TRUST POLICY AND PROCEDURES FOR THE MANAGEMENT OF INFLUENZA (FLU)

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	2	December 2012	H. Forrest	Update into a influenza policy from a pandemic flu policy
	2.1	October 2014	H. Forrest	Review of policy
	3	October 2017	Janice Toplass	Amendment and review of policy
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Contact for Review	Lead Nurse Infection Prevention and Control
Executive Lead Signature	Cathy Winfield
Approving Executive Signature	Cathy Winfield

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TRUST POLICY AND PROCEDURES FOR THE MANAGEMENT OF INFLUENZA

1 Introduction

Influenza or 'flu' is a respiratory illness caused by the influenza virus. The symptoms frequently include headache, fever, cough, headache, sore throat, aching muscles and joints. Influenza occurs most often in winter and usually peaks, in the Northern Hemisphere, between December and March, affecting many thousands of people in the UK.

The symptoms of influenza range from a common cold, through to severe or even fatal disease. It brings about variable effects in successive winters and can cause intense pressure on health and social care services.

Influenza virus is species specific. The influenza viruses that affect animals and birds do not infect humans readily unless the virus undergoes recombination in other hosts. This makes the virus unstable and is why new strains are constantly emerging.

There are two main categories of influenza:

1. Seasonal Influenza
Seasonal influenza occurs on an annual basis and is particularly common during the winter period. Every year human strains of influenza circulate, giving rise to clinical cases which may require hospital admission. Treatment may be required due to the direct effects of influenza virus infection or its possible complications, most commonly secondary bacterial pneumonia.

Certain patient groups are particularly vulnerable to influenza, including the elderly, those with chronic respiratory disease (including asthma), chronic heart disease and chronic renal disease, chronic liver disease, diabetes and immunosuppression and those in long term nursing or residential care, or pregnant ladies.

2. Pandemic Influenza
Pandemic influenza which has rapid global spread occurs when a new influenza virus subtype emerges that is markedly different from recent circulating subtypes and strains and is able to;

- Infect humans of all ages, including healthy young adults.
- Spread efficiently from person to person
- Cause significant clinical illness in a high proportion of those infected.
- Have a severe impact on health care provision as well as other services across the country

Infection prevention and control precautions are the same for pandemic flu as seasonal flu unless directed otherwise by PHE. However, there are significant operational issues which are covered under the Trust Pandemic Flu planning and management Team.

The Trust Pandemic Flu Planning and Management team will:

- meet regularly as necessary to ensure the Trust is prepared to respond to an influenza pandemic
- review the Trust Plan, at least annually, and amend accordingly in light of new guidance and information
- ensure Divisions have identified essential services to be maintained during a pandemic
- ensure essential activity continues in the face of disruption of key services
- keep the Trust Board and Senior Management Team informed of all actions taken
- liaise with all other agencies as required in relation to emergency planning and the multi-agency response.

2 Purpose and Outcomes

This policy applies to all staff in the Trust, including contracted service providers. The purpose of this policy is to:

- Ensure that patients with influenza receive effective and appropriate care
- Minimise the risk of transmission of influenza to patients, staff and visitors.

3 Definitions Used

Influenza	A highly contagious viral infection that affects the respiratory system.
Uncomplicated influenza	Influenza presenting with fever, coryza, generalised symptoms (headache, malaise, myalgia, arthralgia) and sometimes gastrointestinal symptoms, but without any features of complicated influenza.
Complicated influenza	Influenza requiring hospital admission and/or with symptoms and signs of lower respiratory tract infection (hypoxaemia, dyspnoea, lung infiltrate), central nervous system involvement and/or a significant exacerbation of an underlying medical condition.
Pandemic	An epidemic so widely spread across continents, that vast numbers of people in different countries are affected.
Epidemic	A sudden outbreak of infectious disease that spreads rapidly through the population, affecting a large number of people.

