

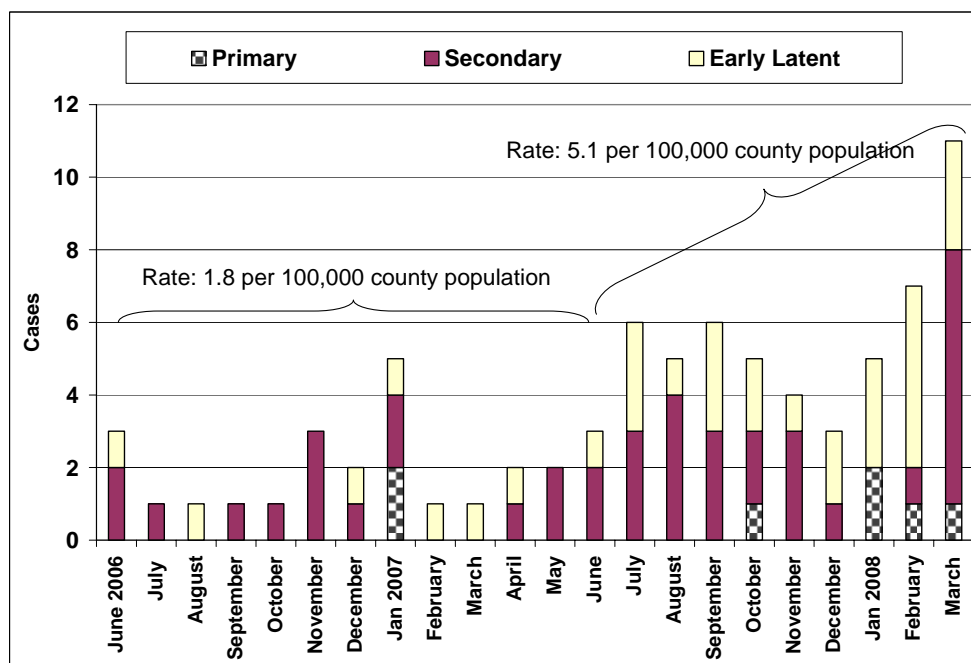
## Syphilis Outbreak in Cuyahoga County:

Interim surveillance report by the Cleveland Department of Public Health and the Cuyahoga County Board of Health

A nearly 3-fold increase in infective primary, secondary cases and early latent syphilis cases has been identified in Cuyahoga County. Cases from June 2006 to March 2008 were identified from surveillance data provided by the STD Surveillance Unit and the HIV/STD Prevention Program of the Ohio Department of Health. More than half (59%) of these cases reported their residence as Cleveland. The remainder (41%) reported residence in other county municipalities.

From July 2007 to March 2008, 52 county residents were diagnosed with active (i.e. primary and secondary) or early latent syphilis, for an annualized rate of 5.1 per 100,000 county residents. On average, about 6 cases were reported during these nine months. Yet from June 2006 to June 2007, only 26 cases, or 1.8 per 100,000, were reported to local public health agencies. See Figure 1. During this period and in the previous three calendar years, about 2 active or early latent cases are reported per month. No cases of congenital syphilis (transmitted from mother to newborn) were reported.

