



## **TEXAS DEPARTMENT OF STATE HEALTH SERVICES**

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COMMISSIONER

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**Please see our new guidelines for  
Laboratory Testing Protocol for the Surveillance of Novel H1N1  
Influenza and Seasonal Influenza**

**Effective September 25, 2009**

**Please route these to all appropriate personnel involved with  
suspected influenza patients so they are aware of the current  
testing protocol.**

**This protocol is posted on the DSHS Website at  
<http://www.dshs.state.tx.us/txflu/Lab-Test-Protocol.shtm>**

## Laboratory Testing Protocol for the Surveillance of Novel H1N1 Influenza and Seasonal Influenza

*These guidelines will be revised as the situation evolves.  
Last revision.....*

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Texas is currently following traditional influenza seasonal surveillance protocols for the identification of novel H1N1 influenza cases and the emergence of other novel influenza strains using providers from the Texas Department of State Health Services (DSHS) Influenza Laboratory Surveillance Program. Public health laboratory testing for influenza conducted by the DSHS Austin Laboratory and Texas Laboratory Response Network laboratories is primarily surveillance:

- To detect the distribution and spread of the virus
- To detect new variants of the virus and
- To assist in outbreak investigations.

Clinical disease management in individual patients is not a primary goal of public health laboratory testing. Diagnostic testing, if desired, should be performed by commercial laboratory services. To make the most effective and appropriate use of the DSHS Laboratory and Laboratory Response Network (LRN) resources in the primary mission of supporting public health activities, DSHS has revised the criteria for specimens that should be submitted to these laboratories. *These criteria may be updated as the influenza season progresses.*

Specimens submitted to the DSHS and LRN laboratories must be from one of the categories listed below. **Specimens not meeting one of these criteria will not be tested** by the DSHS Austin and LRN laboratories. Submitters should send these specimens to a reference laboratory for testing, if testing is desired.

**Testing every patient that meets these criteria is not mandatory;** the decision to test a patient for novel H1N1 virus is appropriately made by the patient's attending physician.

**Qualifying Criteria:** Specimens submitted to the DSHS and LRN laboratories for testing must be from one of the following categories.

- Patients hospitalized for at least 48 hours with influenza symptoms (symptoms are fever greater than 37.8°C (100°F) **and** cough and/or sore throat) plus **one or both** of the following conditions:
  - Severe illness such as lower respiratory tract infections or pneumonia
  - Unusual presentation in children, pregnant women, adults > 64 years of age, and immunocompromised individuals
- Patients who have died with influenza-like illness and have no other known cause of death (specimens must be collected before death to be tested by DSHS; postmortem specimens require a different approach)
- Individuals with influenza-like illness who are part of a critical public health investigation as identified by the DSHS Health Service Region (HSR). DSHS Infectious Disease Control Unit (IDCU) or local health department and communicated by the HSR or IDCU to the state laboratory.
- Providers who are participants in the DSHS Influenza Laboratory Surveillance Program as designated by the DSHS Infectious Disease Control Unit (IDCU). Enrolled providers will

receive instructions from their influenza surveillance coordinator regarding the specimen submission process.

**Qualifying criteria** (symptoms or conditions) **must be indicated** on the submission form to ensure the specimen will be tested.

**Note: It is not mandatory to send every specimen that meets the DSHS criteria only to the DSHS or LRN laboratories.** Where possible, specimens that meet DSHS criteria and that the clinician chooses to test, other than those from surveillance or public health investigations, should be sent to a reference lab. If that is not feasible, then specimens that meet criteria can be submitted to DSHS or LRN laboratories.

## **COLLECTION OF SPECIMENS:**

### **Respiratory Specimens**

Respiratory specimens are the only specimen type acceptable for polymerase chain reaction (PCR) laboratory testing for influenza.

Acceptable respiratory specimens include: nasopharyngeal swabs, nasopharyngeal aspirates, nasal swabs, throat swabs, and dual nasopharyngeal / throat swabs. If the swab or aspirate has been used for performing a rapid antigen test, please send an aliquot (1-2 ml) of the original suspension (not exposed to test kit reagents) in viral transport media or an additional original specimen swab in viral transport media.

Use the sterile, polyester-tipped, plastic shaft swabs and viral transport media (VTM) for specimen collection. Any commercially available VTM is acceptable for specimen transport. Dacron or rayon-tipped swabs with a plastic shaft or any other commercially available sterile collection system intended for virus isolation may be used. **Calcium alginate swabs, cotton swabs or swabs with wooden shafts are not acceptable for specimen collection as they may inhibit recovery of the virus. Supplies used for Genprobe testing are not acceptable. Specimens submitted using these supplies will be rejected.**

Viral transport media (VTM) tubes should be stored at the specified temperature according to product storage requirement(s) or product insert. If the viral transport media (VTM) tube has been stored frozen, the media should be thawed (at either refrigeration or room temperature) completely before specimen collection. **Do not** heat, microwave, or incubate media prior to use as this may cause inactivation of the virus. **Be sure to check the expiration date of the medium prior to specimen collection. Specimens submitted on expired media will be rejected.**

