



Understanding Measles: Symptoms, Causes and Prevention



Measles, also known as rubeola, is a viral infection primarily affecting mostly children. Though once prevalent, measles can now be effectively prevented through vaccination.

This highly contagious disease poses significant risks, particularly for young children, with potential for severe and even fatal complications. While global mortality rates have declined with increased vaccine coverage, measles still claims over 200,000 lives annually, predominantly among children.

Measles manifests as a distinctive red, blotchy rash typically emerging initially on the face and behind the ears. Subsequently, it extends downward to the chest and back before reaching the feet.

Who is vulnerable?

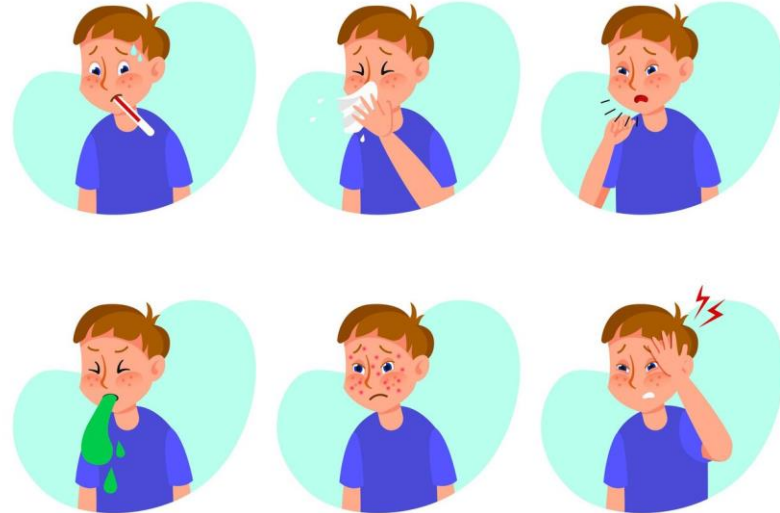
Complications tend to occur frequently in children under 5 years old and adults over 30. Those at higher risk include malnourished children, particularly those deficient in vitamin A, or those with weakened immune systems due to conditions like HIV. Measles infection itself can compromise the immune system, potentially leading to a loss of immune memory and leaving children highly susceptible to infections.



Signs and symptoms

Symptoms resembling a cold: The initial signs of measles include:

- 1.High Fever
- 2.Dry cough
- 3.Runny nose
- 4.Sore throat
- 5.Inflamed eyes (conjunctivitis)
- 6.Several days later, Koplik's spots might emerge: Small white spots with bluish-white centers on a red background, typically found inside the mouth on the inner lining of the cheek. Typically, these spots persist for a few days before subsiding.
- 7.Skin rash: Several days following the onset of cold-like symptoms, a rash typically manifests. It begins on the face and behind the ears before gradually extending to other parts of the body. The measles rash spots may occasionally become elevated and merge, forming blotchy patches. They typically do not cause itching.



Transmission of Measles

Measles, a profoundly contagious virus, resides in the mucus of the nose and throat of an infected individual. It spreads through coughing and sneezing. When others inhale the contaminated air or touch infected surfaces and subsequently their eyes, noses, or mouths, they can contract the virus. Remember to frequently cleanse your hands with soap and warm water. Utilize tissues when coughing or sneezing, and dispose of them in the bin afterwards.



Measles can be prevented by vaccination

The measles, mumps, and rubella (MMR) vaccine is a live vaccine that acts as an active immunization to safeguard against measles, mumps, and rubella. Its mechanism involves prompting the body to generate its own defense system (antibodies) against these viruses.

The measles vaccine is highly effective. Two doses of the vaccine offer approximately 97% protection against measles in case of exposure to the virus, while a single dose provides around 93% effectiveness.



However, a small proportion—about three out of 100 individuals—who receive two doses of the measles vaccine may still contract the illness if exposed to the virus. The reason behind this phenomenon remains uncertain, although it could be due to insufficient response from their immune systems to the vaccine.

Nonetheless, there is positive news: fully vaccinated individuals who do contract measles typically experience a milder form of the illness. Additionally, fully vaccinated individuals appear to have reduced potential for transmitting the disease to others, including those who are unable to receive vaccination due to age or weakened immune systems.

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Sources: <https://www.cdc.gov/measles/symptoms/signs-symptoms.html>

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