

## Hot Tips: Public Health Advisory #148 Date: 3/05/2025

Please copy and distribute to ALL physicians at your location.

### *Measles Suspect Case Response & Clinical Guidance*

#### Key Messages

- Consider measles in patients of any age who have a fever  $\geq 101$  F, plus at least one of the 3 “Cs” (cough, coryza or conjunctivitis) and a descending rash that starts on the face. The rash typically follows the onset of illness within 4 days.
- Measles is a mandatory, immediately notifiable disease by telephone. Health care providers are required to report suspected measles cases to Ventura County Public Health at (805) 981-5201 or call (805) 214-7057 for after hours.

#### Situation

A significant increase in measles cases is affecting multiple regions in the United States, with a recent case in Orange County. According to the Centers for Disease Control and Prevention (CDC), as of February 27, 2025, a total of 164 measles cases were reported by nine jurisdictions: Alaska, California, Georgia, Kentucky, New Jersey, New Mexico, New York City, Rhode Island, and Texas. The outbreaks nationally are primarily affecting unvaccinated individuals, with one fatality reported in Texas—a school-aged child. The outbreaks have raised concerns about declining vaccination rates. Nationally, MMR (measles, mumps, and rubella) vaccination coverage among U.S. kindergartners has decreased from 95.2% during the 2019–2020 school year to 92.7% in the 2023–2024 school year. The national public school MMR vaccination rate for entering kindergartners has dipped below the 95% threshold necessary to prevent outbreaks. Ventura County has not had a measles case in more than 5 years.

**Measles suspect cases must be reported by telephone immediately to Ventura County Public Health (VCPH)—Communicable Disease Program, as required under Title 17, California Code of Regulations, § 2500.** The Communicable Disease Program provides guidance for testing, exclusion, quarantine, isolation, post-exposure prophylaxis (PEP), and contact investigations. The VCPH program staff can be reached at (805) 981-5201 for reporting and consultation.

#### Background

Measles is a highly contagious viral disease caused by the measles virus, which spreads primarily through respiratory droplets when an infected person coughs, sneezes, or talks. The virus can remain suspended in the air for up to two hours, making transmission extremely probable in crowded or enclosed spaces. Measles has

an incubation period of approximately 7 to 14 days, during which an infected person may not show symptoms but can still spread the virus.

Symptoms typically begin within 21 days of exposure. Symptoms can include a high fever, cough, runny nose, and red, watery eyes (conjunctivitis), followed by the appearance of small white spots inside the mouth (Koplik spots). A few days later, flat red spots develop, starting on the face at the hairline and spreading downward to the rest of the body. Serious complications, including pneumonia, encephalitis, and death, can occur, particularly in children younger than 5 years, pregnant women, and people with weakened immune systems.

Although measles was declared eliminated in the U.S. in 2000 due to widespread vaccination, declining immunization rates have led to outbreaks in recent years. The MMR vaccine is highly effective, providing about 97% protection with two doses. The spread of measles can be prevented if 2-dose vaccine coverage remains at 95% or above in the community.

### **Diagnostics & Treatment**

Health care providers should consider measles in patients presenting with febrile rash illness and clinically compatible measles symptoms. Risk factors in the past 21 days include:

- Known contact with a measles case or an ill person with fever and a rash
- Contact with an international visitor who arrived in the U.S.
- Travel outside the U.S.
- Domestic travel through an international airport
- Visited a U.S. venue popular with international visitors such as a large theme park
- Lives in or visited a U.S. community where there are measles cases

Diagnosis is confirmed through PCR testing (preferred) to detect viral RNA from respiratory or urine samples or serology testing for measles-specific IgM antibodies. Obtaining multiple samples such as urine, throat swab (or nasopharyngeal swab), and serum from patients suspected to have measles at first contact with them can help confirm a measles infection. The Communicable Disease Program can provide further guidance for public health laboratory testing.

There is no specific antiviral treatment for measles, management focuses on supportive care. To prevent transmission, patients should be isolated for at least four days after the rash appears in conjunction with public health guidance, and airborne precautions should be implemented in healthcare settings.

People exposed to measles who cannot readily show adequate presumptive [evidence of immunity](#) against measles should be offered PEP. VCPH program staff can help identify eligible persons, assess contraindications, and weigh the benefits.

### **Recommendations**

#### **For health care providers**

- Consider measles in patients of any age who have **a fever, a rash, AND at least one of the 3 “Cs” (cough, coryza or conjunctivitis)** regardless of their travel history.
- **IMMEDIATELY** institute airborne precautions for all persons with a measles-like rash and fever.
- Obtain a thorough history of patients, including travel history and prior immunization for measles.

- Notify any location where the patient is being referred for additional clinical evaluation or laboratory testing about the patient's suspected measles status. Do not refer suspect measles patients to other locations unless appropriate infection control measures can be implemented at those locations.
- **IMMEDIATELY** report suspect cases to the VCPH Communicable Disease Program at (805) 981-5201 or call (805) 214-7057 after hours. Do not wait for laboratory confirmation.

### **For general public**

- CDC recommends that all children get two doses of the MMR vaccine, starting with the first dose at 12 through 15 months of age, and the second dose at 4 through 6 years of age.
- Adults and teens should also be up to date on MMR vaccinations, with either 1 or 2 doses, unless they have other presumptive [evidence of immunity](#) to measles, mumps, and rubella.
- Measles vaccine is recommended in [specific groups](#) who do not have [evidence of immunity](#) against measles, including:
  - College students
  - International travelers
  - Healthcare personnel
  - Close contacts of immunocompromised people
  - People with HIV infection
  - Adults who got the inactivated measles vaccine
  - Groups at increased risk during measles outbreak
- MMR should not be given to pregnant women and those with a weakened immune system due to disease or medical treatments.

### **Resources**

- [Measles | CDPH](#)
- [Measles Investigation Quicksheet | CDPH](#)
- [Measles \(Rubeola\) | Measles \(Rubeola\) | CDC](#)
- [Clinical Overview of Measles | Measles \(Rubeola\) | CDC](#)
- [Measles Vaccine Recommendations | Measles \(Rubeola\) | CDC](#)
- [Interim Infection Prevention and Control Recommendations for Measles in Healthcare Settings | Infection Control | CDC](#)