

Guidance for GPs

Guidance for the Identification, Investigation and Management of Seasonal Influenza Outbreaks in Care Homes in South Yorkshire

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This document describes a practical, systematic and consistent approach to the management of seasonal outbreaks of influenza-like-illness as used across the Yorkshire & Humber region. It incorporates guidance contained in the HPA Centre for Infection draft document 'Managing Outbreaks of Respiratory Illness in Care Homes' and the CDC Atlanta guidelines 'Control Measures for Preventing and Controlling Influenza Transmission in Long-Term Care Facilities'

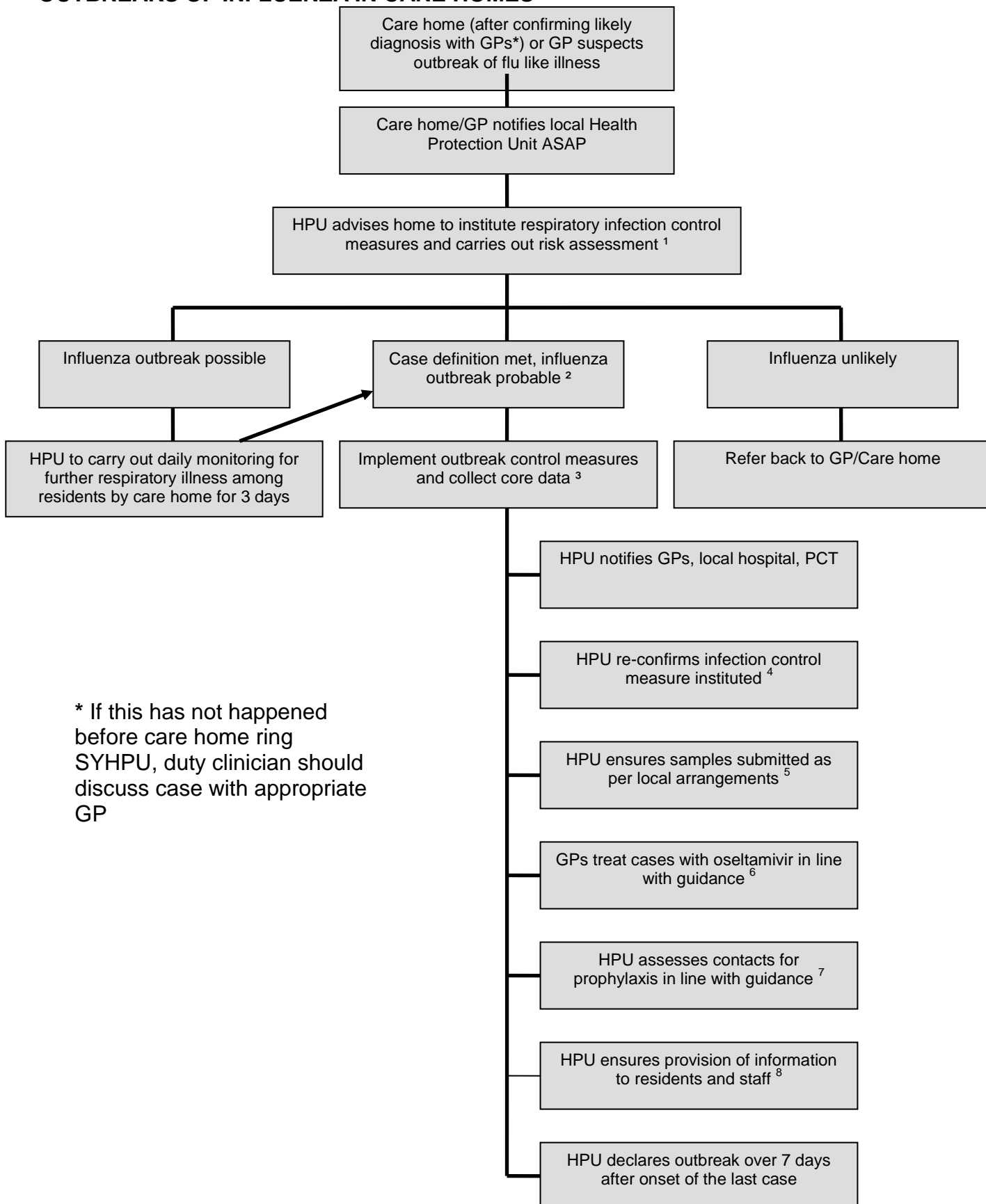
This guidance does **not** apply in an influenza pandemic.

