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**Lab Dept:** Microbiology/Virology

**Test Name:** HERPES SIMPLEX (HSV) CULTURE, NEONATES

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***General Information***

**Lab Order Codes:** VHSV

**Synonyms:** HSV Culture, Neonates

**CPT Codes:** 87254 x2 – Virus isolation, shell vial

**Test Includes:** Identification and typing of herpes simplex virus (HSV) in cell culture. The test can detect and distinguish between HSV-1 and HSV-2 in shell-vial cultures.

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***Logistics***

**Test Indications:** An aid in the diagnosis of congenital herpes simplex virus (HSV) infection in patients younger than 35 days old through the recovery of HSV using viral culture (shell-vial). Testing by PCR is recommended for HSV detection, See [Herpes Simplex \(Types 1 & 2\) Virus \(HSV\) PCR](#)

**Lab Testing Sections:** Microbiology/Virology - Sendouts

**Referred to:** Mayo Clinic Laboratories (Mayo test: VHSV)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 2 – 4 days

**Special Instructions:** This test should only be performed on patients **younger than 35 days old**. It is intended for the recovery of herpes simplex virus in suspected cases of congenital herpes.

Requisition must state **specific site** of the specimen and **date/time of collection**. Collect specimens early in the course of the illness to yield highest viral titers. Do not use calcium alginate swabs.

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***Specimen***

<b>Specimen Type:</b>	Swab sources: Ocular, rectal, skin, dermal, mouth, nasopharynx, conjunctiva, eye anus Urine Stool
<b>Container:</b>	Swab sources: Swab placed in M4-RT or other viral transport media Urine: Sterile container Stool: Sterile container
<b>Draw Volume:</b>	Urine: 1 mL (Minimum: 0.5 mL) Stool: 5-10 grams
<b>Collection:</b>	Swab collection of appropriate source, random urine collection or stool collection
<b>Special Processing:</b>	Lab Staff: Swabs, place in appropriate viral transport media Urine: Submit urine 1mL (Minimum: 0.5 mL) in sterile container Stool: Submit 5-10 grams stool in sterile container Store and ship at refrigerated temperatures.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Frozen, swab with wood handle, gel swabs, blood, bone marrow/bone, tissue, lymph node specimen; mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	No virus isolated  Interpretation: Recovery of herpes simplex virus (HSV) from clinical specimens supports the diagnosis of congenital HSV infection. A negative result by shell vial assay should be interpreted in the context of the patient's clinical presentation and exposure history. Furthermore, testing by real-time PCR for this virus should be considered prior to ruling out HSV disease.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	<ul style="list-style-type: none"> <li>• This test should not be performed on patients older than 4 weeks of age. It is intended for the recovery of herpes simplex virus (HSV) in suspected cases of congenital herpes. For patients older than 4 weeks of age, detection of HSV by real-time PCR is recommended.</li> <li>• A negative result does not rule out the possibility of congenital HSV infection.</li> <li>• Real-time PCR for HSV is the recommended test for all cases of central nervous system disease caused by this virus. Viral culture is an insensitive approach for detection of HSV in spinal fluid</li> </ul>
<b>Methodology:</b>	Virus Culture by Shell-Vial

**References:**

[Mayo Clinic Laboratories](#) (August 2019)