



**PENNSYLVANIA DEPARTMENT OF HEALTH DIVISION OF IMMUNIZATIONS
QUICK GUIDE: MUMPS**

GENERAL INFORMATION

Infectious Agent:

The mumps virus is a paramyxovirus in the same group as influenza.

Mode of Transmission:

Airborne transmission or through direct contact with infected droplets or saliva.

Incubation Period:

Generally 16-18 days post exposure. The maximum period is from 12-25 days post exposure.

Period of Communicability:

The infectious period is considered to be from three days before active disease onset (parotitis) to five days after the active disease onset (per CDC-recent studies show that rarely is there any shedding of the virus after five days).

MUMPS IMMUNITY

Proof of mumps immunity is determined by meeting one of the following criteria:

- Documentation of receiving two doses of live virus mumps vaccine separated by 4 weeks on or after 12 months of age.
- Serological evidence of mumps antibodies.
- Diagnosis of having had mumps as documented by a physician.
- Born before 1957 (for healthcare workers this is insufficient proof of immunity).

MUMPS CASE DEFINITION and CASE CLASSIFICATION

Case Classification:

Suspected

- Parotitis, acute salivary gland swelling, orchitis, or oophoritis unexplained by another more likely diagnosis, OR
- A positive lab result with no mumps clinical symptoms (with or without epidemiological-linkage to a confirmed or probable case).

Probable

Acute parotitis or other salivary gland swelling lasting at least 2 days, or orchitis or oophoritis unexplained by another more likely diagnosis, in:

- A person with a positive test for serum anti-mumps immunoglobulin M (IgM) antibody, OR
- A person with epidemiologic linkage to another probable or confirmed case or linkage to a group/community defined by public health during an outbreak of mumps.

Confirmed

A positive mumps laboratory confirmation for mumps virus with reverse transcription polymerase chain reaction (RT-PCR) or culture in a patient with an acute illness characterized by any of the following:

- Acute parotitis or other salivary gland swelling, lasting at least 2 days
- Aseptic meningitis
- Encephalitis
- Hearing loss
- Orchitis
- Oophoritis
- Mastitis
- Pancreatitis

THE COURSE OF MUMPS DISEASE

Incubation

- Exposure to prodrome is 16-18 days with a range of 12-25 days.

Prodrome

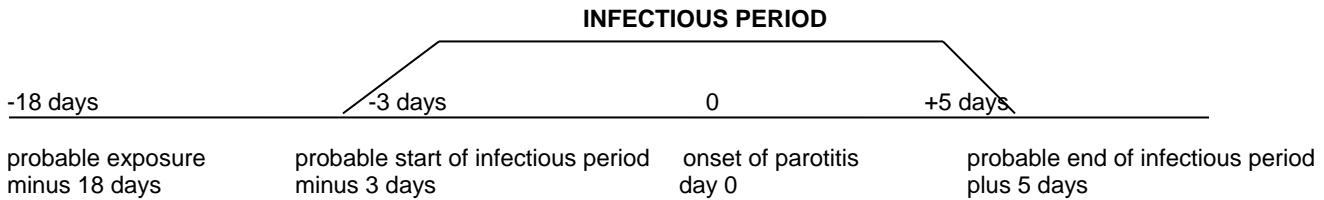
- Prodromal symptoms are nonspecific.
- Include myalgia, anorexia, malaise, headache and low-grade fever.
- Up to 33% of infected persons have minimal or no manifestation of disease.

Parotitis

- One to two days after prodrome (may be noted as earache, tenderness on touching the angle of the jaw).
- Symptoms tend to decrease after one week and are usually gone by ten days.
- Occurs in 30 – 40% of infected persons.
- Unilateral or bilateral, affecting any combination of single or multiple salivary glands.

Complications

- Orchitis, Encephalitis, Oophoritis, Pancreatitis, Deafness and rarely Death (about 1 death per year in USA).



MUMPS CASE INVESTIGATION

- Mumps is a disease that must be reported to the Division of Immunizations (DOI).
- Determination of appropriate investigation and assignment for such will occur at the State Health Center or District Office level regardless of the source of the initial report.
- Any cases reported directly to the DOI by an outside source will be forwarded to the District Office Immunization Consultant for assignment and investigation.
- Disease investigation must be initiated within 24 to 48 hours of receipt of the initial referral. Consultation with DOI is required.
- Status of case investigations must be communicated and submitted to the DOI. Time expectations for such are categorized as:
 - Immediate (same day)
Verbally communicated to DOI and must contain demographic, clinical and lab data, outbreak control measures and follow-up action plan.
 - Within 10 working days
The initial disease report date, case reports of VPD's meeting clinical case definition are to be entered in NEDSS regardless of report status.
 - Within 30 working days
The case must be concluded and have a final interview date and be closed out in NEDSS.
 - Consultation
At any time; for any reason; to determine clinical case definition/status; outbreak control measures; and follow-up action plan.

»»For all cases resulting in death, a copy of the patient's medical records and death certificate are required««

OUTBREAK CONTROL

- Exclude an infectious person for five days after the onset of parotid swelling.
- Identify persons who may be susceptible to contracting mumps and exclude them for 26 days (due to mumps long incubation period) after the onset of parotitis in the last person diagnosed in their vicinity (school, home, work...).
- Immunize excluded persons who are 12 months old or older.
Excluded persons may return to the vicinity immediately after vaccination.
- Immunize with a second dose for persons who have only had one dose.
- Notify susceptible persons of the possible exposure to mumps.
- To be considered not susceptible one of the following scenarios must be present:
 - Have physician documentation of having had the mumps disease.
 - Documentation of having been immunized with one or more doses of a live mumps vaccine on or after the first birthday (separated by at least four weeks).
 - Laboratory evidence of immunity.
 - Born before 1957 (for healthcare workers this is insufficient proof of immunity).

VPD SURVEILLANCE AND REPORTING ARE MANDATED BY 28 PA. CODE CHAPTER 27

Questions should be directed to the Division of Immunizations at 717-787-5681