

When does fever + rash = Measles?

Guidance for health professionals on notification and laboratory testing

Measles is not routinely circulating in the greater Wellington region. Therefore all cases will have been acquired overseas, or from person who has come from overseas, or be part of a localized NZ outbreak. There is a low likelihood of fever and rash being measles in between outbreaks and in the absence of exposure to a known case/overseas travel/ ill overseas visitors during the incubation period (7 to 21 days). Measles is unlikely if someone has had 2 documented doses of MMR (received after 12 months of age) as 99% of recipients are protected. The following information is a guide on when measles lab testing will be most useful for public health control and are the questions public health will ask when you ring to discuss testing.

Does the person have a clinically consistent illness?

- | | | |
|---|-----------------------------|------------------------------|
| Maculopapular rash – generalized | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Fever (or report of fever) still present with rash | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| One of cough or coryza or conjunctivitis (red sore eyes) | <input type="checkbox"/> No | <input type="checkbox"/> Yes |

*If yes to **all** of the above illness questions, continue with the questions below.*

If NO – measles unlikely, lab testing not indicated. Manage clinical illness as indicated.

Is the person susceptible to measles?

- | | | |
|---|-----------------------------|------------------------------|
| Unimmunized or only 1 MMR vaccine (>12m of age) | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Person born 1969 – 80 or 1991-96 | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Person severely immunocompromised | <input type="checkbox"/> No | <input type="checkbox"/> Yes |

*If yes to **any** susceptibility question, continue with the questions below.*

Note: 1 MMR after 12m age = 95% people protected, 2x MMR = 99% of people protected

If NO – measles unlikely, lab testing for public health control not indicated. Manage clinical illness.

Is there a plausible source of infection in the last 3 weeks?

- | | | |
|---|-----------------------------|------------------------------|
| Person been overseas or had overseas visitors | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Person been in a part of NZ that currently has measles* | <input type="checkbox"/> No | <input type="checkbox"/> Yes |
| Person had contact with known measles case | <input type="checkbox"/> No | <input type="checkbox"/> Yes |

If NO also to these questions, measles unlikely, measles testing for public health control not indicated.

Is there another reason (e.g. person in ED or 2nd presentation of this illness, person immunocompromised or healthcare worker) why public health testing may be indicated?

If measles testing is indicated take a throat or N/P swab using viral transport media (VTM) or urine (babies) for measles PCR testing. Write the following on the laboratory request form;

- Date the rash started
- Testing has been “Discussed with the Medical Officer of Health”.