

MEASLES

MDHHS Frequently Asked Questions (FAQ) on Measles

The Michigan Department of Health and Human Services (MDHHS) received many questions during the 2019 measles outbreak and continues to receive questions regarding the measles vaccine. MDHHS thought it would be helpful to share these frequently asked questions. This document may be supplemented or updated based on future needs.

1. Should a child traveling to a county where an outbreak is occurring (e.g., Oakland County) receive measles, mumps, rubella (MMR) vaccine between 6 and 11 months of age?
 - MDHHS does not currently recommend that infants under 12 months of age traveling **within** the United States to a county where there is an outbreak be vaccinated, unless there is a high chance of coming into contact with the affected outbreak population or community (e.g., orthodox Jewish).
 - On a case by case basis, the provider should assess the risk during an outbreak and evaluate the likelihood that one might come into contact with a case.
 - The provider should use their clinical discretion on whether to vaccinate.
 - Note: Doses given **before** 12 months of age cannot be counted toward the routine 2-dose series for MMR.
 - For a child to be fully vaccinated, they need to receive 2 doses of MMR vaccine when they are 12 months of age and older.
 - The routine schedule for MMR vaccine is at 12-15 months and at 4-6 years.
2. Should a child traveling to a county where an outbreak is occurring (e.g., Oakland County) be administered their 2nd dose of MMR vaccine earlier than 4 through 6 years of age?
 - Providers should follow the routine recommended schedule per the Advisory Committee on Immunization Practices (ACIP). So, the 2nd dose of MMR vaccine should be given at 4 through 6 years of age.
 - However, the minimum interval between 2 doses of MMR vaccine must be maintained. The minimum interval between 2 doses is 28 days.
 - MDHHS is not currently recommending administering the 2nd dose of MMR vaccine early.
 - In an outbreak situation, providers should use their clinical discretion and assess each case for their risk of exposure. If there is a high chance of coming into contact with the affected outbreak population or community (e.g., orthodox Jewish), then the provider would assess the need for MMR vaccine.
 - The 2nd dose of MMR can be given 28 days after the 1st dose and would count as a valid dose.
3. Can VFC vaccine be used to vaccinate those 6 through 11 months of age or as the accelerated 2nd dose?
 - If a patient is VFC-eligible (i.e., VFC insurance criteria are met) and the patient is identified as potentially coming into contact with measles in an outbreak area or is travelling internationally, the healthcare provider may vaccinate and may use VFC vaccine.

- The 6- through 11-month MMR dose may be covered by VFC on a case-by-case basis and after appropriate medical assessment.
 - It is not recommended to vaccinate based on parental concern alone but if the patient is in or travelling to a local outbreak area (or traveling internationally), this group can be vaccinated based on clinical discretion.
 - VFC vaccine cannot be used for privately insured patients.
 - Remember: Doses given **before** 12 months of age cannot be counted toward the routine 2-dose series for MMR.
4. What should we do if a patient has 2 valid doses of MMR in MCIR and their measles, mumps, or rubella titer is negative, equivocal, or shows a low level?
- The doctor who ordered the titer should be the one to review and interpret the titer.
 - If someone with 2 documented doses of measles-, mumps-, or rubella-containing vaccines is tested serologically and is determined to have negative, equivocal, or low-level results for measles, mumps, or rubella, it is **not recommended** that the person receive an additional dose of MMR vaccine. We should consider presumptive evidence of immunity.
 - Exception: Women of childbearing age who have a negative **rubella** titer after 2 doses of a rubella-containing vaccine should receive a 3rd and **final** dose of MMR vaccine (not during pregnancy).
 - If there are 2 documented doses of MMR vaccine and both of those doses are valid, then a titer is not recommended under any circumstances.
www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm
5. If a patient can't remember if they have been vaccinated and they have no documentation of any doses, what should we do?
- It is not necessary or recommended to titer the patient. Vaccinate them per the recommendations.
6. Are there any situations where more than 2 doses of MMR are recommended?
- There are two circumstances when a third dose of MMR is recommended.
 - ACIP recommends that women of childbearing age who have received 2 doses of rubella-containing vaccine and have rubella serum IgG levels that are not clearly positive should receive 1 additional dose of MMR vaccine (maximum of 3 doses).
 - In 2018, ACIP published guidance for vaccination of persons at increased risk for acquiring mumps during an outbreak.
 - Persons previously vaccinated with 2 doses of a mumps virus-containing vaccine who are identified by public health authorities as being part of a group or population at increased risk for acquiring mumps because of an outbreak should receive a third dose of a mumps virus-containing vaccine (MMR or MMRV) to improve protection against mumps disease and related complications.
7. Several adults are calling the office requesting a booster dose of MMR vaccine. Do you recommend a booster dose? Do you recommend 1 or 2 doses if they do not have evidence of immunity? If born before 1957, should we offer a booster dose?
- For those without evidence of immunity:
 - Adults born during or after 1957 would need documentation of 1 dose of MMR vaccine.
 - High-risk persons (international travel, postsecondary education, household contact

of an immunocompromised individual, healthcare worker) should receive 2 doses of MMR vaccine.

- Persons who previously received a dose of MMR vaccine in 1963–1967 and are unsure which type of vaccine it was or are sure it was inactivated measles vaccine should be revaccinated with either 1 (if low-risk) or 2 (if high-risk) doses of MMR vaccine.
 - Natural immunity is assumed in those born prior to 1957, however, if they do not recall having disease or being vaccinated, it is okay to go ahead and vaccinate according to the recommendations for 1 or 2 doses.
8. If it takes up to 2 weeks for optimal immune response from MMR, why is MMR vaccine recommended as post-exposure prophylaxis within 3 days of exposure to measles?
- Several published studies have compared attack rates among persons who received MMR or single antigen measles vaccine (without gamma globulin) as postexposure prophylaxis with those who remained unvaccinated after exposure to measles.
 - MMR vaccine given within 72 hours of initial measles exposure can reduce the risk of getting sick or reduce the severity of symptoms.
 - Effectiveness might depend on timing of vaccination and the nature of the exposure.
 - Postexposure prophylaxis with MMR vaccine appears to be effective if the vaccine is administered within 3 days of exposure to measles in "limited" contact settings (e.g., schools, childcare, and medical offices).
 - Revaccination within 72 hours of exposure of those who have received 1 dose before exposure also might prevent measles disease.
 - Postexposure prophylaxis with MMR vaccine does not prevent or alter the clinical severity of mumps or rubella. However, if the exposed person does not have evidence of mumps or rubella immunity, they should be vaccinated since not all exposures result in infection.
 - Another option is giving exposed measles-susceptible people immunoglobulin (IG) within 6 days of exposure.
 - Information on post-exposure prophylaxis for measles can be found in the 2013 ACIP guidance at www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm.

Resources:

MDHHS, "Key Facts about Measles,"

www.michigan.gov/documents/mdch/KeyFacts_Measles_392862_7.pdf

MDHHS, "Measles Investigation Guidelines,"

www.michigan.gov/documents/mdch/Measles_388976_7.pdf

MDHHS, "2019 Michigan Measles Outbreak Information,"

www.michigan.gov/measlesoutbreak

CDC, MMWRs: "Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps, 2013: Summary Recommendations of the ACIP"

www.cdc.gov/mmwr/preview/mmwrhtml/rr6204a1.htm

IAC, "Measles: Questions and Answers Information About the Disease and Vaccines,"

www.immunize.org/catg.d/p4209.pdf