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MEASLES GUIDANCE

Indiana has recently reported its first laboratory-confirmed measles. It is an opportune time to review the characteristics of the measles virus and familiarize yourself with the precautions needed when transporting a known or suspected case.

Transmission

- The measles virus spreads easily through contact with respiratory droplets and airborne spread.
- It can remain for up to two (2) hours after an infectious person leaves the area.
- It is highly infectious, up to 90% of susceptible people having contact with the virus will develop measles.
- Patients are contagious four (4) days before developing symptoms and until four (4) days after the rash onset.

Symptoms

- Measles typically begins with the prodromal symptoms of fever, cough/coryza/conjunctivitis (the three C's). Coryza is mucous membrane inflammation-runny nose/sinus congestion, typically appearing 11-12 days after exposure (range is seven-21 days).
- Small white or gray spots in the inner surface of the cheeks and lips (Koplik's spots) may develop two to three days after symptom onset.
- Three to five days after the prodromal symptoms begin, patients develop a rash that usually begins on the face near the hairline and spreads down across the entire body. It typically lasts for five to six days before fading in the order it appeared.
- The patient's fever may spike to >104 degrees at the time the rash appears. This may be a time when a previously unrecognized case may seek medical attention.

All individuals exposed to measles should monitor for signs and symptoms for 21 days after the last exposure. Treatment is supportive care. Individuals who are not immune should receive the MMR vaccine within 72 hours of exposure.

While known measles cases should initiate the following protocol, defining suspected cases is more challenging. A general guideline is:

Meets the clinical case definition for measles: generalized rash, fever greater than 101, and cough/coryza/conjunctivitis **AND** at least one of the following is true within the last 21 days:

- Unvaccinated
- Known exposure to measles

- Traveled to an area with known measles cases
- Had contact with a patient with the above symptoms unexplained by other medical diagnoses, particularly if they have traveled to an area with known measles.

Of note, if verification of full vaccination is viable, this decreases the clinical likelihood of measles dramatically.

Infection Control

The first step in prevention is insuring that your providers are adequately vaccinated against the measles virus. This requires proof of two MMR vaccines or a titer demonstrating immunity (if born before 1957, may also show immunity by history of natural infection).

EMS providers should wear standard contact and respiratory precautions when transporting a known or suspected measles case. This includes:

- N95 mask
- Gloves
- Disposable gown
- Eye protection

Care should be taken during transport to isolate the driver's compartment from the patient compartment when possible.

The receiving facility, if not previously aware, should be notified immediately so they may take the proper precautions. The local health department should be notified as well.

After transport, the unit should be decontaminated per your agency's protocols. EPA-registered disinfectants should be used on all body fluid-contaminated surfaces. The passenger compartment and driver's compartment should be 'aired out' for two (2) hours post-transport as well. This should occur in an open area, not in an ambulance bay or other indoor setting.

This guidance is intended to facilitate EMS organizations and their medical doctors to develop standard operating procedures and medical protocols in response to measles transports and exposure incidents. Please do not hesitate to reach out at any time with any questions or concerns.

Additional information about measles is available on the Indiana Department of health website:

<https://www.in.gov/health/idepd/diseases-and-conditions-resource-page/measles/>.

Respectfully,



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