



Conjunctival Sample Collection for Influenza A(H5) Testing

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1.0 Purpose

- 1.1 To describe the procedure for collecting, storing, and transporting viral conjunctivitis specimens for H5N1 testing in a patient with conjunctivitis and suspected H5N1 infection.
- 1.2 This procedure was adapted from the SOP for Collection, Storage & Transportation of Viral Conjunctivitis Specimens from the Department of Virology, Public Health Laboratories Division, National Institutes of Health, Islamabad.

2.0 Scope

- 2.1 This procedure applies to staff at clinics or hospitals and to public health department staff collecting conjunctival specimens to test for the presence of H5N1 virus.

3.0 Roles/Responsibilities

- 3.1 Specimen collection should be performed by well-trained healthcare personnel ensuring that all vials are labeled appropriately.

4.0 Materials Needed

- 4.1 Personal protective equipment (PPE), including respirator, eye protection, disposable gowns, and disposable gloves
- 4.2 Sterile Dacron or nylon flocked swab
Note: Swab specimens should be collected only on swabs with a synthetic tip and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate are not acceptable.
- 4.3 Sterile Viral Transport Medium (VTM)
- 4.4 Specimen transport container with ice packs
- 4.5 Specimen label
- 4.6 Pen/marker
- 4.7 CDC 50.34 Specimen Submission form
- 4.8 Biohazard waste disposal bags
- 4.9 Soap and water/hand sanitizer
- 4.10 Disinfectant

5.0 Safety Precautions

- 5.1 Always wear recommended PPE (respirator, eye protection, disposable gowns, disposable gloves).
- 5.2 Always perform hand hygiene before and after the procedure by washing hands thoroughly with soap and water or using hand sanitizer with at least 70% alcohol.
- 5.3 Dispose of all contaminated waste (gloves, swab handles, etc.) into biohazard waste disposal bags for disposal.
- 5.4 Clean and disinfect any equipment used during the procedure.

6.0 Procedure

6.1 Swab collection

Note: A separate nasopharyngeal (NP) swab specimen must be collected and submitted with the conjunctival swab specimen.

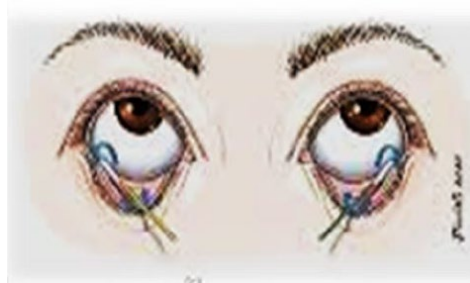
- 6.1.1 Explain the procedure and its purpose to the patient, ensuring their consent.
- 6.1.2 Position the patient in a position that is comfortable for both the patient and the healthcare personnel.
- 6.1.3 Open the swab package and remove the swab.
- 6.1.4 Gently pull down the lower eyelid of the patient to expose the conjunctiva that lines the inside of the eyelid and covers the white part of the eye (see Figure 1 below).

Figure 1.



- 6.1.5 Collect the specimen by gently rotating the swab over the infected area 2-3 times, avoiding touching the cornea (the clear front part of the eye). The specimen must contain conjunctival cells, not exudate alone (see Figure 2).

Figure 2.



- 6.1.6 Gently remove the swab and place it into the VTM immediately. Cut the excess swab handle to fit the transport medium vial and reattach the cap securely.
- 6.1.7 Repeat steps 6.1.4 through 6.1.6 for the other eye, if necessary. A separate swab is required for each eye.
- 6.1.8 Avoid touching the swab applicator below the molded break point as this could lead to contamination and incorrect results.
- 6.1.9 Dispose of any waste materials according to standard protocols.
- 6.1.10 Label the sample appropriately with unique identifier (e.g., name, DOB, and Medical Record or hospital number).

6.2 Sample Storage and Transportation

- 6.2.1 The specimen should be transported to the laboratory in triple packaging as soon as possible maintaining a cold chain (2-4°C) throughout. If there is a delay of more than 72 hours, the sample should be stored at -70°C.
- 6.2.2 Ensure that specimen transporters have the necessary knowledge and skills in safe handling practices and spill decontamination procedures.

6.3 Rejection Criteria

- 6.3.1 Inappropriate containers used.
- 6.3.2 The swab specimen is not labeled or is labeled incorrectly.
- 6.3.3 Specimen is not accompanied by a requisition form (CDC Form 50.34).
- 6.3.4 The transport medium is expired.
- 6.3.5 The swab specimen is suspected to be contaminated.
- 6.3.6 Swabs with cotton or wood shafts or calcium alginate tips.

7.0 References

- 7.1 Department of Virology, Public Health Laboratories Division, National Institutes of Health, Islamabad – [SOP for Collection, Storage, & Transportation of Viral Conjunctivitis Specimen v01](#)