



Department of Virology, USAMC-AFRIMS: Influenza Surveillance Service

Armed Forces Research Institute of Medical Science (www.afrims.org)

Purpose

Armed Forces Research Institute of Medical Sciences (AFRIMS), Bangkok, Thailand is undertaking influenza surveillance with regional U.S. Embassy Medical Units. During the current novel influenza A (H1N1) outbreak, we will continue to conduct this influenza surveillance in which you can send respiratory samples to AFRIMS for influenza testing.

AFRIMS Role

The AFRIMS laboratory in Bangkok will test for certain subtypes of influenza including Influenza A (subtypes H1, H3 and H5) and Influenza B utilizing PCR. AFRIMS is also now able to detect the novel influenza A (H1N1) virus which has caused the current global influenza outbreak.

AFRIMS Point of Contact

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Specimen Collection

Respiratory virus diagnosis depends on the collection of high-quality specimens, their rapid transport to the laboratory and appropriate storage before laboratory testing. Virus is best detected in specimens containing infected cells and secretions. Specimens for the direct detection of viral antigens or nucleic acids and virus isolation in cell cultures should be taken preferably during the first 3 days after onset of clinical symptoms. A variety of specimens are suitable, including:

- Nasal swab
- Throat swab
- Nasopharyngeal swab
- Nasopharyngeal aspirates or washes
- Nasal wash

Nasopharyngeal swabs, aspirates and washes are the best specimens for cell culture and PCR. However, these can be technically difficult, require careful training to ensure proper technique, and may be unpleasant for the patient. An acceptable alternative is to collect a nasal and a throat swab from the same patient and then combine these swabs into a single vial of transport medium.

Preparing to collect specimens:

Label the container and laboratory request form with the pre-printed label provided by AFRIMS that contains a unique specimen identification number. Note that we are in the process of changing from placing patient names on the specimen tube to placing specimen numbers on the tube in order to protect patient confidentiality.

Nasal swab: A dry polyester swab is inserted into the nostril, parallel to the palate, and left in place for a few seconds. It is then slowly withdrawn with a rotating motion. Specimens from both nostrils are obtained with the same swab. The tip of the swab is put into a plastic vial containing 2–3 ml of virus transport media (VTM) and the applicator stick is broken off.

Throat swab: Both tonsils and the posterior pharynx are swabbed vigorously, and the swab is placed in transport medium as described above.

At least one nasal specimen is recommended for the rapid on-site test using the QuickVue kit. A maximum of 3 swabs (1 for the rapid on-site test and 2 for transport to AFRIMS in Viral Transport Media) can be collected from each patient.

Laboratory Request Form and Consent Form ([Click to download the form](#)): Attached to this message is the Request Form and Consent Form that we would like you to use when sending respiratory samples to AFRIMS. Please fill out these forms as much as possible. However, if a patient does not sign the Consent Form, it is still okay to send the sample to AFRIMS (in which case testing will be limited to influenza).

Specimens Storage and Shipment

[\(Click to download Procedures for Packaging and Transport of Diagnostic Biological Materials\)](#)

Specimens should be tightly sealed, and can be kept refrigerated (2-8°C) and transported on ice to AFRIMS. If specimens cannot be shipped within 48–72 hours, they should be kept frozen at or below –70 °C.

You can ship refrigerated samples to AFRIMS in Wizard boxes or Styrofoam boxes using cold packs or ice packs according to the linked instructions. You can also ship on dry ice if available but the sample should not be frozen in a -20 °C freezer (freezing samples at less than -70 °C is okay). Courier service that you use will depend on your particular situation. We can receive shipments by commercial courier such as FedEx. Many of the regional U.S. Embassy Medical Units have utilized the diplomatic pouch to send samples directly to Bangkok to the following address (not for dry ice shipments):

American Embassy
120 Wireless Road
Bangkok, Thailand
M/F: USAMC-AFRIMS
Attn: Ms. Wipa, Dept of Virology
Tel: 66-2-696-2700 Ext 4351

Please contact AFRIMS if you have shipping questions.

Result Reporting

AFRIMS will typically be able to provide preliminary results to you within about 2-3 days from receipt of the sample during this current outbreak situation.

For results, please contact: Richard G. Jarman, PhD, Virology Laboratory Director, Phone: 66- 2-696-2756, Fax: 66-2-644-4760
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