# Oregon State Public Health Laboratory Instructions for Submitting H1N1 ("Rule Out Swine Flu") Specimens

# Acceptable Specimens include the following:

- Nasopharyngeal swabs- specimen of choice
- Nasal swabs
- Throat swabs
- Nasopharyngeal washes
- Nasal washes
- Throat washes
- Bronchial washes
- Tracheal aspirates
- Bronchoalveolar lavages in a small amount of transport media
- Other respiratory collection sites may be tested

Swab specimens should be collected using swabs made of Dacron polyester tip or flocked swabs on a plastic shaft (wooden shafts are not acceptable). These swabs are supplied in the State *Virus Isolation* Collection Kit

http://www.oregon.gov/DHS/ph/phl/docs/stock3.pdf. Swabs specimens must be inserted into viral transport media and refrigerated after collection and shipped at 2-8°C. Do not submit a dry swab for testing as this could result in an unsatisfactory status. Use a cold pack for shipping if it will take longer than 24 hours for transit. If shipping of the specimen cannot occur within 2 -3 days from date of collection, specimens may be frozen, preferably at -70°C, and shipped on dry ice at a later date. Be sure to package specimens properly for transport.

Complete all required fields on the Virology-Immunology test request form (Form 42-also attached below) http://www.oregon.gov/DHS/ph/phl/docs/42.pdf.

Both the test request form and the specimen container label must be labeled with the patient name or unique identifier and/or other relevant information or the sample will not be tested. Make sure to mark the Virus Isolation test box in the bottom left hand corner and indicate that the specimen is for "Rule Out Swine Flu".

## **Unacceptable specimens include:**

- Swabs with calcium alginate, cotton tips, or wooden shafts
- Specimens not refrigerated
- Specimens with insufficient volume (less than 0.8 mL)
- Specimens with incomplete/incorrect labeling or documentation
- Specimens that have dried out (swab not in transport media)

## **OSPHL Contact Information:**

Oregon State Public Health Laboratory Virology/Immunology Section 3150 NW 229<sup>th</sup> Ave Hillsboro, OR 97207-0275

For Additional Information: 503-693-4100

Refer to brochure below from NYC Health department for Nasopharyngeal specimen collection.

# NASOPHARYNGEAL SPECIMEN COLLECTION FOR VIRAL RESPIRATORY PATHOGENS

A Guide For Providers

# **USE MASK, GLOVES, AND EYE PROTECTION**

# NASOPHARYNGEAL ASPIRATE METHOD (PREFERRED)

# **Materials:**

- Suction apparatus (Luken's trap, syringe, or bulb)
- Sterile suction catheter (e.g., #8 French)
- Sterile saline
- Viral transport medium tube
- 1. Attach catheter to suction apparatus.
- 2. Instill several drops of sterile saline into each nostril.
- 3. Place catheter through nostril to posterior nasopharynx (same distance as from nostrils to external opening of ear).
- 4. Apply gentle suction. Using rotating motion, slowly withdraw catheter.
- 5. For an optimal sample, repeat procedure using other nostril.
- 6. With the viral transport medium, rinse secretions through the catheter into the collection container.

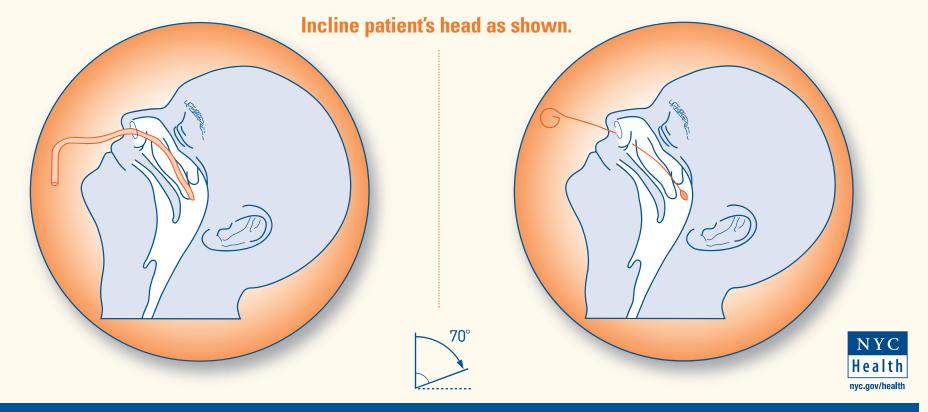
# NASOPHARYNGEAL SWAB METHOD

# **Materials:**

- Nasopharyngeal swab (flexible shaft) with rayon tip
- Viral transport medium tube
- 1. Bend shaft to follow curve of nasopharynx.
- 2. Insert swab through nostril to posterior nasopharynx (same distance as from nostrils to external opening of ear).
- 3. Rotate swab a few times to obtain infected cells.
- 4. For an optimal sample, repeat procedure using other nostril.
- 5. Place swab in transport medium.
- 6. Bend or cut shaft to completely seal transport tube.

