure to comply with this policy could result in disciplinary action.** However, it is recognised that the management of influenza and the appropriate actions to take are entirely dependent on the background levels of disease in the community and therefore the volume of patients admitted to hospital. As the influenza season escalates close liaison between the clinicians and the Infection Prevention and Control Team may result in pragmatic adjustments in practice.

2. **PURPOSE**

2.1 The purpose of this document is to provide information to ensure the Trust is able to respond to the consequences of rising numbers of patients with seasonal ‘flu and to ensure patients with ‘flu are managed safely and effectively.

2.2 This policy supports the Trust's [Infection Prevention and Control Policy](#).

2.3 This will be implemented when the Public Health England (PHE) national surveillance scheme indicates that influenza virus A or B is circulating and there is a substantial likelihood that people presenting with an influenza-like illness are infected with influenza virus.

2.4 It would also implemented if an outbreak of ‘flu is detected locally or within the Trust, in the absence of evidence from national surveillance as in 2.3.

2.5 It may also also be implemented in the early stages of a flu pandemic before the need for the Trust’s Pandemic Flu Plan to be implemented.
3. **DEFINITIONS**

3.1 Definitions are contained within the body of the policy.

4. **DUTIES AND RESPONSIBILITIES**

4.1 **Infection Control and Prevention Team:**

- To monitor and contribute to surveillance schemes
- To notify the Trust’s Senior Management Team when there is evidence from Public Health England’s national surveillance scheme, or elsewhere, to indicate that influenza virus A or B is circulating and there is a substantial likelihood that people presenting to the Trust with an influenza-like illness are infected with influenza virus
- To participate in Trust Influenza Control Team Meetings and carry out actions contained within this plan

4.2 **Microbiology Laboratory**

- To provide appropriate capability for the diagnosis of viral respiratory illness, either on site or by referring specimens to another laboratory.
- The level of diagnostic capability to be varied so as to be consistent with the requirements of the Trust to diagnose and to manage influenza-like illness in non-epidemic and epidemic conditions.

4.3 **Trust Influenza Control Team**

- To meet when notified that influenza virus A or B is circulating and there is a substantial likelihood that people presenting with an influenza-like illness are infected with influenza virus
- To co-ordinate the response to the consequences of rising numbers of patients with seasonal ‘flu and to ensure patients with ‘flu are managed safely and effectively

4.4 **Clinical and Non-clinical Divisions**

- Contribute to the response to seasonal flu by participating in Trust Influenza Control meetings and communicating actions to relevant staff

5. **ARCHIVING ARRANGEMENTS**

The original of this policy will remain with the consultant microbiologist/infection control doctor, Microbiology/Infection Control Department. An electronic copy will be maintained on the Trust Intranet, P – Policies (Trust-wide) – S – Seasonal Influenza Management Policy. Archived electronic copies will be stored on the Trust’s “archived policies” shared drive, and will be held indefinitely. A paper copy (where one exists) will be retained for 10 years.
6. PROCESS FOR MONITORING COMPLIANCE WITH AND EFFECTIVENESS OF THE POLICY

6.1 This policy will be monitored during and after the management phase of the response to seasonal flu and any development actions identified incorporated into a revised policy.

7. STANDARDS/KEY PERFORMANCE INDICATORS

Not applicable

8. REFERENCES


**NOTE** References to influenza infection control guidance generated in preparation for a pandemic are included as general sources for information which can be applied to epidemic influenza as deemed appropriate by local teams.
APPENDIX 1 - STAGED RESPONSE

At some point during the autumn or winter, the levels of flu circulating in the community will rise, the incidence of flu-like illnesses will increase and GP practices and hospital services may come under increased pressure.

It is not possible to predict when this will happen or to what extent. The Department of Health (DOH) will use such information to assess the overall impact of flu on the population and on health services and, if needed, initiate a public health response to address the situation.

When this occurs, the response phase of implementation will come into effect. Not all elements may come into effect at the same time, or in a particular order, or in all localities. Local plans must be sufficiently flexible to be able to respond to local situations.

While the DOH and Public Health England (PHE) leads the national strategic response to flu each winter, the system needs to be sufficiently flexible to allow local adaptation of responses to take account of local variations in the spread and type of infection and local health services.

In this section, the flu response is set out in stages of activity that would take place depending on various factors, including the levels of flu that are circulating, pressure on NHS services, and epidemiological evidence on the nature and severity of illness the virus is causing, and among whom.

While the stages are illustrative of when levels of escalation in the flu response could be expected, other factors will sometimes determine an alteration to the timing of an activity. For example, based on a range of indicators collected each week during the flu season by PHE and others, DH informs GPs that flu is circulating at levels that would justify the use of antiviral medicines.

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Level of flu-like illness</th>
<th>Description of flu season</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community, primary and/or secondary care indicators starting to show that flu and flu-like illness are being detected</td>
<td>Beginning of the flu season – flu has now started to circulate in the community</td>
</tr>
</tbody>
</table>

- review data on flu activity and severity from the southern hemisphere
- GPs invite their eligible patients to be vaccinated, using call and reminder systems
- GPs make arrangements to vaccinate patients who cannot attend the surgery because of frailty, severe chronic illness or disability
- GPs encourage and facilitate their own frontline staff to be vaccinated
- other NHS, local authority and care home employers arrange for their frontline staff to be vaccinated
- data on flu incidence and vaccine uptake rates in England issued at a national and, if available, regional/local levels
- data on influenza-like illnesses, virological surveillance, vaccine uptake and NHS operational data published
- PHE publishes weekly reports on flu incidence, vaccine uptake, morbidity and mortality
- NHS England writes to the NHS if vaccine uptake is low
- PHE in contact with vaccine manufacturers on production and delivery schedules
- DH in contact with antiviral medicine manufacturers on their preparedness plans
- the respiratory and hand hygiene campaign may be launched
### Stage 2

<table>
<thead>
<tr>
<th>Level of flu-like illness</th>
<th>Description of flu season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu indicators starting to show that activity is rising</td>
<td>Normal levels of flu and/or normal to high severity of illness associated with the virus</td>
</tr>
</tbody>
</table>

- GPs and other non-medical prescribers will be alerted through a CMO/CPhO letter, to start prescribing antiviral medicines in line with the NICE guidance and Schedule 2 to the National Health Service (General Medical Services Contracts) (Prescription of drugs etc) Regulations 2004), commonly known as the Grey List or Selected List Scheme (SLS) and following expert advice that the flu virus is circulating.
- If evidence emerges that a particular age group or people with certain clinical conditions are being disproportionately affected by the flu virus, a joint letter on behalf of DH, NHS England, and PHE may issue specific advice to both the public and health professionals to increase efforts to vaccinate that particular group, if practicable and seeking expert advice from JCVI if necessary.
- Local NHS responds to local circumstances according to local plans and needs.
- Review daily NHS operational data, e.g. critical care.
- CMO or representatives of PHE or NHS England may provide a media briefing to provide clear, factual information on flu. This may include information for the public about what to do if they become unwell and advice on accessing services.
- If countrywide vaccine shortages are considered likely, PHE will alert GPs to the availability of the central strategic reserve and set out how they should access it. It is likely this will be through the on-line ImmForm system. Depending on the level of shortages, restrictions may be placed on the number of doses a GP can order.
- Vaccine manufacturers contacted by PHE regarding the availability of additional supplies if needed.
- In the event of shortages of antiviral medicines, and an evident public health need, PHE would take steps to support arrangements for supplies by using its pandemic flu stocks as buffers in the supply chain. In this system, government stocks of antiviral medicines would be supplied to the manufacturers who would distribute to community and hospital pharmacies using their normal supply chain mechanisms.
- DH will work closely with antiviral medicines manufacturers, wholesalers and pharmacies to minimise disruptions of supply to patients.
- DH will work closely with antibiotic manufacturers, wholesalers and pharmacies to minimise disruptions of supply to patients.

