HERPES SIMPLEX

REPORTING INFORMATION
- Class A(3) (congenital) - report by close of work week
- Class B (genital) - report number of cases of disease by close of work week
- Confidential Case Report Card (3812.11, rev. 12/81), lab report (3833.11), or telephone

AGENTS
Herpes simplex virus - Types I and II
HSV I - usually associated with oral fever blisters, herpetic keratitis, and encephalitis in adults.
HSV II - usually associated with genital and neonatal infections.
HSV I can occur in the genital area and HSV II can occur above the waist, possibly due to auto-inoculation by the hands of the infected person.

CASE DEFINITION
Genital herpes

Clinical description
A condition characterized by visible, painful genital or anal lesions.

Laboratory criteria for diagnosis
- Isolation of herpes simplex virus from cervix, urethra, or anogenital lesion, or
- Demonstration of virus by antigen detection technique in clinical specimens from cervix, urethra, or anogenital lesion, or
- Demonstration of multinucleated giant cells on a Tzanck smear of scrapings from an anogenital lesion

Case classification
Probable : a clinically compatible case (in which primary and secondary syphilis have been excluded by appropriate serologic tests and darkfield microscopy, when available) with either a diagnosis of genital herpes based on clinical presentation (without laboratory confirmation) or a history of one or more previous episodes of similar genital lesions.

Confirmed: a clinically compatible case that is laboratory confirmed.

Comment: Herpes should be reported only once per patient. The first diagnosis for a patient with no previous diagnosis should be reported.

Congenital herpes (CDC has not published a case definition for congenital herpes. For cases in Ohio, the following definition is suggested.)
Clinical description

Appearance in a newborn ($\leq$ 72 hours old) of one of the following symptom complexes:
1) disseminated disease, involving the liver and multiple other organs; frequently includes encephalitis; and, in up to 80% of cases, vesicular skin lesions
2) encephalitis; only 60% of these cases have vesicular skin lesions at some point during their illness
3) skin, eye, and/or mouth involvement. Vesicles occur in 90% of cases. These cases generally present at an older age (10-11 days)

Laboratory confirmation
- isolation of HSV from skin lesions, cerebrospinal fluid (CSF), urine, throat, nasopharynx, or conjunctivae, or
- detection of HSV DNA in CSF by polymerase chain reaction (PCR), and
- elimination of other possible etiologies, such as cytomegalovirus, varicella-zoster virus, rubella, enteroviruses, etc.

Case classification
Confirmed: a clinically compatible case that is laboratory confirmed

Comment
Neonatal herpes, presenting similarly but in an infant ≤ 60 days of age, can also be reported.

SIGNS AND SYMPTOMS

Genital herpes
Vesicular lesions appear on internal and external genitalia. Lesions often ulcerate (especially in moist areas). Primary infections often produce pain, dysuria, local inflammation, tender inguinal adenopathy, vaginal discharge, and constitutional symptoms. Recurrent symptoms are believed to be milder and of shorter duration than primary symptoms. The mean duration of recurrent infections is 4.5 days. Sixty-two percent of infections recur within six months of original infection. Recurrence rates are higher in Type II infections. Women with cervical and vaginal infections might be asymptomatic.

Possible complications involve the central nervous system and occur in several forms, including aseptic meningitis and transverse myelitis.

Congenital herpes
See case definition.

DIAGNOSIS

See case definition.

EPIDEMIOLOGY

Source
Humans.

Occurrence
Nationwide reporting of cases for genital herpes is not available in the United States. The prevalence of clinically diagnosed genital herpes appears to be greater in whites than in non-whites. In STD clinics seeing a high proportion of non-whites, genital herpes is reported only one-tenth as frequently as gonorrhea. Data suggest that the disease may be increasing in frequency in some population groups.

Mode of Transmission
Genital herpes infections are transmitted sexually from an individual who is shedding virus from a peripheral site, mucosal surface, or secretion. Infection occurs via inoculation of virus onto susceptible mucosal surfaces or through small cracks in the skin. Congenital infection most commonly results from intrapartum transmission during birth through an infected maternal genital tract or by ascending infection, usually after rupture of membranes. Intrauterine transmission can also occur, and postpartum transmission results in later onset disease (neonatal herpes).

Period of Communicability
While symptoms are present. The median duration of viral shedding as defined from onset of lesions to the last positive culture is approximately 12 days. Genital HSV infection can be transmitted during periods of both symptomatic and asymptomatic shedding of virus. Patients should be advised not to resume sexual activity until lesions have completely healed. The period of time for healing appears slightly longer for women than for men.

Incubation Period
Estimated 2-14 days for HSV Type II infection.

PUBLIC HEALTH MANAGEMENT

Case

Patients infected with *Herpes simplex* should be counseled about their infection regarding sexual activity during periods of communicability and measures for preventing transmission. Currently there are no proven effective means of prophylaxis. Barrier forms of contraception, especially condoms, might decrease transmission of disease.

Management of Pregnant Women

The management of pregnant women with genital HSV must be individualized and based on the clinical course of disease in the mother. Cesarean section is not routinely warranted for all women with recurrent genital disease. Only those women who shed HSV at or near the time of delivery need be considered for Cesarean delivery. Pregnant patients with recurrent genital HSV should be encouraged to come to the hospital early in labor so careful examination of the external genitalia and cervix can be performed.

Treatment

There is no proven cure to date for HSV infection.
Consult the most recent CDC-published "STD Treatment Guidelines" (currently *MMWR* 1997;47[RR-1]) for recommended therapy. Copies of the guidelines are available from the HIV/STD Prevention offices and on the Internet at the CDC Web Site (www.cdc.gov).

Isolation

Infants at risk of having acquired disease at birth should be placed in isolation. Viral cultures, liver function studies, and CSF examinations should be followed and the infant should be monitored closely for the first month of life.

Prevention and Control

Encourage patients to avoid sexual intercourse during initial and recurrent infections. Encourage the use of condoms during latent periods because of possible risk of transmission. Women should have annual pelvic examinations and pap smears. Encourage women to inform their physician of their herpes infection to reduce the chance of neonatal infection.