

# Measles Outbreak Vaccination Guidance

- During the current measles outbreak, MMR vaccination recommendations vary based on the location and age of the patient.
- Assess measles immune status for every patient at every visit, regardless of age.
- Recall children and adolescents age 12 months and older whom have not received the first dose of MMR, as resources allow.
- Before giving a MMR vaccine, check MIIC records and ask parents whether any vaccines have been administered in the previous 4 weeks to ensure no MMR doses are administered less than 28 days from previous MMR, varicella or MMRV. If a parent-reported vaccination is not found in MIIC, verify administration by requesting documentation from the parent or administering clinic. Provide patients with written documentation of vaccines administered.

	6 months to less than 12 months	12 months and older
<b>Exposed to measles<sup>1</sup></b> (Persons notified by public health officials or health care facilities as having been exposed to measles)		
Received Post-Exposure Prophylaxis <sup>1</sup>	Do not administer MMR at this time	Determine Post-Exposure Prophylaxis received to guide MMR vaccination needs
Did not receive Post-Exposure Prophylaxis	<ul style="list-style-type: none"> <li>▪ Administer MMR if there is any concern for ongoing measles exposure<sup>2,3</sup></li> <li>▪ For all others, no early MMR vaccination recommended<sup>4</sup></li> </ul>	Accelerate the two-dose MMR series if there is any concern for ongoing measles exposure <sup>3,5</sup>
<b>Not exposed to measles</b>		
Children and adolescents of a county in which a measles case has been reported in the previous 42 days	Do not administer MMR at this time	Accelerate the two-dose MMR series <sup>5</sup>
Somali Minnesotan children and adolescents, regardless of county of residence	Do not administer MMR at this time	Accelerate the two-dose MMR series <sup>5</sup>
All other Minnesotans	Do not administer MMR at this time	Consider acceleration of the two-dose MMR series <b>OR</b> follow the recommended immunization schedule for age-appropriate vaccination <sup>5</sup>

<sup>1</sup>Individuals with the highest risk of exposure have been notified, and post-exposure prophylaxis has been provided if able.

<sup>2</sup>This early MMR dose will not count toward the two recommended doses due at 12-15 months and 4-6 years.

<sup>3</sup>Those currently recognized as at an “increased risk for ongoing exposure” include persons previously informed of exposure who are residents of counties in which a measles case has been reported in the previous 42 days and/or Somali Minnesotans.

<sup>4</sup>Early MMR is not necessary if beyond post-exposure prophylaxis window period and not at a recognized increased risk for ongoing exposure. PEP consists of either administering MMR within 72 hours of exposure or administering immune globulin within 6 days of exposure.

<sup>5</sup>Administer the first dose of MMR on (or as soon as possible after) the first birthday, followed by a second dose 28 days later. Administer the second MMR dose now if it has been at least 28 days since the first MMR dose and no other live virus injectable vaccines (i.e., varicella vaccine, MMRV) have been administered in the past 28 days. MMRV is approved for children 12 months through 12 years of age (until the 13<sup>th</sup> birthday), and may be used for the second dose, depending on supply. Ensure that adults born in 1957 or after have at least one documented MMR.

## General considerations

- The minimum interval between doses of MMR is 28 days.
- Do not give MMR to persons who are pregnant or immunosuppressed. For a complete list of contraindications and precautions, see CDC's [Contraindications and Precautions](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html) ([www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/contraindications.html)).
- MMR vaccination given within 72 hours of exposure to measles virus may provide some protection against disease. If given during the pre-symptomatic or prodromal stage of illness MMR does not increase the risk for vaccine-associated adverse events.
- If a patient received intramuscular immune globulin (IMIG) or intravenous immune globulin (IVIG) as post-exposure prophylaxis, they should wait to receive MMR, varicella, or MMRV. For IMIG they should wait 6 months, and for IVIG they should wait 8 months. For more information, see CDC's [Recommended intervals between administration of immune globulin preparations and measles- or varicella-containing vaccine](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/a/mmr_ig.pdf) ([www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/a/mmr\\_ig.pdf](http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/appendices/a/mmr_ig.pdf)).
- Adults born before 1957:
  - Most adults born before 1957 are considered immune to measles.
  - Health care personnel born before 1957 are typically considered immune to measles. However, ACIP recommends that unvaccinated health care workers born before 1957 who lack laboratory evidence of measles immunity (see below) receive 2 doses of MMR vaccine separated by at least 28 days.
- Adults born in 1957 or later:
  - These adults should have either laboratory evidence of measles immunity or documentation of at least one live measles or MMR vaccine administered after the person turned 1 year old.
    - If adults cannot provide documentation or if the documentation is unclear regarding what type of measles vaccine (inactivated or live) was administered, it is recommended that they receive an MMR.
    - Documented measles vaccination from 1968 to present in the United States would have been with a live measles vaccine.
  - Health care workers, students in post-high school educational institutions, or international travelers should have two documented vaccinations with a live measles (for example, MMR vaccine) separated by at least 28 days and administered after the person turned 1 year old.
- Laboratory evidence of measles immunity includes:
  - Laboratory evidence of measles immunoglobulin G (IgG) - equivocal results should be considered negative.
  - Laboratory confirmation of measles disease.

NOTE: In the event that a health care worker who has 2 documented doses of MMR vaccine is tested serologically and determined to have negative or equivocal measles titer results, it is not recommended that the person receive an additional dose of MMR vaccine. Such persons should be considered to have presumptive evidence of measles immunity.

- Health care providers should not accept verbal reports of vaccination without written documentation as presumptive evidence of immunity. For additional details about evidence of immunity criteria, see Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the Advisory Committee on Immunization Practices (ACIP). [Table 3. Acceptable presumptive evidence of immunity to measles, rubella, and mumps](https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm#Tab3) (<https://www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm#Tab3>)