### Stage 3

<table>
<thead>
<tr>
<th>Level of flu-like illness</th>
<th>Description of flu season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu indicators exceeding historical peak norms</td>
<td>Epidemic levels of flu – rare for a flu season</td>
</tr>
</tbody>
</table>

- A national flu epidemic is declared.
- GPs alerted that a late surge in demand for the vaccine may occur and that there may be greater use of antiviral medicines.
- Vaccine manufacturers contacted by PHE regarding availability of additional supplies.
- Antiviral medicines manufacturers contacted regarding availability of additional supplies.
- JCVI will review the available data and amend guidance on vaccination if necessary and if sufficient supplies of vaccine are available and can be delivered and administered in time.
- PHE may extend the vaccine uptake collections for additional weeks/months if vaccine uptake rates are still rising.
- Weekly press briefings will be considered. These will be led by CMO or representatives of PHE or NHS England.
- Maintain or boost the respiratory and hand hygiene campaign.
- Proactive work with media to allay any public concerns.
- Reiterate advice on signs and symptoms, and treatment at home.
- Communicate regularly with clinical and professional networks and stakeholder groups for patients at risk of severe illness.
- Regular liaison with pharmacy organisations to keep abreast of any supply problems associated with antiviral medicines.
- Continue to review daily NHS operational data, for example, critical care.
- Alert the NHS when the flu season has peaked, to aid local planning.
APPENDIX 2 - RD&E PLAN IMPLEMENTATION

**Triggers**

Infection Prevention and Control Team and Microbiology monitor:

- PHE reports for increasing influenza like illness and confirmed influenza
- Requests from admission areas and Emergency Department for influenza/respiratory viral PCR
- Positive flu results for RD&E patients

Or

**Stage 2 Declared**

Or

When Public Health England (PHE) national surveillance scheme indicates that influenza virus A or B is circulating and there is a substantial likelihood that people presenting with an influenza-like illness are infected with influenza virus

Or

Once Flu is circulating in community or initial cases identified in hospital

- Infection Prevention and Control Team advise Chief Nurse or Deputy
- Chief Nurse or Deputy convene Trust Influenza Control Team

**Trust Influenza Control Team**

**Membership**

- Chief Nurse or Deputy (Chair)
- Infection Control
- Microbiology
- Medicine
- Respiratory Consultant(s)
- Emergency Department (ED)
- Intensive Care Unit (ICU)
- Paediatrics
- Cancer Services
- Pharmacy
- Other Divisional Reps as required
- Site Management
- Others as required, e.g.:
  - Human Resources (HR)/Occupational Health (staffing, vaccination)
  - Logistics

**Actions**

- Co-ordinate preparatory actions and refer to Capacity Management Plan
- Determine criteria to cancel electives to maintain capacity of Respiratory Physicians
• Agree consistent approach for responding to enquiries from patients/carers directly to consultants
• Review national guidance and refer to staged response summary at Appendix 1
• Review Annexes in Appendix 2

Infection Prevention and Control Team:

• Monitor:
  o PHE reports for increasing influenza like illness and confirmed influenza
  o Requests from admission areas and Emergency Department for influenza/respiratory viral PCR
  o Positive flu results for Trust patients
• When increase noticed, liaise with Microbiology to initiate local influenza PCR testing for Influenza A and B. Review Annexes in Appendix 2
• Advise clinical areas regarding:
 ➢ Use of PPE in cohort areas and non-cohort areas (including fit-testing)
 ➢ Criteria and areas for isolation/cohorting
 ➢ Need for wards to identify patients with flu on Ward Whiteboard using Influenza indicator flag
 ➢ Need to move patients promptly out of side rooms when not infected and test is negative

• Check stocks of fit testing test kits and Personal Protective Equipment (PPE)

Microbiologists and Microbiology Laboratory

• Monitor:
  o PHE reports for increasing influenza like illness and confirmed influenza
  o Requests from admission areas and Emergency Department for influenza/respiratory viral PCR
  o Positive flu results for Trust patients
• When influenza activity begins local influenza PCR will commence using point of care testing in designated areas and laboratory based tests at frequencies determined by need. Microbiology will train staff and monitor point of care testing equipment in designated areas such as Medical Admissions Unit and others determined by resources available and need.
• Review Annexes in Appendix 2
• Advice regarding clinical management & diagnosis
  ➢ Symptoms
  ➢ Need to test and record that test has been requested (especially admission areas)
  ➢ Times of test runs and return of results (As cases rise, increase test runs to daily)
  ➢ Treatment (e.g. anti-virals)
  ➢ Check stocks of Influenza / respiratory virus test kits

Paediatrics:

• Review arrangements with ICU to co-ordinate care delivery to manage extreme demand on services
• Review paediatric medical staffing to provide cover for Bramble and ED
• Review Regional Paediatric Intensive Care Unit (PICU) arrangements and contingency plans
Medicine:

- Review [Appendix 3](#) for procedure for admission of suspected flu patients
- Review need for medical cover over 24 hour period to support discharge of patients
- Review discharge criteria
- Review information for patients that do not need to be admitted.
  - Refer to [Appendix 7: Information for Patients in the Community](#)
  - Refer to [Patient Information Leaflet Seasonal Influenza](#) and arrange for copies to be printed and made available in clinical areas - Reference Number TW 12 001 002

- Emergency Department - Review management of suspected flu patients attending the Emergency Department – [Appendix 4](#)

Cancer Services

- Review the management of paediatric and adult patients attending Haematology/Oncology/Radiotherapy – [Appendix 5](#)

ICU:

- Review arrangements with Bramble High Dependency Unit (HDU) to co-ordinate care delivery to manage extreme demand on services
- Review contingency plans between ICU and Respiratory HDU
- Review staffing contingency plans - RD&E, Bank and agency staff
- Review Regional ICU and Extra Corporeal Membrane Oxygenation ECMO arrangements and contingency plans – [Appendix 6](#)
- Review arrangements for cohorting influenza patients in Rooms 11-15:
  - Tested 2010-2011 season and no evidence of spread of infection
  - Intubated Patients can be safely managed with excellent hand and environmental hygiene precautions and PPE. If appropriate antiviral agents may also be helpful.

Pharmacy:

- Check stocks of anti-virals

Occupational Health:

- Review information on intranet (HUB)
- Review advice for pregnant staff regarding working with flu patients
- Review vaccine availability and consider further vaccination sessions or liaise with Divisions regarding peer vaccination
ANNEX A to APPENDIX 2 - IDENTIFICATION OF POTENTIAL CASES

A.1 Screening of admissions

A.1.1 Many viruses can cause a “flu like illness”. However the probability of true influenza infection increases sharply when ‘flu is actually circulating.

A.1.2 Departments will be informed when national surveillance detects increasing ‘flu activity. When this happens GPs will be authorized to use specific influenza drugs (oseltamivir or zanamivir) if indicated

A.1.3 Current advice for people who suspect that they may have ‘flu is to stay at home and contact NHS 111. People with serious underlying illness, who are pregnant or whose condition suddenly worsens should consult their GP if they are concerned that they have ‘flu. Therefore it is hoped that most patients arriving at hospital with ‘flu like illness will have been in contact with a GP first and are expected. However it is likely that some will ignore advice and arrive at a Walk in Centre, Minor Injury Unit or the Emergency Department of the Hospital.

A.1.4 It is important that patients who may have influenza are recognised early. Potential cases can be segregated appropriately. Attending staff can use appropriate PPE including masks. Patients needing admission can be isolated in side rooms.

A.1.5 Clinical criteria will be used to screen patients.

A.1.6 Patients with any of the following should be reviewed as possible cases of ‘flu.

- Fever ≥ 38oC or a history of fever.
- Flu like illness (any two or more of the following symptoms: cough, sore throat, headache, rhinorrhea limb/joint pain)
- Pneumonia
- Exacerbations of chronic obstructive pulmonary disease (COPD)
- Severe life threatening illness
- Other presentations suggesting suspicion of influenza to admitting clinician
- Young children considered as possibly infected by a senior paediatrician

A.1.7 Emergency Department (ED) and Acute Medical Unit (AMU) staff should be proactive in asking about flu like symptoms, and a high index of suspicion should be maintained especially for serious respiratory illness which may be a complication of flu.

