

Exclusion Assessment Tool for a Health Care Worker Exposure to Mumps

The purpose of this assessment tool is to assist public health, infection control practitioners and doctor office/ clinic staff in evaluating the exposure of workers in a health care setting. The following guidance is based on information contained in the American Academy of Pediatrics Red Book (29th Edition) and [Immunization of Healthcare Personnel: Recommendations of the Advisory Committee on Immunization Practices](#) (11/ 25/11) and may be updated as additional information becomes available.

Patients with mumps are considered **infectious** from 3 days before through 5 days after parotitis onset. **Exposure** is defined as being within three feet of a patient with a diagnosis of mumps without the use of proper personal protective equipment (surgical mask and gloves). Irrespective of their immune status, all exposed health care workers should report any signs or symptoms of illness during the incubation period, from 12 through 25 days after exposure.

All persons who work in health care facilities should be immune to mumps. **Immunity to mumps for a health care worker** should be determined by any of the following criteria: written documentation of vaccination with two doses of live mumps-containing vaccine¹ (can be mumps or MMR vaccine), laboratory evidence of immunity², or laboratory confirmation of disease. Birth before 1957 is not acceptable evidence of immunity for health care workers exposed to mumps virus. Exposed health care personnel born before 1957 without other proof of immunity should obtain a mumps antibody titer to document their immune status and, if negative, be furloughed from the health care facility.

Status	Course of Action
Exposed HCW	<p>Must prove immunity by documentation of vaccination with 2 doses of live mumps-containing vaccine administered at least 28 days apart¹, laboratory evidence of immunity², or laboratory confirmation of disease.</p> <ol style="list-style-type: none"> 1. <i>Has documentation of immunity:</i> <ol style="list-style-type: none"> a. May continue to work. b. Educate and monitor for signs and symptoms. 2. <i>Has documentation of one dose of MMR:</i> <ol style="list-style-type: none"> a. Give second MMR³ and may continue to work. It is not necessary to draw an IgG to confirm immunity. b. Educate and monitor for signs and symptoms. 3. <i>Has no documentation of immunity – Will have serology for IgG⁴:</i> <ol style="list-style-type: none"> a. Should remain out of direct patient contact while serology is pending if the person is within the 12th day after the first exposure through the 25th day after the last exposure. b. If not immune (IgG negative), remain out of direct patient contact from the 12th day after the first exposure through the 25th day after the last exposure. Provide first dose of MMR and second dose no sooner than 28 days later. It is not necessary to draw an IgG to confirm immunity. c. If immune (IgG positive), HCW may return to work. d. Educate and monitor for signs and symptoms.
Exposed health care workers with special conditions	<p>Consult personal health care provider (e.g. pregnant woman should consult with obstetrician).</p>

¹ The first dose of mumps-containing vaccine should be administered on or after the first birthday and the second dose should be administered no more than 28 days after the first.

² Positive mumps IgG

³ Second dose should be given as soon as possible, but no sooner than 28 days after the first.

⁴ This is a good opportunity to also assess immunity to measles and rubella.

Additional Notes:

- Patients who have been exposed to a probable or exposed case of mumps in a health care setting should be informed of their exposure, educated on the signs and symptoms of mumps (including non-specific presentations), and asked to contact their health care provider and employee health if symptoms appear.
- One dose of MMR vaccine is about 80% effective in preventing mumps and two doses is about 90% effective; therefore, some vaccinated personnel remain at risk for infection.
- Anyone could potentially be exposed in the community.
- Single antigen mumps vaccine was licensed in 1967 and recommended for routine childhood immunization in 1977. MMR was licensed in 1971 and a two-dose MMR recommendation was implemented in 1989.
- Immune globulin (IG) is not effective as postexposure prophylaxis for mumps.