



**NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE**

Ashwin Vasani, MD, PhD
Commissioner

January 8, 2024

- Providers should be vigilant for possible cases of measles. Large outbreaks have occurred globally and there have been increased importations into the United States, including a December 2023 case in New York City from a tourist visiting the city.
- To identify suspected cases of measles and prevent exposures, screen for rash with fever at the point of entry of a healthcare facility and inquire about recent international travel or known exposure to measles.
- Measles is one of the most contagious infections and individuals remain contagious through the fourth day after rash onset.
- Immediately institute airborne precautions for patients with suspected measles to prevent healthcare-associated exposures.
- Report patients with suspected measles immediately to the NYC Health Department; do not wait for lab confirmation.
- Collect specimens on patients with suspected measles for testing at the NYC Health Department's Public Health Laboratory.

Transmission and Infection Control

Measles is transmitted by airborne particles, droplets, and direct contact with the respiratory secretions of an infected person. Measles virus can remain airborne for up to two hours after a person leaves the room. A brief delay in airborne isolation of the recent case in New York City led to a large number of exposed patients requiring extensive follow-up. Infected individuals are contagious four days before rash onset through the fourth day after rash appearance. People without documentation of measles-containing vaccine are at highest risk for infection following exposure. Screen for rash with fever at the point of entry of a healthcare facility and inquire about international travel or a known exposure to a person with measles. Patients with suspected measles should immediately be placed in negative pressure rooms for airborne precautions while being evaluated. If a negative pressure room is not available, place the patient in an exam room, have the patient wear a mask, and do not use that room for 2 hours after the patient has left.

Clinical Presentation

Measles typically presents in adults and children as an acute viral illness characterized by fever and generalized maculopapular rash. The prodrome may include cough, coryza, and conjunctivitis. Koplik's spots (punctate blue-white spots on the buccal mucosa) are occasionally seen. The rash usually starts on the face, proceeds down the body, may include the palms and soles, and appears discrete but may become confluent. Complications may include diarrhea, otitis media, pneumonia, hepatitis, encephalitis, miscarriage, premature birth in pregnancy, and death.

Reporting

Report persons with suspected measles immediately to the NYC Department of Health and Mental Hygiene (NYC Health Department) at 866-692-3641 at time of initial clinical suspicion. Do not wait for laboratory confirmation to report. If you are considering the diagnosis of measles and are ordering diagnostic testing, then you should report the individual at that time.

Laboratory Testing

Collect a nasopharyngeal or throat swab for measles PCR and blood for measles IgM and IgG. When you call the NYC Health Department to report the patient suspected to have measles, we will arrange pick-up and transport of the specimens to the NYC Public Health Laboratory. Measles IgM results from blood specimens collected within the first 72 hours after rash onset may be falsely negative and may need to be repeated before excluding the diagnosis, highlighting the importance of PCR. Collect blood in serum separator tubes (red, red-speckled, or gold-top tops), and if possible, centrifuge and separate. Swabs should be synthetic (non-cotton) in liquid, viral transport media. Refrigerate specimens after collection.

Additional guidance regarding treatment, post-exposure prophylaxis, and international travel vaccination recommendations for individuals ages 6 months and older can be found [here](#). Resources for screening and isolation guidance can be found [here](#).