



## **MEASLES HEALTH ALERT/ADVISORY**

Date: February 5, 2019

Dear Colleague:

**Details of situation:** Five measles cases, four between the ages of 12 to 21 months, have been reported in three different counties within the Department of State Health Services Region 6/5 South (Southeast Texas).

Vaccination remains the most effective method for preventing measles. Two of the cases had their immunizations administered only 1 - 3 weeks prior to developing symptoms. Genotyping has revealed the cases were B3 strain, the most common strain currently circulating in Mexico and the second most common strain seen in Canada and the United States. The current vaccine, which contains strain A, is effective against B3 and has demonstrated a high protection rate (95-98% seroconversion with the first dose and 99% with the second dose). One of the cases was an adult linked to one of the infant cases.

Measles is highly contagious and early identification remains a critical public health measure to reduce the spread of the disease. We are working with local health departments regarding the reported cases. Please consider measles as a part of your differential diagnosis if you see patients with the clinical signs and symptoms described below.

**Clinical information:** Measles (rubeola) is a highly contagious febrile rash illness caused by a paramyxovirus transmitted via the respiratory route. The incubation period averages 10-12 days from exposure to prodrome and 14 days from exposure to rash onset (range 7 -18 days). The prodrome generally lasts 2-4 days and is characterized by fever, increasing in stepwise fashion and often peaking at 103°-105°F.

Fever is followed by the onset of cough, coryza, and/or conjunctivitis. Koplik spots, while not always present, are considered to be pathognomonic for measles and appear as punctate blue-white spots on the bright red background of the buccal mucosa, occurring 1-2 days before rash to 1-2 days afterwards. The measles rash is a maculopapular eruption that begins at the hairline and gradually proceeds to face and upper neck and from there downward and outward. The maculopapular lesions are generally discrete but may become confluent. Other symptoms of measles include anorexia, diarrhea (especially in infants), and



generalized lymphadenopathy. Complications can include otitis media, pneumonia, encephalitis, seizures and death.

While it is rare that vaccinated individuals develop measles, it can happen. Vaccinated individuals may have an atypical clinical presentation—typically shorter rash duration or atypical rash presentation, and possible lack of fever, cough, coryza or conjunctivitis.

**Disease Reporting Requirements/Statute:** Several Texas laws ([Health & Safety Code, Chapters 81, 84, and 87](#)) require specific information regarding notifiable conditions be provided to the health department. Health care providers, hospitals, laboratories, schools, childcare facilities and others are required to report patients who are suspected of having measles ([Chapter 97, Title 25, Texas Administrative Code](#)).

**In Texas, suspicion of measles is required to be reported immediately.  
Do not wait for laboratory confirmation to report measles.  
Measles reports should be made to the local health department or  
800-705-8868.**

**Infection Control:** Patients are contagious from 4 days before onset of rash to 4 days after appearance of rash (day of rash onset is day 0). If a patient presents with these symptoms, isolate the patient with airborne isolation precautions, if possible.

All healthcare facilities should ensure that they have updated documentation of measles immunity status for all staff—not just healthcare providers. Documentation of immunity includes written record of receipt of two MMRs, positive serological titers, or birth prior to 1957 (although healthcare facilities should consider vaccinating unvaccinated personnel born before 1957 who do not have laboratory evidence of measles immunity). During an outbreak of measles, unvaccinated healthcare workers regardless of birth year who lack laboratory evidence of immunity should receive 2 doses of MMR vaccine. Exclude healthcare personnel without evidence of immunity from duty from day 5-21 after last exposure, regardless of post-exposure prophylaxis.

People suspected of having measles should be advised to stay home from work, school, daycare, and any public outings (e.g., church, grocery store) until four days after rash onset have passed. People that have been exposed to measles and are not immune and did not receive PEP should be advised to stay home from day 5-21 after exposure.

### **Lab Confirmation Tests:**

- Testing for measles should be done in patients meeting clinical case definition: (1) a generalized rash lasting >3 days, and (2) fever >101F (38.3C), and (3) cough, coryza or conjunctivitis.
- A blood specimen for serology and throat swab for viral culture or PCR should be collected at the first contact with a suspected measles case. Currently PCR is only available through public health laboratories. Work with the local health department to coordinate PCR testing.
- For serological testing performed, please provide both IgM and IgG test results to your local health department.
- 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.