A.1.8 It is important to note that Avian Influenza also remains a risk and that travellers with symptoms consistent with Avian Influenza who have travelled from areas with avian influenza and had contact with birds in markets for example, will also need to be isolated and assessed. See Guidance for the Management of Suspected Cases of Severe & Imported Respiratory Virus Infections Including Avian Influenza and MERS Cov on Hub.
A.2 Case definitions

A.2.1 Case definitions may vary depending on the likelihood of influenza, which is a function of the level of influenza activity in the community at the time. During high levels of community activity the following clinical criteria are appropriate.

A.2.2 Clinical criteria in hospital

Any person in hospital with one of the following:
Fever >38°C OR history of fever. It is important to remember that fever may not have been recorded in hospital

AND

flu-like illness (two or more of the following symptoms: cough, sore throat, headache, rhinorrhea limb/joint pain)

OR

Other severe/life-threatening illness suggestive of an infectious process

OR

severe community acquired pneumonia

A.2.3 Laboratory criteria

A positive validated specific molecular test for influenza A or B

A.3 Case classification

Possible case
Any person meeting the clinical criteria

Probable case
Any person meeting the clinical criteria AND with unconfirmed laboratory results

Confirmed case
Any person with laboratory confirmation

Discarded case
Any suspect case not fulfilling the possible case definition or a possible case if the laboratory result is negative
ANNEX B to APPENDIX 2 - MANAGEMENT OF ADMISSIONS

B.1 Admissions to hospital

B.1.1 Cases of suspected or confirmed flu should only be managed in hospital if this is essential. Otherwise cases should be managed in their own homes and followed up by Primary Care. The infection control team MUST be informed of any patients seen in the hospital whether or not they are admitted.

B.2 Patients arriving in the Emergency Department, Paediatric Assessment Unit or Walk-In Centre - See Appendix 4

B.2.1 As soon as the potential flu case is recognised, the patient should be moved to an appropriate cubicle room in ED or the Walk-In Centre with the door closed or the ICE-pod in the Paediatric Assessment Unit (PAU). If the patient’s condition allows it he/she should wear an ordinary surgical mask. Oxygen may be given by nasal prongs if necessary and following the emergency oxygen guidelines.

B.2.2 Attending staff should put personal protective equipment (PPE) including respiratory protection (see Annex E to Appendix 2) before any further action is taken. If assessment shows he/she possibly has flu, and that admission is indicated, then he/she must be admitted to an isolation room designated in agreement with site management and the infection control team for adults, or Bramble Green for paediatric cases or ICU for adults or children if ventilation support is necessary as soon as assessment is complete and the receiving ward is ready.

B.2.3 The cubicle used for assessment must then be terminally cleaned using the standard terminal clean procedure before it is used again. Respiratory protection is not required during the cleaning process as the patient will have vacated the room.

B.2.4 All staff should be covered by seasonal ‘flu vaccine.

B.2.5 Influenza prophylaxis is not offered to staff contacts who did not have appropriate PPE. However any potential staff contacts who are concerned because they consider themselves to be in a high risk group should contact their manager. Advice from Occupational Health or Microbiology can be obtained, normally during working hours.

B.2.6 If admission is not indicated but the patient is thought to have flu refer to Paragraph B7 and Appendix 7.

B.3 Patients identified as possible cases before admission

B.3.1 Possible flu cases should not be accepted for admission unless hospital management is clearly necessary. If possible cases should be discussed with a senior member of clinical staff to determine if admission is advisable.

B.3.2 Those requiring admission should be admitted directly to an isolation room designated with site management and the infection control team, or Bramble Green for paediatric cases or ICU if ventilation support is necessary. It is essential to confirm in advance that the receiving ward is ready and prepared to receive the patient.

B.3.3 There must be close liaison with ambulance personnel by the admissions coordinator, informing them where they should bring the patient. The patient should be given a surgical mask to wear while being transported through the hospital and be taken to the isolation room without delay.
B.3.4 Attending staff in the receiving ward should use appropriate protective clothing (see Annex E to Appendix 2).

B.4 Patients identified as possible flu cases after admission

B.4.1 These patients should be transferred to a side room on a suitable ward, Bramble Green or ICU if appropriate as soon as possible. Site Management should be contacted to identify where the patient should be isolated, in liaison with the ICT. The patient should be given a surgical mask to wear until transferred to a single room.

B.4.2 The infection control team should be contacted to advise on identifying patient contacts, and environmental cleaning required. Guidance for the management of contacts is at Annex F to Appendix 2.

B.4.3 All staff should be covered by seasonal ‘flu vaccine.

B.4.4 Influenza prophylaxis is not offered to staff contacts who did not have appropriate PPE. However any potential staff contacts who are concerned because they consider themselves to be in a high risk group should contact their manager. Advice from Occupational Health or Microbiology can be obtained, normally during working hours.

B.5 Paediatric Patients

B.5.1 Children, as adults, should only be admitted if hospital treatment is essential. Cases requiring respiratory support should be admitted to the ICU. Others should be admitted to a designated side room on Bramble Green.

B.5.2 Children must not be re-admitted to the Neonatal Unit from the community if there is a potential for respiratory virus infection including influenza.

B.5.3 Parents or carers who accompany children with probable or confirmed influenza may themselves be infected or incubating flu. If appropriate they may stay with their children but should be isolated and not allowed to use shared parent accommodation or other areas of the hospital. Advice should be sought from the ICT.

B.5.4 Staff attending the patient must wear appropriate protective clothing (see Annex E to Appendix 2).

B.6 Oncology/ Haematology Patients - paediatric and adult

B.6.1 Patients being treated for haematological and other cancers, who may be neutropaenic, and bone marrow transplant patients, are given contact details and advised to call for advice if they develop a febrile illness.

B.6.2 The algorithm at Appendix 5 should be followed when these patients phone in for advice about a febrile illness or contact with influenza.

B.6.3 Prophylaxis may be advised in the case of close, sustained and unavoidable contact. Refer to the Public Health England guidance on use of antiviral agents for the treatment and prophylaxis of influenza.

B.7 Discharge Arrangements

B.7.1 Flu patients should be discharged as soon as they are medically fit for discharge, and they have a suitable place to be discharged to.
B.7.2 Patients are infectious for 7 days after symptoms begin and should be advised to stay at home until they are no longer infectious. Contacts at home should seek advice from NHS 111.

B.7.3 Information for patients in the community is contained in Appendix 7.
ANNEX C to APPENDIX 2 - DIAGNOSTIC INVESTIGATIONS

C.1 Baseline diagnostic investigations

C.1.1 Includes investigations for the diagnosis and management of respiratory tract infection, and specific investigations for avian 'flu.

C.1.2 Respiratory specimens should be taken with care to avoid generating aerosols. They should only be taken if staff are wearing appropriate protective equipment (see Annex E to Appendix 2).

C.2 Virology

C.2.1 Viral diagnosis is only advised for patients who are to be admitted. This is to confirm diagnosis, and to inform the ICT on the requirements for isolation. Admitting areas will be informed by Microbiology and Infection Control when influenza activity is increasing, and therefore swabbing for influenza is encouraged. Near patient testing equipment and staff training in its use will be provided when influenza activity is detected at significant levels.

C.2.2 Respiratory Samples for Influenza A&B. It is crucial that good quality specimens are obtained for a reliable diagnosis to be made. A nose swab should be taken. For young children or ventilated patients a nasopharyngeal aspirate is a preferable sample if it can be obtained.

C.2.3 Taking the Swabs

- **ENSURE THAT YOU USE VIRAL ISOLATION SWABS.**

Assemble all supplies including the virus isolation kit, gloves, pen, scissors, etc.

- **ENSURE VIRUS ISOLATION SWAB IS IN DATE.**
Discard if out of date and obtain in-date stock from Pathology supplies.