The single most important step to reduce cases and outbreaks of influenza in Care Homes, is to ensure that all residents and staff are offered annual immunisation with the current seasonal flu vaccine, and that pneumococcal vaccine is offered, as appropriate.

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1. SUMMARY OF KEY ACTIONS TO IDENTIFY, INVESTIGATE AND MANAGE OUTBREAKS OF INFLUENZA IN CARE HOMES



Further sources of information

CMO letter – [Seasonal Flu Immunisation Programme 2011/12](#)
[The Green Book \(Influenza: September 2011\)](#)

2. NOTIFICATION

Early notification is vital if a timely intervention is to be possible. However this needs to be balanced against frequent notifications of incidents which are unlikely to be due to influenza outbreaks.

Therefore **notification should only be made to HPU's if the home manager or deputy has confirmed with the resident's GP(s) that influenza is a likely diagnosis. If a call is received from a home before verification by GP, HPU staff should contact relevant GP(s) and discuss diagnosis.**

3. RISK ASSESSMENT

On being notified of a potential outbreak in a care home the HPU will carry out an assessment based on the symptoms, timing and numbers of cases, as summarised in the risk assessment below:

Scenario	Action
One or more residents or staff members with virologically confirmed influenza	Influenza outbreak <ul style="list-style-type: none"> • Implement outbreak control measures detailed below
<u>Three or more</u> cases of influenza- like illness occurring within 72 hours in residents or staff who are in close proximity to each other (e.g., in the same area of the facility). Note: it is not necessary for influenza virus to be circulating in the local population	Probable outbreak <ul style="list-style-type: none"> • Implement outbreak control measures detailed below • Seek confirmatory virological diagnosis concurrently
<u>Two</u> cases of influenza- like illness occurring within 72 hours , in residents or staff who are in close proximity to each other (e.g., in the same area of the care home).	Possible outbreak <ul style="list-style-type: none"> • Ensure standard Infection Control precautions continue • Institute droplet precautions for affected residents • Daily monitoring and vigilance for further cases of Influenza-like illness in residents or staff • Strongly consider rapid virological testing • If influenza is known to be circulating consider upgrading risk assessment to "probable outbreak"
<ul style="list-style-type: none"> • One resident or staff member with influenza-like illness • More than one case but ILI case definition not clearly met 	Influenza outbreak unlikely, but not ruled out <ul style="list-style-type: none"> • Advise home to be vigilant for further cases • Consider virological testing, especially if influenza virus known to be circulating.

4. CASE DEFINITION FOR AN OUTBREAK OF INFLUENZA-LIKE-ILLNESS

- **Definition of a case of influenza-like illness:**

Acute deterioration in physical or mental ability without known cause, **OR** acute onset of weakness, **irrespective of the presence of fever**

PLUS

New onset or acute worsening of one or more respiratory symptoms:

- cough (with or without sputum),
- nasal discharge or congestion,
- sore throat,
- sneezing,
- hoarseness,
- shortness of breath,
- wheezing,
- chest pain.

- **Definition of a possible outbreak of influenza-like-illness:**

Two or more cases of influenza-like illness as defined above, **occurring within 72 hours**, in residents who are in close proximity to each other (e.g., in the same area of the care home).

(This should be notified to HPU who will then carry out a risk assessment. If flu is circulating, HPU staff will upgrade this to a probable outbreak. If flu isn't circulating, it may remain as a possible with daily monitoring. If a 3rd case then occurs, it gets upgraded to probable.)

- **Definition of a probable outbreak of influenza-like-illness:**

Three or more cases of influenza-like illness as defined above, **occurring within 72 hours**, in staff and / or residents who are in close proximity to each other (e.g., in the same area of the care home).

