



**ADVISORY for FLORIDA PHYSICIANS and HOSPITAL CLINICAL LABS
Laboratory Testing for Avian Flu
Florida Department of Health**

**For consultation on possible human cases of avian influenza
contact your county health department**

Laboratory testing for human cases of possible avian influenza (H5N1) is available only through the Florida Department of Health Public Health Laboratories and the CDC. To make certain that such testing is done for people who meet the current clinical case definition and have appropriate travel history, it must be pre-approved by the Florida Department of Health Bureau of Epidemiology physicians. For 24/7 consultation, please contact your county health department or the Bureau of Epidemiology, Florida Department of Health at (850) 245-4401.

Avian influenza testing is carried out as part of a standard protocol of sequential testing for human influenza and other respiratory viruses that can cause influenza-like illnesses during the winter, including parainfluenza, adenovirus and Respiratory Syncytial Virus (RSV).

Initial influenza screening tests, such as commercially available rapid antigen detection assays, may be performed by the submitting clinician. If such testing has been completed at the referring lab, results should be included with the specimen submitted to the state laboratory. The rapid antigen detection tests that are available commercially for influenza vary greatly in sensitivity and have low predictive power when there is a low prevalence of infection in the community. This means there are often false negatives in a non-outbreak situation. The hospital should use these as screening tests for general guidance only. The clinician should proceed as if this is a possible influenza case even with a negative quick test if all the clinical and epidemiological considerations fit.

For details on testing see, section 2 below.

1. Needed Clinical and Exposure Information

Clinicians requesting avian influenza testing must be able to supply clinical details and a detailed travel history that suggests exposure to avian influenza. County health departments can assist with the interviews. The questions used to guide information collection are below.

1. Has the person traveled recently to Southeast Asia, (specifically China, Vietnam Thailand, Cambodia, Indonesia), or Eastern Europe (eastern Russia, Turkey or Romania), or another country with known avian influenza activity in birds or people? Alternatively, has the patient been exposed to a traveler to SE Asia or Eastern Europe? Please get a specific destination City/Province/Country and whether it was rural or urban. Did the patient have contact with any wild or domestic animals, chickens, ducks or pigs?
2. What was the purpose of the trip? Business or pleasure? Where did the patient stay – hotel or private home? With whom did the patient travel? Please get an estimate of the number of travelers in the party. Are any other persons who traveled in the group ill with similar symptoms?

3. How long was the patient there? Get number of days and dates of travel.
Determine the dates of departure from the United States and return to the United States. In relation to travel, when did the patient become ill? How did the patient travel – by air or train or auto?
4. Has the patient been in contact with anyone who works in a hospital or laboratory—especially in Southeast Asia?
5. Is there influenza-like illness activity or a confirmed influenza outbreak in the patient's home county? If the patient is not a Florida resident, where is the patient's home? Is the patient part of or linked to a confirmed influenza outbreak?
6. In what hospital has the patient been admitted? Who is the attending physician and has influenza testing been ordered? What tests? What are the test results? If the test results are not available yet, when they will be available? Obtain contact information (pager number, cell number, home phone, office phone) and address for the physician.
7. If testing for avian influenza H5N1 is positive, a case report will need to be filled out. (See case report form).

2. Specimen Collection, Packing, and Shipping Instructions

If a suspect case is evaluated by the Bureau of Epidemiology as acceptable for testing, it is critical that an oropharyngeal swab be collected using a viral culturette of viral transport media immediately. Beyond the first few days after onset, the probability of recovering virus is low. The specimen must be collected prior to treating the patient with antivirals. Swabs with wood shafts, dry swabs or culturettes designed for bacterial samples are not acceptable.

Sample collection:

- Have patient give a deep cough.
- Swab the nasopharynx or far back in the throat using a Dacron or rayon tipped plastic shaft swab.
- Reinsert the swab back into the culturette and crush the ampoule at the base of the culturette. *OR:* Insert the swab into a tube of transport media; remove excess shaft from the swab and close the tube tightly.
- Label the culturette/tube with the patient's name.
- Do not freeze the swab.
- Hold the specimen in the back of a refrigerator until shipped (up to 48 hours).

Shipping

- Wrap the culturette or the tube of viral transport medium containing the swab in a paper towel and place in a zip-lock plastic bag.
- Place the swabs in a small styrofoam cooler with a frozen blue-ice or gel cold pack.
- Add sufficient "stuffing" to prevent the items from shifting during transport.
- Put the lid on the cooler and place the paper-work/submittal sheets on top of the lid.
- Tape the outer cardboard box shut.
- The box should have a "clinical specimens" label on it (**not** a biohazard label).
- Ship overnight to the lab.
- If possible, avoid shipping on Fridays, but if you must do so, be sure the mailing label has "Saturday Delivery" indicated.

- Please completely fill out the requested patient information on the submission sheets. The laboratory specimen submission sheet may be downloaded from http://www.doh.state.fl.us/lab/PDF_Files/doh_form.pdf
- Be sure that the name, address and phone number of the person to whom the report is to be sent is clearly written.
- Specimens should be sent without delay to the nearest Bureau of Laboratories location, e.g., Jacksonville, Tampa or Miami, with a note indicating that this is a suspect avian flu. The submitter should also call the laboratory before sending the sample. Between 8 AM and 5 PM Monday thru Friday, you may contact the laboratory directly as follows.
 - Jacksonville: Valerie Mock, 904-791-1539
 - Tampa: Lillian Stark, 813-974-5990
 - Miami: Peter Shih, 305-324-2428The after hours number is 1-888-FLA-LABS.

Specimens will be screened with a real-time RT-PCR molecular assay for Influenza A, B and A types H1, H3, H5. Specimens may then be inoculated into a variety of cell cultures for confirmation and detection of additional viral agents.