- **VIRAL NOSE SWAB COLLECTION**
• Insert swab in to the nasopharynx. Rotate the swab two to three times and hold the swab in place for 10 seconds.
• Put the swab in the viral transport medium and break the shaft at the painted breakpoint.
• Firmly secure the cap.
• Label the swab container with a sticky label, or by hand (name, address, date of birth) or the barcode label.

C.3 Bacteriology

C.3.1 The following specimens should be taken if pneumonia is suspected, as this may either be a primary infection or a bacterial infection complicating flu.

• Blood Culture
• Sputum culture and Gram stain
• Legionella and Pneumococcal urinary antigens

C.4 Radiology

C.4.1 Chest X ray

C.4.2 If departmental radiological investigations are essential for a patient suspected of having ‘flu, the investigation should be agreed in advance. The patient should wear a surgical mask when being transported to the department and during the procedure. No delay should occur in the department i.e. the patient must be transported back to the isolation room as soon as the investigation is complete. The area and equipment that the patient has been in contact with should be cleaned after the patient has left.

C.4.3 If a designated cohort area for ‘flu patients is opened due to a high level of influenza activity a dedicated portable x-ray machine should be identified and kept for the use of cohorted patients.

C.5 Visits to other departments for investigations

C.5.1 These should be limited, but investigations that are clinically essential must be performed. Suitable arrangements must be made in advance and agreed with Infection Control.

C.5.2 While outside the isolation room the patient should wear a surgical mask and a clean gown. All staff involved in transportation, and in contact with the patient in the receiving department must wear personal protective equipment (PPE) – see Annex E to Appendix 2. The area and equipment that the patient has been in contact with should be cleaned after the patient has left.
ANNE D to APPENDIX 2 - TREATMENT AND PROPHYLAXIS

D.1 Patients with suspected or confirmed influenza

D.1.1 Admitted patients assessed as likely to have influenza or with laboratory confirmed influenza should be given antiviral treatment in accordance with current PHE recommendations. Treatment should be with either oseltamivir or zanamivir at recommended doses. However the effectiveness of these agents is low for established influenza infection.

D.1.2 Refer to the Trust guidance on use of antiviral agents for the treatment and prophylaxis of influenza.

D.1.3 If tests for influenza are negative the specific antiviral treatment should be stopped and appropriate management determined according to clinical judgment.

D.1.4 Patients should be managed at home if possible, and given advice on self-isolation until results of testing available, or until 7 days since onset of symptoms. Patients also should be given advice on respiratory and hand hygiene.

D.1.5 Patients who require admission should be admitted to a side room or ICU isolation room if ventilatory support is required.

D.1.6 If patients have pneumonia, antibacterial agents should be given. Use recommendations as for community acquired pneumonia, as determined by the CURB score. See Trust antimicrobial guidance on HUB or on smartphone app.

D.1.7 Treatment modalities that may result in aerosol production should be avoided as far as possible without compromising patient care. Such procedures increase the risk of infection of healthcare staff and include:

- Intubation and certain types of ventilation - especially non-invasive ventilation - are associated with aerosol risk. Ventilators must be protected by appropriate HEPA filters changed daily.
- Suction – closed suction systems should be used for intubated patients. Otherwise suction should be avoided.
- Cardiopulmonary resuscitation.
- Bronchoscopy
- Surgery

D.2 Post Exposure Prophylaxis

D.2.1 Post exposure prophylaxis is not considered necessary in most cases. However there are some high risk groups in which prophylaxis may reduce the risk of infection and is advised (guidance on use of antiviral agents for the treatment and prophylaxis of influenza). Seek advice from Microbiology.

D.2.2 These groups include people with the following risk factors:

- Chronic respiratory disease
- Chronic heart disease
- Chronic kidney disease
- Chronic liver disease
- Chronic neurological disease
- Immunosuppression (whether caused by disease or treatment)
- Diabetes mellitus
- Patients who have had drug treatment for asthma within the past three years
- Pregnant women
- People aged 65 years and older
- Children under five years old

D.2.3 Prophylaxis is advised in limited situations where sustained unavoidable contact is likely, either in an institutional or household situation for example.
ANNEX E to APPENDIX 2 - INFECTION CONTROL

E.1 Mode of Transmission

E.1.1 Human influenza is transmitted by droplets and fine droplet nuclei - airborne - and also by direct and indirect contact. World Health Organisation (WHO) and the PHE recommend the use standard infection control precautions to prevent contact and droplet spread, single room isolation and respiratory precautions.

E.2 Infectious Period

E.2.1 The infectious period starts 12 - 24 hours before onset of symptoms. Adults and children older than 12 years should be considered potentially infectious until 7 days have lapsed since onset of symptoms. Children under 12, especially younger children may be infectious for longer, as are immunocompromised patients. Patients sent home should be advised to avoid contacts for 7 days after illness onset.

E.3 Isolation

E.3.1 Patients with suspected or confirmed ‘flu will be initially admitted to an isolation room on as directed by site management in cooperation with infection control or Bramble Green for paediatric Patients.

E.3.2 If they require ventilatory support, a negative pressure room on ICU should be used instead.

E.3.3 If it becomes necessary single rooms or cohort areas will be designated for patients with confirmed and suspected influenza by Trust management with the infection control team.

- In 2010/11 ICU Rooms 11-15 were used to cohort influenza patients with no evidence of spread of infection. Intubated patients can be safely managed with excellent hand and environmental hygiene precautions and PPE practice.
- Antiviral agents if indicated may be useful.
- See Appendix 3 for procedure for admission of suspected flu patients

E.4 Protective clothing (PPE)

E.4.1 For contact with patients suspected or known to have influenza the following PPE should be worn:

- Surgical facemask (unless FFP3 indicated)
- plastic apron
- gloves – non sterile
- eye protection – face shield or goggles if there is a risk of eye splash

If procedures likely to cause aerosols are to be undertaken, e.g. intubation, then enhanced PPE should be worn, consisting of:

- a correctly fitted high filtration mask (FFP3)
- fluid resistant gowns or long sleeved plastic aprons – non-sterile
- gloves – non-sterile
- eye protection – face shield or goggles
- theatre caps must be worn for direct or close contact
E.4.2  PPE will be available in key areas, including ED, AMUs, Torridge Ward, Bramble Ward and other locations as necessary.

E.4.3  Normally a surgical mask is used when a mask is indicated.

E.4.4  Disposable, single use, FFP3 standard respirators will only be used during procedures that may generate aerosols by personnel who have been have been fit tested. The FFP3 mask is only likely to be needed in areas such as ICU and Respiratory HDU where aerosol generating procedures may be undertaken on patients requiring respiratory support.

E.4.5  It is crucial that disposable, single use, FFP3 respirators are fitted correctly and cover both nose and mouth. No FFP3 respirator will be effective for staff with beards. People likely to have to wear an FFP3 respirator must be fit tested in advance to ensure the respirator is suitable for the wearer (however, refer E4.6). Gloves, gowns, caps, face shields and masks must be single use and disposed of as clinical waste. Single use disposable respirators must not be decontaminated and reused. In the event of shortages of FFP3 masks guidance on alternatives will be given by the Infection Control Team if the need arises.

E.4.6  In the event of shortages, NHS Supply Chain may not be able to supply the same brand of disposable FFP respirator that staff have been fit tested for in advance. If a substitute FFP3 respirator is supplied at short notice it may not be possible to undertake fit testing for the substitute brand of respirator. The emphasis must therefore be on wearing the FFP3 respirator correctly and the wearer checking the fit before contact with the patient for aerosol generating procedures, as follows:

- Put on the FFP3 respirator ensure that the straps are tight enough to secure closely to the face.
- Ensure that any shaping devices over the nose are pressed close to the bridge of the nose
- Cover the front of the respirator with both hands being careful not to disturb the position of the respirator.
- Inhale sharply. A negative pressure should be felt inside the respirator. If any leakage is detected adjust position of respirator and/or tension of the strap/s
- Retest the seal.
- Repeat procedure until the respirator is sealed properly.

