

	<b>POLICIES &amp; PROCEDURES</b> Number: <b>40-100</b> Title: <b>Measles (<i>Rubeola</i>)</b>
<b>Authorization:</b> [ 4 ] SHR Infection Prevention & Control Committee [ ] Facility Board of Directors	Source: <b>Infection Prevention &amp; Control</b> Date Initiated: May, 2007 Date Reaffirmed: Date Revised: Scope: SHR Agencies & Affiliates

**Introduction**

Measles is an acute viral disease characterized by fever, cough, coryza, conjunctivitis, an erythematous maculopapular rash, and pathognomonic Koplik spots. Sometimes the characteristic rash does not develop in immunocompromised patients.

Complications such as otitis media, bronchopneumonia occur in about 10% of reported cases, even more commonly in those who are poorly nourished and chronically ill, and in infants < 1 year of age. Measles encephalitis occurs in approximately 1 of every 1,000 reported cases and may result in permanent brain damage.

Measles is transmitted by direct contact with nasal and throat secretions or, less commonly, by airborne spread and articles freshly soiled with nose and throat secretions. Measles is extremely contagious.

The incubation period generally is 8 to 12 days from exposure to onset of symptoms.

**Confirmed Case** – Laboratory confirmation of infection in the absence of recent immunization with measles-containing vaccine:

- isolation of measles virus from an appropriate clinical specimen or
- significant rise in measles specific antibody titre between acute and convalescent sera or
- positive serologic test for measles IgM antibody using a recommended assay. If the clinical and epidemiologic presentations are inconsistent with a diagnosis of measles, IgM results must be confirmed by additional testing or
- clinical illness in a person who is epidemiologically linked to a laboratory confirmed case.

**Clinical Illness** is characterized by all of the following features:

- fever 38.3°C or greater
- cough, coryza, or conjunctivitis
- generalized maculopapular rash for at least 3 days.

**Measles immune individual:** Any person with one of the following:

- a positive serologic test for measles antibody, IgG
- documented receipt of 2 doses of live-virus measles vaccine, the first of which is given on or after the first birthday
- born before 1970 (assumed to have acquired natural immunity to measles)
- physician-diagnosed measles

### **Policy**

1. Place patients on Standard and **Airborne Precautions**, for 4 days after the onset of the rash in otherwise healthy patients and for the duration of illness in immune compromised patients.
2. **Airborne Precautions** should be taken with neonates born to mothers with measles infection at delivery.
3. Only immune health care workers and visitors should enter the room.
4. Report to Public Health.
5. Adults born in 1970 or later who have not had a measles vaccine or have not had natural measles infection should receive a dose of MMR (measles, mumps, and rubella vaccine, live, attenuated). A second dose of MMR should be offered only to adults born in 1970 or later who are at greatest risk of exposure. These people include: travelers to measles endemic area, health care workers, military recruits, and students at post-secondary institutions.

### **Purpose**

1. To reduce the mortality and morbidity associated with measles.
2. To prevent the spread of measles.

### **Procedure**

1. Personal Protective Equipment
  - Immune health care workers and visitors do not require masks.
  - Health care workers and visitors who are susceptible but who absolutely must enter the room of a patient for whom Airborne Precautions are in place for suspected or confirmed measles wear N95 high particulate filtration masks.
2. Post-exposure management following patient exposure to a confirmed or clinical case of measles.
  - Confirm the diagnosis.
  - Consult Infection Prevention and Control.
  - Identify patients and health care workers who have been exposed and are susceptible to measles, consult Infectious Diseases, so immunoprophylaxis can be started. Susceptible individuals > 12 months of age who are exposed to measles may be protected from disease if measles vaccine is given within 72 hours of the exposure. Immune Globulin (IG) can be given to prevent or modify measles in a susceptible person within 6 days of exposure and may be used for this purpose in infants < 12 months of age, people for whom vaccine is contraindicated, or those for whom more than 72 hours but less than 1 week have elapsed since exposure.
  - Discharge all exposed susceptible patients as soon as possible, if discharge is not possible, place susceptible non-immunized patients on Airborne Precautions from days 5 through days 21 post exposure.

Number: 40-100  
Title: Measles (*Rubeloa*)

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2. American Academy of Pediatrics. (2003) Red Book: Report of the committee on infectious diseases. (26<sup>th</sup> ed.). Elk Grove Village, IL: Author.
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4. Health Canada, *Infection Control Guidelines. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Health Care.* CCDR 1999; 25S4.
5. Public Health Agency of Canada, (2006) *Canadian Immunization Guide*, (7<sup>th</sup> ed.).