Public Health England

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Guidance for the Management of Influenza-like Illness Outbreaks in Community Health and Social Care Settings

Public Health England South East (PHE South East)
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Introduction

This advice is aimed at nursing and residential homes that are experiencing unusually high numbers of residents and/or staff with respiratory symptoms (cough, runny nose, fever, malaise). It is written to guide staff to respond effectively to prevent further spread of the infection within the institution, and to others in the local community.

People living in care homes are especially vulnerable to both contracting infections and having a poorer outcome because residents are often frail, with other underlying diseases. Infections can spread rapidly in care homes due to the close contact between residents. Without adequate infection control measures, carers can also unintentionally facilitate the spread of infection in this setting.

An outbreak of influenza-like illness in a care home can therefore rapidly cause significant morbidity and mortality and requires prompt investigation and management.

During outbreaks of Influenza, residents should be managed effectively through the basic principles of infection prevention and control (IPC) whilst maintaining the comfort that they usually enjoy. Please note that under the Health and Social Care Act (2010/2011), it is a legal requirement to report outbreaks to the Thames Valley Health Protection Team (TV HPT).

Roles and Responsibilities

It is important that all parties understand each other's roles in responding to a flu outbreak. Below is a table which outlines the key responsibilities of each party.

Table 1 *Roles and responsibilities of key persons and organisations*

Care home	**1.** Nominate a key member of staff to coordinate a guided response to the outbreak **2.** Follow IPC principles, as outlined in these guidelines to limit on-going transmission of infection **3.** Liaise with TV HPT and GP practices to ensure that appropriate samples are collected **4.** Provide information about the immunisation status (influenza and pneumococcal) of residents and staff to TV HPT to aid the risk assessment **5.** Return a daily log of new cases to TV HPT **6.** Liaise with the GP and CCG to ensure that antiviral drugs are dispensed in a timely manner (as soon as practically possible), if required.
Thames Valley Health Protection Team	**1.** Send a copy of TVP HPT influenza guidelines to the care home and GP practices following report of a suspected flu outbreak **2.** Undertake a risk assessment and provide advice on controlling the outbreak **3.** Liaise with the care home and laboratories for samples to be taken and tested **4.** Inform all stakeholders about flu results in a timely manner **5.** Support GPs in writing prescriptions for appropriate treatment and prophylaxis doses of antiviral medication **6.** Circulate a report at the end of the outbreak
General Practice	**1.** Continually assess and manage residents, as required **2.** Request sputum samples from patients to rule out other aetiologies **3.** Facilitate the taking of respiratory swabs, if required **4.** Identify residents (and staff if on GP list) with renal impairment as they may need dose adjustment for antiviral medication **5.** Write prescriptions for treatment and prophylaxis with antiviral medication.
Local Microbiology Dept	**1.** Test sputum samples sent by the GP **2.** Send viral swabs to the PHE reference laboratory, if required.
PHE Reference laboratory	**1.** Test viral swabs for flu A/B and other respiratory viruses.
Clinical Commissioning Group (CCG)	**1.** Support health care professionals in accessing antiviral medication appropriately **2.** Facilitate the emergency supply of antiviral medication, if required.

Responding to a Flu Outbreak

Unusually high numbers of residents with respiratory symptoms

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Nominate an "outbreak coordinator" for your institution and inform your GP(s) of the outbreak

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Contact the Thames Valley Public Health Protection Team (TV HPT)

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TV HPT will undertake a verbal risk assessment and provide you with verbal & written advice

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A) Implement Infection Control Measures:

- Emphasise need for strict hand washing.
- Isolate/cohort affected residents and exclude affected staff until they are symptom free.
- Nursing and care staff should be assigned to cover either the affected or unaffected areas, not both.
- Enhanced cleaning will be required – ensure adequate numbers of domestic staff to maintain good IPC principles.