Incubation Period	The interval between exposure to an infection and the appearance of the first symptom.
Influenza Virus Subtypes	There are 3 types of the influenza virus, A, B and C. Only influenza A has subtypes.
Aerosol Generating Procedures (AGP's)	Aerosol generating procedures (AGPs) are medical and patient care procedures that result in the production of airborne particles (aerosols) and create the potential for airborne transmission of infections that may otherwise only be transmissible by the droplet route. AGPs can produce airborne particles <5 microns (µm) in size which can remain suspended in the air, travel over a distance and may cause infection if they are inhaled. PHE guidance [2] defines the following procedures to be considered likely to generate aerosols capable of transmitting respiratory pathogens when undertaken on a patient with a respiratory tract infection: • intubation, extubation and related procedures; for example manual ventilation and open suctioning • cardiopulmonary resuscitation • bronchoscopy (unless carried out through a closed circuit ventilation system) • surgery and post mortem procedures in which high-speed devices are used • dental procedures • non-invasive ventilation (NIV) e.g. bi-level positive airway pressure ventilation (BiPAP) • continuous positive airway pressure ventilation (CPAP) • high frequency oscillatory ventilation (HFOV) • induction of sputum (not including chest physiotherapy)
Direct Contact Transmission	A transmission mechanism in which the infectious agent is transferred directly from person to person via touching, biting, kissing, sexual intercourse or by droplets entering the eye, nose or mouth
Droplet transmission	Droplets are >5 microns (µm) and may be generated from the respiratory tract during coughing, sneezing or talking. These droplets remain in the air for a short period and most settle within 1 metre. If droplets from an infected person come into contact with the mucous membranes (mouth or nose) or surface of the eye of a recipient they can transmit infection. Direct droplet transmission requires close contact. Droplets containing respiratory pathogens can contaminate surfaces, which may result in indirect contact transmission of infection

Indirect Contact Transmission	A transmission mechanism in which the infectious agent is transferred to the person by a fomite or vector
Fomite	An inanimate object or substance that is capable of transmitting infectious organisms from one individual to another.
Incubation Period	The time between exposure to an infectious disease and the appearance of the first signs or symptoms
Period of Communicability	The time period over which an infected person can spread the infection to someone else

4 Managing the Policy and Procedures for Influenza

4.1 Routes of Transmission

The pathogens that cause influenza are spread through one or more of four main routes:

1. Droplet Transmission
Droplets greater than 5 microns in size may be generated from the respiratory tract during coughing, sneezing or talking. If droplets from an infected person come into contact with the mucous membranes of the mouth or nose, or surface of the eye they can cause infection. These droplets remain in the air for a short time and travel about 1 metre, so closeness is required for transmission.

2. The Airborne Route During and after Aerosol Generating Procedures
Aerosol generating procedures can produce droplets less than 5 micron in size. These small droplets can remain in the air, travel more than one metre from the source and still be infectious, either by inhalation or mucous membrane contact.

3. Direct Contact Transmission
Infectious agents are passed directly from an infected person (for example after coughing into their hands) to a recipient who then transfers the organism into their mouth, nose or eyes.

4. Indirect Contact Transmission
This takes place when a recipient has contact with a contaminated object, such as bedding, furniture or equipment which is in the environment of an infected person. The recipient transfers the organism into their mouth, nose or eyes.

4.2 Incubation and Communicability

4.2.1 Incubation Period
The time between exposure to the influenza virus and developing symptoms is usually 2-3 days, but can range from 1-4 days.

4.2.2 Period of Communicability

The period of communicability is 3-7 days, or until the patient is no longer symptomatic. Immunocompromised individuals and the seriously ill may remain infectious for a much longer period.

Adults can be infectious from 24 hours before symptoms begin through to about 5 days after illness onset. Children may be infectious for 24 hours prior to the onset of symptoms to around 7 days. Severely immunocompromised people can shed the virus for weeks after the onset of illness.

4.2.3 Persistence in the environment

Experimental studies on respiratory pathogens has shown the influenza virus can be transferred from hard surfaces such as glass or plastic to hands up to 24 hours after contamination has occurred, and from soft materials such as clothing up to 2 hours.

4.3 Risk Factors for complicated influenza

Some people will be at greater risk of developing complications and becoming more seriously ill, e.g. people with:

- Chronic lung disease, including asthma
- Chronic heart disease
- Chronic Kidney disease
- Chronic liver disease
- Chronic Neurological disease
- Immunosuppression (whether caused by disease or treatment)
- Diabetes mellitus
- Pregnant women
- Young children under 5 years old
- People aged 65 years and older.

4.4 Initial Identification

Early identification and isolation of patients with influenza is important in controlling hospital-based cross-transmission.

Clinical features of influenza include:

- Fever, dry cough with abrupt onset.
- Headache, sore throat, runny or stuffy nose, aching muscles and joints and extreme tiredness.

The Algorithm for management of suspected acute viral respiratory tract infection **(Appendix 1)** is a quick reference guide to aid with caring for patients suspected to have 'flu and other viral respiratory tract infections. This should be read in conjunction with local pathways where available.