E.4.7  Training must be given in the correct use and disposal of protective clothing. Laminated aide memoirs should be appropriately displayed in clinical areas – See overleaf.
Guidance for staff on putting on and removing PPE for ‘flu

The correct order for putting on PPE is: APRON, MASK, GLOVES

PPE should be put on BEFORE entering the room/area

- Clean your hands
- APRON: Pull over head and fasten at back of waist
- FASK MASK: Secure ties at middle of head and neck
- Fit flexible band to nose bridge
- Fit mask snugly to face and adjust to fit
- GLOVES: extend to cover wrists

Remember: keep hands away from face, limit surfaces touched, change gloves regularly/clean hands within room as needed.

Adapted from Department of Health ‘Prepare and Protect’ 2007

Seasonal Influenza Management Policy 2018/19
Ratified by: Infection Control & Decontamination Assurance Group: 17th October 2018
Review date: August 2019
Guidance for staff on putting on and removing PPE for ‘flu

The correct order for removing PPE is: GLOVES, APRON, MASK

PPE should be removed & disposed of into clinical waste bag before leaving the room/area

- GLOVES: Grasp the outside of one glove with the opposite gloved hand; peel off
- Hold the removed glove in the gloved hand
- Slide the fingers of the ungloved hand under the remaining glove at the wrist
- Peel the second glove off over the first glove
- Dispose of gloves

- APRON: break ties
- Pull apron away from the neck and shoulders, break at collar to avoid lifting over head, touching inside only
- Fold or roll into a bundle
- Dispose of apron
- Clean your hands

- MASK: unfasten the ties- first the bottom, then the top
- Pull away from the face without touching front of the mask
- Dispose of mask
- Clean your hands

Adapted from Department of Health ‘Prepare and Protect’ 2007

Seasonal Influenza Management Policy 2018/19
Ratified by: Infection Control & Decontamination Assurance Group: 17th October 2018
Review date: August 2019
E.5  Hand hygiene

E.5.1 It is likely that hand hygiene is the single most important practice needed to reduce transmission of the virus. Influenza viruses are susceptible to alcohol. Hand hygiene must be performed using soap and water if visible soiling is present. Otherwise alcohol hand rub is appropriate.

E.5.2 Hand hygiene must be performed before and after removing facial protection (to avoid contamination of the eyes and mucous membranes from contaminated hands). This means that all other protective equipment such as gloves and aprons/gowns must be removed first, then hand hygiene is performed and then respiratory/eye protection can be removed. Hands must then be cleaned after disposing of the respiratory/facial protection and prior to leaving the room (refer to poster above). Hand hygiene must also be performed after cleaning of contaminated equipment.

E.6  Waste

E.6.1 Infected patients may excrete ‘flu virus in respiratory secretions and in faeces.

E.6.2 En suite facilities in the isolation rooms should be used if possible. If unable to use the en suite the patient should use a disposable bedpan / urinal. Urine can then be poured carefully down the en suite toilet. Faeces and the receptacle should be disposed of in a clinical waste sack.

E.6.3 All clinical waste must be placed in clinical waste bags and bags sealed in the normal way taken directly to the usual waste collection point and placed within the collection bin. Double bagging is not necessary.

E.7  Laundry

E.7.1 Laundry should be placed in water-soluble bags and then into a red outer bag. Laundry will be collected on the normal way.

E.8  Cutlery and crockery

E.8.1 Disposable cutlery and crockery is not necessary for infection control purposes, but cutlery and crockery must be washed in the ward dishwasher.

E.9  Domestic issues

E.9.1 Daily cleaning of isolation rooms should be undertaken, staff need to wear appropriate PPE (see above).

E.9.2 In areas where flu patients are being nursed frequent cleaning with Chlorclean (or Tristel in community hospitals) of ward areas, door knobs, staff toilets, sluice etc. is also essential and this is the responsibility of Domestic Services. Damp dusting should be performed wherever possible to avoid aerosolisation of virus. It is important that all areas are allocated and none missed. This should be monitored by infection control staff or ward managers.

E.9.3 Terminal cleaning is the responsibility of Domestic Services. Surfaces within the room must be disinfected using Chlorclean solution 1000ppm (or Tristel in community hospitals). There is no need to wash walls. Curtains must be changed.
ANNEX F to APPENDIX 2 - MANAGEMENT OF CONTACTS, INCLUDING CONTACT TRACING

F.1 Transmission

F.1.1 Influenza is transmitted from human to human. Infection can occur by contact or respiratory routes.

F.1.2 Close contacts are defined as within a metre of a confirmed or suspected case.

F.2 Vaccination

F.2.1 All hospital clinical staff are offered seasonal influenza vaccine, and should have this, unless contraindicated, for the protection of patients, other staff and themselves.

F.2.2 This has been strongly recommended by the Chief Medical Office & Nursing Officer. Use of PPE correctly will add to protection from immunisation.

F.3 Staff contacts

F.3.1 Only essential HCWs should have access to the isolation room where a suspect or confirmed flu patient is located.

F.3.2 Staff who are exposed to probable or confirmed ‘flu patients are not routinely offered prophylaxis.

F.3.3 If symptoms of ‘flu develop they must stay at home, and contact their GP, or NHS direct for advice on treatment. They must also inform their manager that they may have flu symptoms.

F.3.4 Significantly immunocompromised staff and those with certain chronic respiratory, cardiac, renal and other illnesses should NOT enter areas where flu patients are being cared for. The need to avoid flu contact should be confirmed with occupational health and line managers must be informed of the risk. In addition pregnant staff should not care for ‘flu patients.

F.4 Visitors

F.4.1 Any visitors must be advised of the risks of infection and preferably not visit. If they insist on visiting they must take the same precautions as staff if not already classed as a close contact, in which case it may be felt that PPE is not warranted. However hand hygiene and the use of a surgical mask would still be sensible.

F.4.2 Those visitors that have been close contacts may be incubating the disease or already be infectious due to common exposure. They must be advised not to come to the hospital.

F.4.3 Visitors should be advised to contact NHS direct for advice if they have symptoms of flu.

F.4.4 Parents of infected children may want to stay with their children, and may also be symptomatic, infectious or incubating ‘flu. They should be isolated and accommodated in the same area as their child if possible. Advice from infection control should be obtained.
F.5 Contact Tracing

F.5.1 Definitions – Contacts

- Influenza is a highly infectious illness transmitted through the respiratory route by aerosols or contact. Patients are infectious from 1 day prior to onset of symptoms to 7 days after. Immunosuppressed patients and children may be infectious for longer periods.

- Surfaces touched by infectious patients are contaminated. Most infectious droplets will settle within an area of a metre of an infectious patient, though small aerosol particles may be distributed further.

- The following should be considered contacts:
  - People who live in the same household an infectious case
  - Patients nursed in the same bay as an infectious case

- People who have had face to face encounters with an infectious case, or been within a meter an infectious case for a significant time, for example in a waiting room, clinic or transport. This will include healthcare workers and other staff working in the patient environment with infectious cases.

F.5.2 Identification of Contacts

F.5.2.1 Visitors

- Visitors of suspected or confirmed cases of ‘flu are contacts and have a high risk of being infected if they live in the same household, or have prolonged contact e.g. at work. They should be advised not to visit the hospital unless considered essential. See F.4 and B.5.2.

F.5.2.2 Ward Patients

- When a patient is identified as an infectious case after admission, and has not been isolated, all inpatients nursed in the same bay during the infectious period should be considered contacts.

- The ICT will inform ward staff.

- Ward staff will assist the ICT by urgently compiling a list of patient contacts. Identified patient contacts will be reviewed by the clinician responsible in order to identify those who should be prescribed prophylaxis. Refer to Public Health England guidance on use of antiviral agents for the treatment and prophylaxis of influenza.

- Contacts may need to be isolated in a single room or in a cohort bay if they remain in hospital to avoid secondary spread whether or not they are prescribed prophylaxis. This will depend on the level and duration of contact. The infection control team will advise.

- If isolation is advised the patient/s will require isolation for 72 hours from their last exposure.

