Algorithm for Assessment of People Exposed to Measles

Exposed to Person with Confirmed Measles During Infectious Period

- **Yes**
  - Known Vaccination History
    - Yes
      - MMR within 72 hours of exposure
      - MMIR recommended even if MMR not given within 72 hours of exposure
      - Yes: Discuss date of exposure and symptom watch times. Consider active monitoring if possible, with check-in every 2-3 days. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.
    - Susceptible
      - MMR within 72 hours of exposure or consider IG if indicated
      - If asymptomatic, encourage IG titer or dose of MMR through HC provider (in special situations PH can support testing)
      - Yes: Discuss date of exposure and symptom watch times. Consider active monitoring if possible, with check-in every 2-3 days. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.
    - Presumed Susceptible
      - MMR within 72 hours of exposure or consider IG if indicated
      - If asymptomatic, encourage IG titer or dose of MMR through HC provider
      - Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.

- **No**
  - 0 Doses
    - Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.
  - 1 Dose
    - Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.
  - 2 Doses
    - Yes: Discuss date of exposure and symptom watch times. Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.

**Risk Assessment**
- Presumed Immune: None
- Susceptible: IG (if indicated) within 6 days of exposure
- Presumed Susceptible

**Prophylaxis**
- None unless symptoms develop

**Recommendations**
- Second MMR recommended if needed per ACIP recommendations even if >72 hours after exposure (but MMR within 72 hours preferred)
- MMR recommended even if MMR not given within 72 hours of exposure
- MMIR within 72 hours of exposure
- IG (if indicated) within 6 days of exposure

**Symptom Watch**
- Yes: Discuss date of exposure and symptom watch times.
- Explain what to do if symptoms arise: stay home, call PH/HC provider before going to HCF. Counsel on adverse events.

**Work/School Exclusion**
- None unless symptoms develop

**Quarantine at Home**
- No

**Testing at OSPHL**
- Yes until 21 days after exposure, whether or not given MMR or IG
- Yes and no non-immune visitors

**Notes**
- ACDP: Acute and Communicable Disease Prevention Section, Oregon Health Authority
- HC: Health Care
- HCF: Health Care Facility
- IG: Immune Globulin
- OSPHL: Oregon State Public Health Laboratory
- PH: Public Health

Last Revised: February 2019
Adapted from Washington State Department of Health
Yes: Household, close social contact, small space for extended time, direct caregiver to case, classroom, health care setting OR named close contacts who can be monitored daily and have had a specific measles exposure identified.

No: Possible exposure to measles because of being in the same place/time as an infectious measles case but not a named contact. This excludes other members of the general public (who should be recommended to follow CDC vaccination schedules and get up-to-date on vaccines).

Claims to be vaccinated but has no documentation and no serology; self-report of prior measles and no serology done

High-risk setting/occupation: health care, day care, schools with MMR rates less than 95%, direct contact with pregnant women, direct contact with immunocompromised, direct contact with infants, direct contact with unvaccinated. Healthcare Workers (HCW) born in 1957 or later who have had one dose of MMR and who have a definite or possible measles exposure (i.e., who are named close contacts or visited an exposure venue) should be treated as a close contact with unknown MMR status and should be excluded from work until 21 days after exposure. This additional caution is necessary due to the higher risk that a HCW contagious for measles might expose medically fragile individuals. The local health officer has discretion not to recommend exclusion in these situations. Healthcare workers born before 1957 are encouraged to get a second MMR but would not be excluded from work.

Possibly 5-12 days after MMR received: 5% get rash, 5-15% get fever. Rash and fever rates after MMR refer to adverse events after the first dose; fever and rash are less common after the second dose.

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

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.

People who receive MMR vaccine or immunoglobulin (IG) as post-exposure prophylaxis to measles should be monitored for signs and symptoms consistent with measles for at least one incubation period.

Quarantine and isolation are at the discretion of each LHD and are typically voluntary, but under some circumstances quarantine/isolation may be legally mandated or enforced, as per LHD discretion and determination.

Exclusion for 28 days after exposure if received IG. If received MMR <72 hours after exposure, may return at discretion of local health officer.

Compelling presentation with some convincing combination of fever, cough, coryza, conjunctivitis, and a morbilliform rash.