

State Hygienic Laboratory

Avian Influenza A(H5) Virus Testing at State Hygienic Laboratory and CDC

07-17-2024 version 2

Criteria for Influenza A(H5) Virus Testing

Testing should be performed on persons who meet epidemiologic **AND** clinical criteria

<u>Case Definitions for Investigations of Human Infection with</u> <u>Avian Influenza A Viruses in the United States (cdc.gov)</u>

Epidemiological criteria

Exposure to a avian influenza through human, animal or lab contact

Clinical criteria

- Consider testing individuals who have had contact with avian influenza (see epidemiological criteria) as soon as possible if they exhibit any respiratory symptoms (e.g., cough, runny nose, sore throat, congestion) or conjunctivitis regardless of the presence or absence of fever and regardless of whether symptoms may be explained by other etiologies such as seasonal allergies.
- Signs and Symptoms of Avian Influenza A Virus Infections in Humans



Notification of Suspect Cases and Specimen Testing

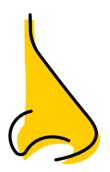
- If a patient has conjunctivitis and/or influenza-like symptoms and has a high-risk exposure (e.g., exposed to birds or animals infected with avian influenza), health care providers should contact the Center for Acute Disease Epidemiology (CADE) in the Division of Public Health within the Iowa Department of Health and Human Services at 800-362-2736 (during business hours) or 515-323-4360 (after business hours) for consultation.
- The CADE epidemiologist will review information about the suspect case and provide specimen collection information.
- Once specimens have been collected, the epidemiologist will contact SHL to make courier arrangements and request testing.



Acceptable Specimens for Testing

Individuals with respiratory symptoms

Nasopharyngeal (NP) OR a combined Nasal & Throat swab can be accepted swab in viral transport media (VTM or UTM).



Individuals with conjunctivitis (with or without respiratory symptoms), Two samples needed

1. Submit a conjunctival swab

AND

2. Nasopharyngeal (NP) OR a combined Nasal & Throat swab can be accepted swab in viral transport media (VTM or UTM).





Conjunctival Specimen Collection

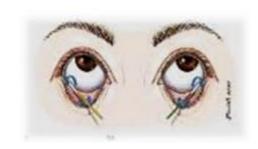
- SHL can now test conjunctival specimens
 IF it is submitted with a corresponding NP swab in separate tubes of VTM.
 - Without a corresponding NP swab, the conjunctival swab will be sent to CDC for testing, which will delay results.
- Specimens should be obtained from the everted eyelid by using a Sterile Flocked Collection Swab (not cotton).
- Specimens must contain conjunctival cells, not exudate alone.



Conjunctival Specimen Collection, Cont.

- 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.
- 2. 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).
- 3. Gently remove the swab and place it into the transport medium immediately.
- 4. A separate swab is required for each eye, and each swab should be put it its own individual tube of VTM. If both eyes are swabbed, label "left eye" and "right eye".





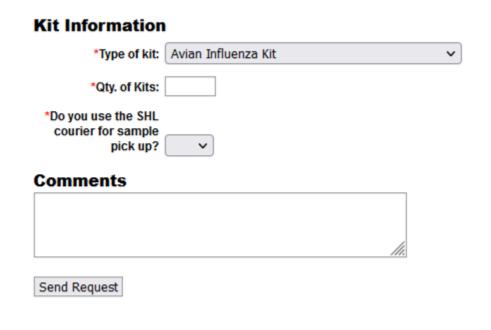
Excerpt from Conjunctivitis-Sample-Collection-and-test-requisition-form-for-viral-conjunctivitis.pdf (nih.org.pk)



Ordering Collection Kits from SHL

From the SHL webpage:

- Go to "Order Test"
- Select "Order Clinical Kits"
- Under Kit Information select "Avian Influenza Kit"



Swabs and Viral Transport Media (VTM)









SHL's avian influenza collection kit is used for Viral Infections & PCR, including influenza testing. Contact SHL to order extra VTM and swabs for collecting multiple specimens per patient.