### **Postexposure Prophylaxis (PEP) Recommendations:**

**MMR vaccine** is recommended for the following potentially exposed groups:

- Exposed persons (6 months and older and not otherwise contraindicated) without evidence of immunity to measles –**administer MMR within 3 days of exposure**. If a child <12 months old is vaccinated for a potential exposure, he should be revaccinated with 2 additional doses of MMR according to schedule.

### **Immune globulin**

IGIM 0.5 mL/kg of body weight (maximum dose = 15 mL) is recommended for the following potentially exposed groups:

- Infants 0-6months **within 6 days of exposure**
- Any susceptible, immunocompetent, exposed individual (except pregnant women), if the window for MMR PEP has passed and it is still **within 6 days of exposure**
- Priority for IG should be given to infants, household contacts, anyone at risk for complications, and anyone with prolonged, close contact.

IGIV 400 mg/kg is recommended for the following potentially exposed groups **within 6 days of exposure:**

- Severely immunocompromised persons
- Pregnant women without evidence of measles immunity

Any nonimmune person exposed to measles who received IG should subsequently receive MMR vaccine, which should be administered no earlier than 6 months after IGIM administration or 8 months after IGIV administration provided the person is then aged ≥12 months and the vaccine is not otherwise contraindicated.



**Routine Vaccination:** All patients should be kept current with measles vaccination. Check the vaccination history of all patients and offer vaccine to anyone that is not up to date with the vaccine schedule. Maintaining high two-dose MMR vaccination coverage in communities remains the most effective way to prevent outbreaks.

**If you have further questions or need to report measles case(s), please contact your local health department:**

Brazoria County Health Department  
Telephone: (979) 864-2168  
Fax: (979) 864-3694  
After hours: (800) 511-1632  
<https://brazoriacountytx.gov/home>

Fort Bend County Health & Human Services  
Telephone: (281) 342-6414  
Fax: (281) 342-7371  
After hours: (281) 434-6494  
<http://www.fbchealth.org/>

City of Beaumont Health Department  
Telephone: (409) 832-4000  
Fax: (409) 835-2545  
After hours: 409-839-4208  
<https://beaumonttexas.gov/departments/health-services/>

Galveston County Health District  
Telephone: (409) 938-2322  
Fax: (409) 938-2399  
After hours: (888) 241-0442  
[www.gchd.org](http://www.gchd.org)

City of Port Arthur Health Department  
Telephone: (409) 983-8848  
Fax: (409) 982-5616  
After hours: (409) 981-9901  
<https://www.portarthurtx.gov/213/Health-Department>

Hardin County Health Department  
Telephone: (409) 246-5188  
Fax: (409) 246-4373  
After hours: 409-659-7759  
<http://www.hardincountytexas.us/PublicHealth/publichealth.htm>

Chambers County Health Department  
Telephone: (409) 267-2731  
Fax: (409) 267-4276  
After hours: (409) 267-9862  
<https://www.co.chambers.tx.us/page/health.department>

Harris County Public Health  
Telephone: (713) 439-6000  
Fax: (713) 439-6306  
After hours: (713) 755-5000  
<https://publichealth.harriscountytexas.gov/>



Houston Health Department  
Telephone: (832) 393-5080  
Fax: (832) 393-5232  
After hours: (832) 393-5080  
<http://www.houstontx.gov/health/>

Montgomery County Public Health  
District  
Telephone: (936) 523-5026  
Fax: (936) 539-9272  
After hours: (888) 825-9754  
<https://mcphd-tx.org/>

Orange County Health Department  
Telephone: (409) 246-5188  
Fax: (409) 246-4373  
After hours: 409-659-7759  
[http://www.hardincountytexas.us/  
PublicHealth/publichealth.htm](http://www.hardincountytexas.us/PublicHealth/publichealth.htm)

**If you are not in one of the above jurisdictions, contact our office:**

Department of State Health Services, Region 6/5 South  
Telephone: (713) 767-3000  
Fax: (713) 767-3006  
After hours: 800-270-3128  
<https://dshs.texas.gov/region6-5/default.shtm>

Best Regards,

A handwritten signature in black ink, appearing to read "C. Plasencia".

Carlos Plasencia, MD, MSPH  
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