Testing for influenza: A guide for aged care facilities

Health Protection Service
ACT Health
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Testing for influenza: a guideline for aged care facilities

Why test for influenza viruses during flu season?

- It is important to identify the pathogen causing the illness and to determine whether there is an outbreak of influenza in a facility.
- Confirmation of influenza helps clinicians make appropriate clinical decisions about treatment of those who are sick and reduces the inappropriate use of antibiotics.
- Detection of influenza helps the Communicable Disease Control (CDC) section to advise and assist you in managing the outbreak, to control the spread of the illness, and to prevent further cases.
- It provides important information on the types of influenza viruses that are circulating in the community, which will contribute in assessing how effective current vaccines are and in developing new vaccines.

When should you test and who should be tested?

If a resident or a staff member has symptoms of an influenza-like illness (ILI) including:

- **Sudden onset** of symptoms
- AND at least **one** of the following **respiratory** symptoms:
  - Cough, or other symptoms such as stuffy or runny nose
  - Sore throat
  - Shortness of breath
- AND at least **one** of the following **systemic** symptoms:
  - Fever
  - Malaise/Fatigue
  - Myalgia
  - Headache.

- A GP can assess the ILI and request a test for influenza (“Influenza PCR” or “flu PCR”) or influenza and other pathogens (“respiratory PCR”).
- Testing should be performed as soon as possible after the onset of ILI symptoms.
- An outbreak of ILI is when three or more residents/staff develop symptoms of ILI over a 72 hour period.
- During an outbreak several people meeting the case definition for ILI should be tested (usually 4-6 cases).
- Subsequent testing of other people is at the discretion of the treating clinician or on advice of CDC.
What to do when a suspected outbreak of influenza-like-illness is identified (3 or more residents/staff develop ILI in the same 72 hour period):

Outbreak: 3 or more residents/staff develop ILI within 72 hours. ILI is defined as:

- **Sudden onset** of symptoms
- **AND** at least one of the following respiratory symptoms:
  - Cough, or other symptoms such as stuffy or runny nose
  - Sore throat
  - Shortness of breath
- **AND** at least one of the following systemic symptoms:
  - Fever
  - Malaise/fatigue
  - Headache
  - Myalgia

ACF staff contact medical practitioner for assessment of case/s

Medical practitioner to assess, provide laboratory testing slip for influenza PCR test and decide treatment plan

Medical Practitioner, RN or pathology provider collects swab – nasopharyngeal swab (orange/red) is preferred, throat swab (green) is acceptable

Refrigerate specimen and send to ACT Pathology on the day of collection or the following day.

The requesting practitioner has the responsibility of following up test results and advising the ACF of results.

CDC will be notified of specimens that test positive for influenza as it is a notifiable disease.

Please note:

- If residents have ILI it is important that they are isolated and medically assessed by their GP.
- Unwell staff should be sent home and excluded for 5 days from onset of symptoms.
- Initiate infection control measures.
- It is also important to closely monitor other residents and staff to observe whether they develop ILI symptoms.

ACF staff to contact Communicable Disease Control (CDC) on Ph: 6205 2155.

CDC is able to provide advice on:

- Infection control and prevention
- Outbreak management
- Testing

The decision to cease testing should be made in consultation with the Communicable Disease Control section, the treating medical practitioner and ACF staff.
Swab collection procedure:

1. Before performing swab:

Obtain required equipment:

- Personal protective equipment (PPE) for the person taking the swab, including gown, gloves, eye protection (goggles or face shield), and surgical mask.
- One flocked swab for nasopharyngeal specimen, preferably with viral transport medium, or one viral throat swab.

![Image](Image1.png)

Figure 1: From left to right - dry flocked swab, flocked swab with viral transport medium tube, viral throat swab

IMPORTANT NOTES:

- Swabs should only be taken from residents or staff with acute symptoms (onset within the preceding 72 hours).
- Do not use bacterial (blue top) swabs for specimen collection. If in doubt contact your laboratory provider or CDC for advice.
- Do not use a viral throat swab (green top – Figure 3) for the collection of a nasopharyngeal specimen.
- Choose an area for the procedure where the patient can rest their head supported by a wall or on a high backed chair with sufficient room for you to stand beside (not in front of) the resident.
- Ensure the area is well lit and that hand washing facilities and appropriate infectious waste disposal facilities are available.
- Remember to WASH AND DRY HANDS before and after the procedure.
- Gloves, masks and eye protection MUST be worn when collecting nose and throat swabs.
- Masks should NOT be touched during wear and should NOT be worn around the neck at any time. When masks are removed they should be handled by the ties of the mask only and disposed of immediately.
- Gloves, gowns and masks should be disposed of in an infectious waste bag.
2. Performing the swab

Preparation:

1. Perform hand hygiene.
3. Explain the procedure to the patient and obtain consent.
4. Place patient standing or sitting with head tilted 70° supported against a wall.

Deep nasopharyngeal swab (NPS) procedure (preferred specimen):

5. Stand at the side of the patients head and place your non-dominant hand on the patient’s forehead with your thumb at the tip of the nose.
6. With the other hand, insert the flocked end of the swab horizontally into the patient’s nostril, approx 2-3 cm, gently pushing the swab directly back, rather than up.
7. Place lateral pressure on the swab in order to collect cells from the midline nasal septum.
8. Rotate the swab twice (2 x 360 degree turns) against the turbinate in the nostril to ensure the swab contains epithelial cells (not mucus) from the nostril.
9. Withdraw the swab from the nostril and place directly in its labelled tube.

Throat swab procedure (acceptable specimen if NPS is not possible):

10. Stand at the side of the patients head and ensure their head is resting against a wall or supporting surface.
11. Place your non-dominant hand on the patient’s forehead.
12. Ask the patient to open his/her mouth widely and say “aaah”.
13. Use a wooden spatula to press the tongue downward to the floor of the mouth. This will avoid contamination of the swab with saliva.
14. Using the dry flocked viral swab, insert the swab into the mouth, avoiding any saliva.
15. Place lateral pressure on the swab in order to collect cells from the tonsillar fossa at the side of the pharynx.
16. Rotate the swab twice (2 x 360 degree turns) against the tonsillar fossa to ensure the swab contains epithelial cells (not mucus).
17. Withdraw the swab from the throat and place directly in its labelled tube.
3. After performing the swab

Labelling and storage of specimen:

1. Ensure the swab is completely and accurately labelled. This will include the resident’s full name, date of birth, sex, specimen type (e.g. nasopharyngeal swab), date and time of collection, and address/name of facility.

2. Ensure the request form is completely and accurately filled out. This will include the resident’s full name, date of birth, sex, specimen type (e.g. nasopharyngeal swab), type of test requested, date and time of collection, Medicare Number, name of requesting doctor, date of request, name and signature of collector, and address/name of facility.

3. Ensure the information on the swab label matches the information on the request form.

4. Remove (doff) PPE in the order of: remove gloves -> perform hand hygiene -> remove goggles/face shield -> remove gown -> remove mask -> perform hand hygiene again.

5. Refrigerate the specimen until it is sent to the laboratory. Do not freeze the specimen. Specimens should preferably be sent on the day of collection or the following day.