



**LAC DPH Health Alert:
Mumps Clusters in Adults in
Los Angeles County**

March 9, 2017



*This message is intended for primary care, urgent care, emergency, internal medicine, and infectious disease providers.
Please distribute as appropriate.*

Key Messages

- There are two clusters of mumps cases occurring in adult men in Los Angeles County.
- Health care providers should consider the diagnosis of mumps among patients presenting with parotitis, other salivary gland swelling, and/or orchitis, even if patients have been vaccinated.

Situation

The Los Angeles County Department of Public Health (LAC DPH) is investigating five confirmed and two likely cases of mumps in adult men; the majority have been in HIV uninfected men who have sex with men. Contact investigations are ongoing.

Actions requested of providers

- ✓ Consider mumps when evaluating any patient who has acute orchitis, parotitis, or other salivary gland swelling, even in patients who have been immunized [see clinical presentation below].
- ✓ Obtain specimens for confirmation of diagnosis: buccal swab for PCR ideally within three days but no greater than nine days after symptom onset and blood for serology (IgM and IgG) ideally collected four or more days after symptom onset. Keep in mind that in vaccinated individuals the IgM may remain negative [see specimen collection below].
- ✓ Inform suspect mumps patients that they should remain home and away from public spaces such as school and work for five days after parotitis onset or, in its absence, until the resolution of constitutional symptoms.
- ✓ PROMPTLY report suspect cases without waiting for laboratory confirmation [see reporting section below].
- ✓ Consult DPH Immunization Program with any questions about a potential mumps case [see resources section below].

Clinical Presentation

Unvaccinated individuals are at highest risk for infection, though mumps should also be suspected among vaccinated individuals with relevant symptoms and signs. Mumps incubation period ranges from 12-25 days, but symptoms typically develop 16 to 18

days after exposure to mumps virus.

Mumps typically begins with a few days of fever, headache, myalgia, fatigue, and anorexia; these symptoms are usually followed by development of salivary gland swelling, pain and tenderness within 48 hours.

Mumps usually involves one or both parotid salivary glands but in 10% of cases other salivary glands (submandibular and sublingual) are symptomatic. In vaccinated patients symptoms may be non-specific.

Complications of mumps may include orchitis, oophoritis, and neurologic manifestations (including meningitis, encephalitis, and deafness). Orchitis can occur in as many as 50% of post-pubertal males without prior presentation of parotitis/salivary gland swelling. Clinicians should inquire about scrotal or testicular pain in men with fever and other non-specific symptoms.

Specimen Collection and Testing at Public Health Laboratory

The Public Health Laboratory will transport and process all mumps specimens. Note: specimens will not be processed until the suspect case has been reported to Public Health [see reporting details below].

Specimens for Mumps Testing:

- **Buccal swab:** A reverse-transcriptase polymerase chain reaction (PCR) test of the parotid duct (buccal swab) is the preferred method of confirming acute mumps infection. Optimal timing for specimen collection is within three days of symptom onset but specimens may be collected up to nine days. Massage the salivary gland area for about 30 seconds and use a viral culturette/synthetic swab to swab around the parotid duct. Place the swab in 2-3 mls of liquid viral or universal transport media.
- **Serum:** In addition to PCR, test blood for mumps IgM and IgG antibodies, ideally four or more days after symptom onset as earlier tests may be falsely negative. *Serum IgM may be absent or attenuated in previously vaccinated individuals.* Draw 8-10 mL of blood in a red top or serum separator tube; spin down serum if possible.
- **Urine:** In addition, submit a urine specimen in a sterile container for supplemental mumps testing.

Call the Public Health Laboratory courier to arrange for specimen pick-up weekdays 8:00am – 5:00pm: 562-658-1460. All specimens should be stored at 4°C until pick-up.

The turnaround time for results can be up to 7-10 business days after receipt of specimens at the Public Health Laboratory.

Transmission and Infection Control

Mumps is highly infectious and is transmitted by contact with airborne respiratory secretions or saliva or through fomites. Typically, mumps patients are contagious from two days before through five days after onset of parotitis. Suspected mumps cases should wear a mask and sit apart from other patients (3-6 feet). Patients should be told to stay at home and avoid public spaces for five days after the onset of parotid swelling, or, if they do not have parotid swelling, until constitutional symptoms have resolved.

Prevention

Routine vaccination with two doses of mumps-containing vaccine is the most effective way to prevent disease. It is routinely recommended for all children and is a requirement for school attendance. Adults without proof of immunity should receive a two shot series depending upon the details of their risk.

Management of exposed individuals: DPH will assist in the management of all suspect cases and their contacts. The management of contacts will be based on their exposure, vaccination, and immune status. In general, if not contraindicated, management may include vaccination. Immune globulin is not indicated for mumps post-exposure prophylaxis.

Reporting

Mumps suspect cases should be reported by telephone promptly to the local health department. Do not wait for laboratory confirmation.

Los Angeles County DPH:

- Weekdays: 888-397-3993
- After 5 pm or on weekends: 213-974-1234.

Long Beach Health and Human Services:

- Weekdays: 8:00 am to 5:00 pm: 562-570-4302.
- After hours: 562-435-6711 ask for the Communicable Disease Officer.

Pasadena Health Department:

- Weekdays: 8:00 am to 5:00 pm: 626-744-6089.
- After hours: 626-744-6043.

Additional Resources

- Technical or clinical assistance-contact LAC DPH Immunization Program's Surveillance Unit:
 - Weekdays: 8:00 am to 5:00 pm call: 213-351-7800.
 - After hours call: 213-974-1234.
- Mumps for Community Members (LAC DPH)

<http://publichealth.lacounty.gov/ip/DiseaseSpecific/Mumps.htm>

- Mumps for Healthcare Providers (CDC): <https://www.cdc.gov/mumps/hcp.html>
- Mumps Factsheet (CDPH): <https://www.cdph.ca.gov/HealthInfo/discond/Pages/Mumps.aspx>

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