After specimen has been collected, insert the fiber tip of the swab immediately into the VTM and break off the shaft so that the swab fits completely within the tube. Please tighten the cap securely and place at 4°C immediately in an upright position. Ship specimen tubes to your local Laboratory Response Network (LRN) laboratory or to the DSHS Austin Laboratory, as appropriate, **as soon as possible after collection. Specimens not shipped within 2 days of collection should be frozen in an upright position at -70°C. Ensure that the patient name and date of collection are written on each specimen tube that is submitted.**

## SPECIMEN LABELING AND SUBMISSION FORM COMPLETION:

Obtain submission form from your appropriate LRN. Submission forms must be **completely** filled in for each specimen; incomplete information may cause the specimen to be rejected. Ensure that the patient name and date of collection are written on each specimen tube that is submitted. ***The patient name and date of collection on the specimen tube must match the name and date on the corresponding laboratory form. Qualifying criteria (symptoms or conditions) must be indicated on the submission form to ensure the specimen will be tested.***

## PACKING AND SHIPMENT OF SPECIMENS TO LRN:

On January 1, 2007, the shipping regulations for clinical specimens changed. Boxes containing clinical specimens must now be labeled, "Biological Substance, Category B". Air shipments must display the UN3373 label with the adjoining words, "Biological Substance, Category B". The phone number and name of a contact person must be listed on the box or airbill for both the shipper and the recipient.

It is important to follow the triple container rules for all "Biological Substance, Category B" shipments. Components of a triple packing system include:

- Primary container = the receptacle specimen tube containing the media that the specimen swab is placed in or the blood tube
- Secondary container = the plastic liner with screw cap
- Outer shipping container = the Styrofoam box placed inside of the cardboard shipping box

**Note:** Please refer to the detailed diagrams of packing and shipping instructions that can be found at the end of this document.

The primary container (the specimen) should be placed into the secondary container (the plastic liner with screw cap or biohazard bag) with enough absorbent material to absorb the entire contents if leakage/breakage occurs. Be certain that the specimen tube and the plastic liner with screw cap are securely sealed to prevent leaks. The secondary container must then be placed in the Styrofoam box or other suitable container for controlled-temperature shipment. The Styrofoam box is then placed in a corrugated cardboard box, which is taped for shipping. (Please keep these two units together; do not separate the Styrofoam box from the outer cardboard box.). Place the laboratory submission form in a plastic bag on top of the Styrofoam box inside the cardboard box. ***You must submit a laboratory submission form for each specimen in the shipment in a plastic bag.***

**Note:** To avoid specimen warm-up during packing and shipment, it is helpful if the plastic liner (secondary container) is cold before placing the specimen inside.

If the specimen has been refrigerated at 4°C, place enough cold packs in the Styrofoam box to maintain that cold temperature until received at the laboratory. If the specimen has been frozen at -70°C, place enough dry ice in the Styrofoam box to maintain that frozen temperature until received at the laboratory. The recommended method of shipment is to use a carrier that will deliver the next day. **Next day deliveries cannot be accepted on Saturday, Sunday or state holidays unless coordinated with the receiving laboratory.**



**Note: It is your responsibility as the shipper to make sure that all packaging and labeling meet the current criteria.**

### **DSHS Austin Laboratory**

Viral Isolation Team  
Laboratory Services Section, MC 1947  
Texas Department of State Health Services  
1100 W. 49th Street  
Austin, TX 78756-3199

For shipping to the DSHS Austin laboratory, use the G-2A Specimen Submission Form. Qualifying criteria (symptoms or conditions) **listed on the first page** must be indicated on the submission form to ensure the specimen will be tested. Under Section 5, "Payor Source" please check IDEAS.

### **DSHS LABORATORY FORMS**

Go to [www.dshs.state.tx.us/lab/MRS\\_forms.shtm](http://www.dshs.state.tx.us/lab/MRS_forms.shtm) to:

- Receive Test Request Form Samples and G-2A Form – Laboratory Services
- Obtain Test Request Forms by e-mail

### **LRN LABORATORIES**

Please use the correct specimen submission form when submitting specimens to the LRN laboratories.

