

**Postexposure Prophylaxis (PEP) for Asymptomatic Persons Who Were Exposed to Measles:  
Recommendations by Age, Health Status, and Level of Measles Immunity**

Age or Health Status Category	Measles Immune Status	Time From First Exposure <sup>1</sup>		
		≤72 hours	>72 hours-6 days	>6 days
All ages	Immune <sup>2</sup>	<ul style="list-style-type: none"> <li>• PEP not indicated when exposed person has presumptive evidence of immunity</li> <li>• No quarantine or exclusion from congregate setting/work needed</li> <li>• Monitor for symptoms for 21 days after exposure</li> </ul>		
<6 months, not severely immunocompromised <sup>5</sup>	Non-immune	<ul style="list-style-type: none"> <li>• Give IMIG<sup>3</sup></li> <li>• Quarantine and monitor for symptoms for 28 days after last exposure</li> </ul>		<ul style="list-style-type: none"> <li>• PEP not indicated (too late)</li> <li>• Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>
6-11 months, not severely immunocompromised <sup>5</sup>	Non-immune	<ul style="list-style-type: none"> <li>• Give MMR<sup>4</sup> vaccine (preferred) or IMIG<sup>3</sup></li> <li>• If vaccinated: no quarantine or exclusion from congregate settings needed. Monitor for symptoms for 21 days after last exposure</li> <li>• If IMIG: quarantine and monitor for symptoms for 28 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>• Give IMIG<sup>3</sup></li> <li>• Quarantine and monitor for symptoms for 28 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>• PEP not indicated (too late)</li> <li>• Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>

Age or Health Status Category	Measles Immune Status	Time From First Exposure <sup>1</sup>		
		≤72 hours	>72 hours-6 days	>6 days
≥12 months, not pregnant, not severely immunocompromised <sup>5</sup>	Non-immune  (0 doses MMR vaccine or IgG negative)	<ul style="list-style-type: none"> <li>● Give 1<sup>st</sup> MMR<sup>4</sup> vaccine dose</li> <li>● No quarantine or exclusion from congregate settings needed if vaccinated in time</li> <li>● Healthcare work restriction: exclude from work for 21 days after last exposure</li> <li>● Monitor for symptoms for 21 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>● Give IMIG<sup>3</sup> if &lt;66 lb and quarantine and monitor for symptoms for 28 days after last exposure.</li> <li>● Otherwise, PEP not indicated. Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>● PEP not indicated (too late)</li> <li>● Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>
	1 dose of live MMR vaccine	<ul style="list-style-type: none"> <li>● Give 2<sup>nd</sup> MMR<sup>4</sup> vaccine dose if at least 28 days since first dose</li> <li>● No quarantine or exclusion from congregate setting/work needed if vaccinated in time</li> <li>● Monitor for symptoms for 21 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>● PEP not indicated</li> <li>● No quarantine or exclusion from congregate setting/work needed</li> <li>● Monitor for symptoms for 21 days after last exposure</li> </ul>	
	Unknown immune status	<ul style="list-style-type: none"> <li>● Give MMR<sup>4</sup> vaccine</li> <li>● No quarantine or exclusion from congregate setting needed if vaccinated in time</li> </ul>	<ul style="list-style-type: none"> <li>● Give IMIG<sup>3</sup> if &lt;66 lb and quarantine for 28 days after last exposure.</li> <li>● Otherwise PEP not indicated. Quarantine and monitor for</li> </ul>	<ul style="list-style-type: none"> <li>● PEP not indicated (too late)</li> <li>● Quarantine for 21 days after last exposure</li> </ul>

Age or Health Status Category	Measles Immune Status	Time From First Exposure <sup>1</sup>		
		≤72 hours	>72 hours-6 days	>6 days
		<ul style="list-style-type: none"> <li>● Healthcare work restriction: exclude from work for 21 days after last exposure</li> <li>● Monitor for symptoms for 21 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>● symptoms for 21 days after last exposure</li> </ul>	
Pregnant	Immune <sup>2</sup>	<ul style="list-style-type: none"> <li>● PEP not indicated</li> <li>● No quarantine or exclusion from congregate setting/work needed</li> <li>● Monitor for symptoms for 21 days after exposure</li> </ul>		
	Non-immune (IgG negative)	<ul style="list-style-type: none"> <li>● Give IVIG<sup>3</sup></li> <li>● Quarantine and monitor for symptoms for 28 days after last exposure</li> </ul>	<ul style="list-style-type: none"> <li>● PEP not indicated (too late)</li> <li>● Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>	
	Unknown	<ul style="list-style-type: none"> <li>● Draw IgG titers to determine immunity</li> <li>● If IgG negative: give IVIG<sup>3</sup> and quarantine and monitor for symptoms for 28 days after last exposure</li> <li>● If IgG positive: PEP not indicated. No quarantine or exclusion from congregate setting/work needed. Monitor for symptoms for 21 days after exposure.</li> </ul>	<ul style="list-style-type: none"> <li>● PEP not indicated (too late)</li> <li>● Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>	