OR

Two or more cases of influenza-like illness as defined above, **occurring within 72 hours**, in staff and / or residents who are in close proximity to each other (e.g., in the same area of the care home), **if influenza is circulating.**

- **Definition of a confirmed outbreak of influenza:**

One or more virologically confirmed cases of influenza in residents or staff members.

5. INFECTION CONTROL MEASURES

In the event of an outbreak, the standard infection control principles that should be in place in all health and care settings should be maintained.

Standard infection control precautions:

- Staff should wash their hands thoroughly using liquid soap and water **before and after any contact with residents**. 70% alcohol hand rub may be used on clinically clean hands, wherever soap and water are not readily available. Placing hand rub dispensers at the residents' bedsides for use by visitors and staff should be considered. It is advisable to recommend carrying out a risk assessment before introducing alcohol gels into the workplace.

Respiratory Hygiene/Cough Etiquette

Where possible, respiratory hygiene/cough etiquette should be implemented whenever residents or visitors have symptoms of respiratory infection to prevent the transmission of all respiratory tract infections in long-term care facilities. **When an outbreak of influenza is being considered, respiratory hygiene/cough etiquette is essential and must be implemented.**

Respiratory hygiene and cough etiquette include the following:

- Posting visual alerts at the entrance to the home instructing residents and visitors to inform staff if they have symptoms of respiratory infection and discouraging those who are ill from visiting the home, encouraging them to practice respiratory hygiene/cough etiquette.
- Providing tissues to residents and visitors who are coughing or sneezing so that they can cover their mouth and nose, and bins for the disposal of the used tissues.
- Providing tissues, bins and alcohol-based hand rubs in common areas and waiting rooms.
- Ensuring that supplies for hand washing are available where sinks are located and providing dispensers of alcohol-based hand rubs in other locations.
- Encouraging coughing persons to sit at least 3 feet away from others, if possible.
- Residents with symptoms of respiratory infection should be discouraged from using common areas where feasible. Residents should have an adequate supply of tissues and covered sputum pots, as well as convenient and hygienic methods of disposing of these.

Care homes should ensure the availability of materials for adhering to respiratory hygiene etiquette in waiting areas for residents and visitors.

- Provide tissues and no-touch receptacles for used tissue disposal.
- Provide conveniently located dispensers of alcohol-based hand rub; where sinks are available, ensure that supplies for hand washing (i.e., liquid soap, disposable towels) are consistently available.

Droplet precautions:

- If possible symptomatic residents should be cared for in single rooms until fully recovered and at least five days after the onset of symptoms. If this is not possible then cohort suspected influenza residents with other residents suspected of having influenza; cohort confirmed influenza residents with other residents confirmed to have influenza. At the very least, symptomatic residents should be cared for in areas well away from asymptomatic residents. If the

design of the care home and the numbers of symptomatic residents allows, the separation of symptomatic and asymptomatic residents in separate floors or wings of the home is preferable.

- If possible, staff should work with either symptomatic or asymptomatic residents (but not both), and this arrangement should be continued for the duration of the outbreak.
- Staff should use single-use plastic aprons when dealing with patients, and gloves as appropriate. Glove wearing does not obviate the need for hand hygiene.
- Surgical masks should be worn by care staff attending to personal care needs of affected residents or working within three feet of an affected person. This is particularly important during cough-inducing procedures, including nebuliser administration. Masks should be removed on leaving the resident's room and disposed of as clinical waste. Homes should obtain masks from their usual PPE suppliers.
- If resident movement or transport is necessary, the affected resident should wear a surgical mask, if possible.
- All staff should perform hand hygiene immediately after de-masking, as per standard infection control precautions.

Restrictions to residents, visitors and healthcare staff:

- The home (and any associated day care facility) must be closed to admissions until the outbreak is declared over.
- Residents should not be transferred to other homes or attend external day centres, social events or similar activities until the outbreak is declared over.
- Residents should avoid non-urgent outpatient clinic visits. More urgent outpatient or similar visits (e.g. for investigations) should be subject to a risk assessment by the clinicians involved in collaboration with infection control staff in the concerned hospital.
- Agency and temporary staff who are exposed during the outbreak should be advised not to work elsewhere (e.g. in a local acute care hospital) until the outbreak is over.
- Symptomatic staff and visitors should be excluded from the home until fully recovered and at least five days after the onset of symptoms.
- Children and adults vulnerable to infection should be discouraged from visiting during an outbreak.
- Visitor access to symptomatic residents should also be kept to a minimum, consistent with patient welfare.
- Enhanced surveillance for further cases should be initiated by way of monitoring of all residents for symptoms.

