



SAN JOAQUIN COUNTY PUBLIC HEALTH LABORATORY (SJCPHL)

1601 EAST HAZLETON AVE. STOCKTON, CA 95205.

Phone: 209-468-3460

AVIAN and NOVEL INFLUENZA LABORATORY TESTING GUIDANCE

Health care providers must contact the local public health department for Avian and Novel Influenza consultation and testing approval prior to sending to SJCPHL.

**Use the following procedure for collection and submission of clinical specimens for:
 Avian and Novel Influenza testing.**

**I. Supplies needed for Avian and Novel Influenza NAAT Testing
 (can be provided by SJCPHL):**

1. Sterile synthetic swab(s) (e.g., Dacron swab)/ Viral Transport Media)
2. Sterile container (If collecting lower respiratory specimens)
3. Biohazard labelled Zip lock bags with outer sleeve.
4. Requisition form (fill out all the fields) Please include Influenza vaccination status, exposure history (e.g. to infected animals, raw animal products, working with livestock or poultry, or close contact to infected persons) and date of initial antiviral treatment, if any.
5. For Web Portal users: Print out a copy of online submission. The patient's animal/human exposure history, workplace exposure history, vaccination status, and antiviral treatment information can be included in the additional notes section of the Clinical information section.

1



2



3



4



II. Preferred Specimens for Avian and Novel Influenza NAAT:

Note: Specimen should be collected using swabs with synthetic tips (e.g. Polyester or Dacron) and aluminium or plastic shaft swabs in a standard container with 2-3 mL of viral transport media (VTM). Cotton swabs, calcium alginate swabs, and wooded shaft swabs are not acceptable. Patients must meet clinical and epidemiological criteria before submitting any of the following specimens to SJCPHL for Avian Influenza testing.

A. Respiratory Specimen:

- The following respiratory specimens should be collected as soon as possible after illness onset: (i) Nasal swab (NS) and oropharyngeal swab (OP), preferably **combined in a single transport media vial**. (ii) Nasopharyngeal swabs

Note : Nasopharyngeal (NP) swab should not be combined with any other type of swab.

Respiratory

- For testing of individuals that meet clinical and epidemiologic criteria for influenza A(H5N1) with respiratory illness, preferably two specimens should be collected a 1. a nasopharyngeal (NP) swab and 2. a combined nasal swab oropharyngeal swab (e.g., two swabs combined into one viral transport media vial) and minimally a single NP swab should be collected

B. Conjunctival Swab:

- Patients with conjunctivitis should also have conjunctival swab specimen collected. If conjunctivitis is present on both eyes, collect separate swabs from each eye and combine the swabs in a single viral transport media vial.

Note: Conjunctival swabs MUST be paired with Oropharyngeal and Nasal swab or a nasopharyngeal swab specimen, even if the patient does not have respiratory symptoms. OP and NS in separate vials (or combined into one vial) are recommended for cases with conjunctivitis.

Conjunctivitis

- Individuals that meet clinical and epidemiologic criteria for influenza A(H5N1) with conjunctivitis (with or without respiratory symptoms) should have two swabs collected as well: 1. a conjunctival swab and 2. an NP swab.



C. Lower Respiratory Tract Specimen:

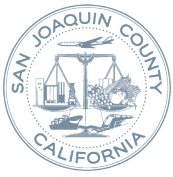
- Patients with severe respiratory disease also should have lower respiratory specimens collected including an endotracheal aspirate (EA), bronchoalveolar lavage (BAL), or sputum.

D. Multiple Respiratory Tract Specimens:

- For severely ill persons, multiple respiratory tract specimens from different sites should be obtained to increase the potential for HPAI (H5N1) virus detection.

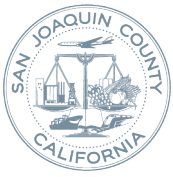
III. Specimen storage and handling:

- Place specimen swab in specimen collection vial containing 2-3 mL of viral transport medium (VTM) and immediately place on ice or cold packs (2-8°C. /refrigerated condition) for transport to the laboratory. Please note that universal transport medium (UTM) has **NOT** been verified as an acceptable medium for avian influenza testing at SJCPHL. Specimens received in UTM will be forwarded to the California Department of Public Health for testing.
- Label the viral transport media with the **patient's name, date of birth, source of specimen, and date specimen collected**. Please make sure the caps are tight before transport.
- Refrigerate specimens at 2-8°C. for up to 3 days (72 hours) from collection. If samples cannot be received by the laboratory within 3 days, they should be frozen at -70°C. or below.
- Specimens must arrive at the Public Health Laboratory frozen or can be transported on ice/cold packs at 2-8°C. if collected within 3 days of testing.



IV. Unacceptable specimens:

- Calcium alginate swabs or swabs with wooden shafts are unacceptable as they may contain substances that inactivate some viruses and inhibit PCR testing.
- Leaking specimens.
- Specimens received at SJPHL not stored as directed.
- Requisition form incomplete.
- Specimens received without a test requisition form.
- Unlabeled or mislabeled specimen.
- Specimen submitted on outdated media or transport kits.
- Nasopharyngeal swab in combination with other types of swabs
- Swab specimens submitted using Universal Transport Media (UTM).
- No specimen received with test requisition form.



Post-Collection:

1. Place specimens **inside the zip lock** specimen bag. (Fig.1)



Seal the specimen in the specimen bag

Figure 1: Biohazard Bag

2. Complete all the required information on the laboratory requisition form. (Note: Web Portal users will use and print out a copy of the completed online submission for the laboratory form).
3. Place laboratory form **in the outer sleeve** of zip-lock bag to separate it from the specimen, in case of leakage. (Fig. 2)



Insert the laboratory form into the outer sleeve

Figure 2: Outer sleeve of Biohazardous Bag