

# Measles Post-Exposure Prophylaxis (PEP) Table

Age Range	Measles Immune Status at Time of Exposure	PEP Type Depending on Time After Initial Exposure		
		≤3 days (≤72 hours)	4-6 days	>6 days
All ages	Immune (2 MMR doses, or born before 1957, or IgG positive)	PEP not indicated		
< 6 months	Non-immune due to age	Give IMIG. Home quarantine for 28 days after last exposure		PEP not indicated (too late). Home quarantine for 21 days after last exposure
6-11 months	Non-immune due to age	Give MMR (preferred over IG). No quarantine needed	Give IMIG. Home quarantine for 28 days after last exposure	PEP not indicated (too late). Home quarantine for 21 days after last exposure
	1 early dose of MMR vaccine	PEP not indicated		
≥ 12 months	Non-immune (zero doses of MMR or IgG negative)	Give MMR. No quarantine needed	PEP not indicated (too late). Home quarantine for 21 days after last exposure. Two doses of MMR vaccine, given at least 28 days apart, recommended to protect against <u>future</u> exposures.	
≥ 12 months	1 dose of MMR vaccine	Give 2 <sup>nd</sup> MMR dose if ≥ 28 days from last dose of live vaccine. No quarantine needed	Give 2 <sup>nd</sup> MMR if not up-to-date. No quarantine needed, but monitor for symptoms for 21 days after last exposure.	
Adults	Unknown measles immune status	Give MMR vaccine  No quarantine needed if MMR PEP given	Obtain IgG titers to determine immunity, home quarantine while awaiting results. If IgG negative, quarantine for 21 days after last exposure. Two doses of MMR, given at least 28 days apart, recommended to protect against <u>future</u> exposures	

Category	Measles Immune Status	PEP Type Depending on Time After Initial Exposure		
		≤3 days (≤72 hours)	4-6 days	>6 days
Severely immunocompromised*	Will need IG regardless of measles immune status**	Give intramuscular immunoglobulin (IMIG) if < 12 months old, or intravenous immunoglobulin (IVIG) if ≥12 months old. Home quarantine for 28 days after last exposure		PEP not indicated (too late). Home quarantine for 21 days after last exposure
Pregnant	Immune (IgG positive or 2 MMR doses)	PEP not indicated, exposed person has documented immunity		
	Non-immune (IgG-negative)	Give intravenous immunoglobulin (IVIG) and home quarantine for 28 days after last exposure		PEP not indicated (too late). Home quarantine for 21 days after last exposure
	Unknown immunity	Draw titers (measles IgG) to determine immunity; proceed as above based on titer results		PEP not indicated (too late). Draw titers to determine risk of infection/risk to infant; proceed as above based on titer result.

Adapted from Red Book 2024-2027 Report of the Committee on Infectious Diseases, 33<sup>rd</sup> edition

\* Management of immunocompromised persons can be challenging and may require individualized decisions with provider based on immunocompromising condition or medications. Severely immunocompromising conditions (per ACIP and IDSA) include:

- Severe primary immunodeficiency;
- Bone marrow transplant until >12 months after finishing all immunosuppressive treatment, and maybe longer in patients who have developed graft-versus-host disease;
- On treatment for acute lymphoblastic leukemia (ALL) within and until ≥6 months after completion of immunosuppressive chemotherapy;
- On cancer chemotherapy\*\*
- Post solid organ transplantation\*\*
- Receiving daily corticosteroid therapy with a dose ≥20mg (or >2 mg/kg/day for patients who weigh <10 kg) of prednisone or equivalent for ≥14 days
- Receiving certain biologic immune modulators, such as tumor necrosis factor-alpha (TNF-α) blockers or rituximab\*\*
- After hematopoietic stem cell transplant, duration of high-level immunosuppression is highly variable and depends on type of transplant (longer for allogeneic than autologous), type of donor and stem cell source, and post-transplant complications such as graft vs. host disease and their treatments\*\*
- AIDS or HIV with severe immunosuppression defined as CD4 <15% (all ages) or CD4 count <200 lymphocytes/mm<sup>3</sup> (age >5 years).

Low-level immunosuppression: In the absence of published guidance on exposed persons with low-level immunosuppression, consider assessing presumptive immunity to measles (measles IgG positive or 2 MMR vaccine doses) to determine if PEP is indicated. If not immune to measles, give PEP as MMR (if not contraindicated^ and within 72 hours of initial exposure). Consider intravenous IG if MMR is contraindicated^ or if it is too late for MMR (day 4-6 after initial exposure) with home quarantine for 28 days after last exposure. If no PEP is given because it is too late, home quarantine for 21 days after last exposure.

\*\* If a severely immunocompromised person has a new positive IgG titer collected on or after the date of exposure, quarantine is not required. The person should still monitor for symptoms for 21 days from the date of exposure, or 28 days if IVIG or IMIG was administered.