

# Check List: Managing Patients Suspected of Having Mumps

The purpose of this checklist is to provide clinicians step-by-step guidance for evaluating patients suspected to have mumps to reduce the spread of mumps and facilitate Public Health investigations.

For questions, please call the Epidemiology Unit in the Los Angeles County Department of Public Health Vaccine Preventable Disease Control Program (VPDC) at (213) 351-7800

Monday through Friday 8:00am – 5:00pm

After business hours/weekends - (213) 974-1234, option 8 - Administrative Officer on Duty (AOD)

## Step 1. Isolate the suspected patient with mumps, using Aerosol Transmissible Diseases Standards (ATD), under droplet precautions<sup>2</sup>

- 1a. Remove patients presenting with parotitis, salivary gland swelling and/or orchitis/oophoritis from waiting areas, place a surgical mask and sit apart from other patients (3-6 feet)

## Step 2. Assess if the patient has mumps-like symptoms, regardless of vaccination status

- 2a. Assess if patient has any of the following symptoms and obtain onset and resolution dates:
  - Swollen and tender salivary glands, including parotid gland, under the ears on one or both sides
  - Orchitis/Oophoritis
  - Fever
  - Headache
  - Muscle aches, tiredness, loss of appetite

### Common differential diagnoses

- ★ Influenza A, parainfluenza virus types 1 and 3, Coxsackie A viruses, CMV, EBV, adenovirus, Bacterial suppurative parotitis (Staph aureus and Strep)

## Step 3. Collect appropriate mumps specimen(s)<sup>1</sup>

- 3a. Follow [specimen collection](#), labeling and storage instructions, and complete [laboratory forms](#). Obtain the following specimens for mumps laboratory testing:
  - **Buccal for PCR:** Massage the parotid gland (the space near the upper rear molars between the cheek and teeth) for 30 seconds, then vigorously swab the parotid area with a sterile synthetic swab (e.g., Dacron). Place swab in 2-3mLs of liquid viral/universal transport media.
  - **Serum for IgM/IgG:** 7 - 10 ml in gold top serum separator tube. Capillary blood, finger or heel stick, can be used for pediatric patients with at least 3-5 non-glass capillary blood collection tubes needed.
- 3b. Refrigerate serum (4°C) within 8 hours of collection.
- 3c. Freeze specimens ( $\leq -20^{\circ}\text{C}$ ) that are stored for more than 48 hours. Serum specimens can be stored frozen ( $\leq -20^{\circ}\text{C}$ ) for up to 8 weeks. Avoid multiple freeze/thaw cycles which may cause loss of antibody activity and give erroneous results.
- 3d. **If specimens are not collected at the clinic, do not refer the patient to another facility to obtain specimens (i.e., commercial lab or another medical clinic). Notify Public Health.** Upon approval by Public Health (VPDC or AOD), the Public Health Laboratory (PHL) will advise and assist with specimen handling and courier pick up. Specimens that arrive at PHL without prior VPDC or AOD approval may experience significant delays in testing. Select commercial labs can perform mumps buccal PCR testing.

#### Step 4. Identify exposed persons at high risk of mumps complications and any high risk settings <sup>1</sup>

- 4a. Identify if the patient has been in recent contact with any of the following:
  - Infants <12 months of age
  - Pregnant persons
  - Immunocompromised persons
  - Persons unimmunized for mumps
  - Healthcare workers (including staff at facility)

#### Step 5. Instruct patient to remain isolated until 5 days after swelling/tenderness onset.

- 5a. Regardless of mumps immunity status, the case-patient is not allowed to attend school/work, participate in any social or academic activities and attend large public gatherings/venues through the 5<sup>th</sup> day after parotitis/orchitis onset.

#### Step 6. Report the patient suspected of having mumps to Public Health<sup>1</sup>

- 6a. Inform the case-patient that Public Health may be in contact to provide mumps-related assistance to them and their family/friends.
- 6b. Please fax the following to Public Health at (213) 351-2782
  - ✓ Patient Demographics
  - ✓ All lab results assessing respiratory illness
  - ✓ Medical Records
  - ✓ Immunization Records (if available)
  - ✓ Travel History in the last 2 months

#### Step 7. Identify and address potential mumps exposures in hospital/clinic.

##### *Who is considered exposed to mumps in a healthcare facility?*

Regardless of vaccination or immunity status, an individual who had unprotected face-to-face contact (less than 3 feet) for at least 5 minutes with the case-patient while the case patient was infectious (2 days before through 5 days after parotitis/orchitis onset)

**OR**

An individual who had direct contact with respiratory, oral, or nasal secretions from a case-patient while the case patient was infectious (2 days before through 5 days after parotitis/orchitis onset)

- 7a. Of the identified exposed patients and staff, determine those who are at high risk of developing severe complications from mumps: See Step 4.
- 7b. Once Public Health has confirmed the mumps diagnosis in the case-patient, notify these high-risk individuals of their exposure and perform symptom monitoring for 25 days from the date of last exposure.
- 7c. Call Los Angeles County Department of Public Health for any further assistance in defining a mumps exposure. - See Public Health contact information in box on page 2.

#### References:

1. [Mumps B- 73](#)
2. [Title 8 California Code of Regulations: ATD Standards. CDPH.](#)
3. [Title 17, California Code of Regulations \(CC R\) §2500, §2593, §2641.5- 2643.20, and §2800-2812 Reportable Diseases and Conditions. CDPH](#)