



UTSW/Parkland BioTel EMS ALERT

February 25, 2019

EMS ALERT 19-001 Measles

Purpose:

To advise BioTel EMS Providers about measles cases in North Central, Central and Southeast Texas.

Background:

- Measles (rubeola) is a highly contagious, febrile, viral illness that can be serious and even fatal.
- Infants, young children, older adults, pregnant women and those with compromised immune systems are at high risk for severe illness and complications
- As of February 2019, Texas DSHS has confirmed a total of 8 measles cases: 4 in Harris County and 1 case each in Bell, Galveston, Montgomery and Denton Counties. Large outbreaks have been identified by the CDC in Washington State, New York State and New York City. These outbreaks have been confirmed or suspected to be associated with travelers returning with the virus back to unvaccinated groups and communities.

Measles transmission:

- Easily transmitted by both respiratory droplets and airborne spread, with 90% of unvaccinated or non-immune persons exposed in close contact contracting the disease
- Virus remains infectious in the air for up to 2 hours after an infected person leaves an area
- Incubation period: approximately 2 weeks (range 7-18 days) from exposure to rash onset
- Individuals are contagious from 4 days before rash onset to 4 days after appearance of rash
- Two doses of MMR vaccine are 97% protective against measles

What are the signs and symptoms of measles?

- "PRODROME" that lasts 2 to 4 days:
 - 1st symptom is typically FEVER (often up to 103 – 105°F or 39.4 – 40.5°C)
 - Then, "Three Cs": COUGH, CORYZA (congestion/nasal inflammation) and/or CONJUNCTIVITIS
- RASH:
 - Begins at the hairline, gradually spreading down and outward to the face, upper neck, extremities and trunk
 - Maculopapular (red spots & bumps), as shown here:



When should EMS Providers consider measles?

- Consider measles in patients presenting with the following symptoms, particularly those who have traveled abroad or who came into contact with known measles cases, **regardless of vaccination history**:
 - Fever (typically at least 101°F or 38.3°C) **AND**
 - Generalized maculopapular rash lasting at least 3 days **AND**
 - Cough, coryza (runny nose) and conjunctivitis (“3 Cs”)

What steps should EMS Providers take for suspected measles cases?

- Prior to contact or immediately upon recognition apply airborne isolation precautions (N95 mask or PAPR) and standard PPE, and place a surgical or non-rebreather mask (if tolerated) on the patient
- For aerosol producing procedures (e.g. airway management and suctioning or CPR), protection of eyes, nose and mouth, along with gown and gloves, is recommended
- All suspected cases of measles must be transported to an appropriate hospital E.D.
- Unless the patient is critically ill or in special circumstances, BioTel EMS Providers shall **contact BioTel prior to transport** for BOTH pre-notification AND receiving hospital destination decision making
- If the ambulance driver/patient compartments are not isolated, or if the pass-through window cannot be closed, the driver should also wear an N95 respirator during transport
- Notify your agency’s occupational health personnel or infection control officer, per SOP
- Disinfect any visibly soiled surface, potentially contaminated or high-touch surfaces or equipment with an EPA-registered hospital disinfectant

EMS Provider Immunity and Vaccination:

- All EMS personnel should have documented evidence of measles immunity on file with their agency
- Healthcare providers born in 1957 or later can be considered immune to measles, mumps, or rubella **ONLY** if they have documentation of:
 - a. laboratory confirmation of disease or immunity **OR**
 - b. appropriate vaccination with 2 doses of MMR vaccine

References (links accessed February 11th, 2019 & are subject to change):

- [DSHS Measles Health Alert/ Advisory - February 5, 2019](#)
- [Harris County Public Health Confirmed Cases](#)
- [Denton County Public Health Press Release - February 6, 2019](#)
- [Bell County Measles Health Alert/Advisory – February 6, 2019](#)
- [CDC Measles Home Page](#)
- [HHS-ASPR TRACIE EMS Infectious Disease Playbook](#) (pp. 5-27 – 5-32)
- [Healthcare Personnel Vaccination Recommendations](#)

Questions or concerns about measles or about this EMS Alert?
Please contact BioTel or send an email to BioTelDocs@utsouthwestern.edu