

# Measles

## Chief Health Officer Alert

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| <b>Status:</b>      | Active   |
| <b>Date issued:</b> | 20 July 2017   |
| <b>Issued by:</b>   | Dr Brett Sutton, Deputy Chief Health Officer (Communicable Diseases), Victoria |
| <b>Issued to:</b>   | General Practitioners and Hospital Emergency Departments                       |

## Key messages

- **There is a confirmed case of** measles in a person who was infectious in a number of locations in Melbourne, including Sofitel Hotel, Queen Victoria Market, Tullamarine Airport and flight VA 841 to Sydney.
- **The case has travelled internationally recently** and likely acquired the infection in Indonesia.
- **Be alert** for measles in patients presenting with a fever at rash onset, particularly if they attended the above places.
- **Isolate suspected cases** to minimise the risk of transmission within your department/practice.
- **Notify** the Communicable Disease Prevention and Control Section at the Department of Health and Human Services on 1300 651 160 of suspected cases immediately.
- **Take blood for measles serology** in all suspected cases.
- **Discuss whether to take nose and throat swabs** for PCR with the Department if your suspicion for measles is high. Approval is required prior to PCR testing at the reference laboratory. PCR testing for measles does not attract a Medicare rebate.

## What is the issue?

There is a confirmed case of measles in a person who was infectious whilst in a number of locations in Melbourne, including in the Tullamarine Airport and on a domestic flight to Sydney. Known exposure sites include:

- Wednesday 12 July:
  - Sofitel Hotel (Collins Street)
  - Parliament House
  - St Patricks Cathedral
  - Trams in the free tram zone
- Thursday 13 July:
  - Sofitel Hotel
  - Train from city to Brighton
  - Brighton Beach
- Friday 14 July:

- Sofitel Hotel
- Trams in the free tram zone
- Queen Victoria Market (Elizabeth Street)
- Saturday 15 July:
  - Sofitel Hotel (Collins Street)
  - Taxi to Tullamarine Airport
  - Tullamarine Airport
  - Virgin Airlines flight VA 841 to Sydney.

The case is an international tourist and the illness was likely acquired in Indonesia.

Anyone who presents with signs and symptoms compatible with measles should be tested and notified to the Department. There should be an especially high index of suspicion if they have attended any of the areas stated above and are unvaccinated or partially vaccinated for measles.

## Who is at risk?

Children or adults born during or since 1966 who do not have documented evidence of receiving two doses of a measles-containing vaccine or do not have documented evidence of immunity are considered to be susceptible to measles. People who are immunocompromised are also at risk.

## Symptoms and transmission

Clinical features of measles include prodromal fever, a cough, conjunctivitis and coryza. Individuals, especially children, are typically unwell.

The most important clinical predictors are the following features:

- generalised, maculopapular rash, usually lasting three or more days, AND
- fever (at least 38°C, if measured) present at the time of rash onset, AND
- cough, coryza or conjunctivitis.

Measles is transmitted by airborne droplets and direct contact with discharges from respiratory mucous membranes of infected persons and less commonly, by articles freshly soiled with nose and throat secretions.

Measles is highly infectious and can persist in the environment for up to two hours.

The incubation period is variable and averages 10 days (range: 7 -18 days) from exposure to the onset of fever, with an average of 14 days from exposure to the onset of rash. The infectious period of patients with measles is roughly five days before, to four days after, the appearance of the rash.

Use the most appropriate tests for diagnosis depending on timing of symptoms and presentation:

- Take blood for serological confirmation in all suspected cases. If a patient has measles, IgM is reliably positive if the rash has been present for three or more days. IgG in the absence of IgM indicates the patient is protected and means measles is unlikely.
- Nose and throat swabs for PCR diagnosis are best for early diagnosis (including prior to rash); you must contact the Department prior to taking swabs to gain approval for these to be tested at the Victorian Infectious Diseases Reference Laboratory. PCR testing for measles does not attract a Medicare rebate.

This picture is typical of rash on the face. This is a rash on day three in a young boy.



Picture courtesy of U.S. Centers for Disease Control and Prevention

## Recommendations

- Be alert for new measles cases – ensure all staff, especially triage nurses, have a high index of suspicion for patients presenting with a febrile rash or unwell following recent international travel.
- Notify suspected cases immediately to the Communicable Disease Prevention and Control Section via telephone on 1300 651 160 (24 hours).
- Take blood for serological confirmation.
- Call the department to discuss the need for PCR diagnosis.
- To minimise the risk of measles transmission within your department/practice:
  - avoid keeping patients with a febrile rash illness in shared waiting areas
  - give the suspected case a single use mask and isolate them, until a measles diagnosis can be excluded
  - leave vacant all consultation rooms used in the assessment of patients with suspected measles for at least 30 minutes after the consultation.
- Seek advice from the Department of Health and Human Services Communicable Disease Prevention and Control Section regarding:
  - the management of susceptible hospital or clinic contacts
  - prevention of measles in susceptible contacts.
- On advice, follow up all persons who attended the emergency department or clinic at the same time as a case and for 30 minutes after the visit. These people are considered to be exposed to the measles virus.
- Check your staff vaccination records.
- Earlier outbreaks have affected health care workers, including some who have not been involved in the direct care of measles cases and have only been in the same ward, clinic, or department as a case. All staff born during or since 1966 should have documentation of two doses of measles-containing vaccine, or laboratory-confirmed evidence of past measles infection.

## More information

### Clinical information

- [The Australian Immunisation Handbook: 10th edition, 2013.](http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-9)  
<<http://www.immunise.health.gov.au/internet/immunise/publishing.nsf/Content/Handbook10-home~handbook10part4~handbook10-4-9>>
- [The Blue Book – Guidelines for the control of infectious diseases](https://www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/measles)  
<<https://www2.health.vic.gov.au/public-health/infectious-diseases/disease-information-advice/measles>>

### Consumer information

- [Better Health Channel – Measles](http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Measles?open)  
<<http://www.betterhealth.vic.gov.au/bhcv2/bhcarticles.nsf/pages/Measles?open>>

## Contacts

For further information please contact the Communicable Disease Prevention and Control section at the Department of Health and Human Services on 1300 651 160 (24 hours).



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