

## Specimen Requirements for Viral Culture and Identification

Methodology:	Viral culture and identification.
Performed:	Culture for respiratory viruses including Influenza, Herpes Simplex Virus (HSV), Varicella Zoster Virus (VZV), Cytomegalovirus (CMV), and Enterovirus (EV). A variety of cell lines are inoculated and held for up to 4 weeks to detect characteristic cytopathic effects (CPE) followed by identification using biochemical and immunological methods.
Turn-Around-Time:	Results are reported out from 2 to 8 weeks.
Specimen (type) required:	Appropriate clinical specimen. Refer to Table I – Specimens for Isolation of Viruses
Specimen Collection:	<p>Swab specimens submitted in an appropriate viral transport medium (VTM). Acceptable VTM include the following commercially available M4 medium, Tryptose Phosphate Broth, and Stuart's medium; and viral transport medium supplied by the Virology Section.</p> <p>Specimens not requiring a transport medium include: urine, stool, cerebrospinal fluids and tissue specimens.</p> <p><b>Note: Specimens should be collected as soon as possible in the course of illness. Recovery of viruses diminishes markedly &gt;72 hours after onset of symptoms.</b></p>
Specimen storage, packing and transport:	<p>Specimens should be stored at 2° to 8°C immediately after collection. If transport to the laboratory is delayed freeze at -20° to -70°C unless contraindicated for the suspected virus (i.e. Cytomegalovirus)</p> <p>Tissue specimens may be submitted in sterile 50% glycerine-saline solution if the specimen cannot be shipped on dry ice.</p>

Ideally specimens submitted for viral culture and identification should be submitted to the laboratory frozen unless contraindicated for the suspected virus. Respiratory specimens submitted for molecular tests such as PCR for influenza should be submitted on refrigeration/ice packs to keep the specimen at 4°C. It is recommended that specimens for viral culture be transported to the laboratory on refrigeration packs in a leak-proof container.

Follow instructions for Class B – Biological Substance of the U.S. Department of Transportation (U.S. DOT) and International Air Transport Association (IATA) for packing and shipping.

**Specimen submission:** Submitters (Clinical Laboratories, Epidemiology Specialists with the DOH Disease Investigation Branch).

**Requisition Form:** MMB Form 81.3 or  
DIB Influenza Surveillance Laboratory Submission Form (current Influenza Surveillance Period)

Specimen must have a completed submission form (MMB Form 81.3 or DIB Influenza Surveillance Laboratory Submission Form) with the following information including but not limited to the patient's name or unique identifier, submitter's name and address, specimen site/specimen type, date of onset of illness, and date of collection. Additional information including clinical signs and symptoms, virus suspected, travel history, immunization history, and other pertinent information should be provided.

**PLEASE INDICATE SUSPECTED VIRUS(ES) ON MMB FORM 81.3.**

**Unacceptable conditions:**

- Specimen that is leaking;
- Unlabeled specimens;
- Illegible form or specimen label;
- Specimen quantity is insufficient to perform the tests;
- Improperly filled requisition MMB Form 81.3;
- Specimen label does not match the requisition;
- Improper container or handling;

- Expired transport tube.

**Stability:** Specimens should be stored at 2° to 8°C immediately after collection. Specimens should be frozen at -20° to -70°C unless contraindicated for the suspected virus (i.e. Cytomegalovirus) if transport to the laboratory is delayed (>48 hours).

Transport specimen to the laboratory as soon as possible.

**Normal Value:** No virus isolated.

**Result Notification:** Laboratory results are reported to the submitters

**Test performed at:** Virology Section, Medical Microbiology Branch  
State Laboratories Division  
Department of Health  
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12/4/2019  
Date

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12/5/19  
Date

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12/5/2019

Date