# **TRANSPORT & STORAGE**

- 1. Send specimen to lab immediately (testing sensitivity decreases over time).
- 2. Cool specimen to  $2^{\circ}$   $4^{\circ}$ C ( $36^{\circ}$   $40^{\circ}$ F) during storage and transport.



THE NEW YORK CITY DEPARTMENT of HEALTH and MENTAL HYGIENE



# VIROLOGY/IMMUNOLOGY REQUEST

Oregon State Public Health Laboratory PO Box 275 - Portland, OR 97207-0275 Information: 503-693-4100

OSPHL Use Only - Please Do Not Write In Shaded Area

DATIENT INCORMATION		OUDMITTED INCODMATION	0.1
PATIENT INFORMATION  Patient Name (Last First MI) or University Identifies		SUBMITTER INFORMATION	Submitter Code
Patient Name (Last, First, MI) or Unique Identifier			
		Return Results To: (Must provide complete address)	
County of Residence	Date of Collection		
	M M — D D — Y Y		
	Date of Birth		
Female Male			
Patient ID Number	Health Plan Name		
Medicaid Number	Social Security Number (If Medicaid eligible)	Authorized Ordering Individual (Physician/Clinician)	
ICD-9 Code Referr	ring Physician's Medicaid Provider Number	Submitter Phone Number	Extension
TESTS REQUESTED			
HEPATITIS		SYPHILIS	
☐ Hepatitis A Screen Only (Anti-HAV IgM)		☐ Routine Screen	
☐ Hepatitis A Total Antibody (Anti-HAV Total)		Prenatal - Trimester 1 2 3	
<ul><li>Acute Symptoms Present (Anti-HAV IgM, HBsAg, Anti-HBc)</li><li>Carrier Status Assessment (HBsAg, Anti-HBc IgM)</li></ul>		☐ Diagnosis ☐ Premarital - State	
☐ Hepatitis B Contact (HBsAg, Anti-HBc)		Treatment Check	
☐ Prevaccine Screen (Anti-HBc) ☐ Postvaccine Check (Anti-HBs)		☐ FTA-ABS (DS)	
☐ Infant of HBsAg+ Mother (HBsAg, Anti-HBs)		□ VDRL (Spinal Fluid)	
Refugee/Immigrant Screen (HBsAg)		RUBELLA IMMUNE STATUS	
<ul> <li>☐ Hepatitis C Antibody (screen only)</li> <li>☐ Other (Specify)</li> </ul>		Prenatal - Trimester 1 2 3	
Other (Specify)  Additional Information		Premarital - State	
PRENATAL HEPATITIS SCREENING For Local Health Departments Only		MISCELLANEOUS SEROLOGIES	
Prenatal - Trimester 1 2 3 If PREVIOUSLY POSITIVE for HBsAg - (MM/YY) When?		SINGLE SPECIMEN  ACUTE  DATE OF ONSET  M M - D D - Y Y	
VIRUS ISOLATION		☐ Brucellosis ☐ Hantavirus (with prior approval only)	
Rule-Out Influenza Culture		Leptospirosis	
☐ Virus Identification		Lyme Disease Mumps	
☐ Virus Isolation		Parvovirus	
☐ Other		Polioviruses	
Source	Date of Onset	Rickettsial Battery (RMSF, Murine typhus, Q F Rubella IgG (Immune Status)	ever)
		Rubeola	
Clinical Diagnosis	Specific Agent(s) Suspected	│	
Comments:  West Nile Virus (requires additional form)  Other			
		Other	
		CDC Sendout for	
Symptoms/Syndromes (check those applicable) Type of Specimen: (check one)		(Requires Completed CDC form 50-34)	
☐ Cardiovascular ☐ Cerebrospinal Fluid ☐ Central Nervous System ☐ Lesion Swab		COMMMENTS:	
☐ Congenital/Neonatal ☐ Stool			
<ul><li>☐ Gastrointestinal</li><li>☐ Rash</li></ul>	<ul><li>☐ Throat Washing/Swab</li><li>☐ Tissue</li></ul>		
☐ Respiratory ☐ Other	☐ Urine ☐ Other		
NOROVIRUS  Outbrook Associated FRI Outbrook #			
Outbreak Associated EPI Outbreak #			
□ Not Outbreak Associated     □			

#### **GENERAL INSTRUCTIONS**

- · Please use a separate request form for each specimen type (i.e. serum, spinal fluid, throat swab, etc.)
- Submit each specimen with a completed request form. PLEASE PRINT LEGIBLY.
- Please fill out the request form COMPLETELY or delays in processing and testing the specimen may occur.
- Additional information beyond that on the test request form may be required (such as a CDC form), depending on the examination requested, to assure
  accurate and timely testing and reporting of results.
- Both the test request form and the specimen container label must have the same patient name or unique identifier and/or other relevant information or the sample will not be tested. If specimen identity differs from that on the test request form, testing will not be performed!
- Specimens will be rejected if they are of insufficient quantity, insufficient quality, excessive age for the examination requested, received with either specimen container unlabeled or test request form incomplete or mismatched, submitted in an inappropriate manner, or leaking. Every attempt will be made to salvage leaking or improperly submitted samples of cerebrospinal fluid, biopsy tissues, aspirates, and other specimens obtained surgically providing that the safety of the laboratory worker is not compromised.

