



## **MEASLES/RUBEOLA**

### **Cause/Epidemiology**

The measles virus is a member of the Morbillivirus of the family Paramyxoviridae.

The disease is usually more severe in infants, malnourished children, and adults. Deaths occur mainly in children under 5 years old.

Measles is a vaccine-preventable disease. With effective childhood immunization programs, measles cases have dropped 99% and occur in persons too young to be immunized or in older age groups.

### **Clinical Presentation**

Measles is an acute, highly communicable viral infection with fever, cough, coryza, conjunctivitis, Koplik spots and a characteristic red, blotchy rash beginning on the face and becoming more generalized. The rash lasts 4 to 7 days.

Complications include

- Otitis media
- Bronchopneumonia
- Laryngotracheobronchitis (croup)
- Diarrhea in young children
- Acute encephalitis, which often results in brain damage, occurs in approximately 1 out of every 1,000 cases

### **Transmission**

Spread by airborne transmission, or direct contact with nasal or throat secretions of infected persons. All persons who have not had the disease or who have not been successfully immunized are susceptible. Acquired immunity after the illness is permanent.

Susceptible contacts are

- Persons born in 1970 or later who have not received at least one dose of live measles vaccine after 12 months of age and do not have serological evidence of immunity
- Persons born in 1985 or later who have not received 2 doses of measles-containing vaccine and do not have serological evidence of immunity



## **Incubation Period**

The incubation period is approximately 10 days, varying from 7 to 18 days from initial exposure to onset of symptoms.

Measles is communicable from 5 days before onset of rash (1-2 days before onset of initial symptoms) until 4 days after onset of rash (longer in immunocompromised persons).

## **Infection Prevention and Control Practices**

Implement Airborne Precautions immediately for a resident with Measles/Rubeola. Refer to the Management of Communicable Diseases in Personal Care Homes Table for specific disease/microorganisms information. Refer to Airborne Precautions in the Additional Precautions section 5.

Implement Airborne Precautions for a resident who is a susceptible contact to Measles. Refer to the Management of Communicable Diseases in Personal Care Homes Table for specific microorganism information. Refer to Airborne Precautions in the Additional Precautions section 5.

## **Occupational Health**

### **Definition of Occupational Exposure**

A susceptible healthcare worker who has been in an enclosed airspace or had face-to-face contact with an infectious person during the period of communicability (5 days before to 4 days after the onset of rash). Exposure can also occur through indirect contact.

### **A Healthcare Worker Exposed to Measles/Rubeola**

- Healthcare workers immune status shall be determined
- Consider immune if
  - Born before 1970, or
  - Born in or after 1970 with evidence of two doses of live measles-containing vaccine, or
  - Physician diagnosed measles, or
  - Documentation of measles immune titre
- Exposed, susceptible healthcare workers shall contact Occupational Health/designate for clinical management
- Immunization within 72 hours of exposure may prevent measles
- Exclude exposed susceptible healthcare workers from day 5 of first exposure until day 21 after last exposure



- Do not exclude healthcare workers from work with a history of a single dose of measles vaccine if a second dose is given within 72 hours of exposure

#### A Healthcare Worker Symptomatic or Infected with Measles/Rubeola

- Physician confirmed diagnosis
- Inform Infection Prevention & Control immediately if suspected or confirmed measles
- Healthcare workers shall be referred to Occupational Health/designate for clinical management
- Healthcare workers shall be excluded from work until 4 days after the rash first appears