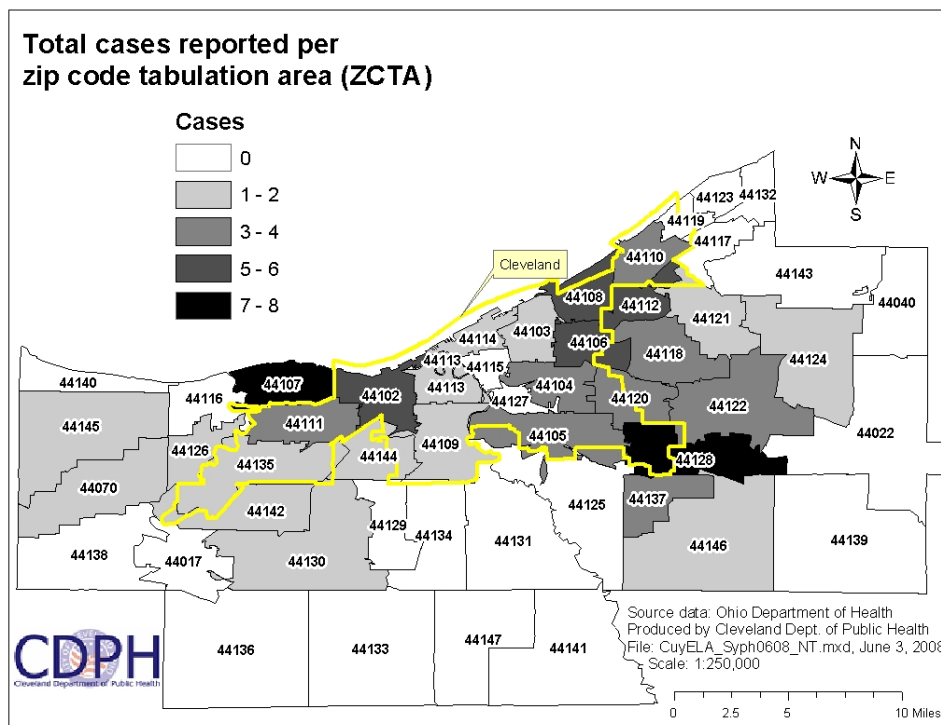
Figure 1. Active (primary & secondary) and early latent syphilis cases among Cuyahoga County residents diagnosed from June 2006 through March 2008 and reported to the Ohio Department of Health



**Two communities are hardest hit by the outbreak:** 1) men who have sex with men and bisexual males of all races and ethnicities (n=48, 30 from July 2007-March 2008), and, 2) heterosexual males and females (n=36, with 20 from July 2007 to March 2008). Ninety percent of reported heterosexual cases were Black/African

American. Figure 2 below shows residence by zip code. Previous surveillance reports by this office have shown these areas to have high incidence rates of HIV/AIDS, Chlamydia and gonorrhea.

**Figure 2. Active (primary & secondary) and early latent syphilis cases among Cuyahoga County residents by zip code tabulation area (ZCTA) diagnosed from June 2006 through March 2008 and reported to the Ohio Department of Health**



78% (n=61) of cases are males. Cases ranged in age from 15 to 60. One-third (33%) were age 15 to 24 while another quarter (23%) were 25 to 34 years when diagnosed. African American heterosexual females (n=15 + 4 orientation not reported) were significantly younger, on average, than males (mean ages 25 versus 35, respectfully.) African Americans under age 29 are especially at risk since this population had the highest rates for Chlamydia infection for Cuyahoga County in 2006, and having a sexually transmitted disease increases the likelihood of contracting another.

Condom use was poor regardless of orientation and was intermittent among men who have sex with man and bisexual males (MSM/BI) engaging in sex with HIV-positive males. Nearly all cases reported an anonymous sexual contact(s) and unprotected oral sex. Rectal intercourse was reported by nearly all infected MSM/BI males and 29% heterosexual cases. Single partners were the norm, with only 9% reporting multiple partners.

About a third of active and early latent cases met their partners through friends. 29% reported illicit drug use (marijuana, cocaine/crack cocaine, or crystal methamphetamine) and 22% reported alcohol use. Crystal meth use was reported in

only 6% of all cases regardless of orientation. One in six MSM/BI males used either a bath house (16%) or the internet (16%) for their liaison. Fewer reported meeting through bars, clubs or on trips.

**Signs and Symptoms:** Persons with active syphilis exhibited symptoms for an average of eighteen days before seeking medical attention. Some persons with symptoms sought medical care over two months after the development of symptoms.

