2012 STD Data Summary

All Georgia physicians, laboratories, and other health care providers are required by law (O.C.G.A. 31-12-2) to report patients with chlamydia, gonorrhea, and syphilis, commonly referred to as sexually-transmitted diseases (STDs), to the Georgia Department of Public Health (DPH). This report summarizes STD surveillance data for 2012.

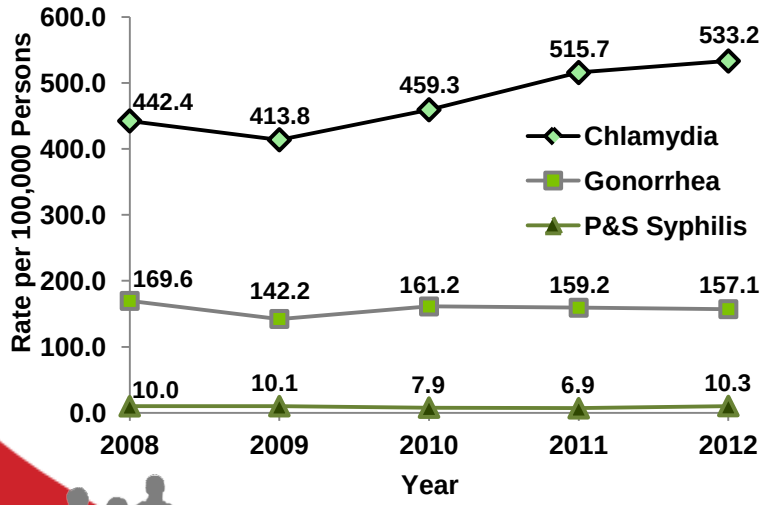
Georgia STD Overview

• *Chlamydia trachomatis* infection is the most-commonly reported notifiable disease in the United States. In 2011, Georgia had the 7th highest incidence rate of chlamydia in the U.S. and 6th highest incidence rate of chlamydia in the in the Southeast (SE).[1] In 2012, the incidence rate of chlamydia infections in Georgia was 533.2 cases per 100,000 population. Rising incidence rates of chlamydia in Georgia, and the U.S. over the past four years may be partially attributed to increased screening in females under 26 years of age.[2]

• Gonorrhea (*Nesseria gonorrhoeae*) infections are the second most-commonly reported notifiable disease in the United States. In women, about 80% of chlaymdial and gonococcal infections are asymptomatic but can result in infertility, increased risk of ectopic pregnancy, and other serious complications.[3] In 2011, Georgia was ranked 6th in the U.S. and the SE for the highest incidence rates of gonorrhea with159.2 cases per 100,000 population, compared to the national incidence rate of 104.2 cases per 100,000 population (Figure 1).[1]

• Syphilis is a multi-stage bacterial infection that can lead to organ failure and death if left untreated.[4] In 2011, the incidence rate of primary and secondary syphilis (P&S) in Georgia was 6.9 cases per 100,000 population compared to the national rate of 4.5 per 100,000 population. In 2011, Georgia was ranked 3th in the U.S. and the SE for the highest P&S syphilis rates.[1]

Figure 1. Incidence Rates for STDs, Georgia, 2008-2012.



Georgia STD Profile

• STDs, like other communicable diseases, have clear disparities in disease burden by race/ethnicity.[5] Although 37.8% of reported STD cases in Georgia in 2012 had missing or unknown race/ethnicity data, racial disparities were observed among cases where race was known.

• In Georgia, incidence rates for all STDs are disproportionately higher among black non-Hispanics than other racial/ethnic groups. In 2012, rates of chlamydia among black non-Hispanic females were 6.4 times higher than among white non-Hispanic females. Gonorrhea rates were 16.2 times higher among black non-Hispanics than whites non-Hispanics. P&S syphilis rates were 5.8 times higher among black non-Hispanic males than white-non-Hispanic males (Table 1).