4.5 Diagnostic Investigations

Accurate diagnosis and assessment of the risk of transmission are essential to the management and control of influenza. Other than

during an established Pandemic, laboratory confirmation should be obtained. **A viral throat swab is required for 'point of care' testing where available or to be sent for 'respiratory virus PCR'.**

4.5.1 How to Take a 'Flu' Swab

A viral throat swab is required – follow site specific protocols available from pathology or the infection prevention team. Appendix 2 – how to take a viral throat swab for derby and Burton campuses
The person taking the swab should wear a fluid repellent surgical face mask, eye protection as assessed, plastic apron and gloves.

There is no need to wait for a flu swab result if the patient is medically fit for discharge.

4.6 Treatment and Prophylaxis

All patients with suspected or proven influenza requiring hospital admission or at high risk of complications should receive treatment with an anti-viral agent. Treatment should be started as soon as possible and should still be considered even if the patient presents more than 48 hours after the start of symptoms.

Patients not requiring hospital admission should be discharged home with written patient information for flu (appendix 3).

For inpatients who were not cared for under respiratory precautions, but have been found to be positive for Flu A or B there may be implications for contact tracing and prophylaxis to other patients, therefore the '5 steps following a confirmed diagnosis of Influenza A or B in an inpatient (appendix 4) should be followed

Guidance for the prophylaxis and treatment of Influenza can be found on KOHA via the Trust Intranet

Patients who fall into one of the risk categories for influenza as defined by the Department of Health would usually be offered a seasonal influenza vaccine by their GP. Long stay patients in one of these categories, who are an inpatient for the duration of the vaccination "season", and hence are unable to access it from their GP, should be offered an influenza vaccine by the Trust. Guidance on this can be found on KOHA via the Trust intranet.

.4.7 Infection Prevention and Control Measures

4.7.1 Respiratory hygiene and 'Cough Etiquette'

Cough etiquette / respiratory hygiene can be defined as source control measures intended to contain respiratory secretions in order to prevent droplet transmission of respiratory pathogens in the healthcare environment; especially during seasonal outbreaks of viral respiratory tract infections in the community.

- Ensure there are adequate supplies of tissues available
- Cover nose and mouth with disposable tissues when sneezing, coughing, wiping and blowing the nose.
- Dispose of used tissues into nearest appropriate waste bin.
- Wash hands after coughing, sneezing, using tissues or contact with respiratory secretions and contaminated objects.
- Keep hands away from mucous membranes of eyes and nose.
- Certain patients may need assistance with containment of respiratory secretions including provision of tissues, disposal facilities and hand hygiene facilities.
- If running water is not available and hands are contaminated with respiratory secretions then hand wipes followed by hand sanitizer may be used, with hands washed at the earliest opportunity.
- If there are no tissues available and it is not possible to wash hands straight away, and wipes / alcohol sanitiser is not available, do not cough or sneeze into hands, instead, the elbow or upper arm may be used – however, this is only in extreme cases, - it must be remembered that this area will then be a risk for indirect contamination.
- Some respiratory viruses are excreted in faeces – as a general precaution, toilet seats must be down before flushing.

4.7.2 Isolation

Respiratory droplet precautions (as per isolation policy) should be applied to all patients suspected to have flu.

If having to sit with others for example in assessment waiting areas, or during transit, the patient should wear a surgical facemask until allocated a bed space. Once in a bed space in patient can remove the mask.

During flu season, it is acknowledged that there will be considerable the pressure on side rooms. Patient placement in order of preference is:

- Single side room – with the door closed
- Segregated area / cohort bay (curtains should be pulled between bed spaces unless unsafe to do so)
- Bed/ Treatment space with the dividing curtain between the next bed space drawn, until a side room is available. ‘bedside bay precautions’

Side rooms with the door closed must be used for AGP’s

Isolation may be discontinued once acute coryzal symptoms have settled, and patient has been apyrexial for 24 hours without antipyretics (cough is not considered a symptom in this context). Some patients may be complex due to immunosuppression or continuation of

symptoms, therefore the guide 'Stopping infection control precautions for patients with viral respiratory tract infections (appendix 7) will be useful.'

4.7.3 Patient Transportation

- The movement and transport of patients from their rooms or the co-hort area should be limited to essential purposes. Receiving areas must be informed so that they can manage patient placement effectively.
- A surgical mask should be worn by the patient during transit and whilst in communal waiting areas to minimise dispersal of droplets. Staff would not need to wear masks if the patient can.

- If a surgical mask cannot be tolerated then good respiratory hygiene must be encouraged. Patients must be segregated from others, and transporting staff who are within 1metre of the head will need to wear a surgical mask.

4.7.4 Hand Hygiene

Hands must be decontaminated with soap and water or alcohol based hand disinfectants:

- Before and after all patient contact or contact with their immediate environment
- After removing protective clothing
- After decontaminating equipment

Hands must be thoroughly dried after washing hands with soap and water.

