Health Professional Advice - Measles

July 2012

MANAGING SUSPECTED MEASLES CASES

You should notify Auckland Regional Public Health Service (ARPHS) of any suspected measles cases on (09) 623 4600 which is a 24 hour service:

Measles is a notifiable disease under section 74 of the Health Act 1956. The responsible clinician, on suspicion of measles in a patient, is obliged to notify ARPHS without delay. When you call ARPHS you need to provide the following:

1. **Your details**: Name, treating doctor’s name, contact number (in case more information is needed).
2. **Case details**: Name, address, contact number, age, ethnicity, NHI.
3. **Clinical history**: Onset date, maculopapular rash onset date, fever (≥38°C), cough, coryza, conjunctivitis, Koplik’s spots, hospitalisation (and date).
4. **Laboratory test(s) arranged**
5. **Immunisation status**: include dates of MMR immunisations if available.
6. **Is the patient linked to other notified patients, and if so name(s).**
7. **Early childhood centres or schools the patient attends.**

CASE DEFINITION

For notification, a suspect case has fever and rash and one of: cough, coryza, conjunctivitis or Koplik’s spots. If you are in doubt, manage as if it is measles and ensure the patient/caregiver has the appropriate factsheets.

Measles signs and symptoms:

- Measles is a highly infectious viral infection spread by coughing, sneezing or direct contact with secretions.
- Signs of infection include:
  - **Prodrome**: fever (≥38°C usually the first sign, lasts 4-7 days). Malaise, anorexia, cough, coryza, conjunctivitis.
  - **Enanthem**: Koplik’s spots are pathognomonic for measles. There are small white spots inside the cheeks and present near the end of the prodrome, usually prior to the eruption of rash. The absence does not exclude diagnosis.
  - **Exanthem**: The measles rash is an erythematous maculopapular rash (usually 14 days post initial exposure, 3-5 days post onset of prodrome). It begins on the face and upper neck and spreads to the truck and extremities.
- Complications include otitis media, diarrhoea, pneumonia and in severe cases, encephalitis.
- Incubation period: From exposure to onset of symptoms ranges from 8-12 days.
- Infectivity: Cases are contagious from five days before the onset of rash to five days after (10 days – see Table 1).
Advise patients on isolation and quarantine

- **Isolate** suspected and confirmed patients until five days after the rash onset, with the first day being the day the rash started and the last day being day five (Table 1).

- **Advise quarantine** of susceptible household contacts, starting seven days from the first exposure and lasting until 14 days after the last contact with a case while infectious (and longer if the contact gets measles). For further information visit the ARPHS website: [http://www.arphs.govt.nz/health-information/communicable-disease/measles](http://www.arphs.govt.nz/health-information/communicable-disease/measles).

- **High risk contacts** include non-immune pregnant women, immune compromised people, and unimmunised infants less than 12 months of age. For advice on managing these patients contact ARPHS on 09 623 4600. Generally ARPHS will advise you to arrange IV immunoglobulin if it is within six days of first contact with an infectious case, via your local hospital (paediatrics or infectious diseases).

Investigate where necessary

- Investigation is **required for all suspected cases**. Investigation by throat or nasopharyngeal swab for PCR or serology should be completed for suspect cases (see Table 1).

- If laboratory tests are required it is the responsibility of the requesting clinician to follow up the results and inform the patient, unless the test has been arranged by ARPHS.

- If patient presents with a rash 6-28 days post MMR vaccination, consider the possibility of a vaccine reaction. If a vaccine reaction is diagnosed, then both notifications to ARPHS and isolation are unwarranted.

<table>
<thead>
<tr>
<th>Day</th>
<th>-5</th>
<th>-4</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptoms</td>
<td>Prodrome (5 days)</td>
<td>Rash (5 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infectious</td>
<td>Infectious Period (10 days)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investigation Timing</td>
<td>PCR</td>
<td>PCR</td>
<td>PCR</td>
<td>PCR</td>
<td>PCR</td>
<td>PCR or Serol</td>
<td>Serol</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**PROCESS FOR HEALTH PROFESSIONALS**

Auckland Regional Public Health Service (ARPHS) undertakes contact tracing for measles cases.

- **ARPHS receives and records notifications.** If the notifying doctor is not the patient’s normal GP, they should still inform the normal GP as soon as is practicable.

- **ARPHS follows up on patients** to advise isolation or quarantine for household contacts of confirmed cases of measles. Health Professionals should also provide the patients with advice or direct them to the ARPHS website for more information: [http://www.arphs.govt.nz/health-information/communicable-disease/measles](http://www.arphs.govt.nz/health-information/communicable-disease/measles).

ARPHS will get in touch with measles contacts by telephone to provide advice.

