



Measles Health Advisory July 10, 2019

Situation Overview

The El Paso Department of Public Health and Texas Department of State Health Services (DSHS) are currently investigating two cases of reported measles in El Paso. As of July 10, 2019, there are 17 confirmed cases of measles reported from 12 different counties, including Montgomery, Harris, Galveston, Bell, Denton, and El Paso. Additional cases may occur. DSHS is recommending that providers consider a patient's symptoms, vaccination status, and travel history when including measles in their differential. Due to the highly communicable nature of this disease, we advise clinicians to follow the below recommendations.

Guidance for Health Care Professionals

Clinical illness:

- Fever $\geq 101^{\circ}\text{F}$ (38.3°C) **AND**
- Generalized maculopapular rash lasting >3 days **AND**
 - Rash begins at the hairline/scalp and progresses down the body
- Cough, runny nose, or conjunctivitis

Vaccination history considerations:

- Patients with a recent MMR vaccination (6-45 days) may show mild symptoms and will test positive by PCR, but is not a case and do not need control and prevention measures
- 1 dose of MMR is 93% effective
- 2 doses of MMR is 97% effective

Travel history within 21 days of onset of symptoms that increases level of suspicion:

- Domestic travel to an area experiencing an outbreak
- International travel to an area experiencing widespread measles transmission, e.g., The Philippines, Israel, Europe, etc.
 - Mexico has not had a non-imported case of measles in over 20 years
- Airport exposure where travelers from domestic or international flights congregate

If you suspect your patient has measles:

- In Texas, measles (suspected **or** confirmed) is required to be reported **immediately** to your local health department or your DSHS regional office (contact information for each county can be found at:



<https://www.dshs.texas.gov/idcu/investigation/conditions/contacts/>). It is preferred that contact be made while the patient is present in the clinical setting in order to facilitate testing and initiate the public health investigation, including follow-up of potential exposures.

Infection Control Precautions

- Measles is highly contagious and is transmitted primarily from person to person by respiratory droplets and airborne spread. The incubation period is about 2 weeks (range of 7 - 21 days) from exposure to onset of illness. Persons are contagious from 4 days before onset of rash to 4 days after appearance of rash.
- In the urgent/emergency healthcare settings, suspected cases should be masked with a surgical mask and triaged quickly from waiting areas into a room with a closed door, with airborne isolation precautions recommended. In other outpatient settings, suspected cases should be scheduled at the end of the day, if feasible. Healthcare workers caring for patients suspected of having measles should use airborne infection control precautions. (www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html)
- Persons with measles commonly present in physician's offices or emergency rooms and pose a risk of transmission in these settings. All healthcare personnel should have documented evidence of measles immunity on file at their work location (www.immunize.org/catg.d/p2017.pdf). Healthcare facilities are reminded to review the immune status of all employees.

Diagnostic Testing

- Testing for measles should be done in patients meeting clinical case definition: (1) a generalized rash lasting >3 days, AND (2) fever >101°F (38.3°C), AND (3) cough, coryza, or conjunctivitis.
 - Testing should also be considered in persons who have been exposed or travelled to an area where measles is endemic and who have a rash-fever illness.
- A blood specimen for serology (IgM and IgG) AND a throat swab for PCR should be collected at the first contact with a suspected measles case. Currently PCR is only available through public health laboratories. The local health department or DSHS regional office can help coordinate PCR testing.



Control and Prevention Measures

- Control measures are more effective when implemented as early as possible.
 - Measles vaccination may prevent disease if given within 72 hours of exposure to susceptible persons (i.e., those who may have potentially been exposed and have not been fully vaccinated with 2 measles vaccines) who are 6 months of age or older. Measles vaccination following exposure may also provide some long-term protection, but generally should be followed with a second vaccination, at least 28 days later, for the best protection. Any children vaccinated prior to their first birthday will require two additional doses of MMR vaccine, once when they are 12 to 15 months of age and again when they are 4 to 6 years of age, in order to be fully immunized against measles.
 - Immune globulin (IG) may be indicated for some persons, especially infants under the age of one year, pregnant women without evidence of immunity, and severely immunocompromised individuals, if within 6 days of measles exposure. Intravenous IG (IGIV) is recommended for susceptible pregnant women and severely immunocompromised individuals who have had a measles exposure within the last 6 days. Intramuscular IG (IGIM) is recommended for infants under the age of one year who are within 6 days of exposure. IGIM can be obtained by healthcare providers from the manufacturer. It can also be obtained through your local health department or by contacting your regional DSHS office.
- Contraindications to measles vaccination include previous anaphylactic reaction to a vaccine component and severe immunosuppression. Measles vaccination is also contraindicated during pregnancy and pregnancy should be avoided for at least a month following vaccination. Close contact with a pregnant woman is NOT a contraindication for measles vaccination. Breastfeeding is NOT a contraindication to either the woman or the breastfeeding child.
- Measles is best prevented by keeping patients up-to-date on their routine immunizations, including MMR. ACIP and CDC recommend two doses of MMR vaccine routinely for children, starting with the first dose at age 12 through 15 months and the second dose at age 4 through 6 years before school entry. Children can receive the second dose earlier as long as it is at least 28 days after the first dose. Find printable versions in various formats and recommendations for all ages at <http://www.cdc.gov/vaccines/schedules/>.



Exclusionary Criteria

In those with measles, rash onset typically occurs between the 3rd and 7th day of illness. Persons should be excluded from school/work and other group settings until after the fourth day of rash onset. During an outbreak, susceptible persons (i.e., those without documented immunization or previous measles infection) should be isolated from those who have measles to prevent further propagation of the disease. In schools or other group settings, children who have not been immunized should be excluded from the setting for at least 21 days after the last date the unimmunized child was exposed and observed for signs and symptoms. Additional information on exclusion and readmission can be found at http://www.dshs.texas.gov/DCU/health/schools_childcare/SchoolHealth/.

If you have further questions regarding measles or would like to report suspected measles cases, please contact your local health department or DSHS regional office (contact information for each local health department and DSHS regional office can be found at: <https://www.dshs.texas.gov/idcu/investigation/conditions/contacts/>).