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IS1200 Measles

EFFECTIVE DATE: February 2012
REVISED DATE: December 2012
December 2014, March 2019
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1.0 PURPOSE

To prevent transmission of measles to patients and staff.
To provide guidance to healthcare workers on how to report a case of measles.

2.0 DEFINITIONS

Measles (rubeola) is caused by a virus and is one of the most contagious of all infectious diseases, with >90% attack rates among susceptible close contacts. Initial symptoms include 2-4 days of fever, cough, runny nose and red inflamed eyes (prodromal period) followed by a maculopapular rash, appearing on the 3rd to 7th day. The rash begins on the face, then becomes generalized, lasts 4 – 7 days, and sometimes ends in brawny desquamation. Koplik spots may appear on the inside of the mouth.

Complications include ear infections, pneumonia and encephalitis in 10% of reported cases and are most common in infants < 12 months of age. Measles during pregnancy results in a higher risk of premature labor, spontaneous abortion and low birth weight infants.

In BC most clusters and outbreaks of measles occur in association with imported cases. BC has experienced two larger outbreaks (2010 and 2014) in recent years, typically lasting not more than two to three months.

Healthcare worker (HCW) contact identification – HCWs include students, physicians, facility employees, emergency responders and others who were in a shared airspace with the case or for up to 2 hours after the case left the room/space. All of these individuals should be assessed with respect to their exposure.

2.1 Mode of transmission

- Airborne by aerosol and droplet spread, direct contact with nasal or throat secretions of infected persons
- Less commonly spread by articles freshly soiled with nose and throat secretions

2.2 Incubation period

- Average is 8 – 12 days with a range of 7 – 18 days, rarely may be as long as 21 days

2.3 Period of communicability

- From 1 – 2 days before the beginning of the prodromal period (usually about 5 days before rash onset) to 5 days after rash appearance in a healthy person and for the duration of measles illness in an immunocompromised person

- 2.4 Diagnostic testing** - all specimens are sent to BCCDC for testing
- Virus detection in nasopharyngeal swab and urine
 - Serology testing for measles specific IgM and IgG class antibodies

3.0 GUIDING PRINCIPLES

- 3.1** Immune persons include the following:
- Birth date before January 1, 1970 (1957 for HCW s – these persons are assumed to have acquired immunity to measles from natural infection. Those without a history of measles disease should be considered susceptible and offered vaccine.
 - Documented evidence of vaccination with 2 valid doses of live measles-containing vaccine after their 1st birthday and given at least one month apart.
 - Laboratory evidence of immunity
 - Laboratory evidence of prior measles infection
- 3.2** A baseline assessment of all healthcare workers immunity and vaccination status against measles needs to be done by WH&S.
- 3.3** An N95 respirator must be worn by all HCWs entering the room of a patient with measles regardless of immune status when Airborne Precautions are in place with [visible signage](#)

4.0 PROCEDURE

- 4.1 Additional Precautions**
- Confirmed or suspect cases must be placed on Airborne Precautions – do not await laboratory confirmation of the case
- 4.2 Discontinuing Precautions**
- Precautions may be discontinued 5 days after the onset of the rash in healthy individuals
 - Precautions must remain in place for the duration of the illness in immunocompromised patients
- 4.3 Reporting**
- Investigate all clinically identified and laboratory reports of measles within 24 hours and immediately notify the CD Unit (1-866-778-7736) Monday to Friday 0830-1630 or the Medical Health Officer On-Call (1-866-457-5648) after hours
 - Report case to Infection Control who will complete the [Communicable Disease Notification Tool](#)
- 4.4 Management of Susceptible Exposed Patients**
- Follow up exposed inpatients born after 1970 to ensure they have been immunized; all other patients to be monitored for signs and symptoms of measles
 - CD Unit to follow up with any patient contacts who have been discharged
- 4.5 Management of Susceptible Exposed Healthcare Worker**
- Consider excluding HCW from any work in the health care setting from 5 days after the first exposure to 21 days after the last exposure regardless of whether the HCW received measles vaccine or immune globulin after the exposure
 - Follow up provided by MHO and/or W H&S – See [BCCDC Communicable Disease Control- Management of Measles](#)

4.6 Exclusion of Healthcare Worker Case of Measles

- Healthcare workers who are diagnosed with measles should be excluded from work for at least four days after the onset of a rash
- Follow up provided by MHO and/or WH&S – See BCCDC [Communicable Disease Control- Management of Measles](#)

5.0 REFERENCE

- 1) BCCDC Communicable Disease Control –Management of Measles September 2014.
<http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/MeaslesSeptember2014.pdf> Accessed October 2019