Symptoms of syphilis can mimic many illnesses. Primary syphilis is characterized by an open, painless sore at the site of initial infection and is referred to as a chancre. These chancres may occur in the mouth, rectum or vagina, so many are unaware of the initial infection. Secondary syphilis is characterized by rash, fever, headaches, fatigue, swollen glands, open sores on tongue and throat or inside mouth, patchy hair loss and flat, wart-like sores in the genital region. One, some or all symptoms may be present. Persons with primary and secondary syphilis are highly infectious and may be infectious to others for up to two years after the initial infection occurs.

Most cases of active syphilis reported a generalized rash or localized rashes on the palms or soles of the feet. On average, persons waited two to three weeks with these symptoms before seeking medical care. A lesion or sore was reported by 26% of cases, with symptoms lasting for almost two weeks before seeking care. Condyloma lata, or flat wart-like sores in the genital region were reported in 5% of cases with secondary syphilis. Since June 2006, only 4 of 31 persons with early latent syphilis reported a history of symptoms.

Most persons were diagnosed and treated in an emergency room or hospital, while fewer (1 in 5) were treated in an STD clinic. Cases have been reported by private physicians, correctional facilities, laboratories blood bank and employment screening.

Therefore, physicians and staff working in emergency, local clinics and urgent care facilities, prenatal care, infectious disease, maternal delivery (OB/GYN) and dermatology should increase surveillance and screening.

### **Clinical importance**

Rapid identification and full treatment of persons with syphilis (cases) and their sexual partners is very important. Untreated primary and secondary syphilis can lead latent and late stages, after the secondary symptoms disappear. Persons with latent syphilis are still infectious to others despite the absence of observable symptoms. Persons with untreated late syphilis, those living 10-20 years after infection can suffer from significant damage to the internal organs, permanent neurological damage and death.

Infected females can pass the syphilis bacterium to her unborn infant. An infected, untreated mother runs the risk of giving birth to a dead baby, a baby dying shortly

after the birth, or one that can have serious problems including seizures, developmental delays and even death.

Open lesions, or chancres, increase the risk of transmission or acquiring HIV eight-fold when present among sexual contacts. Syphilis in early stages can be easily treated, but re-infection can occur to those repeating risky behaviors with infected partners. (Source: Centers for Disease Prevention and Control. [http://www.cdc.gov/STD/HealthComm/fact\\_sheets.htm](http://www.cdc.gov/STD/HealthComm/fact_sheets.htm) or <http://www.cdc.gov/std/Syphilis/STDFact-Syphilis.htm> )

## Action Plan

These directives were made jointly in discussion with Disease Intervention Specialists of the Ohio Department of Health and Cleveland Department of Health, Cuyahoga County Board of Health and Cleveland Department of Public Health.

1. The STD Clinics at J Glen Smith Health Center, 11100 St. Clair Avenue, Cleveland and Thomas McCafferty Health Center, 4242 Lorain Avenue, Cleveland will begin providing routine Syphilis testing and treatment to all clients receiving walk-in, confidential HIV testing services. Both services are **FREE** and open to anyone 13 years old and older. These services will be available Monday-Thursday from 8:00-11:00 and 1:00-4:00.

Both STD Clinics will continue to provide Comprehensive STD testing services that includes HIV, Syphilis, Chlamydia, and Gonorrhea screening. Comprehensive testing is also available Monday-Friday from 8:00-11:00 and 1:00-4:00. There is a \$10.00 fee, and both clinics are closed from 1:00-4:00 on the 3rd Wednesday of each month.

2. The City of Cleveland will re-deploy Disease Intervention Specialist staff and increase their focus on finding undiagnosed Syphilis cases. The staff will contact the sexual partners of active Syphilis cases to inform them of the exposure and refer them for testing. The Disease Intervention Specialists serve anyone living in Cuyahoga, Huron, Lake, Geauga, Erie, and Lorain counties.
3. A public awareness campaign will begin to target bars, clubs, community centers, and other popular social venues as well as local hospitals, health clinics, and social services programs providing family planning, HIV/STD prevention and care, and maternal health services.

Contact the CDPH at (216) 664-7080 for questions or information about testing resources.