

MUMPS

Cause/Epidemiology

Infections can be sub-clinical e.g. the characteristic signs and symptoms of the illness are not apparent. If contracted in adulthood, the disease is likely to produce a more severe disease. Deaths attributed to mumps have been rare.

Persons with asymptomatic or non-classical infection can transmit the virus. No carrier state is known to exist.

Mumps is a vaccine-preventable disease. Importation from countries with low vaccines coverage rates presents an ongoing risk to under-vaccinated individuals and communities.

Mumps is caused by the mumps virus, a member of the family Paramyxoviridae.

Definitions

Susceptible Person: All persons who have not had the disease or who have not been successfully immunized are susceptible. Immunity acquired after contracting the disease is usually permanent. A susceptible person is someone born during or after 1970 who DOES NOT meet one or more of the following criteria:

- Documented evidence of vaccination with two doses of mumps-containing vaccine administered at least 28 days apart on or after their first birthday
- Laboratory evidence of immunity
- Documented history of laboratory confirmed mumps infection

Clinical Presentation

Mumps is an acute viral infection characterized by low-grade fever, myalgia, anorexia, malaise, and headache. As well, there is painful swelling of one or more of the salivary glands, usually the parotid and sometimes the sublingual or submandibular glands.

Prodromal symptoms are usually non-specific and may include low-grade fever, anorexia, malaise and headache. Generalized nonspecific symptoms or primarily respiratory symptoms occur in about half of infected persons. Symptoms usually resolve three to ten days after onset of illness. Subclinical infection is common.

Transmission

Mumps is spread by Droplet transmission, and by direct contact with saliva of an infected person (e.g., from coughing, sneezing, sharing drinks/utensils, kissing).parotitis. Virus can be isolated in saliva seven days prior to onset of parotid swelling to five day after. Viral excretion is highest two days before to five days after onset of parotitis.

Incubation

The incubation period is usually 16-18 days (range 14 -25 days).

Complications

Sometimes mumps can be serious and cause swelling of the brain or its protective surface (encephalitis or meningitis) and temporary or permanent deafness. Central nervous system (CNS) involvement (i.e., aseptic meningitis) is the most common extra-salivary gland manifestation of mumps. It can also cause swelling of the testes or ovaries, which may result in infertility on rare occasions.

Complications of acute mumps can include:

- **Orchitis in males is a common complication (15-25%) after puberty (sterility from orchitis is rare)**
- Oophoritis in females is about 5%

Rare complications of acute mumps include:

- Arthritis
- Pancreatitis
- Thyroiditis
- Nephritis
- Arthralgia
- Mastitis
- Glomerulonephritis
- Myocarditis
- Thrombocytopenia
- Deafness
- Increased risk of spontaneous abortion if infected during the 1st trimester of pregnancy

Infection Prevention and Control Practices

Reporting: *Mumps is a Reportable Disease.* Probable (clinical) cases of mumps are reportable to the Public Health Surveillance Unit by telephone (204-788-6736) during regular hours (8:30 a.m. to 4:30 p.m.) AND by secure fax (204-948-3044) on the same day that they are identified. Afterhours telephone reporting is to the Medical Officer of Health on call at (204-788-8666). The *Clinical Notification of Reportable Diseases and Conditions* form:

https://www.gov.mb.ca/health/publichealth/cdc/protocol/mhsu_0013.pdf should be used.

Cooperation in Public Health investigation is appreciated.

Contact follow up and management: Contact follow up and management in the community will be coordinated by Public Health.

Case Management: Implement Droplet Precautions immediately for a patient with mumps. Refer to [Droplet Precautions](#) in the Additional Precautions section of the Community Infection Prevention & Control Manual.

All cases should be offered supportive care, encouraged to practice hand hygiene correctly, respiratory hygiene and avoid sharing drinking glasses or eating utensils.

Education

Advise client/care givers to:

- Stay home (self-isolate) from school, post-secondary educational institutions, child care facilities, workplaces and other group settings for five days after symptom onset.
- Care givers should be advised to keep children excluded from other susceptible persons (children and adults) during the exclusion period.
- Present to health care facilities only for urgent medical issues during this five day period.
- Clean frequently touched environmental surfaces with a household cleaner daily and when visibly soiled.
- Practice [Respiratory Hygiene](#)
- Perform [Hand Hygiene](#)
- Clean frequently touched items (e.g.: countertops, TV remotes, door knobs etc.) with a household cleaner daily and when visibly soiled.
- Avoid sharing drinking glasses or eating utensils.

Occupational Health

Contact Occupational and Environmental Safety and Health (OESH) for staff assessment and/or concerns.

References

1. Communicable Disease Management Protocol – Mumps. (July 2010) with additional information from Dr. Richard Rusk and Dr. Richard Baydack (April 26, 2017). Manitoba Health. <http://www.gov.mb.ca/health/publichealth/cdc/protocol/mumps.pdf>
2. Routine Practices and Additional Precautions: Preventing the Transmission of Infection in Health Care. (April 2012). Manitoba Health. <http://www.gov.mb.ca/health/publichealth/cdc/docs/ipc/rpap.pdf>

Protocol Contact:

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