

EMS PROVIDER GUIDANCE FOR SUSPECTED MEASLES PATIENTS

Measles Epidemiology

Measles can be severe and is highly contagious. 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 active and contagious for up to 2 hours in the air or on surfaces. The time from exposure to the onset of a rash averages 14 days. Persons with measles are infectious from 4 days before the onset of symptoms to 4 days after rash onset.

Clinical Features

Symptoms of measles include a prodrome of:

- Fever (101-105 degrees F)
- Runny Nose
- Cough
- Red, watery eyes
- Koplik Spots - blue-white spots on the bright red background of the buccal mucosa may be present, often before the rash develops, but are often not seen and are not required for the diagnosis of measles

A red, blotchy rash presents 3-7 days later and lasts 4-7 days. It usually starts on the face and proceeds down the body to involve the extremities last and may include the palms and soles. The rash resolves in the same order that it appeared.

Infection Control

Providers should remain vigilant for persons presenting with febrile and rash illness particularly among people who reside in or have spent time in geographic areas experiencing measles outbreaks, have recently traveled internationally, or who were exposed to a person with febrile rash illness.

- Measles is spread via airborne transmission and direct contact with infectious droplets.
- EMS providers should take respiratory precautions using an N95 respirator mask.
- Patients presenting with febrile rash illness should immediately be placed in a surgical mask and, when transporting a patient through the hospital, the patient should remain masked.
- The ambulance used to transport a patient with suspected measles infection should not be used for a period of 2 hours after the patient exits the vehicle and the number of people entering and leaving the vehicle should be minimized.

Personal Protective Equipment

EMS providers are required to follow their local infectious disease emergency response plan. The following PPE is recommended for use by EMS when treating a patient with suspected measles infection:

- Disposable exam gloves
- Goggles or face shield
- Disposable NIOSH-approved, fit-tested N95 respirator or PAPR.
- Disposable fluid-resistant gown that extends to at least mid-calf or disposable fluid-resistant coveralls.

Patient Care Considerations

Anyone with measles can have serious complications but those under 5 years old and those older than 20 are at greatest risk, along with pregnant women, and any immunocompromised individuals. Complications may include: ear infections; diarrhea; pneumonia; encephalitis; deafness or cognitive disability.

- Provide a surgical mask (N95 is not recommended) for all patients with febrile rash illness.

- Provide tissues to patients for secretion control and encourage patient hand hygiene and cough etiquette practices.
- The performance of aerosol generating procedures, such as endotracheal intubation and open suctioning of the respiratory tract should be avoided unless medically indicated.
- Patients who are intubated should be ventilated with a bag-valve device or ventilator equipped with a HEPA filter on exhalation port.

Transport Considerations

- Standard transportation to appropriate hospital receiving facility.
- It is recommended to have the patient compartment exhaust vent on high and isolating the driver compartment from the patient compartment. It is also recommended to have the driver compartment ventilation fan set to high without recirculation.
- When providing hospital pre-notification, please indicate if any family or supports are accompanying the patient, as they too may need to be isolated and follow agency plan.

Hospital Notification

EMS personnel must notify the receiving hospital before arrival if they are transporting a patient with febrile and rash illness, with or without a rash, to their facility.

Decontamination Considerations

Follow agency decontamination procedures after transfer of patient.

DOH Bureau of EMS Notification

Complete the Measles Contact Form for any suspected measles related ambulance transport and fax to NYS DOH EMS at (518)402-0985