4.7.5 Personal Protective Equipment (PPE)

This is worn to protect staff from contamination with body fluids and respiratory secretions to reduce the risk of transmission between patients and other staff. Care in the correct donning and removal of PPE is essential to avoid inadvertent contamination.

Disposable Gloves

Gloves do not routinely need to be worn, unless the healthcare worker is coming into contact with respiratory secretions and blood/body fluids. Gloves are strictly single use and must be changed between patients and disposed of into infectious waste. Hands must be decontaminated after removing gloves.

Disposable Aprons

These are a single use items and should be changed between each patient contact. Full gowns are not necessary for routine care; the exception would be if there is a risk of extensive soiling of clothing or during aerosol generating procedures.

Masks - surgical mask / FFP3 masks

Fluid repellent surgical masks

Fluid repellent surgical masks should be worn if within 1 metre of a patient with flu like symptoms (unless undertaking AGP's when FFP3 is required). They are simply there to provide a physical barrier to minimise contamination of facial mucosa by large droplets and to prevent touching of noses and mouths. The mask should not be moved on or off the mouth and nose until it needs to be changed. One mask can be worn until it becomes moist and then changed. It does not need to be changed between patients in a cohort area. Handling of the mask should be kept to a minimum.

FFP3 Respirators and aerosol generating procedures

FFP3 Respirators (EN149:2001), eye protection, fluid repellent gowns and gloves should be worn during aerosol-generating procedures (AGPs).

Only essential aerosol generating procedures should be carried out. Wherever possible, aerosol-generating procedures should be performed in well ventilated single rooms with the door shut, with minimal staff present.

- All staff required to use respirators must be fit tested according to COSHH regulations Fit tests must be carried out by a competent person who has been trained in FIT testing procedures
- Fit checks must be performed every time the respirators are put on.
- In the event that a member of staff has to wear a FFP3 mask that they haven't been fit tested against then a fit check must still be carried out. This situation should be escalated to the line manager.
- If breathing becomes difficult, the respirator becomes damaged or distorted or contaminated with body fluids, or if a proper seal cannot be maintained, the wearer should go to a safe area and change the respirator immediately.
- In the event of a breach in infection prevention and control procedures, such as incorrectly worn FFP3 respirators during an AGP, staff should be reviewed by Occupational Health.
- Powered air respirator hoods which do not require fit testing may be used in place of FFP3 masks where available.

PHE guidance[2] defines the following procedures to be considered likely to generate aerosols capable of transmitting respiratory pathogens when undertaken on a patient with a respiratory tract infection:

Aerosol Generating Procedures:

- intubation, extubation and related procedures; for example manual ventilation and open suctioning
- bronchoscopy (unless carried out through a closed circuit ventilation system)
- surgery and post mortem procedures in which high-speed devices are used
- dental procedures
- non-invasive ventilation (NIV) e.g. bi-level positive airway pressure ventilation (BiPAP)
- continuous positive airway pressure ventilation (CPAP)
- high frequency oscillatory ventilation (HFOV)
- induction of sputum (not including chest physiotherapy)

There may be other procedures that are added to this category under local risk assessment. Cardio pulmonary resuscitation was also in the PHE[2] list referenced; however, this is being removed due to lack of evidence.

Certain other procedures/equipment may generate an aerosol from material other than patients' secretions but are NOT considered to represent a significant infectious risk. Procedures in this category include:

- obtaining diagnostic nose and throat swabs
- administration of pressurised humidified 02
- administration of medication via nebulisation

During nebulisation, the aerosol derives from a non-patient source (the fluid in the nebuliser chamber) and does not carry patient-derived viral particles. If a particle in the aerosol coalesces with a contaminated mucous membrane, it will cease to be airborne and therefore will not be part of an aerosol. Staff should use appropriate hand hygiene when helping patients to remove nebulisers and/or oxygen masks.

Eye Protection

Eye protection e.g. full face visor or goggles must be worn if there is a risk of contamination of the eyes by blood or body fluids and during aerosol-generating procedures.

PPE Summary table – in addition to standard Infection Prevention precautions

	Entry to co horted area but no close patient contact	**Close patient contact and cleaning procedures (<1 metre)**	**Aerosol generating procedures (Must be in closed room – minimal staff present)**
Hand hygiene	Yes	Yes	Yes
Gloves	No	Yes	Yes
Plastic Apron	No	Yes	No
Long sleeved Gown (fluid repellent)	No	No (unless risk of blood / body fluid soiling)	Yes
Surgical mask	No	Yes	No
FFP3 respirator	No	No	Yes
Eye protection	No	Risk Assessment	Yes

4.8 Infectious and Non-Infectious Waste

Waste generated within the isolation room or co-hort area should be treated as infectious waste, i.e. managed safely and effectively, with attention paid to disposal of items which have been contaminated with secretions / sputum (e.g. paper tissues and surgical masks)

4.9 Linen and Laundry

- Linen should be categorised as infected.
- Used 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.