Age or Health Status Category	Measles Immune Status	Time From First Exposure <sup>1</sup>		
		≤72 hours	>72 hours-6 days	>6 days
Severely immunocompromised <sup>5</sup>	Any	<ul style="list-style-type: none"> <li>• Give IVIG<sup>3</sup> (preferred); IMIG<sup>3</sup> is an option if &lt;12 months</li> <li>• Quarantine and monitor for symptoms for 28 days after last exposure</li> </ul>		<ul style="list-style-type: none"> <li>• PEP not indicated (too late)</li> <li>• Quarantine and monitor for symptoms for 21 days after last exposure</li> </ul>

**Table Footnotes**

<sup>1</sup>**Exposed** = Household or other close contact, persons in the same congregate setting (e.g., school classroom), or anyone who shared air space with a confirmed case within 2 hours of the person known or suspected to have measles leaving a room.

- All exposed persons should self-monitor for [signs and symptoms of measles](#).
- Quarantine or self-quarantine means to stay home and away from others. It includes not going to school, work, or public spaces and not using public transportation.
- Information regarding healthcare personnel (HCP) work exclusion, self-quarantine, and self-monitoring, can be found in the [VDH Assessment Tool for Healthcare Personnel Exposed to Measles](#).
- After receipt of IG, individuals should self-quarantine at home for 28 days after the last exposure to measles and self-monitor for symptoms of measles. This is because IG prolongs the incubation period. If quarantine for 28 days is not possible, then self-quarantine and self-monitoring for 21 days should occur followed by seven more days of self-monitoring.
- Persons who continue to be exempted from or who refuse measles vaccination should be excluded from the school, childcare, or other institutions until 21 days after last contact with any case of measles.

<sup>2</sup>**Immune** = meets presumptive evidence of immunity criteria for exposed persons, as defined below.

Presumptive Evidence of Immunity for Exposed Persons who Do Not Work in a Healthcare Setting

Acceptable presumptive evidence of measles immunity includes at least one of the following:

- Written documentation of adequate vaccination— receipt of one or more doses of a live\* measles-containing vaccine administered on or after the first birthday for preschool-age children and adults not at high risk, and two doses of measles-containing vaccine for school-age children and adults at high risk for exposure transmission (i.e., health care personnel, international travelers, and students at post-high school educational institutions); or
- Laboratory evidence of immunity; or
- Birth before 1957; or
- Laboratory confirmation of disease.

Persons who do not meet the above criteria are considered susceptible and should be vaccinated unless contraindicated.

Presumptive Evidence of Immunity for Exposed Persons who Work in a Healthcare Setting (including volunteers, trainees, nurses, physicians, technicians, receptionists, and other clerical and support staff)

Presumptive evidence of immunity to measles for health care personnel includes any of the following.

- Written documentation of vaccination with 2 doses of live\* measles or MMR vaccine administered at least 28 days apart, or
- Laboratory evidence of immunity, or
- Laboratory confirmation of disease.

\*People who were vaccinated prior to 1968 with either inactivated (killed) measles vaccine or measles vaccine of unknown type are considered susceptible and should be vaccinated unless contraindicated.

Source: CDC Vaccine Preventable Diseases Surveillance Manual (Chapter 7: Measles).

<https://www.cdc.gov/vaccines/pubs/surv-manual/chpt07-measles.html>

<sup>3</sup>**Immunoglobulin (IG)** – Use of IG is prioritized for infants, susceptible pregnant women, and severely immunocompromised persons. It is not indicated for persons who have received one or more doses of measles-containing vaccine at age 12 months or older, unless they are severely immunocompromised.

- Doses – intramuscular (IMIG) = 0.5 mL/kg. Maximum dose 15 mL. Give measles vaccine 6 months after IMIG as long as at least 12 months of age and not contraindicated.
- Doses – intravenous (IVIG) = 400 mg/kg. Give measles vaccine 8 months after IVIG as long as at least 12 months of age and not contraindicated.

<sup>4</sup>**MMR** – measles, mumps, rubella vaccine. For dosing information, refer to the [package insert](#).

<sup>5</sup>**Severely immunocompromised** persons includes:

- Patients with severe primary immunodeficiency;
- Patients who have received a hematopoietic stem cell transplant, until at least 12 months after finishing all immunosuppressive treatment or longer in patients who have developed graft-versus-host disease;
- Patients undergoing treatment for acute lymphoblastic leukemia, within and until at least 6 months after completion of immunosuppressive chemotherapy;
- People who have received a solid organ transplant;
- People with human immunodeficiency virus (HIV) infection who have severe immunosuppression; and
- Patients younger than 12 months whose mothers received biologic response modifiers during pregnancy.

Source: Red Book: 2021 Report of the Committee on Infectious Diseases, 32nd Edition, American Academy of Pediatrics. <https://ebooks.aappublications.org/content/red-book-2021>