

INFECTIOUS PAROTITIS (MUMPS)

I. DEFINITION:

The clinical case definition of infectious parotitis (mumps) is defined as an illness with acute onset of unilateral or bilateral tender, self-limited swelling of the parotid and or other salivary gland(s), lasting at least 2 days, or orchitis or oophoritis unexplained by another more likely diagnosis.

II. BACKGROUND/EPIDEMIOLOGY:

See Epi Manual

III. CLINICAL FEATURES:

See Epi Manual

IV. MANAGEMENT PLAN FOR LABORATORY SPECIMENS:

A. Contact the Acute Disease Service (ADS) Epidemiologist-on-Call (405-271-4060) prior to obtaining laboratory specimens to discuss specimen collection of suspected mumps cases. Ensure that anyone possibly susceptible to mumps is not accidentally exposed while the specimens are being obtained.

B. Possible testing methods include serology testing and viral detection. For serology testing, the acute specimen should be collected as soon as possible upon suspicion of mumps disease, and a convalescent specimen should be collected about 2 – 3 weeks after the acute specimen. Mumps virus can be isolated from saliva (buccal swab); specimens should be collected as close to symptom onset as possible, preferably within 1 – 3 days of parotitis onset. Virus can also be isolated from urine specimens, although they are not as useful as buccal specimens for virus isolation or detection of mumps RNA. Urine specimens may not be positive for mumps virus until > 4 days after symptom onset.

C. Viral detection from buccal swab samples:

1. Specimens are collected by massaging the parotid (salivary) gland area for 30 seconds, swabbing the parotid duct (space near the upper rear molars between the cheek and teeth), and placing the specimen into viral transport media.
2. Once specimens are collected, refrigerate at 4°C until shipment.
3. Specimens should be shipped on cold packs within 24 hours. If there is a delay in shipment, the sample is best preserved by freezing at -70°C. Frozen samples should then be shipped on dry ice.

D. Serology:

1. Of the serology testing, EIA (enzyme immunoassay) is the most sensitive method in identifying mumps.
2. Refer the client to their primary healthcare provider or alternative clinic for IgM and IgG testing.
3. In situations where laboratory testing cannot be obtained by the client's primary healthcare provider or an alternative clinic (in a timely fashion or due to costs) for specific persons suspected of having mumps, the public health nurse should

notify the ADS Epi-on-Call and discuss laboratory testing of the client through the OSDH contract reference laboratory.

4. If testing is conducted using the OSDH contract reference laboratory, specimens will be collected per contract laboratory specifications.
5. Instructions for specimen collection, documentation, and transport to the contract reference laboratory will be provided by the ADS Epi-on- Call to the public health nurse prior to collection.

REFERENCES:

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