4.10 Crockery and utensils

- All crockery and utensils must be returned to the central dishwashing facility and not washed within clinical areas.
- There is no requirement for disposables.

4.11 Environmental Cleaning

- Daily and terminal cleans of isolation rooms and co-horted areas will be with Actichlor Plus (1000ppm Av Chlorine) in line with the isolation policy.
- As a minimum patient isolation rooms / co-horted areas should be cleaned at least daily. The Infection Prevention and Control Team will advise if the frequency is to be increased.

- Vacuuming should be avoided.
- Healthcare Cleaning staff should be allocated to specific areas and must clean non-influenza areas first before moving onto any influenza isolation room / cohort areas.
- Healthcare Cleaning staff must be trained in the correct use of protective clothing and precautions to be taken when cleaning co-horted areas.
- Emergency assessment areas/ Radiology etc. – routine cleaning of contact surfaces between patients using detergent or Clinell universal wipes (or equivalent) is adequate
- Curtains do not need to be routinely changed unless visibly soiled.

4.12 Staff – During flu season:

- **Staff** with a temperature and at least 1 coryzal / flu like symptom should not be attending work.

- **Staff** with coryza (coughing, sore throat, sneezing, and runny nose) who are fit to be at work and no temperature should ideally avoid patient contact whilst symptomatic. If this is not possible, symptomatic staff should wear a surgical mask whilst giving direct patient care in the following areas:
  - Haematology
  - Oncology
  - Respiratory
  - Renal
  - ICU
  - NICU
  - Any immunocompromised patient in any area

4.13 Visitors

Visitor has symptoms:

- Visitors with respiratory symptoms should be advised not to undertake visits until their own symptoms have resolved.
- Under certain circumstances such as end of life care, it would be inappropriate to stop a close visitor with respiratory symptoms. The nurse in charge should risk assess and support the visit to take place limiting contact with other susceptible patients.

Patient has symptoms:

- All visitors entering an isolation or cohort area must be instructed to wash their hands on entering and departure and when removing protective clothing, (if worn).
- Non-essential visits should be discouraged until the patients symptoms have resolved.
- Visitors having close contact should be offered the choice to wear relevant PPE. Whilst they may have already been exposed

to the infectious agent, it may prevent them from receiving an infective dose. Advice on donning and doffing PPE must be given.

4.14 Last Offices

When performing last offices for deceased patients, healthcare workers must follow standard infection control precautions; surgical masks and eye protection (or full face visor) must be used if there is a risk of splashes of blood or body fluids, secretions (including respiratory secretions) and excretions to the facial mucosa.

Mortuary staff must be informed that the deceased had a suspected / confirmed influenza infection.

5 Monitoring Compliance and Effectiveness

Monitoring Requirement :	• The IPCT will monitor compliance with the management of all patients known or suspected to have influenza • Any non compliance issues will be reported to the Matron / Divisional Nurse Director or the site manager as appropriate.
Monitoring Method:	• Adherence to policy will be monitored by the Infection Prevention and Control Nurse Team • Non-compliance will be reported via the incident reporting system
Report Prepared by:	Lead Nurse – Infection Prevention and Control
Monitoring Report presented to:	Non-compliance will be reviewed through the Infection Control Operational Group
Frequency of Report	As required

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Appendix 1 Algorithm for Management of Suspected Acute Viral Respiratory Tract Infection

