

## HERPES SIMPLEX VIRUS INFECTION

Herpes simplex virus infection is characterized by lesions around the genitals, rectum or mouth caused by either HSV-1 or HSV-2. HSV-1 is the main cause of herpes infections around the mouth, but can also cause genital herpes. HSV-2 causes the majority of genital herpes, but HSV-1 genital herpes is increasing. Both primary and recurrent infections can occur, with the primary infection usually more severe than recurrent infections. Asymptomatic or mild infections are common for both HSV-1 and HSV-2. HSV awareness is important because genital herpes lesions are a risk factor for the contraction of Human Immunodeficiency Virus (HIV.)

### CAUSE

Herpes simplex virus type 1 (HSV-1) and type 2 (HSV-2)

### SYMPTOMS

Most individuals infected with HSV-1 or HSV-2 are asymptomatic, or have very mild symptoms that go unnoticed or are mistaken for another skin condition. Symptomatic primary infections usually last longer and are more severe than reactivation of a latent infection (recurrent infection).

#### Oral herpes:

Primary (often occurs before the age of 5)

- Fever and irritability
- Tender submandibular adenopathy (swollen lymph nodes)
- Rash or inflammation of oral mucosa and/or gums
- Lesions around the mouth
- Conjunctivitis and Keratitis possible
- Potential CNS involvement (meningoencephalitis)

Recurrent

- Tingling in affected area prior to lesion development
- Fever blisters
- Cold sores
- Conjunctivitis and Keratitis possible
- Potential CNS involvement (meningoencephalitis)

#### Genital herpes:

Primary

- Vesicular lesions around the genitals or rectum; painful
- Lymphadenopathy (swollen lymph nodes)
- Fever, body aches, head ache
- Painful urination as urine makes contact with lesions
- Vaginal discharge
- Potential CNS involvement (meningitis, encephalitis)

Recurrent

- Tingling in affected area prior to lesion development
- Vesicular lesions around the genitals or rectum
  - Often less painful than lesions of primary infection
- Painful urination as urine makes contact with lesions
- Vaginal discharge
- Potential CNS involvement (meningitis, encephalitis)

### **SPREAD**

HSV-1 is most frequently spread through contact with saliva or herpetic lesions. HSV-2 is most frequently spread through sexual contact with an infected individual. Both HSV 1 and 2 can be transmitted in the presence or absence of symptoms because asymptomatic infection with viral shedding is common. Transmission to a neonate usually occurs via the birth canal of an infected mother.

### **INCUBATION** (time from exposure to onset of symptoms)

2 to 14 days, average is 4 days

### **CONTAGIOUS PERIOD**

HSV can be isolated for 2 to 7 weeks after primary stomatitis (rash or sores in mouth) or primary genital lesions appear. After a recurrent infection, the virus can usually be isolated for 5 days. Asymptomatic viral shedding is possible.

### **EXCLUSION**

Child care and School: Children with primary herpes **and** uncontrolled drooling.

### **DIAGNOSIS**

HSV diagnosis is often made by examining symptoms and taking a sample from a lesion if necessary. Blood tests are available and useful for asymptomatic infection or if a patient presents themselves after symptoms have resolved. HSV-1 and HSV-2 antibodies can be distinguished.

### **TREATMENT**

HSV will remain in the body for life. Antiviral medication is recommended for primary and recurrent HSV infection. Antiviral medications will vary by symptoms present (oral, genital, CNS involvement). Antiviral medication can be used to reduce the length and severity of lesion outbreaks, and reduce viral shedding (communicability). Treatment can be used as prophylaxis to reduce the incidence of recurrent infection, but not primary infection.

### **PREVENTION/CONTROL**

- In general, avoid contact with HSV lesions (both oral and genital.)
- Wash your hands immediately if you touch HSV lesions on your body or someone else's body; autoinoculation is possible.
- Health care personnel should wear gloves when in contact with potentially infectious lesions.
- Avoid kissing people and sharing personal items with people who have oral sores or lesions.
- Use latex condoms during sexual practices.
- Treat infections with antiviral medication to reduce communicability.
- If primary genital herpes infection occurs in late pregnancy, a cesarean section is recommended.

For more information please contact Contra Costa Public Health at 925-313-6740 and visit our website at <http://cchealth.org/cd/>