- **Fact Sheets for:** patients, contacts, schools, early childhood education centres, workplaces, and medical clinics are available from ARPHS ([www.arphs.govt.nz](http://www.arphs.govt.nz)).
IMMUNISATION

Immunisation for children under 15 months of age

- Unimmunised infants over six months and under 15 months who are contacts of probable or confirmed cases of measles:
  - Vaccinate if the infant is within three days of first exposure to an infectious patient. The second MMR may be given at 15 months, and a third MMR should be given at the usual time (age four).
  - Discuss with a paediatrician the need for the administration of immunoglobulin if more than three days and up to six days post first exposure to an infectious case delay the first MMR until at least five months after immunoglobulin is administered: Immunoglobulin is only given if the child is at high risk of complications.

- Other unimmunised infants over six months and under 15 months.
  - If children are at very high risk of being in contact (e.g. if they have siblings who have been exposed to measles at pre-school), then offering an MMR is reasonable. The infant will need MMR again at the usual scheduled ages. This is outside of the practice nurses' authorisation, therefore they should get GP approval for giving MMR under 15 months, but there are no vaccine safety concerns.

Immunisation for women of childbearing age

- Enquire if there is any possibility of pregnancy before administering MMR. Check before offering MMR to any woman of childbearing age.
- MMR should not be given to pregnant women.
- If MMR is administered, advise to avoid pregnancy for four weeks following immunisation.
- If it is only the first MMR received by the woman, a second MMR should be given at least one month after the first MMR.

Proactive immunisation for children ages 15 years and under

- Active invitation for children and young people aged up to and including 15 years of age, if they have not had two doses of MMR vaccine, ensuring two doses are administered (28 days apart if they have not received a previous dose).

Immunisation for patients over 15 years of age

- Where the opportunity arises, invitation for people aged from 16 to those born after 1 January 1969 if they have not had two doses of MMR vaccine, ensuring two doses are administered (28 days apart if they have not received a previous dose). This will most likely be when patients in this age group visit or call for a separate reason.

When the vaccine should not be given

- MMR should not be given to pregnant woman at any stage of pregnancy.
- MMR should not be given to immune compromised people.

Immunisation for Parents

- Mothers of children aged under 15 months are presumed to have been screened for rubella during pregnancy. However, even if this was positive, it cannot be taken as a proxy for immunity (including immunisation) to measles. If the woman does not have documented history of measles vaccination, they should be offered MMR.
• Parents born after 1 January 1969, who have children under 15 months should be proactively targeted to ensure they are fully immunised with two doses of MMR to protect their child.

Proactive immunisation for your staff
• All staff born after 1 January 1969, who have not had two doses of MMR, or who are unsure of their immunisation status, should be offered two doses of MMR vaccine 28 days apart.

Immunisation Schedule
It is important to note that MMR was added to the national Immunisation Schedule for infants aged 15 months from 1990, and from 1992 a second dose was introduced for 11 year old boys and girls.

INFECTION CONTROL

Infection control and contact management associated with waiting rooms
It is best to avoid anyone with measles being in common areas. It is suggested that your receptionist or automated phone system includes a message similar to the following:

‘If you are calling because you or someone else close to you may have measles, it is important you don’t spread it to anyone else in our waiting room. Please do not attend the doctor’s surgery until you have spoken to one of our staff and made arrangements to avoid the waiting room.’

For waiting rooms: where possible, measles cases should be isolated prior to entry to your practise. If a case of measles was in a waiting room you will need to work with ARPHS to identify those who are non-immune or are vulnerable contacts, and were in the common area from 15 minutes before the appointment to one hour after and disseminate advice to these people. Patients for whom vulnerability and immune status is unknown should also receive the advice. ARPHS has developed fact sheets for people who have been in contact with someone with measles, which are available from the ARPHS website: [http://www.arphs.govt.nz/health-information/communicable-disease/measles](http://www.arphs.govt.nz/health-information/communicable-disease/measles)

High quality practice infection control measures should be used when dealing with suspect measles cases. This needs to include adequate social distancing wherever possible and good hand hygiene. It does not necessarily mean utilising masks, gowns or gloves unless there is uncertainty around the measles immune status of the health professional performing the assessment.

Poster Messaging (for the front door/outside the surgery):

‘If you think you have measles, call [INSERT SURGERY PHONE NUMBER] before entering the surgery or waiting area. Measles is highly infectious. To help protect the young or immune suppressed people, we ask that you call before entering the common area.’
CLAIMING THE IMMUNISATION BENEFIT SUBSIDY FOR MMR

The immunisation benefit can be claimed electronically in the usual way for everyone born on or after 1 January 1969 who is not fully vaccinated according to the immunisation schedule.

- **There are four MMR options** in MedTech – MMR1, MMR2, MMR(adult), MMR(misc).
- **For children over 15 months of age, teenagers and adults receiving their first dose**, use the indicator of 15m (MMR1).
- **For children, teenagers and adults receiving their second dose**, which can be given at any time from one month after the first dose, use the indicator of 4y (MMR2).

IMPORTANT REFERENCES

- For more information on immunisation, including quick answers to common MMR questions contact the Immunisation Advisory Centre: **0800 IMMUNE (0800 466 863)** or [www.immune.org.nz](http://www.immune.org.nz)
- Healthline: **0800 611 116**
- Healthpoint: [www.healthpoint.co.nz](http://www.healthpoint.co.nz)