

HERPES SIMPLEX VIRUS

GENITAL | NEONATAL | ENCEPHALITIS | AND OTHER HSV INFECTIONS

Helping you provide better patient care



Protect your patients from the consequences of untreated herpes infections.

Herpes simplex virus infections are common and range from mild to severe disease. Those who are infected with HSV types 1 and 2 (HSV-1 and HSV-2) often have few or no symptoms.¹⁻³ In addition to oral and genital herpes, HSV can also cause more severe disease. Active genital herpes infection can also increase a person's risk of becoming infected with HIV.^{1,2,4}

Genital Herpes

Genital herpes affects more than 1 in 6 Americans age 14 to 49.⁴ Many of those infected are asymptomatic and unaware of their seropositive status, allowing for unknowing transmission.¹⁻³ A diagnosis based on medical history and physical examination may be inaccurate and should thus be confirmed by laboratory testing.¹ LabCorp's test options include HSV detection and differentiation using nucleic acid amplification (NAA) from specimens collected from genital lesions.

Neonatal Herpes

Approximately 22% of pregnant women are infected with HSV-2, but as many as 90% of them are undiagnosed because they have few or no symptoms.⁵ Transmission from mother to newborn can occur during vaginal delivery whether the mother is experiencing a primary infection or a recurrence. The risk for transmission is greatest in babies born to mothers who have a primary infection near the time of delivery.¹⁻³ Serologic

testing can be used to identify women at greatest risk for primary infection because they are HSV-2 antibody-negative. In some cases, an HSV-negative woman's partner may be tested to identify discordant couples. If the partner is serologically positive, safe sex practices may be recommended for the duration of the pregnancy. Serologic testing may also be used to identify women who were infected prior to pregnancy and could be shedding virus during pregnancy and/or delivery, thereby increasing awareness of potential infection in the baby after birth and triggering early testing and administration of antiviral agents.

Central Nervous System Disease

HSV is the most common cause of sporadic viral encephalitis in the United States and is often fatal when not treated promptly.³ Thus, a timely, accurate diagnosis is critical.

Aseptic (viral) meningitis, while self-limiting,³ may cause patients to experience severe headaches, nausea and vomiting, fever, and photophobia.

Nucleic acid amplification methods, such as polymerase chain reaction (PCR), can be used to detect HSV from cerebrospinal fluid (CSF) and is recognized as the diagnostic test of choice for rapid HSV identification.³

Other HSV Infections

HSV is the most common cause of corneal infection in the United States.³ Most infections are superficial, but they can cause scarring and opacification of the cornea.³



Herpes Simplex Virus Test Options

	Test Name	Test No	Clinical Use
Molecular Detection	Herpes Simplex Virus (HSV) Types 1/2, NAA	188056	Detects HSV DNA when active viral shedding is occurring; differentiates HSV-1 from HSV-2.
	Herpes Simplex Virus (HSV) Types 1/2, DNA by PCR	138651	Detects HSV DNA; differentiates HSV-1 from HSV-2. When performed on CSF, supports a diagnosis of herpes simplex encephalitis or herpes simplex meningitis. Whole blood, serum, or plasma specimen types are indicated for testing neonates or immune-compromised individuals.
	Herpes Simplex Virus (HSV) Types 1/2, Amniotic Fluid, DNA by PCR	138594	Detects HSV DNA; differentiates HSV-1 from HSV-2.
Serology	Herpes Simplex Virus (HSV) Types 1- and 2-Specific Antibodies, IgG	164905	Detects IgG antibodies specific to HSV types 1 and/or 2 infection; confirm or rule out possible infection with herpes simplex types 1 and/or 2 virus in prenatal patients in whom HSV infection can cause serious prenatal disease.; confirm or rule out possible infection with HSV-1 and/or HSV-2 in prenatal patients in whom HSV infection can cause serious disease; identify subclinical carriers of HSV-1 and/or HSV-2. These assays are based on purified recombinant glycoprotein G-1 (HSV-1) or G-2 (HSV-2) antigens.
	Herpes Simplex Virus (HSV) Types 1 and 2, IgM Antibodies, Indirect	165180	Semiquantitative detection of IgM antibodies to HSV-1 and HSV-2.*
	Herpes Simplex Virus (HSV), Types 1/2, IgM, By EIA	164806	IgM levels can provide useful information about an acute event.
	Herpes Simplex Virus (HSV), Type-specific Immunoblot	138487	Qualitative, individual detection of IgG antibodies specific to HSV-1 and/or HSV-2 infection; confirm or rule out possible infection with HSV-1 and/or HSV-2; identify patients in whom HSV infection during the third trimester may cause serious infection in the fetus or newborn; identify subclinical carriers of HSV-1 and/or HSV-2. These assays are based on purified recombinant glycoprotein G-1 (HSV-1) or G-2 (HSV-2) antigen.
HSV Cultures	Herpes Simplex Virus (HSV) Culture and Typing	008250	Detection and differentiation of HSV-1 and HSV-2.
	Herpes Simplex Virus (HSV) Culture Without Typing	186072	Detection of HSV.
	Viral Culture, Rapid, Lesion (Herpes Simplex Virus and Varicella-Zoster Virus)	186056	Detection and differentiation of HSV-1, HSV-2, and varicella-zoster virus (VZV) from lesions.

* This procedure may be considered by Medicare and other carriers as investigational and, therefore, may not be payable as a covered benefit for patients.

References

- Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines 2010. MMWR.2012;59(RR-12):20-25.
- Genital herpes - CDC fact sheet. Centers for Disease Control and Prevention Web site. <http://www.cdc.gov/std/herpes/stdfact-herpes.htm>. Accessed July 3, 2013.
- Jerome KR, Morrow RA. Herpes simplex viruses and herpes B virus. In: Versalovic J, Carroll KC, Funke G, Jorgensen JH, Landry ML, Warnock DW. *Manual of Clinical Microbiology*. Vol 2 10th ed. Washington, DC:ASM Press; 2011:1530-1538.
- Centers for Disease Control and Prevention. Seroprevalence of herpes simplex virus type 2 among persons aged 14-19 years—United States, 2005-2008. MMWR.2010;59(15):456-459.
- Brown ZA, Gardella C, Wald A, Morrow RA, Corey L. Genital herpes complicating pregnancy. *Obstet Gynecol*. 2005 Oct; 106(4):845-856.

For more information, including CPT codes, test methodologies, and specimen requirements, as well as information about HSV tests performed in combination with tests for other sexually transmitted diseases or for out-of-the-vial Pap test options that include HSV, visit the online Test Menu at www.LabCorp.com.



www.LabCorp.com