Other measures:

The Influenza virus can persist on dry, inanimate surfaces for up to two days. The importance of thorough environmental cleaning must not be underestimated.

- Surgical masks, gloves and aprons, and contaminated tissues should be disposed of as clinical waste.
- Resident's clothes, linen and soft furnishings should be thoroughly washed on a regular basis, on the hottest cycle appropriate for the material, and all rooms kept clean, including TV remote controls, handles and light switches. More

frequent cleaning of surfaces such as lockers, tables & chairs, televisions and floors is required, especially those located within 3 feet of a symptomatic patient. Hoists, lifting aids, baths and showers should also be thoroughly cleaned between patients.

- 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 separately would apply. Uniforms should not be worn between home and the place of work.

6. IMMUNISATION

Influenza vaccination and infection control practices are of utmost importance in preventing infection and are universally preferred over the administration of chemoprophylaxis.

Encourage immunisation for risk groups as per the [Green Book \(Influenza: September 2011\)](#) together with the latest [CMO letter](#):

- Over 65s;
- Clinical risk groups (see p.193 of the [Green Book \(Influenza: September 2011\)](#));
- Pregnant women;
- Health and social care staff directly involved in the care of their patients or clients;
- Those 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;
- Those who are in receipt of a carer's allowance, of those who are the main carer of an elderly or disabled person whose welfare may be at risk if the carer falls ill.

For guidance on which groups need H1N1 and/or seasonal flu immunisation, follow the algorithm on p.195 of the [Green Book \(Influenza: September 2011\)](#).

Some high street chemists and medical providers offer vaccination privately for those not in risk groups.

Individuals should not receive the vaccine if:

- A confirmed anaphylactic reaction to a previous dose of the vaccine;
- A confirmed anaphylactic reaction to any component;
- A confirmed anaphylactic hypersensitivity to egg products.

It is only anaphylactic egg allergy that requires an alternative vaccine to normal seasonal flu. If a patient claims to be egg allergic but has delayed or non-specific symptoms following egg ingestion they can be immunised as normal.

For those with a genuine history of anaphylactic reaction to egg containing food, refer to p.197 of the [Green Book \(Influenza: September 2011\)](#) for options.

7. DIAGNOSTIC SAMPLES

- **Advice on testing should be sought from the South Yorkshire Health Protection Unit**

Sampling out of season and early or late in the “normal” flu season is particularly important to get a confirmed diagnosis when least expected. A nose and throat swab in viral transport medium should be submitted for viral respiratory PCR.

In care homes it is important to consider other infectious causes of respiratory illness, in particular pneumococcal infection. This may be superimposed upon a viral respiratory infection, and careful clinical monitoring is essential.

8. ANTIVIRAL TREATMENT GUIDELINES

For further information please refer to the HPA Guidelines [Pharmacological treatment and prophylaxis of influenza: 2011](#). This guidance summarises the current HPA recommendations for the antiviral treatment and prophylaxis of influenza.

See Appendices for a summary of the guidance for prescribing oseltamivir or zanamivir for treatment of influenza like illness and for prescribing oseltamivir for prophylaxis of influenza like illness in contacts.

Antiviral therapy may be beneficial in human influenza and has been associated with prevention of disease or complications among patients exposed to the virus, shortened duration of illness among acutely-ill patients and reduction of morbidity and mortality among patients with severe infection.

Outbreaks of influenza can occur outside the usual winter influenza season and there may be no evidence of influenza circulating in the wider community. **HPS-Colindale advise that where an influenza outbreak is confirmed or probable, oseltamivir should be used for treatment and prophylaxis even if there is no evidence of circulating influenza in the community.**

Department of Health has approved using oseltamivir in the specific scenario of the HPA suspecting an influenza outbreak outside of the “flu season”. It may be helpful to discuss this with Cfl in the event of an outbreak.

