

Date: March 3, 2025

From: Kansas Department of Health and Environment – Division of Public Health

To: Kansas Health Care Providers, Laboratories, and Local Health Departments

RE: Stay Alert for Measles—Increase in Domestic Measles Cases and Outbreaks

Summary

As of Feb. 20, 2025, the U.S. Centers for Disease Control and Prevention (CDC) is reporting a total of [93 measles cases](#) in eight (8) jurisdictions: Alaska, California, Georgia, New Jersey, New Mexico, New York City, Rhode Island, and Texas. As of Feb. 28, 2025, the Texas Department of State Health Services has reported [146 measles cases](#) since late January among mostly unvaccinated individuals associated with an outbreak in the South Plains region of Texas. Among the 146 Texas outbreak cases reported, only 5 (3%) of the cases were vaccinated. The rest are unvaccinated, or their vaccination status is unknown. Twenty patients have been hospitalized and [one death](#) has been reported.

Due to the recent cases and outbreaks [domestically](#) and [globally](#), the Kansas Department of Health and Environment (KDHE) advises healthcare providers to be on alert for patients who have: (1) febrile rash illness and [symptoms consistent with measles](#) (for example, cough, coryza, or conjunctivitis) particularly among unvaccinated individuals, or (2) have recently traveled, especially internationally or domestically to areas with ongoing measles outbreaks, or (3) have frequent contact with unimmunized individuals in a congregate setting (e.g. attends daycare).

Mandated Reporters, including clinicians, are required by Kansas Administrative Regulation (K.A.R. 28-1-2) to report by phone all suspected cases of measles to the 24/7 KDHE Epidemiology Hotline (877-427-7317, option 5) within four (4) hours of suspicion.

Laboratories are required by [K.A.R. 28-1-18](#) to report laboratory results of measles to KDHE using an approved electronic method.

Background

Measles (rubeola) is a highly contagious viral illness that can cause severe health complications, including pneumonia, encephalitis (inflammation of the brain), and death, especially in unvaccinated individuals. Measles is characterized by a prodrome of fever (as high as 105°F), cough, coryza, and conjunctivitis (three “C’s”), malaise, and, in some cases, pathognomonic enanthema (Koplik spots), followed by a maculopapular rash. In a typical presentation, which might be seen in under or unimmunized individuals, the rash spreads from the head to the trunk, and then out to the arms and legs. Measles in vaccinated individuals may present mildly, with low-grade or no fever and atypical rash. For additional images of measles rash, refer to [CDC Photos of Measles](#) or [Immunize.org Measles Images](#) (warning: some images are graphic).

Measles Rash on Child's Face



Images source: CDC

The incubation period for measles is averages 11-12 days (range 7-21 days) with rash appearing 2 to 4 days after first symptoms. **The virus is transmitted through direct contact with infectious droplets or airborne spread when an infected person breathes, coughs, or sneezes and can remain in the air and on surfaces for up to 2 hours after an infected person leaves an area.** Individuals with measles are highly infectious from 4 days before the rash starts through 4 days after; **one person with measles can infect on average 12 to 18 people in a susceptible population¹.**

The best defense against measles is the [MMR vaccine](#), with two doses being 97% effective against measles (one dose is 93% effective). When more than 95% of people in a community are vaccinated (coverage >95%) most people are protected through community immunity (herd immunity). MMR immunization [coverage among Kansas kindergarten students](#) during the 2023-2024 academic year is estimated at 90.2% —below the herd immunity threshold— with county-level coverage estimates ranging from 51.7% to 100%. Exemption rate estimates for Kansas kindergarten students has increased over the years from 1.0% in the 2010-2011 academic year to nearly 3.0% in the 2023-2024 academic year. Immunization rates for sampled Kansas school districts are available on the [Kindergarten Immunization Data](#) dashboard.

[Before the measles vaccine](#) was introduced in 1963, an estimated 48,000 people were hospitalized and 400–500 people died in the United States each year. Measles was [officially eliminated from the United States in 2000](#), meaning there is no sustained measles transmission within the country and new cases are only found when someone contracts measles abroad and returns to the country. Achieving measles elimination status in the United States was a historic public health achievement. The risk of widescale spread is low. However, pockets of low coverage leave some communities at higher risk for outbreaks.

