

# Testing Criteria for Highly Pathogenic Avian Influenza (HPAI) H5N1 in Humans at PHEL

## Guidelines for Clinical and Commercial Laboratories

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### Avian Influenza H5N1 Testing Criteria

Send a specimen to the NJDOH Public Health, Environmental and Agricultural Laboratories (PHEAL) in the following circumstances:

- Consult with your local health department to determine if a patient exhibiting signs or symptoms of H5N1 avian influenza infection and/or exposure meets the case criteria to submit a sample for testing.
  - o **NJ State Communicable Disease Service’s Guidelines on Novel Influenza:**  
[https://www.nj.gov/health/cd/topics/novel\\_flu.shtml](https://www.nj.gov/health/cd/topics/novel_flu.shtml)
- If your laboratory is performing onsite influenza testing by PCR, positive influenza A specimens that are subtyped as A(H5) or are identified as **UNSUBTYPEABLE** by your influenza subtyping assay should be submitted to PHEAL for further characterization/subtyping as they could be avian influenza strains.
  - o Positive influenza A specimens that are subtyped as H1N1pdm or H3 **do not** need to be routinely submitted.
  - o Testing for other potential causes of acute respiratory illness will also be considered depending upon currently circulating respiratory viruses, including SARS-CoV-2.

**Note:** Rapid influenza diagnostic testing (RIDT) is not recommended for hospitalized patients. More information can be found here: <https://www.cdc.gov/flu/professionals/diagnosis/rapidlab.htm>

## Specimen Collection and Storage:

### Specimen Collection

- Collect specimens aseptically as soon as possible after symptom onset or at autopsy.
- Refer to the CDC guidelines available [here](#) for current specimen collection recommendations.
- For detailed instructions on how to collect respiratory specimens see here: [Respiratory Specimen Collection Quick Guide](#)
- Proper [infection control practices](#) should be followed during specimen collection.
- Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts.
- **Preferred specimen type:**
  - **Nasopharyngeal (NP) swab**, placed in a transport tube containing 1-3 mL viral transport media (VTM). Nasopharyngeal specimens may have higher yield than nasal or OP swab.
- **Other Accepted Specimens:**
  - Nasal mid turbinate swabs and anterior nasal swabs in VTM
  - Oropharyngeal (OP) swab- CDC recommends collecting only the NP specimen, although an OP specimen is an acceptable specimen type. If both NP and OP specimens are collected, combine them in a single tube of VTM.
  - Nasopharyngeal wash/aspirate or nasal wash/aspirate
  - Bronchoalveolar lavage, tracheal aspirate, pleural fluid

**Note:** Sputum and lung biopsy specimens may be accepted but cannot be tested at PHEL and will need to be forwarded to CDC for testing

**Note:** Saliva is **not an acceptable** specimen type for testing at PHEL and **will be rejected**.

### Specimen Storage

- Diagnostic specimens can be stored at 2-8°C for up to 72 hours after collection. Specimens not received refrigerated within the 72-hour window will be rejected.
- If testing is expected to occur after 72 hours of collection, store specimens frozen at -70°C or below and ship on dry ice.
  - Specimens frozen at -20°C or below will be accepted, but this could result in sample degradation and specimen may not be acceptable quality for testing.

## Test Ordering and Specimen Submission:

### Specimen Labeling

- Label each specimen with a minimum of two patient identifiers (e.g. the patient’s name and date of birth). Ensure the patient’s name and DOB matches the specimen label **exactly**.
- When possible, test requests should be submitted electronically through our Online Ordering and Reporting portal. For a quick reference guide to using the portal, [How to Order Respiratory Testing Online](#)
  - To gain access to this portal, please see instructions located [here](#).
- If you are unable to order test requests electronically, please fill out our current paper requisition form (SRD-1) [here](#).
- Refer to the sections below for detailed instructions on ordering test request for **Avian Influenza H5N1 Diagnostic Testing**.

### How to order a Test Request: Avian Influenza H5N1 Diagnostic Testing

- To request Avian Influenza H5N1 testing, please request “Influenza Subtyping”

Select	Abbreviation	Name	Alternate ID1	Collection Information	Host Codes	Count	Remove
<input checked="" type="checkbox"/>	90798	Influenza Subtyping	90798	Other in Not Specified	IO-90798	1	<input type="button" value="x"/>

- Add the selected test then save
- Fill out the required fields marked with a red asterisk:

**Clinical Information**
?
↻
✕

**Clinical Info**

Order Choices	Clinical Info	Response
90798	<b>T7-Specimen Type?*</b>	<input type="text"/>
90798	C8. Is the patient currently exhibiting signs and/or symptoms of a respiratory infection?	<input type="text"/>
90798	C9. Has the patient been vaccinated against COVID-19?	<input type="text"/>
90798	C7. Relevant Immunizations:	<input type="text"/>
Additional Note		<input style="height: 20px;" type="text"/>

- In the ‘Additional Note’ Please type a comment that this sample belongs to a suspect HPAI case
- After filling out any additional relevant information, click “Save” to save the test order.
- Print the requisition form which automatically pops up and pair the samples with their requisition forms in the package to be sent to PHEL. Do not place requisition forms directly in contact with specimen tubes in case a tube leaks or breaks in transit.

## Specimen Shipping to PHEL

- Specimens may be shipped to the laboratory for receipt Monday- Friday from 8am – 5pm. NJ PHEL is closed on weekends and state holidays.
- For detailed instructions on how to ship specimens to PHEL, please refer to our guidelines available [here](#).
- Questions regarding shipping to the laboratory can be directed to [PHEL.SpecimenReceiving@doh.nj.gov](mailto:PHEL.SpecimenReceiving@doh.nj.gov)