

Acceptable samples for Mumps Virus testing:

1. **Buccal swabs:** PCR testing. If it has been ≤ 3 days since symptom onset, collect a buccal swab specimen for detection of viral RNA by real-time (rRT-PCR). If it has been > 3 days since symptom onset, collect a buccal swab specimen for rRT-PCR *and* a serum specimen for IgM detection. If the patient has orchitis/oophoritis, mastitis, pancreatitis, hearing loss, meningitis, or encephalitis, collect a buccal swab specimen for rRT-PCR and a serum specimen for IgM detection, regardless of days since symptom onset.
2. **Serum:** Serum specimen for IgM detection is collected If it has been > 3 days since symptom onset.

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 is **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

Video: "Collecting a buccal swab for Mumps diagnostic testing." This [short video](#) demonstrates how to correctly collect and transport a 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 the swab into the viral transport media. Make sure the 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 it along with the buccal swab.

Serum

Collect 7–10 ml of blood in a red-top or serum-separator tube (SST) for IgG and/or IgM testing. Centrifuge the tubes and submit the serum.

Specimen Submission Form – available on the website listed below.

PA LINK to website: [BOL Micro Specimen Submission Form.pdf \(pa.gov\)](#)

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 test(s) requested: Mumps PCR or IgM
5. Source of Specimen: **buccal swab, 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 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 Hephzibah Tagaram, 484-870-6380 or htagaram@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.

For any questions, contact **Hephzibah Tagaram Ph.D., 484-870-6380** or htagaram@pa.gov.

Additional information: Refer to CDC: [Mumps Job-Aid Template for Providers | CDC](#)