Clinical presentations: When to suspect acute viral respiratory tract infections

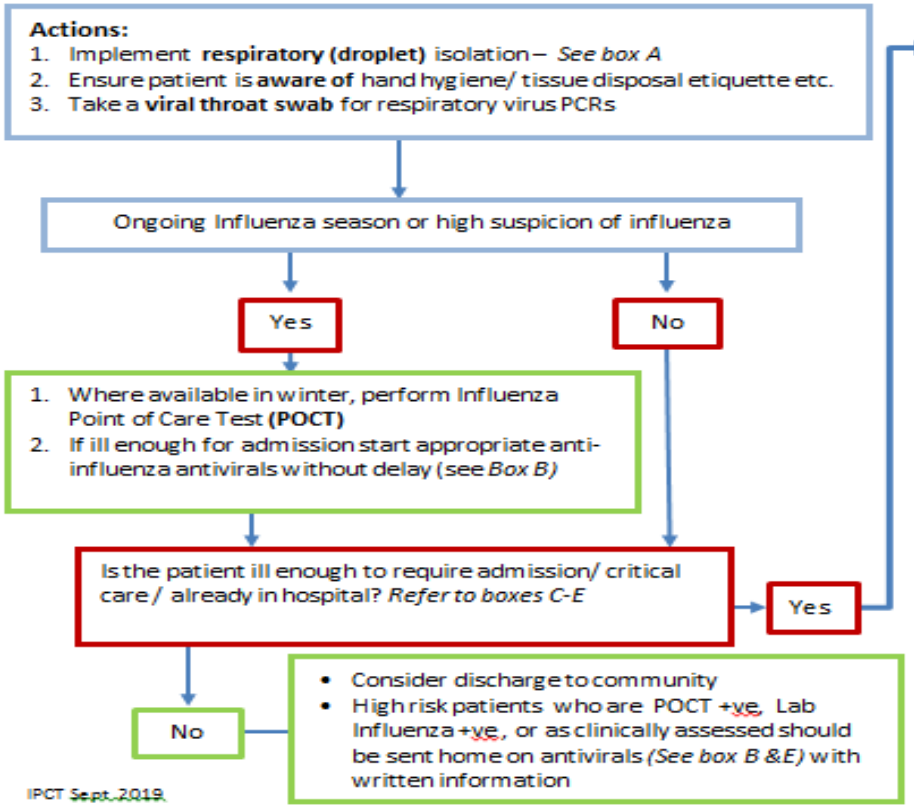
A) **Flu-like symptoms**: Pyrexia (>38ºC) or history of fever AND flu-like illness [one or more of the following: cough, sore throat, rhinorrhoea (runny nose), limb/joint pain, headache]

B) **Acute exacerbation of chronic lung disease** eg COPD, asthma, bronchiectasis

C) **Acute onset lower respiratory tract symptoms**

D) **Predominant upper respiratory tract symptoms** (e.g. rhinorrhoea, sneezing, sore throat, cough)

* If the patient has recently travelled, please assess for SARS / MERS/Avian flu



Patient Placement:

All patients should be isolated under respiratory precautions until results are known

Swab results known

i. **Positive for Group B Viruses** ***(see box F)***
- Keep symptomatic patients in a side room prioritising flu and those most symptomatic
- In Flu season, single rooms are scarce and bays may be used instead. Liaise with Infection Prevention and Control Team

ii. **Positive for Group C viruses**
- may be cared for in bays with standard precautions

iii. **PCRs negative**
- **Febrile** coryzal patients to continue with isolation precautions whilst symptomatic.
- All others to return to standard precautions

Bay Precautions:
- Ensure patients are physically separated (i.e., >1 metre apart) from each other
- Draw the privacy curtain (if available/appropriate) between beds to minimize opportunities for close contact between patients
- Change PPE AND perform hand hygiene between patients (masks / visors may be changed per bay if the whole bay is cohorted)

Ongoing Management:
- Review daily from day 3 post symptom onset
- Stop isolation precautions once acute symptoms settled (cough not considered a symptom in this context). N.B if immunocompromised discuss with Infection Prevention Team

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Box A: respiratory droplet isolation precautions

1. For direct patient care or before entry into patient room:
   - Gloves AND Apron
2. If within 1 metre of patient:
   - As above AND surgical face mask

If splash risk:
- As above with long sleeved gown AND visor

If Aerosol Generating Procedure (ONLY TO BE PERFORMED IN A CLOSED ROOM):
- As above AND FFP3 mask

Box B: Antiviral treatment for Influenza – updated 31/12/18
- Oseltamivir (Tamiflu) po 75mg BD x 5 days ^
- Alternative: Zanamivir (Relenza) inhaled 10mg BD x5 days ^

Use Oseltamivir for all patients (including in pregnancy) unless suspected* Oseltamivir resistance or severely immunocompromised. Those still Febrile/coryzal at Day 5 of treatment may be developing resistance.*

^10 days if immunosuppressed or critically ill

*Will need discussion with a Medical Virologist

Full guidelines on flo

Box C: Suspected or Confirmed Influenza:
Does the patient need to be admitted?

New confusion?	Y/N
O_2 saturations <93%?	Y/N
Aged ≥ 65?	Y/N
Respiratory rate >24	Y/N
Any co-morbidity?	Y/N

If yes to any, assess with CXR and blood tests

Box D: Does the patient need critical care on admission?