- Guidance for nursing such patients in a closed bay or in a single room is attached at the end of this section and should be printed off for ward staff to communicate to those working in such an area. It is not for display in a patient area.

F.5.2.3 Clinics, Day case and Outpatients

- If a suspect or confirmed case attends a clinic, day case or outpatient setting and is not isolated, then other patients in the same area will be potentially infected. A risk assessment needs to be conducted to determine if the contacts are at high risk for developing complications from influenza infection, as in the context of
seasonal ‘flu they will inevitably also be exposed in the environment outside the hospital.

- Areas of special risk include oncology and haematology outpatients and day case, both paediatric and adult, also renal outpatients and haemodialysis patients. Other areas may also have a high proportion of high risk patients.

- Contact tracing should only be considered for patients in high risk categories who would be considered for prophylaxis. The infection control team should be informed by clinic staff of potential incidents. The clinic staff will assist the ICT by drawing up a list of potential contact using clinic lists etc. Clinicians will review potential contacts to identify those who need prophylaxis. It is the responsibility of the clinician to make arrangements for the patients who require prophylaxis to be contacted. In addition contacts, whether or not on prophylaxis, who may return within the incubation period e.g. for day case or dialysis appointments should be identified so that they can be isolated appropriately for these visits.
INFECTION CONTROL PRECAUTIONS FOR NURSING PATIENTS IN A SINGLE ROOM OR BAY DUE TO CONTACT WITH INFLUENZA

- Doors to remain closed
- Minimise number of staff entering single room/bay
- Standard infection control precautions to be observed
- Surgical masks only to be worn if a patient develops 'flu like symptoms
- Whilst well, patients may attend other departments or go outside without restriction
- Visitors to be asked to use gel or soap and water on leaving
- Send viral nose swab for viral respiratory screen if symptoms reported
- Notify Infection Control if 'flu suspected
- Restrictions need to be in place for 72 hours or as advised by Infection Control
- When restrictions are lifted terminal cleaning of the room or bay is NOT required
G.1 PPE

G.1.1 Standard precautions should be followed when caring for a person who dies of ‘flu.

G.1.2 If they die during the infectious period the same level of PPE as worn prior to death should be worn for last offices.

G.1.3 The body should be placed in an impermeable bag prior to transfer to the mortuary.

G.2 Viewing

G.2.1 Family should be able to view the body if they wish.

G.2.2 If the person died during the infectious period, family should be advised that there is a small risk of infection which will diminish as time passes after death. However it is important that very strong advice against facial contact e.g. kissing should be enforced, and hand hygiene is important after touching the body with or without gloves.

G.2.3 Care should be taken if anyone wishing to view the body is a contact and has symptoms suggestive of flu. If necessary advice should be sought from the infection control team.

G.3 Post Mortems

G.3.1 If a full or limited post mortem examination should be performed, this must be discussed first with Infection Control and a Consultant Microbiologist. This is to allow appropriate precautions to be undertaken and to make arrangements for specialist diagnostic services.
APPENDIX 3 - ARRANGEMENTS FOR ADMISSION OF SUSPECTED AND CONFIRMED FLU PATIENTS

If patients with suspected influenza require admission they should be isolated in a side room until the diagnosis is confirmed. Patients with confirmed ‘flu should be isolated until fit for discharge or no longer considered infectious.

In periods with significant ‘flu activity, the numbers of patients with suspected or confirmed ‘flu may exceed the availability of side rooms. When necessary and agreed between the infection control, site management and medical/respiratory medicine teams, arrangements for cohorting patients with suspected or confirmed influenza may be implemented. At times of high flu activity the microbiology department will implement near patient testing facilities and training of staff in designated areas, and increased frequency of laboratory based testing to facilitate early confirmation of ‘flu infection.

The following guidance applies, if cohorting arrangements are in place, to adult patients with suspected flu, and will not apply to children, maternity admissions, oncology/hematology patients or those requiring intensive care.

1. Patients flagged as suspicious of flu (typically a fever or a history of fever and respiratory symptoms) prior to or on admission should be admitted into a side room on AMU for initial assessment and then transferred as soon as possible to the designated cohort if flu like illness is present and clinical condition requires admission.
2. It is important to note that fever may not always be detected, and absence of fever should not preclude testing when there is a potential for ‘flu infection
3. Existing inpatients that develop a ‘flu like illness should be isolated in a single room and the infection control team contacted for advice about treatment and referral.
4. The process for transfer to the cohort is by informing the Site Management Team who will arrange for the patient to be transferred
5. All patients who are suspected of flu should have a viral nose swab (red top virus swab see C.2.3). Antiviral agents may be started if appropriate (see PHE guidance) and antibiotics for CAP if appropriate. If considered appropriate treatment should start as soon as possible but wards should not wait medicines to arrive before transfer to the cohort.
6. For the period immediately prior to transfer respiratory infection control precautions (surgical mask, gloves, and aprons when within 1 metre of patients and FFP3 respirator and eye protection for aerosol generating procedures) should be taken by ward teams for all patients likely to have ‘flu.

Notes in support of the above:

a. Influenza patients should be discharged home as soon as it is safe to do so.
b. If the cohort ward is full the Site Team should move a confirmed flu negative patient who will be completing a 10 day course of prophylaxis (oseltamivir 75mg od po 10 days), or a confirmed positive who has received five days treatment after agreement with on-call respiratory physician (n.b. this applies 24/7).
c. Patients moved from the cohort should transfer to a respiratory ward or a ward twinned with a respiratory ward to ensure continuity of medical care by a respiratory physician
d. Flu patients who require HDU respiratory care should be isolated from other patients requiring HDU respiratory care unless they also have confirmed ‘flu. HDU respiratory care may be delivered on Culm East Ward or on ICU and this should be determined depending on prevailing needs by respiratory and ICU clinicians with site management and infection control
e. An additional respiratory consultant will be provided for the cohort ward and an extra daytime SHO whenever possible.
f. It has been agreed that mixed sex bays are permissible on a ward whilst in use as a cohort area although should be avoided if at all possible.

g. When telephoning results, Infection Control will ask for these to be documented in the clinical notes to aid communication. Results will also be notified to the Site Team to assist in transfer off the cohort ward.
APPENDIX 4 - MANAGEMENT OF SUSPECTED FLU PATIENTS ATTENDING THE EMERGENCY DEPARTMENT (ED)

Patient arrives at ED Reception
Receptionist asks if patient believes they might have flu. If YES then Receptionist states ‘Suspected flu’ on Patient First

Patient triaged in See & Treat Room 6 for isolation

Assess if patient can be treated in the community & discharge if possible

If patient requires admission to hospital

Patient has viral nose swab (see C3.2 red top virus swab) & is prescribed antivirals (usually oseltamivir)
ED contacts Medicine F2 doctor to clerk patient and agree documented management plan with Medical SpR prior to transfer of patient
ED Nurse In Charge notifies Site Manager to arrange transfer of patient to appropriate isolation facility
Staff take respiratory infection control precautions (wear surgical masks, gloves and aprons when within 1 metre of patient)

Vacated cubicle in ED is cleaned before use by next patient

Patient is then admitted to appropriate isolation facility

Site Manager informs on-call Medical Consultant and/or Medical SpR that patient has been admitted directly from ED to isolation facility

The on-call Medical Consultant and/or Medical SpR then ensures the patient receives a timely review by a senior doctor (SpR or above). From 8.30am to 4pm this may be the Respiratory Consultant/ SpR but the default is review by on-call Medical Consultant/ Medical SpR

Seasonal Influenza Management Policy 2018/19
Ratified by: Infection Control & Decontamination Assurance Group: 17th October 2018
Review date: August 2019
APPENDIX 5 - RISK ASSESSMENT AND MANAGEMENT FOR PAEDIATRIC AND ADULT PATIENTS ATTENDING HAEMATOLOGY/ONCOLOGY
(Based on Pandemic Flu Plan Algorithm)

Currently on chemotherapy treatment OR less than 3 months post treatment OR less than 3 months post autologous stem cell transplant OR less than 12 months post allogenic stem cell transplantation OR chronic graft versus host disease with systemic immunosupression.