B) Samples

- Liaise with the GP to collect sputum samples for bacteriology, as appropriate
- Liaise with TV HPT to collect up to 5 samples for virology (combined nose/throat swab)

→ Clinical waste should be disposed of correctly.

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Record the number of residents and staff who are symptomatic on the Daily Review Chart (see Appendix).

Fax (0345 279 9881) or email (with password protection to tvphe@phe.gov.uk) daily

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Provided the above is complete, TV HPT will contact you on Mondays and Thursdays, to discuss your response and progress (in office hours).

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The completion of terminal cleaning (to complete **5 days** after the onset of the last case) **Defines the end of the outbreak.**

- Inform the TV HPT of the successful completion.
- Unrestricted activity may then resume.
- TV HPT will provide you with a brief written outbreak report.
- This will also be circulated to the Local Authority.

Transmission dynamics

Respiratory infections are usually spread by close contact through one of four mechanisms:

- **Droplet transmission** – coughing, sneezing, or even talking may generate droplets more than 5 microns in size that may cause infection if droplets from an infected person come into contact with the mucous membrane or conjunctiva of a susceptible individual. The size of these droplets means that they do not remain in the air for a distance greater than a metre, so fairly close contact is required for infection to occur.

- **Direct contact transmission** – this occurs during skin-to-skin or oral contact. Organisms may be passed directly to the hands of a susceptible individual who then transfers the organisms into their nose, mouth or eyes.

- **Indirect contact transmission** – takes place when a susceptible individual touches a contaminated object, in the vicinity of an infected person and then transfers the organisms to their mouth, nose or eyes.

- **Aerosol transmission** – takes place when droplets less than 5 microns in size are created and remain suspended in the air. This can sometimes occur during medical procedures, such as intubation or chest physiotherapy. These droplets can be dispersed widely by air currents and cause infection if they are inhaled

Actions

The Care home

- Close the home (and any day care facility) to new admissions if the TV HPT confirms an outbreak. Following discussion with TV HPT the home can re-open to admissions following the terminal clean (to be completed 5 days after the onset of the last case).

- The care home should provide a list of **all** residents/patients (including name, date of birth, GP surgery and flu vaccination history – vaccination history can be provided later if this will delay providing these details). The table on page 12 of this guidance can be completed and faxed to 0345 279 9881 or email a password protected excel spreadsheet to tvphe@phe.gov.uk. This will facilitate prescriptions of antiviral medication, if required. **Please use a separate sheet for each GP surgery.**

- Residents should not transfer to other homes or attend external activities.

- Residents should only attend out-patient or investigation appointments where these are clinically urgent.

- Inform visiting health professionals of the outbreak and rearrange non-urgent visits to the home.

- Inform the hospital in advance if a resident requires admission to hospital during the outbreak

Infection control

Residents

- Enhanced surveillance for further cases should be initiated by way of daily monitoring of all residents for elevated temperatures and other respiratory symptoms. It is important to identify infected patients as early as possible in order to implement infection control procedures such as isolation and reduce the spread of infection.

- If possible, symptomatic residents should be cared for in single rooms. If this is not possible, symptomatic residents should be cared for in areas well away from residents without symptoms. If the design and capacity of the care home and the numbers of symptomatic residents involved are manageable, it is preferable to isolate residents into separate floors or wings of the home. Movement of symptomatic residents should be minimised.

- If the organism is unknown, assume cases will be infectious for up to 5-7 days following the onset of symptoms or until fully recovered.

- Resident's clothes, linen and soft furnishings should be washed on a regular basis and all rooms kept clean. More frequent cleaning (at least daily) of surfaces such as lockers, tables, chairs, televisions and floors is indicated, especially those located within one metre of a symptomatic patient. Hoists, lifting aids, baths and showers should also be thoroughly cleaned between patients.

- Residents should have an adequate supply of tissues, as well as convenient and hygienic methods for disposal. Patients should cover their nose and mouth with disposable single-use tissues when sneezing, coughing, wiping and blowing noses and then wash their hands or use hand gel/rub afterwards.

