

Adult MMR Vaccination:

What providers need to know

What are the general recommendations for adults?

- ▶ The recommendations for vaccination and assessing immunity in adults have not changed since publication of the Advisory Committee on Immunization Practices (ACIP) [recommendations for the Prevention of Measles, Rubella, Congenital Rubella syndrome, and Mumps in June 2013](#).
- ▶ Low-risk adults born after 1957 without proof of immunity should have one dose of MMR vaccine.
- ▶ Most adults in the U.S. are at low risk for measles. In general, providers do not need to actively screen low-risk adult patients for measles in non-outbreak areas of the U.S.



Which adults are considered high risk for acquiring measles?

- ▶ Students at post-high school educational institutions
- ▶ Health care personnel
- ▶ International travelers to any country outside the U.S.

Note: High-risk adults need written documentation of two doses of MMR vaccine (each dose separated by at least 28 days) or other presumptive evidence of immunity.

Presumptive evidence of measles immunity includes:

- ▶ Birth before 1957 (except for health care personnel)
- ▶ Laboratory evidence of immunity
- ▶ Laboratory confirmation of disease

Note: All other adults without presumptive proof of immunity should have one dose of MMR.

What is the evidence to support these recommendations?

From 2001-2015, the annual reported incidence for adults 18 and older was <0.5/1,000,000 population (Clemmons et al., JAMA 2017). Further, seroprevalence of measles immunoglobulin G (IgG) in the U.S. for persons aged 20-49 ranges from 87.9% to 93.3%, suggesting high immunity among U.S. adults (Lebo et al., OFID 2017). From January 1 to May 10, 2019, 839 cases were reported to CDC. Of these, 218 (26%) measles cases were reported in adults 18 or older. Among all adult cases, 65% were associated with outbreaks in underimmunized, close-knit communities in two states (NY and WA).



What are the recommendations if a patient is planning to travel internationally?

- ▶ Providers should make sure patients have measles protection before international travel. U.S. residents traveling internationally are at high risk for acquiring measles abroad. They can also transmit measles to susceptible persons, such as infants, when they return home.
- ▶ If a patient is traveling internationally and measles immunity is unknown, providers should vaccinate, unless there are contraindications. Serologic testing for measles immunity is not recommended.

What is the recommendation for adults who received the killed measles virus (KMV) or an unknown type of measles vaccine?

Some adults may have received a killed measles vaccine during the 1960s. The killed measles vaccine was available from 1963 to 1967 and administered to less than 5% of adults. The ACIP recommendation is to re-vaccinate anyone who received the killed vaccine or vaccine of unknown type. However, this only affects a very small proportion of adults who were vaccinated during those years. There is no recommendation for a catch-up program among adults for a second dose of MMR (e.g., persons born before or after 1989).

What is the recommendation if the patient's immune status is unknown?

If a patient's measles immunity is unknown, providers should vaccinate with MMR, unless there are contraindications. Contraindications to MMR vaccination include a history of severe allergic reaction to any component of the vaccine, pregnancy, and immunosuppression. MMR vaccine is safe, even if given to persons who were previously vaccinated or had prior disease. IgG serologic testing to assess measles immunity is NOT recommended during this period of increased measles activity. IgM testing should ONLY be used for patients suspected to have measles.

Could this guidance change if there is an outbreak in Wisconsin?

Yes. During outbreaks, health departments may provide additional recommendations to protect their communities. The at-risk population is defined by local and state health departments, depending on the epidemiology of the outbreak. If there were to be an outbreak in Wisconsin, providers should consult with local health departments for the most up-to-date recommendations for their community.

