FACT SHEET

Mumps virus PCR

Test Description:

The SLO Public Health Laboratory performs a molecular amplification test for detection of Mumps virus by real-time reverse-transcription polymerase chain reaction (RT-PCR) method. Mumps is an acute disease characterized by fever and swelling and tenderness of one or salivary glands, called parotitis.

Between 40-50% of mumps infections are marked by respiratory symptoms in children less than 5 years old. Orchitis can also occur. Symptomatic aseptic meningitis can occur in up to 105 of mumps cases although patients usually recover.

Individuals infected with mumps virus can transmit the virus 2 or more days before the onset of parotitis and up to a week after onset.

Sensitivity: 95-98% Specificity: 98-100%

Specimens:

Obtain specimens as soon as mumps virus infection is suspected. Collect within 4 days of parotitis onset.

- 1. Preferred: Buccal or Throat Swab (Dacron[®] tip swabs with an aluminum or plastic shaft) placed in Viral Transport Media (VTM).
- 2. Acceptable:
 - a. Buccal or oropharyngeal (throat) swab in VTM
 - b. Urine
 - To collect a urine: Collect a first morning voided specimen during the first week after rash onset, although any urine specimen collected up to 10 days after rash onset will be accepted. Collect **50 -100 ml urine in a sterile container.**
 - Urine specimens need to be transported to the public health lab within <u>24 hours of</u> <u>collection</u>.
- 3. Blood—collect 7-10mL in a red top or serum separator tube.
- Mumps virus is sensitive to heat and desiccation and viability decreases when samples are not kept cold. Specimens must be refrigerated at 4°C until they can be sent to the laboratory and must be kept cold during transit.
- 5. Specimens other than urines can be held at **4°C for 72 hours** before testing.
- 6. If specimens are held for >72 hours, they should be frozen, preferably at -70°C.
- 7. Avoid repeat freeze-thaw cycles.



County of San Luis Obispo Public Health Laboratory 2191 Johnson Ave., San Luis Obispo, CA 93401 Phone: (805) 781-5507 Fax: (805) 781-1023 <u>www.sloPublicHealth.org/lab</u> Laboratory Hours: Monday – Friday, 8:00am – 5:00pm