Infection Control When Collecting Specimens

- Standard, contact, and airborne precautions are recommended, as is the use of eye protection.
- Highly Pathogenic Avian Influenza A(H5N1) Virus in Animals: Interim Recommendations for Prevention, Monitoring, and Public Health Investigations | Avian Influenza (Flu) (cdc.gov)
- Interim Guidance for Infection Control Within
 Healthcare Settings When Caring for Confirmed Cases,
 Probable Cases, and Cases Under Investigation for
 Infection with Novel Influenza A Viruses Associated
 with Severe Disease | Avian Influenza(Flu) (cdc.gov)



Separate Test Request Form for Each Specimen

INFORMATION	LETELY FILL OUT BELOW		2490 Crosspark Road Coralville, IA 52241-4721 Phone # 319-335-4500 oi 800-421-IOWA		93 Milford, ĪA 51351-7267 00 Phone # 712-337-3669
	Iowa HHS C	oronavirus (C	OVID-19)/Influe	nza Test Requ	est Form
PATIENT INFORMATION	ON	Sample must ha	ave two patient identifiers	s that match this form.	
Client Reference (Patient	ID/MRN/Chart ID) Last N	lame	Legal First Nam	e	Middle Name
Birth Date Gender	Address		City	State Zip Code	Area Code/Phone #
Female Male Ethnicity	Unknown Whi	te Black Asian	American Indian/Alaska	nn Native Native Haw	vaiian/Pacific Islander Unknow
Hispanic No	on-Hispanic Unknown	The patient mu	ust meet the testing criteria f	ound at www.shl.uiowa.e	edu.
ORDERING HEALTH CA	ARE PROVIDER INFORMA	ATION			
Last Name		First Name		NPI	Area Code/Phone #
ORGANIZATION INFO	RMATION (Results are re	ported to this addre	ss.)		
	Organization Name ABEL KEPPY ANIMAL HOSPITAL			Address 1 619 14TH ST	
Organization Id 20849		IIMAL HOSPITA	L	619 14 I H S I	
		IIMAL HOSPITA	City BETTENDOF		State Zip Code IA 52722
20849	ABEL KEPPY AN	IIMAL HOSPITA	City		
20849 Address 2	ABEL KEPPY AN		City		
20849 Address 2 BILLING INFORMATIO	ABEL KEPPY AN	Services (Iowa HHS)	City	RF	IA 52722
20849 Address 2 BILLING INFORMATIO	ABEL KEPPY AN	Services (Iowa HHS)	city BETTENDOF	RF d corresponding samp	IA 52722
20849 Address 2 BILLING INFORMATIO X Bill To lowa Departr SAMPLE AND TEST INI	ABEL KEPPY AN N ment of Health and Human S FORMATION (Complete Test Requested	Services (Iowa HHS)	City BETTENDOF	d corresponding sample	IA 52722
20849 Address 2 BILLING INFORMATIO X Bill To lowa Departr SAMPLE AND TEST INI	N ment of Health and Human S FORMATION (Complete Test Requested 2019 Novel Coron	Services (Iowa HHS) collection date and s	elect test(s) requested an Corresponding Sample Nasopharyngeal (NP)	d corresponding sample type Swab Nasal Swab	IA 52722
20849 Address 2 BILLING INFORMATIO X Bill To lowa Departr SAMPLE AND TEST INI	N ment of Health and Human S FORMATION (Complete Test Requested 2019 Novel Coron Influenza SARS-Co	services (lowa HHS) collection date and s	City BETTENDOF elect test(s) requested an Corresponding Sample Nasopharyngeal (NP): Nasopharyngeal (NP):	d corresponding sample e Type Swab Nasal Swab Swab Nasal Swab	IA 52722
20849 Address 2 BILLING INFORMATIO X Bill To lowa Departr SAMPLE AND TEST INI	N ment of Health and Human S FORMATION (Complete Test Requested 2019 Novel Coron Influenza SARS-Co	Services (Iowa HHS) collection date and s avirus Diagnostic Test V-2 (Flu SC2) Multiplex generation Sequencing	City BETTENDOF elect test(s) requested an Corresponding Sample Nasopharyngeal (NP): Nasopharyngeal (NP):	d corresponding sample e Type Swab Nasal Swab Swab Nasal Swab	le type.) Other: Other:

 To submit paired NP and conjunctival swab with separate TRFs. The conjunctival swab will be marked on the TRF as "Other: conjunctival swab"

Packaging and Shipping

- After collections, specimens should be sent to SHL on frozen cold packs.
- Request a normal SHL courier pickup.
- Weekend and holiday considerations:
 - Discuss with Iowa HHS to determine risk-based testing urgency and SHL capacity.
 - If specimens will not arrive to SHL within 72 hours of collection, freeze and then send on dry ice, as permitted.





State Hygienic Laboratory

Questions? Call 319-335- 4500

→ shl.uiowa.edu