**Telphone call**

Is patient at risk of neutropenia?
- Yes
- No

Febrile/unwell patient Do they need to come into hospital?
- Yes
- No

**Attendance at Ward or Clinic**

Worried well contact of influenza?
- Yes
- No

Symptomatic ?flu
- Yes

Refer to GP or NHS Direct
- Refer to prophylaxis guidelines (Annex D to Appendix 2)

Place in assessment area:
1) Adults Oncology
   - Cherrybrook (Assessment room)
   - Out of hours: Yeo side room
2) Adults Haematology
   - Yarty Day case, TYA room
   - Yarty side room (switch air handling to neutral)
1) Paediatrics – Respiratory cubicle on Bramble Green

Flu Symptoms?
- Yes
- No

Check FBC Neutrophils <1?
- Yes
- No

Re-diagnose

Inform: Infection Control; Site Practitioner & on call consultant

Do not wait for confirmation of flu, start appropriate treatment. (Refer to Public Health England guidance on use of antiviral agents for the treatment and prophylaxis of influenza)

Neutrophils <1?
- Follow febrile neutropenia guidelines
- Discharge when appropriate to do so

Neutrophils >1?
- Manage appropriately for flu and other complications
  - If admitted, isolate and air handling neutral
**RISK ASSESSMENT AND MANAGEMENT FOR RADIOTHERAPY PATIENTS**  
*(Based on Pandemic Flu Plan Algorithm)*

Phone call from patient receiving radiotherapy with symptoms of Flu

Could the patient be neutropaenic?  
Receiving chemo radiation, craniospinal radiotherapy?

**YES**
- Refer to neutropaenic protocol

**NO**
- Tell the patient to contact GP or NHS Direct for advice and to call back to inform the department what advice has been given.

Radiotherapy continues as normal

CONSIDERED TO HAVE FLU?

**YES**
- Can treatment be deferred until asymptomatic?*

**NO**
- Tell the patient to contact GP or NHS Direct for advice and to call back to inform the department what advice has been given.

Restart radiotherapy as soon as patient feels able to attend

- Patient to be assessed in designated room in Radiotherapy treatment area where PPE will be provided
- Use a separate radiotherapy treatment waiting area
- Minimal waiting
- Treat at the end of the day or session where possible
- Normal equipment cleaning as per department policy
- Lift restrictions when asymptomatic*

---

* Virus is usually shed for up to seven days after the onset of symptoms however people can be considered non-infectious once they are asymptomatic
APPENDIX 6 - EXTRA CORPOREAL MEMBRANE OXYGENATION (ECMO)

Refer to University Hospital Leicester website: Extra Corporeal Membrane Oxygenation (ECMO)
If ECMO is likely to be needed the ICU staff will liaise with the appropriate centre and arrange transfer if agreed.
APPENDIX 7 - INFORMATION FOR PATIENTS IN THE COMMUNITY

Flu Symptoms

- sudden fever - a temperature of 38°C (100.4°F) or above
- dry, chesty cough
- headache
- tiredness
- chills
- aching muscles
- limb or joint pain
- diarrhoea or upset stomach
- sore throat
- runny or blocked nose
- sneezing
- loss of appetite
- difficulty sleeping

Symptoms will usually peak after two to three days and you should begin to feel much better within five to eight days. However, you may have a lingering cough and still feel very tired for a further two to three weeks.

When to contact your GP

If you have flu-like symptoms and:

- 65 years of age or over
- pregnant
- have a long-term medical condition, such as diabetes, heart disease, lung disease, liver, kidney or neurological disease
- have a weakened immune system (the body's natural defence against infection and illness)

If you have flu and any of the following applies:

- symptoms have got much worse and include shortness of breath, chest pain or coughing up blood, or developed other symptoms that are not typical of flu, such as a rash
- symptoms have lasted for longer than a week
- a medical condition is making the flu worse

Treating flu

If you have flu and are not in the at-risks groups you should:

- stay at home
- rest
- drink plenty of fluids while they are recovering
- seek advice from a pharmacist about the best remedy for their symptoms
- consider taking the appropriate dose of paracetamol/ibuprofen-based painkillers or cold remedies to lower your temperature and relieve symptoms
- avoid visiting GP surgeries and hospitals where they may infect other more vulnerable people and use community pharmacists as first port of call for early symptoms
Antivirals

If you are in a 'high-risk' group and are more likely to suffer complications from flu, your doctor may prescribe antiviral medication.

You may be prescribed antivirals if you are:

- pregnant
- 65 or over
- or if you have:
  - lung disease
  - heart disease
  - kidney disease
  - liver disease
  - neurological disease such as motor neurone disease, Parkinson's or multiple sclerosis
  - a weakened immune system
  - diabetes

Antivirals work by stopping the virus from multiplying in the body. Antivirals will not cure flu but they will help to:

- reduce the length of time you are ill by around one day
- relieve some of the symptoms
- reduce the potential for serious complications.

Antibiotics

Antibiotics are not prescribed for flu as they have no effect on viruses. However, occasionally it may be necessary to treat complications of flu, especially serious chest infections or pneumonia, with a course of antibiotics.

Antiviral prophylaxis

Used to prevent flu if all of the following apply:

- Flu A and B is circulating.
- a medical condition such as diabetes, heart disease, lung disease or kidney disease.
- aged 65 or over.
- in contact with someone with a flu-like illness and can start antiviral treatment within 48 hours.
- have not been effectively protected by vaccination e.g.:
  - Have not been vaccinated since last winter.
  - Cannot be vaccinated, or have been vaccinated but it hasn't taken effect yet.
  - Have been vaccinated for a different form of flu virus.

Vaccination

Flu vaccinations are currently offered free of charge to the following at-risk groups:

- people aged 65 years or over (including those becoming age 65 years by 31 March 2018)
- all pregnant women (including those women who become pregnant during the flu season)
- people with a serious medical condition such as:
  - chronic (long-term) respiratory disease, such as severe asthma, chronic obstructive pulmonary disease (COPD) or bronchitis
  - chronic heart disease, such as heart failure
  - chronic kidney disease at stage 3, 4 or 5
  - chronic liver disease
  - chronic neurological disease, such as Parkinson’s disease or motor neurone disease
  - diabetes
  - a weakened immune system due to disease (such as HIV/AIDS) or treatment (such as cancer treatment)
- people living in long-stay residential care homes or other long-stay care facilities where rapid spread is likely to follow introduction of infection and cause high morbidity and mortality. This does not include, for instance, prisons, young offender institutions, or university halls of residence
- people who are in receipt of a carer’s allowance, or those who are the main carer of an older or disabled person whose welfare may be at risk if the carer falls ill

The list above is not exhaustive and decisions should be based on a practitioner’s clinical judgement. Consideration should also be given to the vaccination of household contacts of immunocompromised individuals, specifically individuals who expect to share living accommodation on most days over the winter and therefore for whom continuing close contact is unavoidable.

Also recommended to be vaccinated as part of occupational health:
- health and social care workers with direct patient/client contact
If you have flu:

- rest
- keep warm
- drink plenty of water to avoid dehydration
- try to take paracetamol or anti-inflammatory medicines such as ibuprofen to lower a high temperature and relieve aches

Symptoms will usually peak after two to three days and you should begin to feel much better within five to eight days. However, you may have a lingering cough and still feel very tired for a further two to three weeks.

