

2009 Syphilis Surveillance Technical Report



Cleveland Department of Public Health, in cooperation with the Cuyahoga County Board of Health and Shaker Heights Health Division

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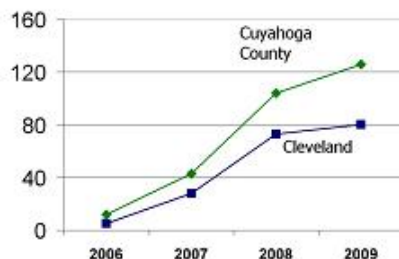
This report accompanies the 2009 Syphilis Update to the Community and is intended to inform the medical and public health community, community-based clinics, agencies involved in STD prevention and screening, medical education and subspecialty services (e.g. emergency medicine, pediatrics, neonatology, dermatology, family and internal medicine, OB/GYN), school systems throughout Cuyahoga County and nursing services, and other interested parties.

Please make these findings part of your assessment, treatment and prevention programs, grand rounds, staff and client/patient education.

Tertiary syphilis is not included in this report.

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Case counts of early syphilis (primary, secondary and early latent stages, combined) in Cuyahoga County and Cleveland, 2006-2009

Early syphilis rates climb 22% in 2009

Early syphilis is defined as persons diagnosed with primary, secondary, or early latent syphilis.

The rate of early syphilis cases rose 22% in 2009 to 9.88 per 100,000 population from 8.10 per 100,000 in 2008.

A total of 126 persons were reported in Cuyahoga County with early syphilis in 2009, the largest case count since the outbreak began in 2007. 80 cases, (63.5%) were from Cleveland.

Late diagnoses

In 2009, about half of the cases were diagnosed as primary or secondary syphilis, the earliest and most infectious periods. This is the lowest annual percentage since the outbreak began.

No congenital cases yet

No cases of mother-to-baby transmission were reported in 2009. However, five pregnant females were found to have syphilis and were treated.

Youth and young adults

(13 to 24y) continue to be 37% of new cases annually.

HIV co-infection in 37%

Of all 126 cases, 46 (37%) were HIV positive. Nearly all (40 of 46, or 87%) were men who have sex with men and bisexual males (MSM/Bi). The other six (13%) were heterosexual males and females.

Clinical presentation

Syphilis stage

Since the outbreak began in 2007, about 10% were diagnosed with primary syphilis, 50% as secondary and 40% as early latent syphilis. In 2009, about half were in early latent stage when diagnosed.

Diagnosing Location

57% of all cases were diagnosed in a hospital (including ED and outpatient clinics), 22% STD/health

department clinic, and 10% family planning clinics.

Sex and Age at diagnosis

Most cases are male. For males and females, ages range from 13 to 62 years, with 38% age 13 to 24, and 26% age 25 to 34 years. Nearly all youth age 13 to 24 were black (93%).

Symptoms

In those reporting symptoms, genital lesions were reported in less than

20%, a rash on palms or soles of feet in 30%, generalized rash in 21%, and condyloma lata (raised skin scaling) or mucous patches in 18%. Only 3% reported swollen nodes. In 2008 data, lesions were present in nearly all primary and early latent cases. **HIV co-infection** is common among MSM/Bi males (56.3% co-infected).

A high index of suspicion is warranted on assessment.



Table 1: Early Syphilis - demographics

Year	Early syph. cases	Rate per 100,000	% as primary or secondary	% as Cleveland resident	% Male	% by Race			% by Hisp. ethn.
						Black	White	Other/unk.	
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
2009	126	9.88	52.4	63.5	77.0	68.2	29.0	2.7	4.0

Year	Early syph. cases	% by Age Groups (3)				% Grouped by risk activity (4)		
		Youth/adults 13 to 24 yrs	25 to 34 years	35 to 54 years	55 and over	MSM and bisexual males	Hetero-sexual males & females	Males, not reporting (NR) or 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 (2)
2008	104	37.5	29.8	29.8	2.9	46.2	38.5	15.3 NR
2009	126	37.6	25.6	33.4	3.4	56.3	42.9	0.8 NR

1. Denominators for rates were from Population Estimates Program, US Census Bureau (2) Includes bi-sexual females and those not reporting activity 3. Not all persons reported age. (4) Grouped by risk activity, not orientation.

