

MUMPS

Last revised July 29, 2011

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** An illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid or other salivary gland(s), lasting at least 2 days, and without other apparent cause (as reported by a health professional)..
- B. **REPORTING CRITERIA:** Clinical diagnosis.
- C. **LABORATORY CRITERIA FOR CONFIRMATION:**
- Detection of mumps nucleic acid (standard PCR) from buccal swab (preferred test for mumps) OR
 - Isolation of mumps virus from clinical specimen, OR
 - Positive serologic test for mumps IgM antibody. (Note: mumps IgM response in persons previously vaccinated with a mumps containing vaccine may be absent or short lived, and false-positive and false-negative results are possible), OR
 - Demonstration of specific mumps antibody response in the absence of recent vaccination--either a fourfold increase in mumps IgG antibody as measured by a quantitative assay, or a seroconversion from negative to positive using a standard serologic assay of paired acute and convalescent serum specimens.
- D. **WISCONSIN CASE DEFINITION:**
- **Confirmed:** An illness that is laboratory confirmed or that meets the clinical description and is epidemiologically linked to a confirmed or probable case.
 - **Probable:** An illness that meets the clinical description without laboratory confirmation and is epidemiologically linked to a clinically compatible case.
 - **Suspected:** An illness that is clinically compatible or meets the clinical case description without laboratory testing, or an individual with laboratory test results suggestive of mumps without clinical information.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. **WISCONSIN DISEASE SURVEILLANCE CATEGORY II:**
Report to the patient's local health department either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means within 72 hours upon recognition of a case or suspected case.
- B. **EPIDEMIOLOGY REPORTS REQUIRED:**
- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs
OR
 - *Paper Copy* – Acute and Communicable Diseases Case Report ([F-44151](#)) AND Mumps surveillance worksheet (<http://www.dhs.wisconsin.gov/immunization/mumps.htm>)
- C. **PUBLIC HEALTH INTERVENTIONS:**
In accordance with Wisconsin Administrative rule DHS 145.05, local public health should follow the methods of control recommended in the current edition of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health

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Association. For further detailed information regarding control measures, please see the additional references cited at the end of this document. The Wisconsin Division of Public Health, Immunization Program should also be consulted regarding state-specific guidelines.

- Isolate individuals with confirmed or suspected mumps, excluding them from school, childcare, or the workplace until five days after onset of parotitis (counting onset of parotitis as day zero). Inpatients should be in respiratory isolation and a private room for five days from onset of parotitis.
- Identify and vaccinate susceptible contacts who do not have contraindications to mumps vaccine. Although this may not prevent disease after exposure to natural mumps, those who did not develop disease would be protected against infection from subsequent exposures. IG is not effective and not recommended.
- Conduct surveillance for 2 incubation periods (50 days) after onset of the last case.

D. PREVENTION MEASURES:

Vaccination with MMR (Measles, Mumps, Rubella) vaccine

- **Children** should routinely receive two doses of MMR vaccine. The first dose should be administered at 12 - 15 months of age and the second dose should be administered at 4 - 6 years of age (at the time of school entry).
- **Adults** should receive at least one dose of MMR vaccine unless they have acceptable evidence of immunity. For the general public, birth before 1957, documentation of previous dose(s) of mumps-containing vaccine, or a positive serologic test for mumps antibodies are considered acceptable evidence of immunity.
- Two doses are recommended for college students and international travelers because of increased risk of exposure.
- **Healthcare workers**
 - Persons born during or after 1957 should receive two doses of live mumps-containing vaccine (e.g. MMR)
 - Persons born before 1957 who have not received 2 doses of MMR vaccine and do not have serologic proof of immunity should strongly consider receiving 2 doses of MMR.

III. CONTACTS FOR CONSULTATION

A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:

<http://www.dhs.wisconsin.gov/localhealth/index.htm>

B. REGIONAL IMMUNIZATION PROGRAM REPRESENTATIVES:

<http://www.dhs.wisconsin.gov/immunization/regiondepts.htm>

C. BCDER/ IMMUNIZATION PROGRAM: (608) 267-9959

D. WISCONSIN STATE LABORATORY OF HYGIENE

Communicable Disease Division

Customer Service: (800) 862-1013 or (608) 262-6386

Clinical Supplies: (800) 862-1088 or (608) 265-2966

IV. RELATED REFERENCES

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

- Heymann DL, ed. Mumps. In: *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008: 431-434
- Pickering LK, ed. Mumps. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009: 468-472
- Measles, Mumps and Rubella – Vaccine Use and Strategies for Elimination of Measles, Rubella and Congenital Rubella Syndrome and Control of Mumps – Recommendations of the Advisory Committee on Immunization Practices (ACIP), *MMWR*, 1998; 47 (RR-8):1-57
- Centers for Disease Control and Prevention. Manual for the surveillance of vaccine-preventable diseases. Centers for Disease Control and Prevention, Atlanta, GA, 2008. Available at: <http://www.cdc.gov/vaccines/pubs/surv-manual>
- Notice to Readers: Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP) for the Control and Elimination of Mumps, *MMWR*, 2005; 55(22); 629-630
- Updated Recommendations for Isolation of Persons with Mumps, *MMWR*, 2008; 57(40); 1103-1105