Recommendations for Measles Vaccination

- Schools, early childhood education providers, and healthcare providers should work to ensure students and patients are current with [MMR vaccines](#).
 - Children should receive their first dose of MMR at age 12-15 months and their second dose at 4-6 years of age.
- One dose of measles-containing vaccine is sufficient protection for most adults. Two doses of measles-containing vaccine are recommended for adults traveling internationally, working in healthcare, or attending post-secondary educational institutions.
- All U.S. residents, including those older than six (6) months of age without evidence of immunity, who are planning to travel internationally should receive an MMR vaccine at least two weeks [prior to departure](#).
 - Infants aged 6-11 months should receive one dose of MMR vaccine at least two weeks before departure. Infants who receive a dose of MMR vaccine before their first birthday should receive two more doses of MMR vaccine, the first of which should be administered when the child is 12-15 months old and the second at least 28 days later.
 - Children 12 months or older should receive two doses of MMR vaccine, separated by at least 28 days.
 - Teenagers and adults without evidence of measles immunity should receive two doses of MMR vaccine separated by at least 28 days.
 - CDC recommends, even if a trip is less than two weeks away, getting one dose of MMR vaccine prior to travel.
- Adults with documentation of [receiving live measles vaccine in the 1960s](#) do not need to be revaccinated. People who were vaccinated prior to 1968 with either inactivated (killed) measles vaccine or measles vaccine of unknown type should be revaccinated with at least one dose of live attenuated measles vaccine. This recommendation is intended to protect those who may have received killed measles vaccine, which was available in 1963-1967 and was not effective.
- Although birth before 1957 is considered acceptable evidence of immunity for healthcare personnel in routine circumstances, healthcare facilities should [consider vaccinating healthcare personnel born before 1957](#) who lack laboratory evidence of immunity or laboratory confirmation of disease.
- The following serve as [proof of immunity](#):
 - Laboratory (serologic) proof of immunity, *or*
 - Laboratory confirmation of previous infection, *or*
 - Birth before 1957.

Recommendations for Clinicians Evaluating Patients

- Consider measles as a diagnosis in anyone with a fever ($\geq 38^{\circ}\text{C}$ or 100.4°F) and a generalized maculopapular rash with cough, coryza, or conjunctivitis, especially among any patients meeting the following criteria:
 - Unvaccinated against measles
 - Recent international travel or domestic travel to areas experiencing measles activity
 - Recent contact with other individuals experiencing similar symptoms
 - Frequent contact with unimmunized individuals in a congregate setting (e.g., daycares, churches, and homeless shelters)
- **Report all suspected cases** of measles to the 24/7 KDHE Epidemiology Hotline by phone to 877-427-7317 (option 5) within **four (4) hours of suspicion** to facilitate rapid testing and investigation. **Do not wait for test results.** Be prepared to provide detailed information on clinical presentation, immunity status, and recent exposure history.
- Implement appropriate [infection control measures](#) (e.g. standard + airborne) when measles is suspected.
 - Do not allow patients with suspected measles to remain in the waiting room or other common areas of the healthcare facility.
 - Isolate patients with suspected measles immediately, ideally in a single-patient airborne infection isolation room (AIIR) with negative pressure and utilize [standard and airborne precautions](#).
 - Healthcare workers should use appropriate respiratory protection that is at least as protective as a fit-tested, NIOSH-certified disposable N95 filtering facepiece respirator, regardless of presumptive evidence of immunity, upon entry to the room or care area of a patient with known or suspected measles.
- Follow the [CDC's testing recommendations](#) and collect either a nasopharyngeal swab (preferred), throat swab, or urine specimen for Reverse Transcription Polymerase Chain Reaction (RT-PCR), as well as blood specimen for serology from all patients with clinical features compatible with measles. Nasopharyngeal or throat swabs are preferred over urine specimens.
 - The Kansas Health and Environmental Laboratories (KHEL) can perform free RT-PCR from nasopharyngeal swab, throat swab, or urine specimens with **prior authorization** from KDHE.
 - Contact the 24/7 KDHE Epidemiology Hotline at 877-427-7317 (option 5) to request prior authorization for free RT-PCR testing at KHEL.
 - KHEL RT-PCR test results should be available within 1-2 business days.
 - Given potential for long turnaround times at commercial laboratories for measles IgM testing, providers should contact the 24/7 KDHE Epidemiology Hotline for guidance on testing through KHEL.

Recommendations for Local Health Departments

Local health departments are advised to take the following actions. Your proactive response and collaboration are vital to protecting public health in Kansas.

- Share this alert with healthcare providers, hospitals, and clinics in your county to ensure they are informed and prepared.
- Promptly report any suspected case of measles to the KDHE Epidemiology Hotline at 877-427-7317 (option 5) and encourage mandated reports to do the same.
- For any questions or further clarification on measles, please reach out to the KDHE Epidemiology Hotline at kdhe.epihotline@ks.gov or your regional epidemiologist.
- For any vaccine-related questions, please reach out to the Kansas Immunization Program at kdhe.vaccine@ks.gov or the Regional Nurse On-Call 877-296-0464 option 3.

For More Information

- [Kansas Measles \(Rubeola\) | KDHE](#)
- [Kansas Disease Reporting Requirements | KDHE](#)
- [Texas Measles Outbreak | Texas Dept of State Health Services](#)
- [New Mexico Measles Outbreak | New Mexico Dept of Health](#)
- [Measles Cases and Outbreaks | CDC](#)
- [Clinical Overview of Measles for Providers | CDC](#)
- [Measles Outbreak Communication Toolkits | CDC](#)
- [Interim IPC Recommendations for Measles in Healthcare Settings | CDC](#)
- [Laboratory Testing for Measles | CDC](#)
- [MMR Vaccination: What Everyone Should Know | CDC](#)

References

1. Guerra F, Bolotin S, Lim G, et al. The basic reproduction number (R0) of measles: a systematic review. *Lancet Infect Dis* 2017;17(12):e420-e428.