Acceptable samples for Mumps Virus testing:

1. **Buccal swabs**: PCR testing. Collect within 1-4 days of the onset of symptoms.

2. **Urine**: PCR testing. Urine samples may not be positive until >4 days after symptom onset. Preferably, a urine specimen to be accompanied with a buccal specimen for improved virus detection.

3. **Serum**: IgM and IgG testing. IgM antibodies are detectable after 5 days of the onset of symptoms.

**Specimen Collection Supplies**

1. Screw-capped 15 ml tube with 3 ml of **viral transport medium** (VTM) collection tube.
2. Store VTM at room temperature until use and monitor expiration dates on the tube.
3. Flock-tipped plastic-shaft standard throat swab.
4. Cotton-tipped swab with wooden shafts are **NOT** acceptable and will be rejected.
5. Sealable multi-compartment plastic biohazard bag with absorbent sheets.
6. Foam packing insert with cardboard mailer and frozen cold pack.

**Buccal swab**

1. Swab the buccal cavity (photo below), which is the space near the upper rear molars between the cheek and the teeth.
2. Swab the area between the cheek and gum by sweeping the swab near the upper molar to the lower molar area.
3. Swab the area between the cheek and gum by sweeping the swab near the upper molar to the lower molar area.
4. Place swab into the viral transport media. Make sure liquid medium covers the swab tip. Break or cut the end of the swab. Screw the vial lid on tightly.

**Note**: For additional respiratory viral panel testing, collect a nasopharyngeal swab in VTM and send along with the buccal swab.

**Urine**

Collect a minimum volume of 50 ml of urine in a sterile leak proof container. Spin down at 2500 x g for 15 minutes in refrigerated centrifuge (4 °C). Transfer the sediment into a VTM collection tube. If centrifugation is not possible, submit the whole urine.
Serum
Collect 7–10 ml of blood in a red-top or serum-separator tube (SST) for IgG and IgM tests. Centrifuge the tubes and submit the serum.

Specimen Submission Form – available on the website listed below.

1. Complete a specimen submission form for each source. Enter the following information and FI outbreak number if applicable:
2. Patient Name (Last, First, Middle), Address - City, including Zip Code and County.
3. Date of Birth and Sex, Date of Onset and Collection.
4. Agent suspected and lab exam: Mumps.
5. Source of Specimen: buccal swab, urine or serum.
6. Submitter name, address, and phone number.

Specimen Packaging and Storage Instructions

1. Label the containers with patient’s name, DOB and the collection date.
2. This information must appear on BOTH the specimen and the specimen submission form or testing will NOT be performed.
3. Place the viral transport tube in one of the compartments of the biohazard bag.
4. Seal the specimen bag and store in the refrigerator specimen at 2-8° C until shipping.
5. Place the biohazard bag containing the specimen into the foam box.
6. Add the FROZEN cold pack and close the foam box. Place foam box into the cardboard mailer.
7. Put the completed specimen submission form in the clear plastic bag.
8. Seal the bag and place it between the form box and cardboard mailer. Close the outer mailer and seal it with tape.

Shipping Instructions

1. Ship the specimen as soon as possible after collection.
2. Refrigerate specimen if they will not be shipped immediately.
3. The specimen must to be at the Bureau of Laboratories/State Public Health Laboratory within 24-48 hours of collection.
4. Keep the specimen cold until it reaches the laboratory.
5. Package the specimen appropriately and ship overnight to the address below.
6. Do not ship specimens out on Fridays, weekends, day before a holiday or holidays, unless approved by Maria Strohecker, 484-870-6289 or mstrohecke@pa.gov.

NOTE: If specimen will not arrive at the Bureau of Laboratories/State Public Health Laboratory within 24-48 hours of collection, freeze and keep specimen at -70°C and ship overnight with FROZEN cold packs. Processing specimens within 24 hours of collection will enhance the sensitivity of PCR testing.