

Case Definition

The following case definition for mumps was updated and approved by the Council of State and Territorial Epidemiologists in 2023 to improve the specificity of the case definition for mumps, particularly for sporadic cases.

Clinical Criteria

In the absence of a more likely alternative diagnosis, an acute illness characterized by:

- Parotitis or swelling of other (non-parotid) salivary glands(s) of any duration,

OR

- At least one of the following mumps-related complication(s):
 - Orchitis
 - Oophoritis
 - Aseptic meningitis
 - Encephalitis
 - Hearing loss
 - Mastitis
 - Pancreatitis

Laboratory Criteria^{*a}

Confirmatory Laboratory Evidence:

- Positive reverse transcriptase polymerase chain reaction (RT-PCR) for mumps-specific nucleic acid^b, **OR**
- Isolation of mumps virus, **OR**
- Significant rise (*i.e.*, at least a 4-fold rise in a quantitative titer or seroconversion^c) in paired acute and convalescent serum mumps immunoglobulin G (IgG) antibody^b

Supportive Laboratory Evidence:

- Positive test for serum mumps immunoglobulin M (IgM) antibody^{bd}

*Note: The categorical labels used here to stratify laboratory evidence are intended to support the standardization of case classifications for public health surveillance. The categorical labels should not be used to interpret the utility or validity of any laboratory test methodology.

^aA negative laboratory result in a person with clinically compatible mumps symptoms does not rule out mumps as a case.

^bNot explained by MMR vaccination during the previous 6-45 days.

^cSeroconversion is defined as a negative serum mumps IgG followed by a positive serum mumps IgG.

^dMay be ruled out by a negative convalescent mumps IgG antibody using any validated method.

Epidemiologic Linkage Criteria

- Exposure to or contact with a confirmed mumps case, **OR**
- Member of a group or population identified by public health authorities as being at increased risk for acquiring mumps because of an outbreak

Case Classifications

Confirmed:

- Meets confirmatory laboratory evidence.

Probable:

- Meets clinical criteria **AND** epidemiologic linkage criteria, **OR**
- Meets supportive laboratory evidence **AND**
 - Meets clinical criteria of:
 - ≥2-day duration of parotitis or other salivary gland swelling **OR**
 - a mumps-related complication

AND

- Does NOT meet epidemiologic linkage criteria**

Suspect:

- Meets the clinical criteria but does not meet laboratory or epidemiologic linkage criteria, **OR**
- Meets supportive laboratory evidence but does not meet the clinical criteria **AND** has documentation that mumps was suspected

**These are considered sporadic cases