

Measles Contact Management Algorithm

Immunization Status →	Birth before 1957	2 doses	1 dose ^{&}	0 doses		Unknown ⁹	
Risk assessment:	Presumed immune	Presumed immune	~95% effective	Susceptible!		Presume susceptible	
Prophylaxis:	None	None	MMR within 72 hours of exposure	MMR within 72 hours of exposure; Consider IG (if indicated ¹) within 6 days of exposure*		MMR within 72 hours of exposure; Consider IG (if indicated ¹) within 6 days of exposure*	
Recommendations:	No recommendations or restrictions HCF should consider vaccinating HCW born before 1957 with two doses of MMR. ¹⁰	No recommendations or restrictions	Second MMR recommended even if >72 hours after exposure (MMR within 72 hours preferred). Preschool aged children with one dose are considered immune. ⁸	Close Contacts^e (Asymptomatic)	Public Callers[#] (Asymptomatic)	Close Contacts^e (Asymptomatic)	Public Callers[#] (Asymptomatic)
				Get a dose of MMR regardless of time since exposure. ² Ig should not be given if longer than 6 days since exposure.	Get a dose of MMR	Draw blood for serum IgG titer and then give a dose of MMR.	Get a dose of MMR. Strongly encourage drawing blood for serum IgG titer.
Symptom Watch:	Yes-self monitor ⁶ Discuss exposure, symptoms, and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; active daily monitoring by LHD not necessary.	Yes-self monitor ⁶ Discuss exposure, symptoms, and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; active daily monitoring by LHD not necessary.	Yes-self monitor ⁶ Discuss exposure, symptoms ^{3,5} and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; active daily monitoring by LHD not necessary.	Yes Discuss exposure, symptoms ^{3,5} and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; Consider active daily monitoring by LHD. ⁷	Yes-self monitor⁶ Discuss exposure, symptoms, and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; active daily monitoring by LHD not necessary.	Yes Discuss exposure, symptoms ^{3,5} , and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF; Consider active daily monitoring by LHD ⁷ unless determined to be immune.	Yes-self monitor⁶ Discuss exposure, symptoms, and symptom watch timeframes. (for 21 days after exposure) Explain what to do if symptoms: i.e. stay home. Call PH/HC provider before going to HCF.
Exclusion:	None unless symptoms develop. Exclusion of HCW in this group not required.	None unless symptoms develop.	None unless symptoms develop. HCW with one dose of MMR who have a measles exposure should receive 2 nd dose and can return to work ^{&}	Yes! Quarantine ⁴ at home with no non-immune visitors and avoidance of all public settings from day 7 - day 21 (day 5-21 for HCW) after exposure if no MMR given within 72 hrs. Those given Ig still need isolated. HCW with no prior doses are excluded until 21 days after exposure regardless of PEP.	None unless symptoms develop If becomes symptomatic, between day 7 through day 21 after exposure, isolate ⁴ and test for measles if rash develops.	Yes: with exceptions Stay home from day 7 (day 5 for HCW) after exposure until titer results available. If titer positive: no further restrictions and no MMR needed. If titer negative or not done: Quarantine at home ⁴ from day 7 through day 21 after exposure. (days 5-21 for HCW)	None unless symptoms develop If becomes symptomatic, between day 7 through days 21 after exposure, isolate ⁴ and test for measles if rash develops. If titer positive: no further restrictions.

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€ Identified close contacts (names known) that can be monitored daily and who have had a specific measles exposure identified.

#Public callers are members of the public who may have been exposed to measles because of being in the same place/time as the infectious measles case but who are not named close contacts. This excludes other members of the general public (who should be recommended to follow CDC vaccination schedules and get up to date on vaccines).

&Health Care Workers (HCW) with one dose of MMR who have a definite or possible measles exposure (i.e. who are named close contacts or public callers) can remain at work (no exclusion) but should receive a 2nd dose of MMR as soon as possible. Titers for HCWs are not usually the best use of time and resources.

*Vaccination and IG recommendations (such as recommended timing between MMR doses, vaccination of infants <1 year, and circumstances under which to give IG), may vary between local health jurisdictions depending on outbreak circumstances in each locale.

!Indications for IG include: Age <1 year, pregnancy, immunosuppression.

2If MMR given >72 hours after last exposure for close contacts with 0 previous doses contacts must be monitored for the possibility of adverse event (fever and/or rash) after first MMR. Vaccine-associated fever/rash, if they occur, typically develop ~2 weeks after vaccination, mimicking the incubation and symptoms of the measles virus. MMR given >72 hours after last exposure is not effective prophylaxis. If measles-like rash illness develops in a close contact that received MMR, genotyping at CDC will need to occur to determine whether illness is caused by wild type or vaccine type measles exposure.

3Rash and fever rates after MMR refer to adverse events after the first dose; fever and rash are less common after the second dose.

4Quarantine and isolation are at the discretion of each LHD jurisdiction and are typically voluntary, but under some circumstances quarantine/isolation may be legally mandated or enforced, as per LHD discretion and determination. [Illinois Administrative Code for Measles](#)

5Adverse event a possibility 5-12 days after MMR received is: 5% get rash and 15% get fever

6Self-monitoring is defined as evaluation of one's own health to determine if they have any measles-like symptoms.

7Active daily monitoring by LHD includes calling contacts daily or relying on the contact to report symptoms daily into a monitoring system such as RedCap.

8Preschool aged children age appropriately vaccinated with 1 dose of MMR are considered presumptively immune, however, a 2nd dose can be considered, especially when there is ongoing transmission potential, as long as 28 days have passed since the last dose.

9Unknown is those that do not know if they've been vaccinated or those that think they have but have no proof.

10Although birth before 1957 generally is considered acceptable evidence of measles, mumps, and rubella immunity, 2 doses of MMR vaccine should be considered for unvaccinated HCW born before 1957 who do not have laboratory evidence of disease or immunity to measles and/or mumps. For HCW who do not have evidence of immunity, two doses of MMR are recommended during an outbreak.

HCF= Health care facility/facilities

HCW= Health care worker(s)

LHD= Local health department

*****NOTE: This is a supplemental document to assist LHDs with contact management. This should not replace all other guidance; please refer to the IDPH Measles Disease Management and Investigation Guidelines and the CDC Manual of Vaccine-Preventable Diseases for more detailed information. Both documents are on the IDPH webportal measles page.**