- Depending on the nature of the infection and the impact on those affected, consideration may be given, in very specific circumstances, to the use of surgical facemasks by affected residents (if this can be tolerated) when they are within one metre of other individuals (unless microbiologically confirmed to share the same infection). TV HPT will advise if this is necessary.

- Note: The use of hand gel/rub may only replace hand washing with soap and water if the hands are visibly clean.

When can hospitalised care home residents diagnosed with influenza or other respiratory viruses be discharged?

Residents may remain infectious to others even after discharge from hospital, and infection control measures are indicated to prevent transmission to others.

Appropriate infection control measures to prevent transmission of infection, including single room dwelling or cohorting, should be continued outside hospital until a minimum of five days after the onset of symptoms. Note that in some circumstances (see below) it may be considered necessary to continue infection control measures for longer than five days.

Can hospitalised care home residents hospitalised for reasons unrelated to influenza or respiratory viral infections be discharged to a care home with an outbreak of a respiratory virus?

Yes, after careful assessment of the risk of exposure to infection and providing the infection control measures are maintained.

Risk factors associated with prolonged shedding of influenza virus:

Patients with an impaired immune system from conditions including systemic corticosteroid use; chemotherapy, organ or bone marrow transplantation.

Staff

- If possible, care home staff should work with either symptomatic or asymptomatic residents (but not both) and this arrangement should be continued for the duration of the outbreak.

- Agency and temporary staff who are exposed during the outbreak should be advised not to work in any other health care settings until the cause is identified and appropriate advice given.

- Symptomatic staff and visitors should be excluded from the home until no longer symptomatic. Children and adults vulnerable to infection should be discouraged from visiting during an outbreak. Consistent with patient welfare, visitor access to symptomatic residents should be kept to a minimum.

- Frequent hand washing has been proven to be effective in reducing the spread of respiratory viruses. Staff should wash their hands thoroughly with soap and water before and after any contact with residents and also after contact with their surroundings. Hand gel/rub may also be used if the hands are visibly clean. Consideration should also be given to placing hand gel/rub dispensers at key points within the care home for use by visitors and staff. It is advisable to undertake a risk assessment before introducing hand gel/rub into the workplace.

- Staff should wear single use plastic aprons, appropriately worn, when dealing with patients. Gloves may also be used if contact with contaminated surfaces is likely. Gloves and plastic aprons should be changed between patients.

- More stringent infection control is needed when aerosol generating procedures (such as airway suction and CPR) are carried out on cases or suspected cases. Such procedures should be performed only when necessary and in well ventilated single rooms with the door closed. Numbers of staff exposed should be minimised and FFP3 respirators and eye protection should be used in addition to gowns, gloves and

universal precautions.

- Staff, patients and visitors should be encouraged to avoid touching their eyes and nose to minimise the likelihood of infecting themselves from viruses picked up from surfaces or other people.

- Uniforms and other work clothing should be laundered at work if there are facilities for this. If laundered at home the general advice on washing work clothes would apply. Uniforms should never be worn between home and the place of work.

- Clinical waste should be disposed of according to standard infection control principles.

- Depending on the causative organism, there may be a case for staff at risk of complications if infected (e.g. pregnant or immunocompromised individuals) to avoid caring for symptomatic patients. A risk assessment will need to be undertaken on a case by case basis.

Cleaning and waste disposal

- Provide tissues and no-touch bins for used tissue disposal in public areas.

- Provide tissues and covered sputum pots for affected residents. Dispose of these as infectious waste.

- Wash residents' clothes, linen and soft furnishings on a regular basis, and keep all rooms clean.

- Clean surfaces of lockers, tables & chairs, televisions and floors etc frequently. Always clean hoists, lifting aids, baths and showers thoroughly between patients.

More advice on infection control precautions for respiratory tract infections can be accessed at:
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/452928/RTI_infection_control_guidance_PHE_v3_FPF_CT_contents2.pdf

Influenza Outbreaks: Information Leaflet for Residents and Carers

What is a flu (influenza) outbreak?