## **COLLECTION AND SHIPPING INSTRUCTIONS**

Observe universal safety precautions in collection and handling of all specimens.

#### 1. BLOOD SPECIMENS

- a. Perform venipuncture using proper technique to obtain 5-7 ml of blood.
- b. Collect the blood in the red-top vacutainer tube provided.
- c. Label the specimen tube IMMEDIATELY after collection with the patient's name and date of collection.
- d. Allow the blood to clot at room temperature.
- e. Place the specimen in a plastic bag containing enough absorbent material to absorb any fluid that may leak, seal the bag, and insert it into the primary (metal) container.
- f. Cap the primary container and wrap the request form around the OUTSIDE, then insert primary container with request form wrapped around it into the secondary (cardboard) mailing container.
- g. Ship specimen to the Public Health Laboratory as soon as possible in compliance with Federal shipping regulations (refer to the *Shipping and Transport* section of the Oregon State Public Health Laboratory's Guide to Services).
- h. Specimens which are not mailed within 8 hours of collection should be refrigerated (after clotting) until shipment. Please do not mail specimens over long weekends or holidays when the mail may be delayed. Long holding times can adversely affect test results in some cases so transport specimens to the lab as rapidly as possible.

#### 2. SERUM SPECIMENS

- a. A minimum of 1 ml of serum is required for testing.
- b. If applicable, indicate in the SPECIMEN INFORMATION section of the request form the time and temperature of serum inactivation and/or the presence of any preservatives.
- c. Follow steps "e" through "h" under BLOOD SPECIMENS above.

### 3. PAIRED SERUM SPECIMENS

- a. The first (acute) specimen should be collected as soon after the onset of disease as possible EXCEPT for suspected cases of PARVOVIRUS where the first specimen should be collected at least 14 days after contact or exposure to avoid false negative results.
- The second (convalescent) specimen should be collected 10 to 20 days later. IF ANTIBIOTICS HAVE BEEN GIVEN, it may be necessary
  to collect a third specimen after treatment is finished because some antibiotics can affect antibody development.
   RICKETTSIAL specimens may require 4 to 8 weeks for an antibody response.

#### 4. SPINAL FLUID SPECIMENS (Syphilis only)

- a. Aseptically collect a minimum of 2 ml of spinal fluid.
- b. Mark the VDRL (spinal fluid) box under SYPHILIS section on request form.
- c. Follow steps "e" through "h" under BLOOD SPECIMENS above.

#### 5. SPECIMENS FOR VIRUS ISOLATION

COLLECT SPECIMENS AS SOON AS POSSIBLE AFTER THE ONSET OF SYMPTOMS AND SEND TO THE OSPHL AS SOON AS POSSIBLE. Specimens can be held for 24 hours at refrigerator temperature, and should be sent refrigerated using wet ice or cold packs. Wet ice must be in a separate, leakproof container. For longer storage, specimens should be frozen at -70°C and kept frozen using dry ice until delivered to the laboratory. SPECIMENS FOR VARICELLA ZOSTER OR CYTOMEGALOVIRUS SHOULD BE STORED AND SHIPPED COLD BUT NEVER FROZEN. LABEL EACH SPECIMEN WITH THE NAME AND DATE COLLECTED. **DO NOT GARGLE WITH VIRAL TRANSPORT MEDIA.** 

- a. **LESION AND OTHER SWAB SPECIMENS** Swab the area thoroughly, break off the swab, and leave in the viral transport media tube. Screw cap on tightly and label the container with the patient name.
- b. **STOOL SPECIMENS** SHOULD BE COLLECTED WITHIN 4 WEEKS OF ONSET FOR RECOVERY OF VIRUS. Transfer a portion of the specimen (at least pea-size or one cc of liquid stool) to a screw-capped container, close tightly, and reseal with tape. Bacteria and parasite kits can not be used for stool specimens for virus isolation.
- c. OTHER SPECIMEN TYPES. Please call OSPHL for specific collection instructions.

**CONSULT CURRENT POSTAL REGULATIONS FOR POSTAGE AND SHIPPING REQUIREMENTS.** Specimens must be packaged with enough absorbent material to retain all of the liquid if the container leaks or breaks. Specimens with insufficient postage or which have broken or leaked in transit will not be accepted.

 FOR FURTHER INFORMATION, COLLECTION KITS, AND/OR REQUEST FORMS, PLEASE TURN THIS FORM OVER AND USE THE INFORMA-TION IN THE TOP LEFT CORNER TO CONTACT US.