

Syphilis Surveillance Update for Cuyahoga County: June 1, 2009

Cleveland Department of Public Health, in coordination with the Cuyahoga County Board of Health, Shaker Heights Health Department and Ohio Department of Health

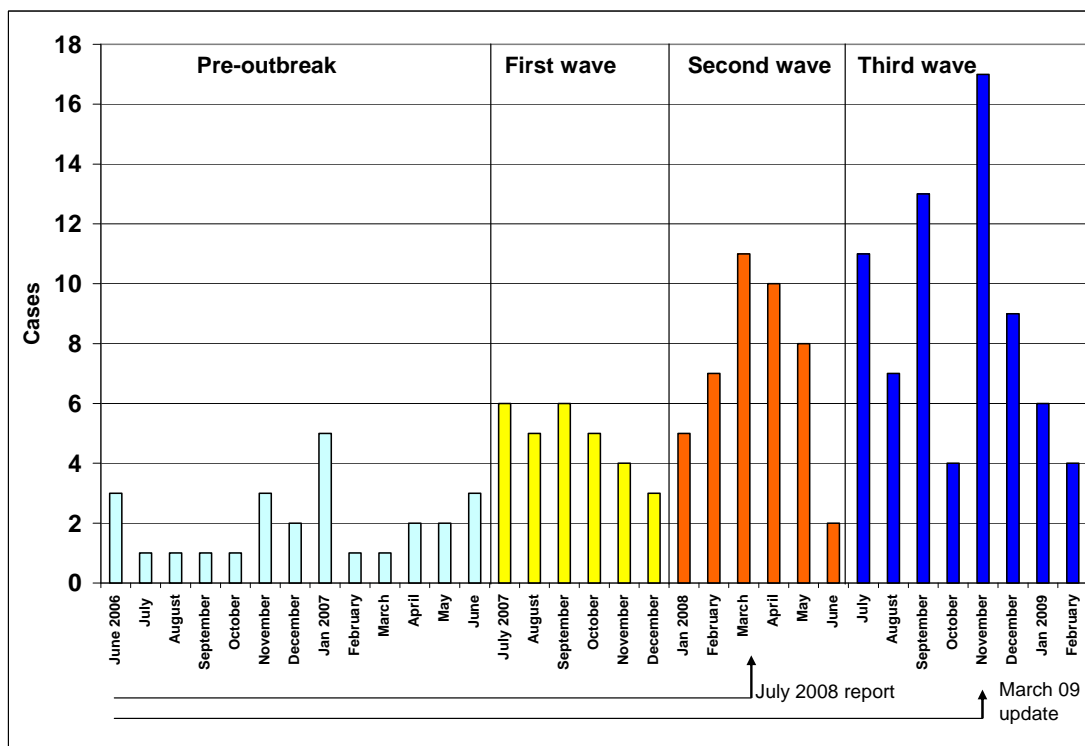
Additional syphilis surveillance data were obtained by local public health officials for analysis from the Ohio Department of Health. These data were collected by Disease Intervention Specialists (DIS), state-trained agents who contact persons with syphilis to refer them to treatment and encourage partner notification of possible exposure to syphilis.

This report is the third describing this outbreak and is focused on surveillance data for 2008.

For 2008, 104 cases of early syphilis were diagnosed and reported, a rate of 8.10 per 100,000 population. This is nearly 2 ½ times the rate for 2007 (3.32 per 100,000).

A peak in early syphilis cases occurred in November 2008 with 17 cases. (**Figure 1**) This third wave of cases can be viewed in the chart below. Early syphilis is defined as persons diagnosed with primary, secondary or early latent syphilis.

Figure 1: Early syphilis cases for Cuyahoga County by the month of diagnosis



Source: CDPH and ODH

The chart also notes when the previous syphilis surveillance reports were released to the public:

- July 2008 with data up to March 2008
- March 2009 with data up to November 2008, with a Public Health Alert letter.

Description of cases diagnosed in 2008

104 cases of primary, secondary or early latent syphilis were diagnosed and reported among Cuyahoga County residents in 2008, a rate 8.10 per 100,000 population. Seventy-three cases were Cleveland residents, the highest number since 1999 when 82 cases were reported by CDPH. Rates for Cleveland are fourth among Ohio major cities, behind Akron (19.6 per 100,000), Columbus (15.1), and Cincinnati (13.8).