Respiratory rate >30	Y/N
Abnormal Chest X-ray	Y/N
O_2 Saturation<90%	Y/N
Albumin <33g/l	Y/N
Urea >8mmol/l	Y/N
CRP >150 mg/l	Y/N

If yes to 2, discuss with critical care. If yes to 3 or more, request critical care review.

Box E: Risk factors for severe Flu:
Pregnancy (↑ with ↑ gestation), morbid obesity, smoking, immunocompromised, asthma/ COPD, diabetes, heart failure

Box F: Grouping of respiratory viral pathogens
Group A: SARS, MERS, Avian Flu (covered by separate detailed policy)
Group B: Influenza A or B, RSV, Parainfluenza 1-4, respiratory adenovirus, Metapneumovirus & respiratory enteroviruses
Group C: Rhinovirus, coronavirus

University Hospitals of Derby and Burton NHS Foundation Trust

DERBY How to Take a Throat Swab for Respiratory Viruses

Equipment:

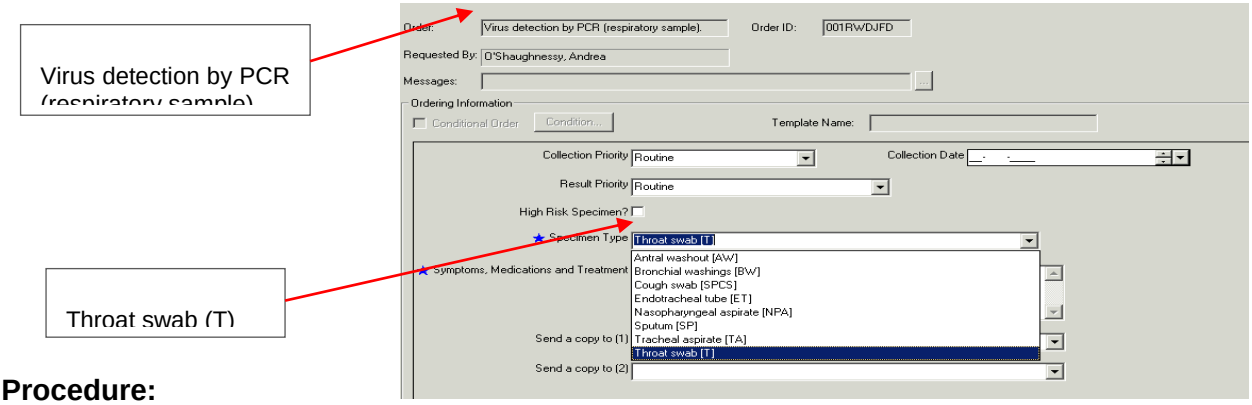
- Green top viral swab
- Personal protective equipment (PPE) for respiratory precautions (gloves, apron, surgical mask, eye shield if splash risk)

Request

- Complete serology request form with patient details and clinical information, requesting respiratory virus PCR

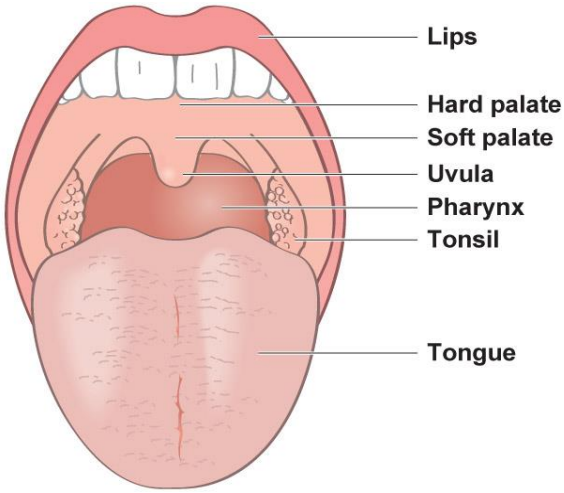
or

- If using ICM select Virus detection by PCR (respiratory sample) and print label:



Procedure:

- Explain procedure to patient and obtain verbal consent.
- Perform hand hygiene and put on PPE.
- Open the swab. Ask the patient to open their mouth wide. Insert the swab towards the back of the mouth. Try not to touch the lips, tongue or inner cheeks. A tongue depressor may make this easier.



- Roll the swab across the pharynx for a few seconds, collecting epithelial cells rather than saliva. This might make the patient slightly gag, but it should not be painful.
- Remove the swab, again without touching the tongue or cheeks, and place it into the tube. Snap the end off the swab and screw on the top.
- Remove, dispose of PPE and wash hands. Label specimen, place it into specimen bag along with the form and transport to lab.