Flu-like illness affects many people during the winter months. Two or more cases of flu–like illness occurring within 48 hours in residents or staff from the same care home indicate that an outbreak of influenza is possible.

Recommended precautionary measures for homes with a possible flu outbreak

If staff in the care home suspect an outbreak, they will ensure that measures are in place to reduce the risk of spread to other residents. They may also advise restrictions on staff and resident movements.

Thames Valley Health Protection Team (TV HPT) and Clinical Commissioning Group (CCG) will be supporting them in ensuring:

- Adequate control measures are taken to prevent the spread of infection
- Affected residents and/or staff receive appropriate treatment and
- Residents, staff and carers receive appropriate and timely information on the measures being taken

What are the specific measures that staff can take?

- Wash hands frequently with soap and water and dry thoroughly
- Dispose of used/dirty tissues as clinical waste
- Ensure frequent cleaning of surfaces
- Ensure that supplies for hand washing are available where sinks are located
- Provide tissues to residents and visitors who are coughing or sneezing so that they can cover their mouth and nose. Appropriate disposal should also be provided.
- Staff should use appropriate infection control precautions while dealing with affected patients e.g. gloves, single use apron

How can residents and carers help?

Residents with flu-like symptoms should:

- Avoid using common areas
- Cover their mouth and nose with a tissue when coughing or sneezing
- Sit at least 3 feet away from others, if possible

All residents can:

- Discourage visitors, especially children and vulnerable adults
- Support the home by adhering to other restrictions which may be needed

Carers, family and friends should not visit the home if they have flu symptoms.

HAND WASHING

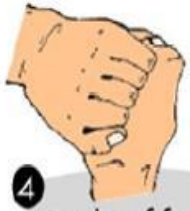
Health Protection Agency

Hand washing technique:

1. Palm to palm

2. Right palm over left dorsum and left palm over right dorsum

3. Palm to palm fingers interlaced

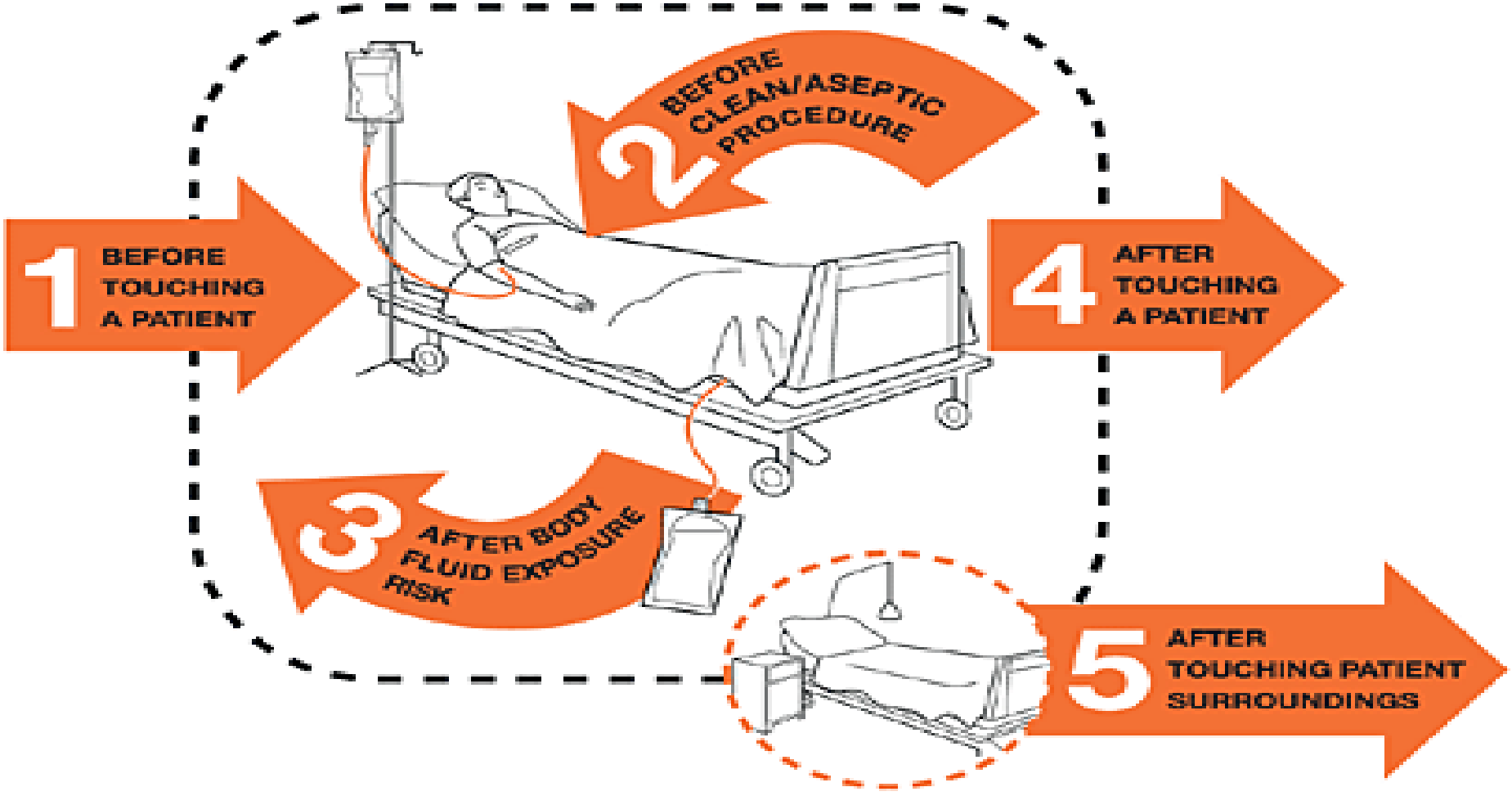


4. Backs of fingers to opposing palms with fingers interlocked

5. Rotational rubbing of right thumb clasped in left and vice versa

6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa

The 5 moments of hand hygiene



Respiratory Outbreak Reporting Form

Thames Valley Health Protection Team

Duty Room Telephone: 0344 225 3861 / Fax: 0345 279 9881

Name of Home…….. **Total number of beds occupied……**

Case Identification	Case number (sequential as cases identified; i.e., 1, 2, 3,…)			
	Name (last, first)			
	Gender (m/f)			
	Date of birth (DD/MM/YYYY)			
Symptoms	Onset date of first symptoms (DD/MM/YYYY)			
	Abnormal temperature (°C)			
	Cough (describe)			
	Runny nose / sneezing (yes/no)			
	Stuffy nose (yes/no)			
	Muscle pain (yes/no)			
	Malaise (yes/no)			
	Sore throat / headache (yes/no)			
	Other (specify)			
Laboratory Specimens	Swab specimen (site & date of collection)			
	Result			
Medication / Vaccination	Antiviral & date			
	Seasonal flu vac (date)			
	Pneumococcal vac (date)			
	Antibiotic (DD/MM/YYYY)			
Complications	Hospital admission (DD/MM/YYYY)			
	Hospital name			
	Deceased (DD/MM/YYYY)			
	Recovered (DD/MM/YYYY)			
Last Day Worked	Last day at work (DD/MM/YYYY)			
Notes	-			

List of all residents/patients by GP surgery

List of residents/patients at:…… Date:……

GP surgery:……

Name	DOB	Symptomatic (Yes/No)	Flu vaccination (date)

References

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3. PHE guidance on use of antiviral agents for the treatment and prophylaxis of seasonal influenza (2015−16) Version 6.0, September 2015. Accessed at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/457735/PHE_guidance_antivirals_influenza_2015_to_2016.pdf

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