

## Measles Health Advisory December 29, 2022

### Situation Overview

The Texas Department of State Health Services (DSHS) is monitoring an outbreak of measles in Ohio that began in November 2022. At publication, the outbreak is composed of 82 confirmed cases, of which 74 (90%) are unvaccinated, and 32 (39%) have been hospitalized. Most cases (66%) are aged 1-5 years, and 51% of cases are male. There have been no reported deaths. While no confirmed cases of measles have been reported in Texas since 2019, healthcare providers are encouraged to consider a patient's symptoms, vaccination status, and travel history when including measles in their differential diagnosis.

### Guidance for Health Care Professionals

Signs and symptoms of clinical illness:

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

Vaccination history considerations:

- Patients with a recent Measles, Mumps, and Rubella (MMR) vaccination (6-45 days) may show mild symptoms and will test positive by PCR but are not considered a case and do not require control and prevention measures. These positive PCR specimens should be sent to the DSHS Lab for additional testing to see if the virus is vaccine related.
- 1 dose of MMR is 93% effective at preventing clinical disease
- 2 doses of MMR are 97% effective at preventing clinical disease

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., India, Yemen, Somalia, Zimbabwe, Pakistan, Ethiopia, Liberia, Indonesia, Nigeria, Angola).
- Airport exposure where travelers from domestic or international flights congregate

Healthcare providers must **immediately** report **all suspected cases of measles by phone** to your local health department (contact information below).

### **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 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 where possible. 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](http://www.cdc.gov/hicpac/2007IP/2007isolationPrecautions.html)).
- All healthcare personnel should have documented evidence of measles immunity ([www.immunize.org/catg.d/p2017.pdf](http://www.immunize.org/catg.d/p2017.pdf)).

### **Diagnostic Testing**

- People with signs and symptoms of clinical illness (see above) should be tested.
  - 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.
- The Texas DSHS Laboratory in Austin can perform measles serology (IgM and IgG) on serum specimens and PCR testing on throat swabs placed in viral transport media. Genotyping will be performed on positive PCR specimens, which can be helpful during outbreaks. Contact your local health department (contact information below) to coordinate testing at the DSHS Laboratory.

### **Control and Prevention Measures**

- Control measures should be implemented as early as possible.
  - Measles vaccination may prevent disease if given within 72 hours of exposure to susceptible persons 6 months of age or older (i.e., those who may have potentially been exposed and have not been fully vaccinated with 2 measles vaccines).
  - Immunoglobulin (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 or by contacting your local health department (contact information below).

- 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 MMR vaccinations. For more information on routine vaccine schedules, visit: <http://www.cdc.gov/vaccines/schedules/>.

### **Exclusion Criteria**

Persons suspected of having measles 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. Additional information on exclusion and readmission can be found at:

[http://www.dshs.texas.gov/DCU/health/schools\\_childcare/SchoolHealth/](http://www.dshs.texas.gov/DCU/health/schools_childcare/SchoolHealth/).

**For questions or to report a suspected case of measles, contact your local health department:**

#### **Bexar County Residents:**

San Antonio Metropolitan Health  
District Epidemiology Program  
Phone: (210) 207-8876  
Fax: (210) 207-2007

#### **Residents of Other Counties:**

Texas Department of State Health Services  
Public Health Region 8  
Phone: (210) 949-2121  
Fax: (512) 206-3995