#### **Corpus Christi**

Corpus Christi Nueces Co Public Health Lab  
Attn: Sandra Heatherley  
1702 Horne Rd  
Corpus Christi, TX 78416

#### **Dallas**

Dallas County Health & Human Services  
Attn: Joey Stringer  
003 Basement  
2377 N Stemmons Freeway  
Dallas, TX 75207

#### **El Paso**

City of El Paso Dept. of Public Health  
Attn: Yolanda Olivas  
4505 Alberta Ave. 2nd Floor  
El Paso, TX 79905

**Houston**

Houston Department of Health Laboratory  
Attn: Meilan Beilby  
1115 South Braeswood Blvd.  
Houston, TX 77030

**Tyler**

UTHSCT/PHLET  
Attn: Jeremy Jordan  
11949 US Highway 271  
Tyler, TX 75708

**Lubbock**

City of Lubbock Health Department  
Attn: Trish Jenkins  
BT Response Lab  
1902 Texas Ave.  
Lubbock, TX 79411

**San Antonio**

San Antonio Metro Health District Lab – BT  
Attn: Patricia Blevins  
Bldg 125, B-Level  
2509 Kennedy Circle  
Brooks City-Base, TX 78235

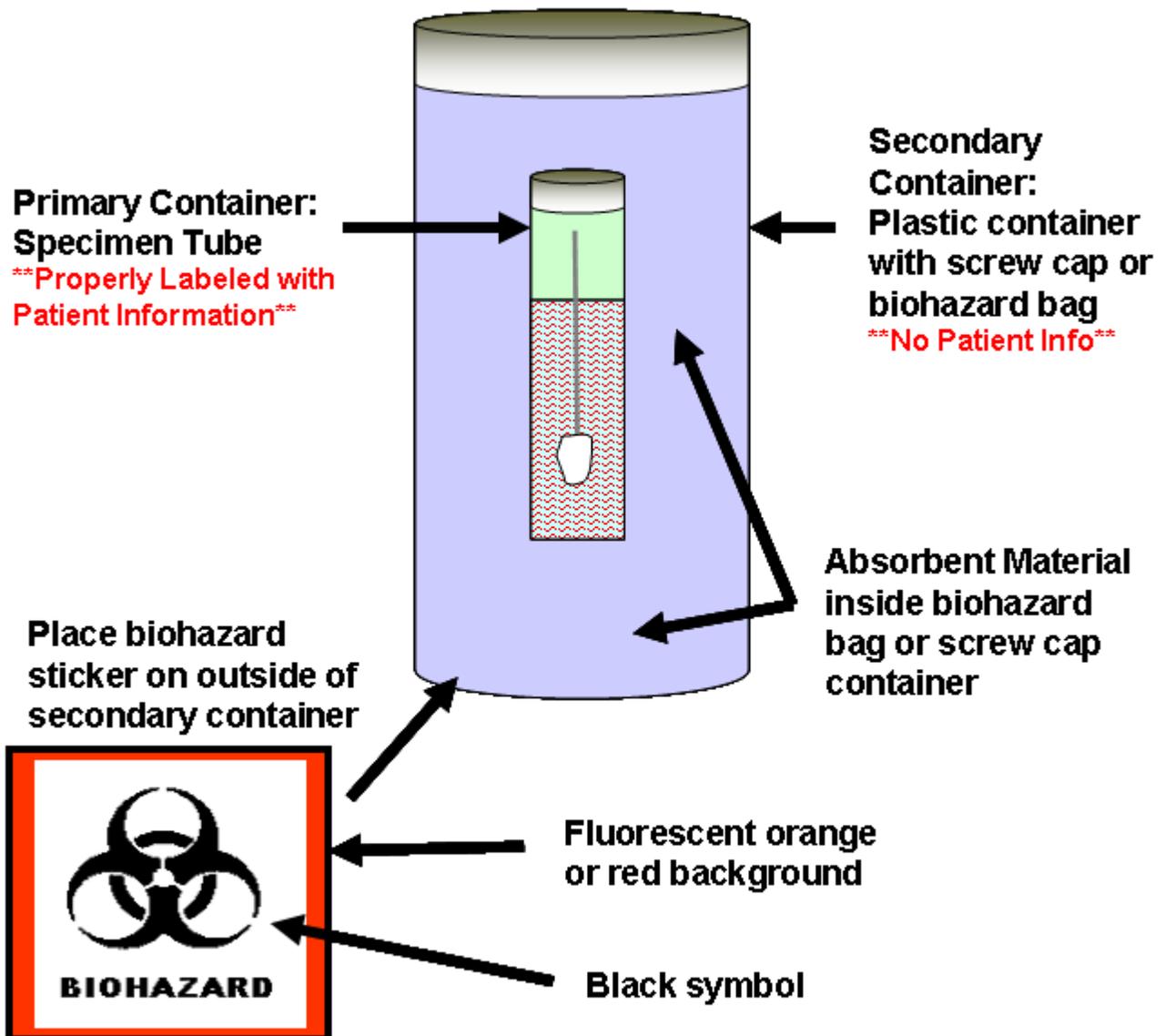
**South Texas Laboratory – Harlingen**

South Texas Laboratory  
Attn: Kristina Zamora  
1301 S. Rangerville Road  
Harlingen, TX 78552

**Tarrant County**

Tarrant County Public Health Department  
Attn: Rebecca McMath  
N Texas Regional Laboratory  
1101 S. Main Street  
Fort Worth, TX 76104

**Do Not Put Any Patient Information  
on Secondary Container or Lid**



**Biohazard Label should already be on  
secondary container.**

