

Managing Mumps Exposures in Health Care Workers

FOR EMPLOYEE HEALTH AND INFECTION PREVENTION STAFF

Report suspected mumps cases

If you suspect mumps in a patient:

- Call MDH at 651-201-5414 or toll-free at 1-877-676-5414 **or**
- Use the [mumps reporting form](http://www.health.state.mn.us/divs/idepc/dtopics/reportable/forms/mumpsform.html) (<http://www.health.state.mn.us/divs/idepc/dtopics/reportable/forms/mumpsform.html>)

Health care facilities are required to report suspect cases of mumps to MDH within 1 working day.

Evaluate health care workers' mumps immune status

Health care workers (HCWs) include everyone working in a health care facility that has the potential for exposure to infectious materials. Workers providing direct, face-to-face patient care should be prioritized. The presumptive evidence of immunity criteria for HCWs differs slightly from the criteria for community settings.

Evidence of mumps immunity for HCWs includes¹:

- Having had 2 doses of MMR vaccine, or
- Serologic evidence of immunity, or
- Birth before 1957, or
- Laboratory confirmation of disease.

If a person is not immune, they should be considered susceptible. History of disease is no longer considered adequate presumptive evidence of mumps immunity for HCWs; laboratory confirmation of disease has been added as acceptable presumptive evidence of immunity².

For HCWs with 2 documented doses of MMR or other acceptable evidence of immunity to mumps, serologic testing for immunity is not recommended.

- If a HCW has 2 documented doses of MMR, is tested serologically, and has negative or unclear mumps titer results, it is not recommended that the person receive an additional dose of MMR vaccine. They should be considered to have adequate presumptive evidence of immunity.
- If a HCW has 1 documented dose of MMR, they should receive a second dose at least 28 days after the first.

A secure system should be used to manage vaccination records for HCWs so records can be retrieved easily as needed¹.

Vaccination recommendations

HCWs without evidence of immunity should receive either:

- Two doses MMR vaccine, or
- Serologic immune status testing with follow-up vaccination of persons with negative or unclear results.

In HCWs without evidence of immunity, serologic testing prior to vaccination is not recommended unless the facility deems it more cost-effective.

Age groups presumed immune to mumps due to disease

Though most persons born before 1957 are likely to be immune to mumps, this does not guarantee mumps immunity. Health care facilities should consider vaccinating HCWs born before 1957 who lack evidence of immunity with 2 doses of MMR at the appropriate interval.

HCW exposure

Unprotected exposure to mumps is typically defined as being within 3 feet of a patient with a diagnosis of mumps without the use of proper personal protective equipment. If a case of mumps is identified at your facility, evaluate HCWs' mumps immune status utilizing criteria on page 1.

For HCWs without immunity:

- HCWs who lack evidence of immunity and have had unprotected exposures to mumps should be excluded from work from the 12th day after the first unprotected exposure to mumps through the 25th day after the last exposure.
- Previously unvaccinated HCWs who receive a first dose of vaccine after an exposure are considered non-immune and should be excluded from the 12th day after the first exposure to mumps through the 25th day after the last exposure. Mumps vaccine cannot be used to prevent mumps after exposure.

For HCWs with partial vaccination:

- HCWs who had been previously vaccinated for mumps, but received only 1 dose of mumps vaccine may continue working following an unprotected exposure to mumps.
- Such personnel should receive a second dose as soon as possible, but no sooner than 28 days after the first dose.
- They should be educated about symptoms of mumps, including nonspecific presentations, and should notify occupational health if they develop these symptoms.

For HCWs with evidence of immunity:

- HCWs with evidence of immunity do not need to be excluded from work following an unprotected exposure.
- However, 2 doses of MMR vaccine do not provide 100 percent protection from mumps. Some vaccinated personnel may remain at risk for mumps.
- HCWs should be educated about symptoms of mumps, including nonspecific presentations,

and should notify occupational health if they develop these symptoms.

Exclusion of exposed HCWs

- A HCW who develops mumps symptoms after exposure should be excluded from work for 5 days following onset of swelling.
- Exclusion for 9 days was recommended previously based on reports of mumps virus isolation from saliva up to 9 days following onset. Risk of transmission beyond 5 days is not supported by epidemiologic data; however facilities may recommend that HCWs wear a mask through day 9 upon return to work.

References

1. CDC. Prevention of Measles, Rubella, Congenital Rubella Syndrome, and Mumps 2013. MMWR 2013;62(No. 4):1-40.
2. CDC. Immunization of Health-Care Personnel: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR November 25, 2011; 60(No. RR-07); 1-45.

Vaccine-Preventable Disease Section
 PO Box 64975
 St. Paul, MN 55164-0975
 651-201-5414
www.health.state.mn.us/immunize

*To obtain this information in a different format, call:
 651-201-5414.*