Measles
(Rubeola)

What is Measles?
Measles, also known as Rubeola, is a highly contagious respiratory infection caused by a virus. Measles can lead to permanent disability and even death of infants. According to the Centers for Disease Control and Prevention (CDC), “Measles is the most deadly of all childhood rash/fever illnesses.”

- The disease primarily affects children less than one year of age, including unborn babies.
- Two out of every 1,000 children who are infected with measles will die from the disease.
- Vaccination is the most effective method to prevent measles.

What are its symptoms?
Once infected with the measles virus, symptoms typically begin 7 to 14 days later. Some common early symptoms include:

- a runny or stuffy nose,
- cough,
- sore throat,
- a mild fever (99 to 101°F),
- red and watery eyes, and
- feeling tired and fatigued.

About three days after these signs begin, small white spots with bluish centers, also known as Koplik’s spots, will appear inside the mouth.

A blotchy, reddish-brown rash will appear on a person’s face and neck and spread downward to their abdomen, arms, and legs three to five days following the early symptoms. During this time, a person’s fever may spike to over 104°F. In most cases, the fever and rash will subside after a few days; however complications may arise, placing young children at risk of more serious health conditions.

How does it spread?
Measles is highly contagious and can be spread from person to person up to 4 days before the onset of symptoms. Measles is spread when germs of an infected person are aerosolized when they cough or sneeze. These germs float through the air, contaminating surfaces and infecting others. If you are not vaccinated against measles and come in contact with someone who is infected, you have a 90% chance of acquiring the disease.

What are some complications associated with it?
Typically, measles itself is manageable, but it can become dangerous when complications arise. Some examples of complications associated with measles include:
Pneumonia:
- 1 out of every 20 children with measles get pneumonia. Pneumonia is the most common cause of death of children with measles.

Ear Infections:
- 1 out of every 10 children with measles will have ear infections. This can increase the likelihood of permanent hearing loss.

Diarrhea:
- 1 out of every 10 children with measles have diarrhea, leading to dehydration.

Brain Inflammation:
- 1 out of every 1,000 children with measles will develop inflammation of the brain that can lead to seizures, mental retardation, and deafness.

Pregnancy Complications:
- Women who are pregnant who have the measles can have a miscarriage, premature birth, or a low-birth-weight baby.

**How do I treat it?**

Measles is a virus, so it needs to run its course; there is no specific cure. Antibiotics are ineffective at treating this disease. If you suspect you or your child has the measles, contact your doctor immediately. The best way to avoid risks associated with measles is to prevent it.

**How do I prevent it?**

Measles is a vaccine-preventable disease. The Measles, Mumps, Rubella (MMR) vaccine is part of the recommended childhood immunizations and is 99% effective at preventing measles. Children can be given their first dose of the MMR vaccine between 12 and 15 months of age. The second dose will be administered between 4 to 6 years of age.

Adults born after 1957 are advised to receive a MMR vaccine booster, especially if they are working in a healthcare setting, attending college, travelling internationally, caring for young children, or living in an area where an outbreak is occurring. Women who are pregnant should wait to get the vaccine or avoid becoming pregnant for at least 4 weeks after receiving a MMR vaccine booster.

During a measles epidemic, unimmunized individuals should not attend school, work, or public gatherings due to their increased likelihood of acquiring this severe illness.