SYHPU staff: If recommending Oseltamivir when influenza is not circulating, please inform the appropriate prescribing adviser.

Antiviral use in the community should be in accordance with NICE guidance and the recent guidance from the Chief Medical Officer for England.

Antiviral treatment should be started as soon as possible. In the community, antivirals should usually be given within 48 hours of the onset of symptoms.

HPS-Colindale recommend that **in the event of a probable or confirmed outbreak of influenza in a care home, consideration is given to offering prophylaxis to all care staff as well as other residents.** There was at least one instance in 2005/06, reported to HPS-Colindale, when prophylaxis of residents alone failed to interrupt an outbreak due to probable transmission from residents to staff and then back to residents (who by this time had ceased prophylaxis).

Adequate dose, dosing interval and duration of antiviral therapy reduce the likelihood of emergence of resistance during therapy.

A high index of suspicion should be maintained for diagnosing antiviral resistant influenza.

Prophylaxis of contacts:

To be used if ALL of the following apply:

- Person in at risk groups;
- Person has been in contact with flu like illness;
- Person can start treatment within 48 hours of last exposure;
- Person has not been vaccinated – encourage immunisation in all groups.

Anti-viral supply

Arrangements for obtaining supplies, prescribing and dispensing of oseltamivir will vary across PCTs.

Influenza Outbreaks Factsheet

Information for Care Homes

What is an outbreak of influenza?

Two or more cases of influenza-like-illness occurring within 72 hours in residents or staff who are in close proximity to each other in the care home indicates that an outbreak of influenza is possible. Your local Health Protection Unit will confirm whether or not there is an outbreak.

How can you reduce the risk of influenza transmission in care homes?

- Wash hands frequently with liquid soap and water and dry thoroughly.
- Ensure frequent cleaning of surfaces.
- Cover your mouth and nose with a tissue when coughing or sneezing.
- Dispose of used/dirty tissues as clinical waste.

What precautions should you take if you suspect a possible outbreak of influenza in the care home?

Care of patients

1. This is the first priority. If possible, affected patients should be cared for in single rooms, or in the same area of the care home, to reduce the risk to other residents who are not affected.
2. Ensure that standard infection control precautions are in place.
3. Inform the South Yorkshire Health Protection Unit as soon as possible.

Informing the Health Protection Unit

Staff at South Yorkshire Health Protection Unit (consultant and specialist nurses) will:

- verify whether there is an outbreak and collect further information
- offer advice on whether further tests or treatment is required
- liaise with other health care professionals who may be involved with the care of residents
- ensure that detailed information on infection control precautions is made available, and
- monitor the progress of the outbreak, and offer support for any other control measures that may be required.

Reinforce infection control measures

In the event of an outbreak, the standard infection control measures that should be in place in all health and care settings should be maintained, and environmental cleaning measures should be enhanced.

Continued overleaf

What precautions should you take if you suspect a possible outbreak of influenza in the care home? (continued)

Additional key measures recommended during outbreaks are outlined below. These cover three main areas:
restrictions to visitors and staff
respiratory hygiene, and
droplet precautions.

Further advice on these matters can be obtained from the South Yorkshire Infection Prevention and Control Nurses or the South Yorkshire Health Protection Unit.

➤ *Restrictions to residents, visitors and staff*

- Restrict **visitor** access to symptomatic patients to the minimum that is required for patient welfare. Children and vulnerable adults should be discouraged from visiting during an outbreak.
- Exclude **symptomatic staff and visitors** until fully recovered and at least five days after the onset of symptoms.
- **Agency and temporary staff who are exposed during the outbreak should be advised not to work in other health or care settings until the outbreak is over.**

