



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

JOSH STEIN • Governor

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DEBRA FARRINGTON • Deputy Secretary for Health

KELLY KIMPLE • Director, Division of Public Health

To: North Carolina Clinicians
From: Zack Moore, MD, MPH, State Epidemiologist
Subject: Consideration of early MMR vaccination in areas with measles transmission
Date: January 21, 2026

Background

Since late December 2025, North Carolina has seen an increase in measles cases in the western part of the state. While many NC cases to date have been linked to an ongoing outbreak in South Carolina, transmission in Buncombe County has recently been confirmed.

Due to anticipated ongoing community transmission, NC DHHS recommends that clinicians consider early vaccination for infants 6-11 months of age residing or spending time in Buncombe County. Information on measles cases in North Carolina can be found on the [NC Measles Dashboard](#) and additional counties where early vaccination may be considered will be posted in the [Measles Resources for Health Care Providers](#) page as the outbreak evolves. Early vaccination should also be considered for infants who will be spending time in other areas where measles transmission is occurring, which currently includes the [Upstate region of South Carolina](#).

Vaccination Recommendations for Infants Living or Spending Time in an Area with Ongoing Community Measles Transmission

While MMR vaccination is not routinely recommended for children under age 12 months, MMR vaccination can be safely given to children as young as six months if they are at higher risk, for example those living or spending time in an area with ongoing community transmission, or with planned international travel.

NC DHHS suggests clinicians discuss the option of an early MMR dose with families. Some considerations when discussing an early MMR dose with families include:

NC DEPARTMENT OF HEALTH AND HUMAN SERVICES • DIVISION OF PUBLIC HEALTH

LOCATION: 1915 Health Services Way, Raleigh, NC 27607

MAILING ADDRESS: 2001 Mail Service Center, Raleigh, NC 27699-2001

www.ncdhhs.gov • TEL: 919-855-4800 • FAX: 919-870-4829

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- MMR in infants less than 12 months of age is an “extra” dose. All infants vaccinated prior to 12 months of age will still need to receive two additional doses of MMR after 12 months of age.
- There is some evidence that infants under 12 months of age may not develop as high a level of protection and may have faster waning of immunity compared to children who receive their first dose of MMR at 12 months of age.^{1,2,3,4} This should be balanced against the likelihood of exposure and potential for severe sequelae from measles infection.
- Risk for severe sequelae is highest in infants <12 months of age, including pneumonia, encephalitis, and subacute sclerosing panencephalitis (SSPE).^{5,6}
- MMR vaccine can cause fever and/or measles-like rash, usually 6-12 days following vaccination.

Vaccines for Children (VFC) supplied doses can be used for early vaccination in VFC-eligible children. MMRV cannot be given before 12 months of age.

Additional information

[NCDHHS measles page](#)

[North Carolina Kindergarten Immunization Dashboard](#)

[Measles cases and outbreaks in the U.S.](#)

[Measles information for healthcare providers](#)

[REDBook Measles Guidance](#)

[Think Measles Clinician Job Aid](#)

[Provider resources for vaccine conversations](#)

References

1. Brinkman ID, de Wit J, Smits GP, et al. [Early measles vaccination during an outbreak in the Netherlands: short-term and Long-term decreases in antibody responses among children vaccinated before 12 months of age](#). Journal of Infectious Diseases 2019;220(4):594–602.
2. Gans HA, Yasukawa LL, Sung P, et al. [Measles humoral and cell-mediated immunity in children aged 5–10 years after primary measles immunization administered at 6 or 9 months of age](#). Journal of Infectious Disease 2013;207(4):574–82.
3. van der Staak M, Hulscher HI, Nicolaie AM, et al. [Long-term Dynamics of Measles Virus–Specific Neutralizing Antibodies in Children Vaccinated Before 12 Months of Age](#). Clinical Infectious Diseases 2025;80(4):904-910
4. Vittrup DM, Jensen A, Sørensen JK, et al. [Immunogenicity and reactogenicity following MMR vaccination in 5-7-month-old infants: a double-blind placebo-](#)

[controlled randomized clinical trial in 6540 Danish infants](#). EClinicalMedicine 2024;68:102421.

5. Leung J, Munir NA, Mathis AD, et al. [The Effects of Vaccination Status and Age on Clinical Characteristics and Severity of Measles Cases in the United States in the Postelimination Era, 2001-2022](#). Clinical Infectious Diseases. 2025;80(3):663-672.
6. Perry RT, Halsey NA. [The clinical significance of measles: a review](#). Journal of Infectious Diseases. 2004;189 Suppl 1:S4-16. doi: 10.1086/377712.