This is an official

DPH Health Alert

On July 1, 2024, the S.C. Department of Health & Environmental Control (DHEC) became two separate agencies: S.C. Department of Environmental Services (SCDES) and S.C. Department of Public Health (DPH).

Distributed via Health Alert Network
October 2, 2025, 4:00 PM
10601-DHA-10-02-2025-MEAS

Measles Outbreak in Upstate Region

Summary

The South Carolina Department of Public Health (DPH) is issuing this Health Alert to notify clinicians of measles cases in the Upstate Region and to provide guidance for evaluating febrile rash illnesses for rapid detection of other possible cases. The original source for the current cases has not been identified which raises concern for unrecognized community spread of measles.

There is risk for continued, rapid spread of measles in the Upstate among communities with low immunization rates. Measles-mumps-rubella (MMR) vaccination remains the most important tool for preventing measles infection and spread. DPH recommends all residents be up to date on MMR vaccinations.

Health care professionals should be vigilant for clinical presentations compatible with measles and report suspect cases immediately to the DPH public health office (listed below) in the region of the patient's residence. The State Public Health Lab (PHL) has testing capability for measles samples approved by our public health physicians.

Background

As of Oct. 1, 2025, a total of eight measles cases has been reported to DPH this year, all in the Upstate Region. Investigation is ongoing. All eight cases are among children and adults who have not received the MMR vaccine. Two cases reported international

travel, four were household contacts of cases, and two have no travel history or identified source. This is a sharp increase in measles cases compared to the one case of measles in the state in 2024.

Measles is a highly contagious viral illness that typically begins with high fever, cough, runny nose, and red eyes, lasting two to four days prior to rash onset. The rash classically starts on the face and moves down the body. Measles can cause severe health complications, including pneumonia, encephalitis, and death. The virus is transmitted by direct contact with infectious droplets or by airborne spread when an infected person breathes, coughs, or sneezes. Measles virus can remain infectious in the air and on surfaces for up to two hours after an infected person leaves an area. Infected people are contagious from four days before the rash starts through four days afterward. The incubation period for measles, from exposure to fever, is usually about seven to 10 days, and from exposure to rash onset is usually about 10–14 days (with a range of seven to 21 days).

Recommendations for Health Care Professionals

Clinical encounters

- Consider measles as a diagnosis in anyone with fever and generalized maculopapular rash with prodromal symptoms who has not been fully vaccinated with MMR or has had contact with a known or suspected measles.
- Immediately upon suspicion of measles, mask and isolate patient in a room with a closed door (negative pressure room if available).
- Obtain a history of local, national or international travel or exposure to a measles case in the prior 21 days for suspect cases.
- If you suspect measles clinically, contact DPH for clinical consultation. Measles is immediately reportable by phone call to a live person at the regional public health office, 24/7.
- Prompt reporting of suspect cases is important for the initiation of investigation and implementation of control measures when indicated. DPH staff can also facilitate testing at the PHL when indicated.
- Consider obtaining measles titers in patients exposed to measles AND who report prior vaccination but do not have documentation of two doses of MMR to assist in decisions about quarantine for susceptible contacts.
- Consider IVIG in patients exposed to measles AND who do not have evidence of immunity to measles AND are pregnant, immunocompromised, or under 6 months of age.

- Encourage all patients to be up to date on routine vaccinations and provide education about the increase in cases and the risk of ongoing spread to those who are not immune.

Testing Procedure

- The preferred test to diagnose measles is a real-time PCR (RT-PCR) test of a swab from the nasopharynx (NP) or oropharynx (OP). NP and OP swabs should be collected with commercial swab products designed for the collection of throat/nasopharyngeal specimens or flocked polyester fiber swabs. Cotton swabs interfere with viral growth and are not acceptable. Swabs must be placed in 2 mL of standard viral transport medium (VTM). Questions about measles PCR specimens and transport can be directed to the PHL at (803) 896-0800.
- Please see attached Testing Resources Information for detailed specimen collection, storage, and shipping information.
- Testing is available through PHL or commercial labs. The PHL has a faster turnaround time, and DPH physicians are available for consultation regarding whether a specimen is appropriate for testing at PHL and approve these. Blood serum to test for measles IgM can also be performed, but RT-PCR is the preferred test. Measles IgG is not recommended to assess for acute infection, but IgG titers can establish immunity.

Clinical practice settings

- Develop a triage system that allows patients who have symptoms compatible with measles to be evaluated expediently and with minimal exposure to other patients and healthcare workers without immunity.
- Collect patient-facing employees' immunity to measles (birth prior to 1957, documentation of two doses of MMR, documentation of measles infection and recovery, or titers).
- Only allow healthcare staff who have immunity to measles to attend to the patient; use airborne and contact precautions, including N95 mask.
- Spaces occupied by people with measles should be closed down for two hours and disinfected. See APIC Measles resource.

Promoting healthy behaviors in the community

- DPH works with confirmed cases to identify contacts and provide notification of exposure and education on symptoms to monitor. Please cooperate with requests to assist DPH in protecting our communities from measles spread.
- If you are sick, stay home and prevent the spread of illness to other people.
- DPH strongly recommends against measles parties because getting measles infection carries significant risk of severe outcomes. Measles infection weakens

the immune system by destroying immune memory cells, making children more likely to get other infections.