➤ *Respiratory hygiene*

- Respiratory hygiene/cough etiquette is essential when an outbreak of flu is being considered. Recommended measures include:
- putting up signs at entrance or common areas instructing residents and visitors to inform staff if they have respiratory symptoms, and discouraging visitors with symptoms
- providing tissues to residents and visitors who are coughing or sneezing so that they can cover their mouth and nose, and bins for disposal of used tissues.
- residents with symptoms of respiratory infection should be discouraged from using common areas where feasible. Residents should have an adequate supply of tissues and covered sputum pots, as well as convenient and hygienic methods of disposing of these
- ensuring that supplies for hand washing are available where sinks are located and providing dispensers of alcohol-based hand rubs in other locations
- **encouraging coughing persons to sit at least 3 feet away from others, if possible**

➤ *Droplet precautions*

- If possible symptomatic residents should be cared for in **single rooms** until fully recovered and at least five days after the onset of symptoms. If this is not possible, then **group together** suspected flu residents with other residents suspected of having flu.
- If possible, staff should work with either symptomatic or asymptomatic residents, but not both, and this arrangement should be continued for the duration of the outbreak.
- Staff should use appropriate infection control precautions while dealing with affected patients, e.g. gloves, single use apron, etc.
- **The Health Protection Unit will advise on the appropriate use of surgical masks.**

Influenza Outbreaks Factsheet

Information for Residents and Carers

What is an influenza (flu) outbreak?

Influenza affects many people during the winter months. Two or more cases of influenza-like-illness occurring within 72 hours in residents or staff from the same care home indicates that an outbreak of influenza is possible.

Recommended precautionary measures for homes with a possible influenza 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 resident and staff movements.

The local Health Protection Unit and Primary Care Trust will work with the staff to ensure that :

- adequate control measures are taken to prevent the spread of infection
- affected residents 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, and bins for disposal of used tissues.
- Staff should use appropriate infection control precautions while dealing with affected patients, e.g. gloves, single use apron, etc.

How can residents and carers help?

Residents with flu 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 should:

- discourage visits, especially from children and vulnerable adults
- support the home by adhering to other restrictions being placed.

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

Further information

Further information can be obtained from:

South Yorkshire Health Protection Unit, Telephone:

0114 242 8850

Summary of the guidance for prescribing oseltamivir or zanamivir for treatment of influenza like illness, and for prescribing oseltamivir for prophylaxis of influenza like illness in contacts.

From HPA Guidelines [Pharmacological treatment and prophylaxis of influenza: 2011](#).

Treatment of uncomplicated influenza among high-risk individuals.

1. Those with suspected or proven influenza who are high-risk individuals, including pregnant women, or those who are considered by their GP to be at serious risk of developing complications, should be offered antiviral therapy if treatment can be started within 48 hours (36 hours for Zanamivir treatment in children) of the onset of symptoms.
2. Treatment should commence as early as possible.
3. Therapy should be given empirically and not deferred until laboratory test results are known.
4. Unless other clinical/virological considerations prevail, oseltamivir is preferred because of its wider availability in community pharmacies.
5. With the exception of severely immunosuppressed patients, the drug of choice for high-risk patients is oseltamivir at standard dosage and duration.
6. Consideration should be given to using inhaled zanamivir at a standard dose for 10 days for severely immunosuppressed patients.
7. Patients should be informed of the symptoms and signs of the complications of influenza and instructed to seek medical attention in such an occurrence.
8. Patients should be advised to self-isolate until symptom free.

Possible exposure of individual's with risk factors for influenza to patients with influenza

1. Onward transmission of influenza should be minimized by institution of strict infection control measures.
2. Chemoprophylaxis with an antiviral should be offered to individuals with risk factors for influenza who have been exposed to a patient with influenza, if antivirals can be started within 48 hours of last contact for oseltamivir, or 36 hours for zanamivir. Close patient monitoring and prompt diagnosis and treatment of influenza are an alternative.
3. The drug of choice is oseltamivir at standard dosage for prophylaxis for 10 days.
4. If oseltamivir resistance is known or suspected among contacts on clinical or epidemiological grounds, inhaled zanamivir prophylaxis should be administered for 10 days.

Possible exposure of severely immunosuppressed individuals to patients with influenza

Full-dose inhaled zanamivir should be offered as chemoprophylaxis in severely immunosuppressed individuals, regardless of the source's antiviral susceptibility.