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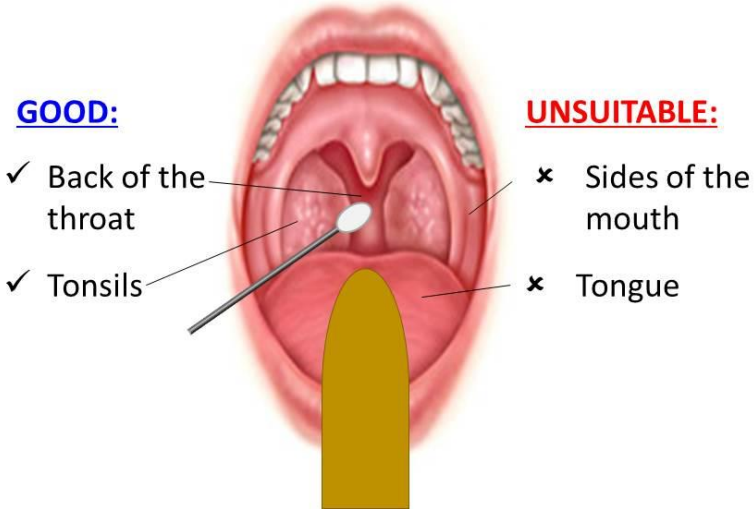
How to Take a Respiratory Swab

(Queens Hospital, Sir Robert Peel, Samuel Johnson)

Use a black swab and tongue depressor

Gain consent from the patient and take throat swab



Cut swab stem with a pair of clean scissors and place into a sterile universal container

Nb. Do not return the swab to the charcoal medium

*Order **'Respiratory virus PCR'** and send to Microbiology Lab*

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When to take a respiratory PCR swab

Patients presenting as acutely unwell, with a plan to admit with the symptoms detailed below.

- *Fever*
- *Runny nose*
- *Sore throat*
- *Cough*
- *Limb or joint pain*
- *Headache*
- *Lethargy*
- *Chest pain*
- *Breathing difficulties*

The requirement to request a respiratory PCR screen should be confirmed with the senior clinician for the department.

Please check Public Health England guidance regarding the use of Tamiflu for symptomatic/prophylactic use

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Influenza (Flu)

You have been diagnosed with **Influenza, 'Flu'**.
Flu is an infection of the airways, caused by the Influenza virus. However, you have been assessed by a doctor and are well enough to go home. This leaflet gives you some information about flu and how to look after yourself at home.

What symptoms can I expect?

- Fever: often 38 - 40°C
- Headache, muscle aches, feeling very tired
- Chills and shivers
- Sore throat and runny nose
- Cough

Flu symptoms usually **last for up to a week**, but you may feel more tired than usual for up to 2 weeks.
Flu is very infectious so please use tissues and wash your hands to help stop the spread to others.

What is the treatment?

Most people with flu get better on their own and do not require hospital admission. Antibiotics do not work against the flu virus.

We recommend that you:

- Stay at home and rest
- Drink plenty of fluid (avoid alcohol and caffeine)
- Take regular pain relief such as Paracetamol and/or Ibuprofen (if you are able to take it). Pharmacists can advise on other symptom relief remedies.

Doctors may prescribe anti-viral medication for flu. They do this if a person is at a higher risk of the complications of flu. These medications are not needed by everybody who has flu.

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What if I am not getting better?

Seek advice from your GP or call 111 **if your symptoms get worse or last longer than 1 week**.
Seek emergency advice by attending Accident & Emergency or calling 999 if you experience any of the following:

 Sharp chest pains when you breathe

 Sudden shortness of breath or increased wheezing

 Coughing up blood

 Severe dizziness on standing or vomiting

What are the complications of flu?

If you are usually fit and well, you shouldn't experience any complications.
If you are in a 'high-risk' group, you may be more likely to suffer from a complication such as pneumonia or bronchitis. You are in a high risk group if you:

 Are over 65 years old

 Are pregnant

 Suffer from other illnesses such as diabetes, kidney failure, heart disease, liver disease or lung disease (including asthma, COPD)

 Have a problem with your immune system e.g. you have had your spleen removed, have HIV, have recently received chemotherapy/radiotherapy for cancer or have had an organ or bone marrow transplant.

Can I pass flu on to anyone else?

Yes! **Flu** is very infectious.
Ways to stop the spread include:

 Cover your mouth when you cough and sneeze, discard used tissues

 Wash your hands regularly and clean surfaces

 Keep away from crowded spaces and avoid contact with other people who may be at risk (see above)

 Encourage any loved ones in an 'at risk group' to have the flu vaccine.

To be effective, vaccination needs to be given annually, usually in the Autumn.
With thanks to Sheffield Teaching Hospitals for original text: PD9053-PIL3874 v1
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