Table 1. Reported Number of STD Cases and Incidence Rates, by Sex and Race/Ethnicity, Georgia, 2012

	Chlamydia		Gonorrhea		P&S Syphilis	
	Number of Cases (Rate[1])		Number of Cases (Rate)		Number of Cases (Rate)	
Total						
	52,336	(533.2)	15,416	(157.1)	1,007	(10.3)
Sex						
Male	14,455	(301.0)	7,351	(153.1)	939	(19.6)
Female	37,447	(747.1)	7,954	(158.7)	67	(1.3)
Race/Ethnicity						
White, Non-Hispanic						
Total	6,105	(112.0)	1,104	(20.3)	134	(2.5)
Male	1,440	(53.65)	419	(15.6)	127	(4.6)
Female	4,622	(167.1)	681	(24.6)	7	(0.3)
Black, non-Hispanic						
Total	24,983	(841.9)	9,775	(329.4)	799	(14.7)
Male	8,077	(580.1)	5,051	(362.8)	743	(26.9)
Female	16,796	(1,066.3)	4,683	(297.3)	56	(2.0)
Hispanic/Latino						
Total	1,519	(170.3)	195	(21.9)	35	(0.6)
Male	387	(80.4)	95	(19.7)	34	(1.2)
Female	1,123	(273.6)	98	(23.9)	<5	(0.0)
Other[2]						
Total	192	(48.5)	35	(8.8)	<5	(1.0)
Male	47	(24.1)	16	(8.2)	<5	(2.0)
Female	140	(69.6)	19	(9.5)	0	(0.0)

[1] Rates are per 100,000 population
[2] Includes; Asian, Pacific Islander, American Indian/Alaskan Native.

2012 STD Data Summary

Chlamydia

• In Georgia during 2012, the greatest burden of chlamydia and gonorrhea infections were noted among women and young adults (of both sexes). Women accounted for 72% of reported cases of chlamydia and young people 15-24 years of age accounted for 71% of reported cases of chlamydia (Table 2). In 2012, the rate of chlamydia infection among females 20-24 years was 7.8 times higher than the average incidence rate of chlamydia in Georgia as a whole (Figure 2).

Gonorrhea

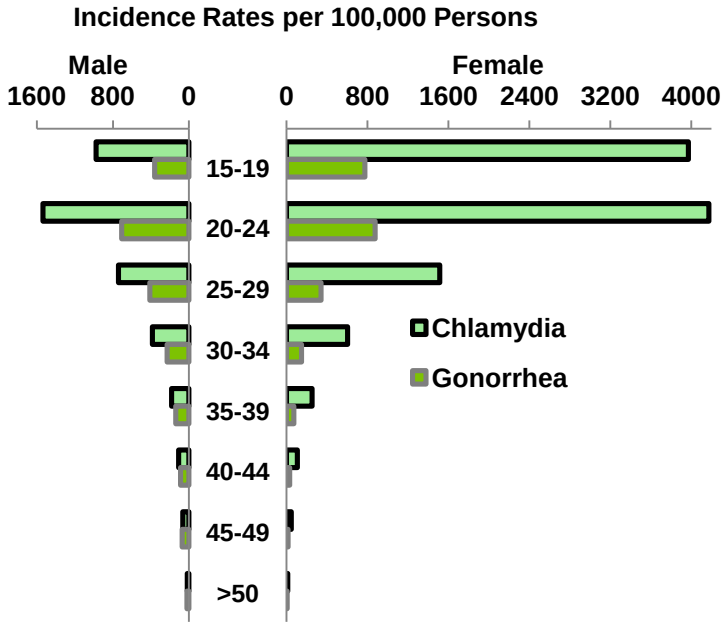
• Differences in disease burden in Georgia in 2012 are less pronounced for gonorrhea. Females accounted for 52% of reported cases of gonorrhea and young people 15-24 accounted for 62% of reported cases of gonorrhea (Table 2). In 2012, the rate of gonorrhea among females 20-24 years was 5.5 times higher than the average rate of gonorrhea in Georgia (Figure 2).

Table 2. Number of Reported STD Cases and Incidence Rates by Age (years) and Sex, Georgia, 2012.

	Chlamydia Cases (Rate[1])		Gonorrhea Cases (Rate)		P&S Syphilis Cases (Rate)	
15-19						
Total	17,207	(2,454.8)	3,985	(568.5)	61	(8.7)
Male	3,523	(977.2)	1,307	(362.5)	54	(15.0)
Female	13,516	(3,970.5)	2,638	(775.0)	6	(1.8)
20-24						
Total	20,168	(2,850.7)	5,624	(795.0)	262	(37.0)
Male	5,538	(1,536.8)	2,551	(707.9)	237	(65.8)
Female	14,489	(4,174.2)	3,041	(876.1)	25	(7.2)
25-30						
Total	7,717	(1,134.8)	2,579	(379.3)	216	(31.8)
Male	2,531	(742.1)	1,408	(412.8)	207	(60.7)
Female	5,131	(1,513.7)	1,154	(340.5)	9	(2.7)
30-34						
Total	3,387	(499.2)	1,279	(188.5)	162	(23.9)
Male	1,286	(385.3)	764	(228.9)	153	(45.8)
Female	2,083	(604.2)	511	(148.2)	9	(2.6)
35-39						
Total	1,482	(219.9)	716	(106.2)	88	(13.1)
Male	607	(184.1)	462	(140.1)	81	(24.6)
Female	867	(251.8)	250	(72.6)	7	(2.0)
40-44						
Total	769	(108.5)	417	(58.8)	91	(12.8)
Male	375	(107.6)	310	(88.9)	86	(24.7)
Female	388	(107.6)	105	(29.1)	5	(1.4)
45-49						
Total	404	(56.5)	303	(42.4)	77	(10.8)
Male	230	(65.8)	248	(70.9)	75	(21.4)
Female	170	(46.6)	54	(14.8)	<5	(0.0)
50+						
Total	382	(13.3)	326	(11.3)	49	(1.7)
Male	220	(16.7)	261	(19.8)	45	(3.4)
Female	159	(10.2)	63	(4.1)	<5	(0.3)

[1] Rates are per 100,000 population.

Figure 2. Incidence Rates of Chlamydia and Gonorrhea by Age (years) and Sex, Georgia, 2012.



Gonorrhea Reinfections

• During 2008-2012, approximately 5% (n= 3,799) of persons diagnosed with gonorrhea were reinfected within the same year. Furthermore, during the five year period from 2008 to 2012, 12.8% (n= 8,376) of persons diagnosed with gonorrhea were reinfected at least once; and of those, 21% (n= 1,758) were reinfected two or more times during that same time period (Table 3).

• Treatment of gonorrhea has been complicated by the increasing resistance to antibiotics used for treatment of gonorrhea. In the last decade, the development of fluoroquinolone resistance has resulted in the availability of only a single class of antibiotics that meet CDC's treatment efficacy standards—the cephalosporins. Recommendations for appropriate screening and treatment of gonorrhea can be found in the CDC's Sexually Transmitted Disease Treatment Guidelines, 2010[6]

Table 3. Number of Repeat Gonorrhea Infections Among Individuals Within 1 Year and 5 Year periods, Georgia, 2008-2012.

Time Period	Single Infection[1]	Two Infections	More than Two Infections
	Patients[2] (%)	Patients (%)	Patients (%)
2008	14,566 (95.1)	681 (4.4)	62 (0.4)
2009	12,579 (95.9)	499 (3.8)	33 (0.3)
2010	14,081 (95.0)	681 (4.6)	67 (0.5)
2011	13,784 (94.0)	793 (5.4)	83 (0.6)
2012	13,527 (93.8)	818 (5.7)	82 (0.6)
2008-2012	57,291 (87.2)	6,615 (10.1)	1,758 (2.7)

[1] Diagnosed infections
[2] Total number of patients

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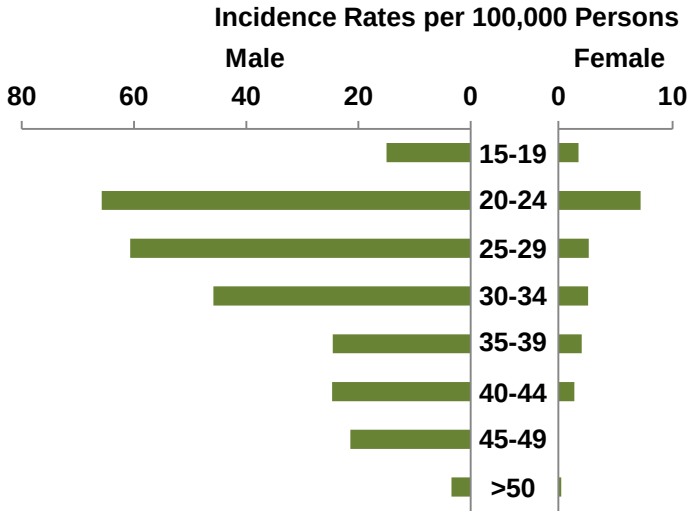
2012 STD Data Summary

Syphilis

• In Georgia during 2012, the highest incidence rates of syphilis were observed among males, particularly young adult males. In 2012, the rate of P&S syphilis among men was approximately 15.1 times higher than females, and the rate of P&S syphilis among males 20-24 years was 3.4 times higher than the average rate of P&S syphilis among men for all age groups (Figure 3).