Table 1: City of residence among cases diagnosed in 2008 for Cuyahoga County

City of Residence	Frequency	Percent
CLEVELAND	73	70.2%
LAKWOOD	5	4.8%
CLEVELAND HEIGHTS, MAPLE HTS.	3 each	2.9% each
BEDFORD, EAST CLEVELAND, GARFIELD HTS., PARMA HTS., WESTLAKE	2 each	1.9% each
BEDFORD HEIGHTS, EUCLID, GATES MILLS, N. OLMSTED, PARMA, RICHMOND HTS., ROCKY RIVER, UNIVERSITY HTS., WARRENSVILLE, and WARRENSVILLE HTS.	1 each	1.0% each

Two populations at risk identified in previous reports continued to appear in 2008:

1) Heterosexuals, primarily black

- Nearly one-third (31.7%) of early syphilis cases were heterosexuals
 - 91% were black, consistent with previous reports.
 - 61% were males, slightly higher than previous reports.

2) Men who are either bisexual or have sex with other men (MSM/Bi).

- Nearly half (46.2%) of early syphilis cases were MSM/bisexual males, with black, white and Hispanic males represented.
 - Slightly more than half of these males were HIV-positive. This factor was unknown and not reported in previous reports.

Four females were pregnant when diagnosed with syphilis. All were treated to prevent congenital syphilis. No cases of congenital syphilis have occurred in Cuyahoga County since the outbreak began in July 2007.

Cases were reported in children as young as 14 years of age.

Table 2: Case demographics, as percent (unless noted) for Cuyahoga County

Year of Diag.	Total cases (n)	Rate per 100,000 ¹	Primary or Secondary Syphilis	Cleve Resident	Male	Race			Ethnicity (Hispanic)
						Black	White	Other or Unknown	
2006	(12)	0.91	75.0	41.7	83.3	66.7	33.3	0	0
2007	(43)	3.32	60.5	65.1	76.7	72.1	27.9	0	4.6
2008	(104)	8.10	56.7	70.2	80.7	70.2	26.0	3.8	2.9

Year of Diag.	Total cases (n)	Age groups				Grouped by risk activity		
		14-24	25-34	35-54	55+	MSM/Bisexual males	Heterosexual males and females	Unknown / All Others ²
2006	(12)	25.0	25.0	50.0	0	58.3	41.7	0
2007	(43)	37.2	20.9	37.2	4.7	62.8	34.9	2.3
2008	(104)	37.5	29.8	19.8	2.9	46.2	31.7	22.1

1. Denominator source: Population Estimates Program, US Census Bureau 2. includes bi-sexual females (n=2)

Over one-third (35%) sought care at a hospital or emergency room, 28% at an STD or health department clinic, and in some other facility in 6%. Facility type was unknown in 32% of cases diagnosed in 2008. Condom use and duration of symptoms were collected in only a quarter of cases for 2008.

Comments and recommendations

Disease Intervention Specialists at the J. Glen Smith Health Center are given credit for bringing the case increase to the attention of CDPH administration as the first wave resolved.

Public health officials from Cuyahoga County, Shaker Heights and Cleveland worked together to obtain surveillance data in early 2008, to develop an Action plan and report findings in July 2008. News outlets, including local television, radio, newspapers and national press wires (Associated Press) followed the release. Additional stories on Chlamydia and gonorrhea infections among youth age 15 to 24 years followed (Rachel Dissell, Plain Dealer; July 13, 2008)

On March 4, 2009, surveillance data up to November 2008 were reported jointly by medical directors of Cleveland, Shaker Heights and Cuyahoga County public health agencies. A Public Health Alert letter was distributed to all medical centers, emergency rooms, clinics and many medical subspecialty associations in the county. Wider screening for syphilis was suggested, and DIS agents gave priority to investigating syphilis cases over new HIV or AIDS cases. Media outlets helped blanket the area with news stories and recommendations from the medical directors.

On May 4, 2009, the Cleveland Department of Public Health requested \$9,000 in additional funding from the Ohio Department of Health for its STD services. The City received a budget reduction in this amount from ODH due to an overall reduction of Federal funds to the State. The City was forced to restructure its STD lab and DIS services because of this cut. If awarded, the City will use some of these funds for syphilis social marketing resources and lab resources.

Benefits to public notification:

- increased awareness of the risk, symptoms among sexually active persons
- increased screening and awareness by medical providers

Continued screening encouraged

- for all women during pregnancy and those seeking prenatal care, and
- for all sexually active persons.

Greater responsibility asked of HIV-positive persons

- to be screened regularly, use condoms and watch for symptoms. Lesions may be in the rectum or mouth. Lesions may be mistaken for other STDs such as herpes.
- A lesion increases the risk of HIV transmission to others. HIV positive persons must take greater responsibility to protect both themselves and others.

All of these actions are necessary to reduce case counts to nominal levels seen before the outbreak began (i.e. 2 cases or less per month). Public health officials will continue monitoring case counts and reporting at appropriate intervals. Please contact the Office of Biostatistics for additional information.