

## For Staff /Patient Education



# Measles (Rubeola)

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### What is it?

- Measles is caused by a single-stranded, enveloped RNA virus with 1 serotype. It is classified as a member of the genus Morbillivirus in the Paramyxoviridae family.
- Measles is one of the most contagious of all infectious diseases; approximately 9 out of 10 susceptible persons with close contact to a measles patient will develop measles.
- People at high risk for severe illness and complications from measles include: Infants and children aged <5 years, Adults aged >20 years, Pregnant women, People with compromised immune systems, such as from leukemia and HIV infection
- **Signs and Symptoms:** Fever; cough; runny nose; sorethroat; red, watery eyes (conjunctivitis), feeling run down, achy (malaise), tiny white spots with bluish-white centers found inside the mouth (Koplik's spots; 2 or 3 days after symptoms begin); a red or reddish-brown rash appears 3-5days after the start of symptoms usually begins on a person's face at the hairline and spreads downward to the neck, trunk, arms, legs, and feet. When the rash appears, a person's fever may spike to more than 104°F.

### How is it spread?

- The virus is transmitted by direct contact with infectious droplets or by airborne spread when an infected person breathes, coughs, or sneezes.
- Measles virus can remain infectious on surfaces and in the air for up to two hours after an infected person leaves an area.

### Where is it found?

- Humans are the only natural hosts of measles virus and is not spread by any other animal species.

### Prevention & Control:

- **ISOLATION:** Infected people should be isolated for four days after they develop a rash
- Healthcare providers should follow respiratory etiquette and **airborne precautions**. Regardless of presumptive immunity status, all healthcare staff entering the room should use an N95 respirator or a respirator with similar effectiveness
- **VACCINATION:** One dose of MMR vaccine is approximately 93% effective at preventing measles; two doses are approximately 97% effective. Almost everyone who does not respond to the measles component of the first dose of MMR vaccine at age 12 months or older will respond to the second dose. Therefore, the second dose of MMR is administered to address primary vaccine failure
- People exposed to measles who cannot readily show that they have evidence of immunity against measles should be offered post-exposure prophylaxis (PEP) or be excluded from the setting (school, hospital, childcare). MMR vaccine, if administered within 72 hours of initial measles exposure, or immunoglobulin (IG), if administered within six days of exposure, may provide some protection or modify the clinical course of disease.
- If a healthcare provider without evidence of immunity is exposed to measles, MMR vaccine should be given within 72 hours, or IG should be given within 6 days when available. Exclude healthcare personnel without evidence of immunity from duty from day 5 after first exposure to day 21 after last exposure, regardless of post-exposure vaccine.



#### For more information contact:

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