"Syphilis is easy to cure in its early stages... Treatment will kill the syphilis bacterium and prevent further damage, but it will not repair damage already done." - CDC Syphilis Fact Sheet

Groups at risk

The populations at greatest risk for syphilis are

1) youth and young adults age 13 to 24 years, 37.6% (47) of 126 cases in 2009. See the map on page 4 for case location.

Youth are at highest risk due to the high prevalence of Chlamydia and gonorrhea among teens and young adults. Having a STD increases the chance of transmitting or acquiring

another STD, including syphilis and HIV.

2) MSM/bisexual males, 56.3%, or 71 of 126 total. At least half were HIV positive when diagnosed with syphilis.

3) heterosexual males and females, 42.9%, or 54 of 126 total. Three in four heterosexuals diagnosed in 2009 were black.

4) pregnant women and

women of reproductive age. In the past two years, nine women tested positive for syphilis while pregnant and were treated before the infant was born. See Table 2 on page 3.

Risk Behavior versus Sexual Orientation. In this report, men who have sex with men (MSM), bisexual men, and heterosexuals with syphilis are identified by risk activity, not sexual orientation.

More cases are from suburbs

Over a third (36.5%) of early syphilis cases reported in 2009 were from county residents living outside of Cleveland. In 2008, only 30% of early syphilis cases were from the suburbs.

Cases were reported in 23 municipalities. Those with

the largest increases from 2008 to 2009 were Euclid (from 1 to 8 cases); Cleveland Heights (from 3 to 6); Shaker Heights (0 to 5); East Cleveland (2 to 3). Also notable was Lakewood (5 to 1 case).

Brooklyn, Maple Heights,

Parma, South Euclid, University Heights, and Warrensville Heights each had two cases in 2009. Twelve other municipalities had one case each.

High HIV risk among MSM/bisexual men

This population has the highest risk of spreading HIV and syphilis.

More than half (56.3%) of all cases in 2009 were MSM/bisexual males. Unfortunately, more of these males are HIV positive than seen in previous years. For 2009, 59% (n=42) of 71 MSM/bisexual males were co-infected compared to only 50% in 2008.

Risk behavior did not differ by race. About sixty percent of all MSM/bisexual males were black. Six in every seven (86%) were MSM, with 1 in 7 (14%) bisexual. This was similar

among white males, where 89% were MSM, 11% bisexual.

Among bisexual males, 66% were black and 33% white, consistent with 2008.

Age differed by race: All MSM/Bi youth (13-24y) were black; none were white (or of Hispanic ethnicity).

Half of MSM/Bi blacks were 26 years of age or younger (i.e. median age was 26). Two-thirds (67%) were under 35 years.

White MSM/bisexual males were much older, with a median age of 41 years.

Roughly one-quarter (24%) were age 24 to 35, none younger.

Partners: Like heterosexuals, half of all MSM/bisexual males had two partners in the past twelve months (median partners =2). This did not differ across race. Sex with anonymous partners was common (68%).

Condom use: 32% always, 59% sometimes, and 9% never used condoms with anal sex. For oral sex: 12% always, 48% sometimes and 37% never. This is disturbing since 30% had a past history of STDs.



Keith Brofsky/Getty Images

HIV positive men must take more responsibility in protecting themselves and others by using safe sex practices always and every time.

Table 2: Early Syphilis by risk activity, Cuyahoga County 08-09

Group	Year	Early syph. cases	% as primary or secondary stage	% males	% as Cleveland resident	% as MSM only	% as HIV pos.	% (n) of females pregnant when diag.	Race %			Hispanic %		
									Black	White	Other /unk.			
Hetero. Males & Females	2008	40	62%	50%	75%	N/A	2.5%	25% (5)	90%	8%	2%	0%		
	2009	54	48%	50%	67%	N/A	7.4%	15% (4)	74%	19%	7%	4%		
MSM/Bi males	2008	48	54%	100%	73%	94%	50%	N/A	56%	42%	2%	4%		
	2009	71	55%	100%	61%	87%	59%	N/A	59%	39%	<2%	4%		
Notes: N/A = Not applicable; Insuff = insufficient data; IDU = intravenous drug/heroin user; Prior STD = (Herpes, gonorrhea, Chlamydia, syphilis, etc)														
Group	Year	Age group (%)				Drug risk activity (%) in past 12 months					Risk activity (%) in past 12 months			
		13-24 yrs	25-34 yrs	35-54 yrs	55+	Marijuana use	Cocaine /Crack	IDU	Meth use	Traded sex for drugs	Internet Hookup	Knew partner was HIV+	Prior STD	Anonymous partners
Hetero. Males & Females	2008	62%	22%	8%	8%	Insuff.	2%	0%	0%	5%	2%	0%	6%	28%
	2009	56%	22%	18%	4%	15%	7%	2%	0%	7%	6%	2%	11%	33%
MSM/Bi males	2008	19%	42%	35%	4%	Insuff.	6%	0%	0%	8%	27%	0%	29%	68%
	2009	23%	29%	45%	3%	10%	1%	1%	3%	7%	41%	18%	30%	68%



George Doyle/Getty Images

“Condom use was poor. Almost a third (29%) never used condoms for vaginal sex.”

Heterosexuals: Blacks predominate

but syphilis is increasing among white heterosexuals

In 2007-2008 surveillance, nearly 90% of all cases of early syphilis among heterosexual males and females were Black/ African American. In 2009, this dropped to 78% black (42 of 54), with 18% white (10 of 54) and 4% Asian (2 cases).

Gender: Males and females are evenly split among all cases.

Age: Average age among all race groups is 27 years. Half (56%) of heterosexual cases were age 13 to 24 years when diagnosed. Almost one-quarter (22%) were age 25 to 34.

Black heterosexuals ranged in age from 13 to 58 years,

19 to 43 years among whites.

Number of partners: Half had two partners in the past 12 months (median=2).

Condom use was poor. Almost a third (29%) never used condoms for vaginal sex (and 57% sometimes.)

HIV: Seven percent (4 persons) were HIV positive.

Risk activities across risk groups (Table 2)

Although heroin, cocaine and crack use in the previous 12 months were quite rare among all risk groups, use of marijuana or alcohol was reported in about one of eight persons (12%) reported in 2009.

Among all cases, 1 in 14 (about 7%) traded sex for drugs, reflecting a disturbing subpopulation among recent syphilis cases.

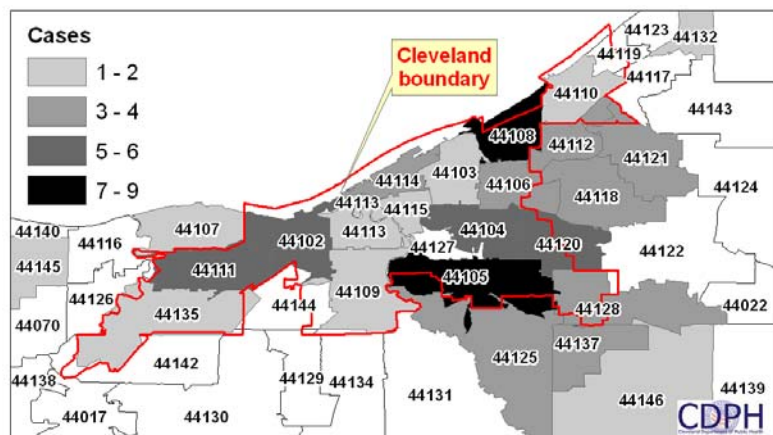
Sex with anonymous partners was reported among two-thirds of MSM/Bi males, possibly associated with the common use of Internet chat rooms, bulletin boards, and messaging to find partners. Only one-third of heterosexuals reported anonymous partners in the past year, with only 6% using the Internet to find partners.

Because of the high prevalence of HIV among MSM/bisexual males and inconsistent use of condoms, these males must take greater responsibility in asking partners about their HIV and syphilis status, learn to recognize symptoms, get screened often, and use condoms for all sex (oral, anal, and or vaginal).

Map: Youth 13-24 yrs. diagnosed with early syphilis

Youth aged 13 to 24 diagnosed with early syphilis in 2008 and 2009 are presented here, by self-reported zip code. Zip codes with the largest number of recent cases are

- 44105 (South B'way, Union-Miles, Corlett)
- 44108 (Glenville & Forest Hills)
- 44111 and 44102 (Kamm's Corner, Jefferson, Edgewater, Cudell, West Boulevard, Detroit-Shoreway)
- 44104 and 44120 (eastern Central, Kinsman Woodland Hills, Buckeye-Shaker, Mt. Pleasant, and Shaker Heights)



Public Health Responds

As early as March 2008, the medical directors of the three local public health agencies teamed together to notify the public and educate the medical community of the syphilis outbreak.

The medical community was asked to be more aware of syphilis symptoms and to increase screening among all sexually active persons. Those especially at greatest risk of transmission were

those identified early in the outbreak: 1) Sexually active youth, 2) MSM/bisexual active males, 3) sexually active heterosexual males and females, 4) pregnant females and females of reproductive age.

This report is one in a series of surveillance reports to inform the public and medical community of this outbreak. Many other Ohio cities have similar

partnerships at the local, county and state level to investigate, educate, prevent and monitor syphilis infections. Go to the Ohio Department of Health website for more information:

www.odh.ohio.gov

The CDC has fact sheets, screening, and treatment guidelines at

www.cdc.gov/std/syphilis



Seth Joel/Getty Images

"The physician who knows syphilis knows medicine."

- Sir William Osler, M.D.

Screening recommendations for clinicians

CDPH, CCBH, and SHHD urge medical providers to screen all sexually active patients for syphilis and to adhere to the CDC STD Treatment Guidelines:

- Any patient presenting with a sexually transmitted disease (STD) should be screened for syphilis by

obtaining a serum RPR.

- All HIV positive patients should have an annual screening RPR. More frequent screening (every 3 to 6 months) is also recommended for those with high-risk behaviors such as having multiple sex partners, engaging in any

unprotected intercourse and/or illicit drug use.

- All pregnant women should have a screening RPR obtained at first prenatal visit and again at 28 weeks gestation, and during the third trimester if the patient has any high-risk behaviors. Any women who delivers

during the third trimester if the patient has any high-risk behaviors. Any woman who delivers without prenatal care needs to have an RPR drawn at delivery.

For further information call CDPH's Partner Notification and Referral Services at **(216)664-7080**.

Where to get screened for syphilis

Your doctor can get you screened.

There are many clinics throughout the county available to the public, some quite affordable, often rated for personal income.

The Cleveland Department of Public Health offers syphilis and HIV screening at their two clinics:

East Side: **J. Glen Smith**

Health Center, 11100 St. Clair Avenue, in Cleveland's East Side, (216) 249-4100. On the West Side: **Thomas F McCafferty Health Center**, 4242 Lorain Rd, (216) 651-5005. Call for hours.

Other sites are the Cuyahoga County Board of Health **Title X Family Planning Clinic** in Parma (216)201-2000 x7.

The Free Medical Clinic of Greater Cleveland (216)721-4010;

Care Alliance (216) 781-6724;

NEON's six health centers – Call the Hough office for information (216)231-7700;

Planned Parenthood's seven offices – call (216)961-8804 for information.

Many other clinics offer safe and affordable screening and treatment. Go to www.hivtest.org for a list of testing sites for HIV, syphilis and other STDs.

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75 Erieview Plaza
3rd Floor
Cleveland, OH 44114

Phone (216) 664-2324

Website
www.clevelandhealth.org

Cuyahoga County Board of Health

5550 Venture Drive
Parma, OH 44130

Phone (216) 201-2001

Website
www.ccbh.net

Shaker Heights Health Department

3400 Lee Road
Shaker Heights, OH 44120

Phone (216) 491-1440

Website
www.shakeronline.com

Abstinence and condoms

Avoiding sex (abstinence) may not be enough to protect you from syphilis.

Oral sex, as innocent as kissing, to oral/genital or oral/anal contact can be enough to pass syphilis if a partner has a lesion or open sore.

Condoms can be an effective barrier if the lesion or sore is covered. Also, it can protect transmission of other STDs.

However, even using condoms is not completely effective in preventing syphilis when the infected site or sore is not protected (covered).

This makes recognizing syphilis symptoms, frequency screening, and seeking medical help so important in stopping the spread of syphilis.

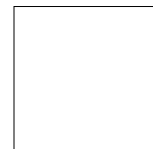
About Our Public Health Organizations

Hospitals, clinics, physician offices and clinical laboratories are required by Ohio law (OAC 3701.23) to report syphilis diagnoses to public health officials.

The Cleveland Department of Public Health works with the Ohio Department of Health (ODH), Cuyahoga County Board of Health and the Shaker Heights Health Department to reduce

syphilis through prevention, education, case investigation and surveillance. This report used ODH data as of July 2, 2010 and reflects all syphilis cases reported to the CDC.

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