Contact your GP if you have flu and any of the following applies:

- symptoms have got much worse and include shortness of breath, chest pain or coughing up blood, or developed other symptoms that are not typical of flu, such as a rash
- symptoms have lasted for longer than a week
- a medical condition is making the flu worse
### APPENDIX 8 - USEFUL CONTACTS

<table>
<thead>
<tr>
<th>Contact</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>On call Microbiologist - daytime</td>
<td>Bleep 176</td>
</tr>
<tr>
<td>Duty Consultant Microbiologist</td>
<td>Page via switchboard</td>
</tr>
<tr>
<td>Senior Nurse Infection Control</td>
<td>Page #6579 or via switchboard</td>
</tr>
<tr>
<td>Infection Control Nurses’ Office</td>
<td>Ext. 2355 (Mon-Fri 08.30 – 16.30hrs)</td>
</tr>
<tr>
<td>Site Practitioner</td>
<td>Bleep #6888 or Bleep 217</td>
</tr>
<tr>
<td>Senior Nurse on-call</td>
<td>Page via switchboard</td>
</tr>
<tr>
<td>Matron General Medicine</td>
<td>#6490 or via switchboard</td>
</tr>
<tr>
<td>Senior Paediatric Nurse on-call</td>
<td>Page via switchboard</td>
</tr>
<tr>
<td>Senior Manager on-call</td>
<td>Page via switchboard</td>
</tr>
<tr>
<td>AMU Admissions Co-ordinator</td>
<td>Bleep 513</td>
</tr>
<tr>
<td>Public Health England</td>
<td>0300 308 8162 (Option 1, Option 1)</td>
</tr>
</tbody>
</table>
**APPENDIX 9 - COMMUNICATION PLAN**

**Royal Devon and Exeter**
NHS Foundation Trust

**COMMUNICATION PLAN**

The following action plan will be enacted once the document has gone live.

<table>
<thead>
<tr>
<th>Staff groups that need to have knowledge of the strategy/policy</th>
<th>Executive Directors, Associate Medical Directors, Clinical Leads, Divisional Directors, Assistant Directors of Nursing, Senior Nurses, Matrons, Divisional Business Managers, Cluster Managers, Service Managers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The key changes if a revised policy/strategy</strong></td>
<td>Minor changes from PHE/DH/NHS England Flu Plan. Minor amendments to update references, hyperlinks and organisational structural changes. Addition of information for the management of contacts in Annex B To Appendix 2, (paragraph B.4.2), Annex F To Appendix 2 (paragraph F.5.2.2) and poster at the end of Annex F.</td>
</tr>
<tr>
<td><strong>The key objectives</strong></td>
<td>To provide information and guidance to ensure the Trust is able to respond to the consequences of rising numbers of patients with seasonal ‘flu and to ensure patients with ‘flu are managed safely and effectively.</td>
</tr>
<tr>
<td><strong>How new staff will be made aware of the policy and manager action</strong></td>
<td>Cascade when influenza virus A or B is circulating and there is a substantial likelihood that people presenting with an influenza-like illness are infected with influenza virus.</td>
</tr>
</tbody>
</table>
| **Specific Issues to be raised with staff**                  | **Clinical Staff:**  
  - Use of PPE in cohort areas and non-cohort areas (including fit-testing)  
  - Symptoms  
  - Need to test and record that test has been requested (especially admission areas)  
  - Times of test runs and return of results (As cases rise, increase test runs to daily)  
  - Treatment (e.g. anti-virals)  
  - Criteria and areas for isolation/cohorting  
  - Need for wards to identify patients with flu on Ward Whiteboard using Influenza indicator flag  
  - Need to move patients promptly out of side rooms when not infected and test is negative |
ICU:
- Review arrangements with Bramble HDU to co-ordinate care delivery to manage extreme demand on services
- Review staffing contingency plans - RD&E, Bank and agency staff
- Review Regional ICU and ECMO arrangements and contingency plans
- Review arrangements for cohorting influenza patients in Rooms 11-15:
  o Tested 2010-2011 season and no evidence of spread of infection
  o Patients intubated and on high doses of antiviral with excellent hand and environmental hygiene precautions and PPE practice can be safely managed

Paediatrics:
- Review arrangements with ICU to co-ordinate care delivery to manage extreme demand on services
- Review paediatric medical staffing to provide cover for Bramble and ED
- Review Regional PICU arrangements and contingency plans

Medicine:
- Review need for medical cover over 24 hour period to support discharge of patients
- Review discharge criteria and information for patients re on-going support from Primary Care

Pharmacy:
- Check stocks of anti-virals

Occupational Health:
- Review information on IaN
- Review advice for pregnant staff regarding working with flu patients

<p>| Training available to staff | N/A |</p>
<table>
<thead>
<tr>
<th><strong>Any other requirements</strong></th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issues following Equality Impact Assessment (if any)</strong></td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Location of hard / electronic copy of the document etc.</strong></td>
<td>Trust intranet</td>
</tr>
</tbody>
</table>
APPENDIX 10: EQUALITY IMPACT ASSESSMENT TOOL

<table>
<thead>
<tr>
<th>Name of document</th>
<th>Seasonal Influenza Management Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division/Directorate and service area</td>
<td>Specialist Services – Infection Control</td>
</tr>
<tr>
<td>Name, job title and contact details of person completing the assessment</td>
<td>Judy Potter - Lead Nurse/Joint Director for Infection Prevention and Control</td>
</tr>
<tr>
<td>Date completed:</td>
<td>03/01/2019</td>
</tr>
</tbody>
</table>

The purpose of this tool is to:

- **identify** the equality issues related to a policy, procedure or strategy
- **summarise the work done** during the development of the document to reduce negative impacts or to maximise benefit
- **highlight unresolved issues** with the policy/procedure/strategy which cannot be removed but which will be monitored, and set out how this will be done.

1. **What is the main purpose of this document?**
   The purpose of this document is to provide information to ensure the Trust is able to respond to the consequences of rising numbers of patients with seasonal ‘flu and to ensure patients with ‘flu are managed safely and effectively.

2. **Who does it mainly affect? (Please insert an “x” as appropriate:)**
   - Carers □
   - Staff □
   - Patients ☒
   - Other (please specify)

3. **Who might the policy have a ‘differential’ effect on, considering the “protected characteristics” below? (By differential we mean, for example that a policy may have a noticeably more positive or negative impact on a particular group e.g. it may be more beneficial for women than for men) **Please insert an “x” in the appropriate box (x)

<table>
<thead>
<tr>
<th>Protected characteristic</th>
<th>Relevant</th>
<th>Not relevant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>☒</td>
<td>☐</td>
</tr>
<tr>
<td>Disability</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Sex - including: Transgender, and Pregnancy / Maternity</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Race</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Religion / belief</td>
<td>☐</td>
<td>☒</td>
</tr>
<tr>
<td>Sexual orientation – including: Marriage / Civil Partnership</td>
<td>☐</td>
<td>☒</td>
</tr>
</tbody>
</table>
4. Apart from those with protected characteristics, which other groups in society might this document be particularly relevant to… (e.g. those affected by homelessness, bariatric patients, end of life patients, those with carers etc.)?

The purpose of this document is to provide information to ensure the Trust is able to respond to the consequences of rising numbers of patients with seasonal 'flu and to ensure patients with 'flu are managed safely and effectively.

5. Do you think the document meets our human rights obligations? ☒

Feel free to expand on any human rights considerations in question 6 below.

**A quick guide to human rights:**

- **Fairness** – how have you made sure it treat everyone justly?
- **Respect** – how have you made sure it respects everyone as a person?
- **Equality** – how does it give everyone an equal chance to get whatever it is offering?
- **Dignity** – have you made sure it treats everyone with dignity?
- **Autonomy** – Does it enable people to make decisions for themselves?

6. Looking back at questions 3, 4 and 5, can you summarise what has been done during the production of this document and your consultation process to support our equality / human rights / inclusion commitments?

Old age, pregnancy and chronic conditions are risk factors for acquiring flu and suffering with serious complications of influenza. This policy will have a positive impact on patients with these risk factors in our care by protecting them from acquiring influenza and thus complications of influenza such as pneumonia. This is well documented in all published flu guidance.

7. If you have noted any ‘missed opportunities’, or perhaps noted that there remains some concern about a potentially negative impact please note this below and how this will be monitored/addressed.

<table>
<thead>
<tr>
<th>“Protected characteristic”:</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue:</td>
<td></td>
</tr>
<tr>
<td>How is this going to be monitored/ addressed in the future:</td>
<td></td>
</tr>
</tbody>
</table>
Group that will be responsible for ensuring this carried out: