

## CHANCROID

### REPORTING INFORMATION

- **Class B:** Report the case, suspected case and/or a positive laboratory result to the local public health department where the patient resides by the close of the next business day. If patient residence is unknown, report to the local public health department in which the reporting health care provider or laboratory is located.
- Health care providers and laboratories report using the following form(s) and/or mechanism: [Ohio Confidential Reportable Disease form](#) (HEA 3334, rev. 5/2014), [Positive Laboratory Findings for Reportable Disease form](#) (HEA 3333, rev. 8/2005), Ohio Disease Reporting System (ODRS), electronic laboratory reporting (ELR), or telephone.
- Local public health departments report the case, suspected case and/or a positive laboratory result to the Ohio Department of Health (ODH) via ODRS by the end of the next business day.
- Key fields for ODRS reporting include: for laboratory - date lab collected, test name, and result; for clinical - treatment name, dose, and start date.

### AGENT

*Haemophilus ducreyi*, is a short, plump, gram-negative coccobacillus.

### CASE DEFINITION

#### Clinical description

A sexually transmitted disease characterized by painful genital ulceration and inflammatory inguinal adenopathy. The disease is caused by infection with *Haemophilus ducreyi*.

#### Laboratory Criteria for Diagnosis

- Isolation of *H. ducreyi* from a clinical specimen.

#### Case Classification

Probable: A clinically compatible case with BOTH

- No evidence of *Treponema pallidum* infection by darkfield microscopic examination of ulcer exudate or by a serologic test for syphilis performed greater than or equal to 7 days after onset of ulcers AND
- Either a clinical presentation of the ulcer(s) not typical of disease caused by HSV or a culture negative for HSV.

Confirmed: A clinically compatible case that is laboratory confirmed.

#### Comment(s)

The 1996 case definition appearing on this page was re-published in the 2009 CSTE position statement 09-ID-31. Thus, the 1996 and 2010 versions of the case definition are identical.

### SIGNS AND SYMPTOMS

Initially a pustular papule develops, which often ulcerates. Ulcers may multiply, are usually painful, have ragged non-indurated borders, and may have a gray or yellow purulent exudate. Several ulcers can merge to form giant ulcers. Most lesions in males are on the frenulum or in the coronal sulcus. The glans and shaft are less frequently involved. In females, most lesions are at the entrance to the vagina. Painful unilateral inguinal adenitis is a characteristic feature of chancroid and may be present in 50% of patients. Buboec, or swollen lymph nodes, can progress to become fluctuant with spontaneous rupture.

## **DIAGNOSIS**

Definitive diagnosis depends upon demonstrating the organism. To collect the specimen:

- Clean lesions by gently abrading with saline-soaked gauze.
- Collect material from the undermined edge.
- Gram stain of material collected from the ulcers shows short gram-negative rods, often with bipolar staining and characteristic long chains (schools of "fish").

## **EPIDEMIOLOGY**

### **Source**

Humans are the only source of infection.

### **Mode of Transmission**

Transmission is through sexual contact. *H. ducreyi* infects the host through breaks in the skin or epidermis.

### **Occurrence**

Since 1987, cases of chancroid reported nationally declined steadily until 2001. Since then the number of cases reported has fluctuated slightly. In 2016, seven cases of chancroid were reported by six states. Ohio last reported a case of chancroid in 2008.

Although the overall decline in reported chancroid cases most likely reflects a decline in the incidence of this disease, these data should be interpreted with caution because *H. ducreyi*, the causative organism of chancroid, is difficult to culture, and as a result, this condition may be substantially underdiagnosed.

### **Period of Communicability**

No studies are available to ascertain the risk of chancroid following sex with a partner who either is colonized or has active genital ulcer disease. Presumably, patients with active lesions are most likely to transmit the disease.

### **Incubation Period**

Incubation period ranges from three to five days, although it may extend up to two weeks. No prodromal symptoms are recognized.

## **PUBLIC HEALTH MANAGEMENT**

### **Case**

#### Investigation

All cases should be reported to the local health jurisdictions, who then report to ODH.

#### Treatment

Consult the most recent CDC-published "STD Treatment Guidelines" for recommended therapy at the CDC Web Site, <https://www.cdc.gov/std/tg2015/default.htm>.

Patients should be re-examined 3–7 days after initiation of therapy. If treatment is successful, ulcers usually improve symptomatically within 3 days and objectively within 7 days after therapy.

#### Isolation

None.

### **Contacts**

Regardless of whether symptoms of the disease are present, sex partners of patients who have chancroid should be examined and treated if they had sexual contact with the patient during the 10 days preceding the patient's onset of symptoms.

**Prevention and Control**

Latex male condoms, when used consistently and correctly, can reduce the risk of getting or giving chancroid when the infected area or site of potential exposure is covered. The surest way to avoid chancroid is to abstain from vaginal, anal, and oral sex or to be in a long-term mutually monogamous relationship with a partner who has been tested and is known to be uninfected.

**What is chancroid?**

Chancroid is a highly contagious yet curable sexually transmitted disease (STD) caused by the bacteria *Haemophilus ducreyi*. Chancroid causes ulcers, usually of the genitals, and inguinal lymphadenopathy (buboes).

**How common is it?**

The prevalence of chancroid has declined in the United States. When infection does occur, it is usually associated with sporadic outbreaks. Worldwide, chancroid appears to have declined as well, although infection might still occur in some regions of Africa and the Caribbean.

**How do people get chancroid?**

Chancroid is transmitted in two ways:

- Sexual transmission through skin-to-skin contact with open sore(s).
- Non-sexual transmission when pus-like fluid from the ulcer is moved to other parts of the body or to another person.

A person is infectious when ulcers are present. There has been no reported disease in infants born to women with active chancroid at time of delivery.

**What are the symptoms of chancroid?**

- Symptoms usually occur within 4-10 days from exposure. They rarely develop earlier than three days or later than 10 days.
- Swollen, painful lymph glands in the groin area are often associated with chancroid. The ulcer begins as a tender, elevated bump, or papule, that becomes a pus-filled, open sore with eroded or ragged edges.
- The ulcer is soft to the touch (unlike a syphilis chancre that is hard or rubbery). The term soft chancre is frequently used to describe the chancroid sore.
- The ulcers can be very painful in men but women are often unaware of them.
- Because chancroid is often asymptomatic in women, they may be unaware of the lesion(s).
- Painful lymph glands may occur in the groin, usually only on one side; however, they can occur on both sides.

**How is chancroid diagnosed?**

A definitive diagnosis of chancroid requires the identification of *H. ducreyi* on special culture media that is not widely available from commercial sources; even when these media are used, sensitivity is <80%.

A probable diagnosis of chancroid, for both clinical and surveillance purposes, can be made if all the following criteria are met:

- the patient has one or more painful genital ulcers
- the patient has no evidence of *T. pallidum* infection by darkfield examination of ulcer exudate or by a serologic test for syphilis performed at least 7 days after onset of ulcers
- the clinical presentation, appearance of genital ulcers and, if present, regional lymphadenopathy are typical for chancroid
- a test for Herpes Simplex Virus (HSV) performed on the ulcer exudate is negative

**What is the treatment for chancroid?**

Chancroid can be treated with antibiotics. Successful treatment cures the infection, resolves symptoms, and prevents transmission to others. Treatment regimens may include the following: azithromycin, ceftriaxone, ciprofloxacin (not recommended for pregnant or nursing females, or people younger than 18 years) and erythromycin base. Left untreated, chancroid may facilitate the transmission of HIV. In advanced cases, scarring can result, despite successful therapy.

A follow-up examination should be conducted three to seven days after treatment begins. If treatment is successful, ulcers usually improve within three to seven days. The time required for complete healing is related to the size of the ulcer. Large ulcers may require two weeks or longer to heal. In severe cases, scarring may result. Partners should be examined and treated regardless of whether symptoms are present.

**How can chancroid be prevented?**

- Abstinence (not having sex)
- Mutual monogamy (having sex with only one uninfected partner)
- Latex condoms for vaginal, oral and anal sex. Using latex condoms may protect the penis or vagina from infection, but does not protect other areas such as the scrotum or anal area. Chancroid lesions can occur in genital areas that are covered or protected by a latex condom, but may also occur in areas that are not covered or protected by a condom. Latex condoms, when used consistently and correctly, can reduce the risk of chancroid, genital herpes, syphilis, and genital warts, only when the infected areas are covered or protected by the condom.

If you do get chancroid, avoid contact with the infected area to prevent chance of spreading the infection to other parts of the body.

**What about HIV?**

Chancroid has been well established as a cofactor for HIV transmission. Moreover, persons with HIV may experience slower healing of chancroid, even with treatment, and may need to take medications for a longer period. Patients should be tested for HIV infection at the time chancroid is diagnosed. If the initial test results were negative, a serologic test for syphilis and HIV infection should be performed 3 months after the diagnosis of chancroid.