Resources

PHL Measles Testing Reference Information (below)

Association of Professionals in Infection Control and Epidemiology (APIC) Measles - https://apic.org/measles/

Photos of Measles Rash - https://www.cdc.gov/measles/signs-symptoms/photos.html

DPH contact information for reportable diseases and reporting requirements

Reporting of **Measles** is consistent with South Carolina Law requiring the reporting of diseases and conditions to your state or local public health department. (State Law # 44-29-10 and Regulation # 61-20) as per the DPH 2025 List of Reportable Conditions.

Federal HIPAA legislation allows disclosure of protected health information, without consent of the individual, to public health authorities to collect and receive such information for the purpose of preventing or controlling disease. (HIPAA 45 CFR §164.512).

Regional Public Health Offices – 2025

Mail or call reports to the Epidemiology Office in each Public Health Region

MAIL TO:

Lowcountry	Midlands	Pee Dee	Upstate
3685 Rivers Avenue, Suite 201 N. Charleston, SC 29405 Fax: (843) 953-0051	2000 Hampton Street Columbia, SC 29204 Fax: (803) 251-3170	1931 Industrial Park Road Conway, SC 29526 Fax: (843) 915-6506	352 Halton Road Greenville, SC 29607 Fax: (864) 282-4373

CALL TO:

Lowcountry	Midlands	Pee Dee	Upstate
Allendale, Bamberg, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper, Orangeburg Office: (843) 441-1091 Nights/Weekends: (843) 441-1091	**Aiken, Barnwell, Chester, Edgefield, Fairfield, Kershaw, Lancaster, Lexington, Newberry, Richland, Saluda, York** Office: (888) 801-1046 Nights/Weekends: (888) 801-1046	**Clarendon, Chesterfield, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter, Williamsburg** Office: (843) 915-8886 Nights/Weekends: (843) 409-0695	**Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Oconee, Pickens, Spartanburg, Union** Office: (864) 372-3133 Nights/Weekends: (864) 423-6648

For information on reportable conditions, see
dph.sc.gov/professionals/health-professionals/sc-list-reportable-conditions

DPH Bureau of Communicable Disease Prevention & Control
Communicable Disease Epidemiology Section
2100 Bull St · Columbia, SC 29201
Phone: (803) 898-0861· Fax: (803) 898-0897
Nights / Weekends: 1-888-847-0902

Categories of Health Alert messages:

Health Alert	Conveys the highest level of importance; warrants immediate action or attention.
Health Advisory	Provides important information for a specific incident or situation; may not require immediate action.
Health Update	Provides updated information regarding an incident or situation; unlikely to require immediate action.
Info Service	Provides general information that is not necessarily considered to be of an emergent nature.

South Carolina Department of Public Health
Public Health Laboratory
Measles Testing Quick Reference

RT-PCR Testing (preferred diagnostic method) — Detection of viral RNA

- **Test Provider:** PHL Virology Unit or commercial labs
- **Specimen Type(s):** Throat (OP) or nasopharyngeal (NP) swabs in viral transport media (VTM) or Universal Transport Media. Must use swabs designed for NP/OP specimens or flocked polyester fiber swabs. Cotton swabs are not acceptable.
- **Storage/Shipping:**
  - *Received within 72 hours of collection:* 2 – 8°C on frozen ice packs
  - *Received > 72 hours after collection:* ≤ -20°C on dry ice
- **Turnaround Time (PHL)**
  - 6 – 8 hours if received by noon Monday – Friday
  - Consideration will be given to after hours and weekend testing on a case-by-case basis.
- **Guidelines**
  - Call the Virology Unit at 803-896-0819 before sending specimens.
  - A positive PCR result is confirmatory for active measles infection.
  - There is no requirement to submit specimens to PHL and a commercial lab.

IgM Serology — Detection of IgM antibodies as evidence of acute infection

- **Test Provider:** CDC or commercial labs
- **Specimen Type(s):** Serum in a Serum Separator Tube (SST)
- **Storage/Shipping:** must be shipped to CDC at ≤ -20°C on dry ice
- **Turnaround Time (CDC):** approximately 7 days
- **Guidelines**
  - Ship specimens to the PHL Virology Unit for CDC submission.
  - Call the Virology Unit at 803-896-0819 before sending specimens.
  - A positive IgM result provides presumptive evidence of a current or recent measles virus infection.
  - Several factors may contribute to increased false positivity rates in IgM tests.

IgG Serology — Detection of IgG antibodies for evidence of immunity

- **Test Provider:** PHL Virology Unit or commercial labs
- **Specimen Type(s):** Serum in a Serum Separator Tube (SST)
- **Storage/Shipping:**
  - *Received within 48 hours of collection:* 2 – 8°C on frozen ice packs
  - *Received > 48 hours after collection:* ≤ -20°C on dry ice
- **Turnaround Time (PHL):** within 1 business day
- **Guidelines**
  - A positive IgG result indicates previous infection or vaccination (i.e., immune status).
  - PHL does not perform IgG titers.

CDC and the VPD Reference Centers offer additional measles testing (i.e., genotyping & avidity). Information provided in this reference is subject to change. Contact the PHL Virology Unit for questions or updates.

updated 7/10/2025