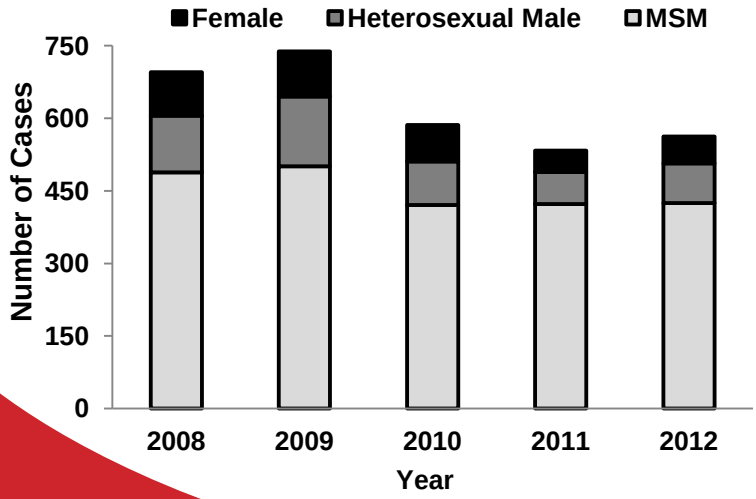
Figure 3. Incidence Rates of P&S Syphilis by Age (years) and Sex, Georgia, 2012.



Syphilis among MSM

• In Georgia, the highest incidence rates of P&S syphilis in 2012 were among men who self-reported as having sex with men (MSM); 76% (n= 425/562) of P&S syphilis cases were attributed to MSM among men and women who identified the sex of their partner (Figure 4). According to the CDC, nationally, from 2000 to 2011 the percentage of P&S syphilis cases who self-identified as MSM among men and women who identified the sex of their sexual partner increased from 7% to 72%.[1]

Figure 4. Reported Cases of P&S syphilis by sexual orientation and sex, Georgia, 2008-2012.

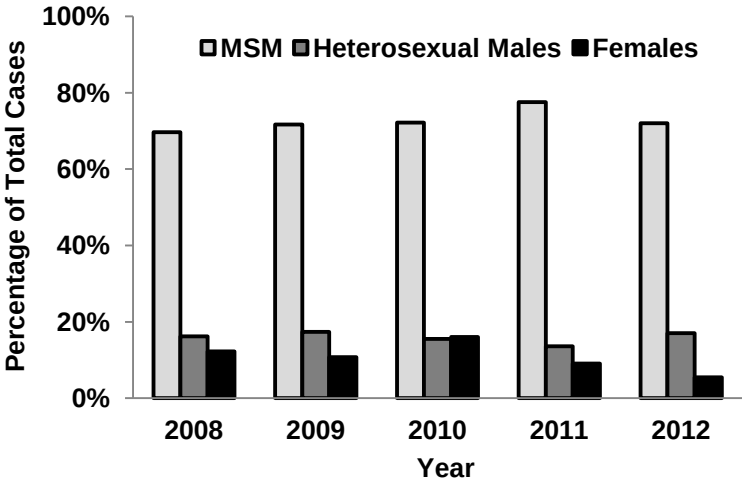


Syphilis and HIV Coinfections

• Ulcers caused by *Treponema pallidum*, the bacterium that causes syphilis, increase the risk of acquiring HIV.[7] In Georgia, the frequency of coinfection with P&S syphilis and HIV varies by sex and sexual orientation.

• In 2012, 57.4% (n=578) of all reported P&S syphilis cases were interviewed, of which 74% (n=425) self-identified as MSM. Based on documented and self-reported status of HIV infection, 72% (n =306) of MSMs with P&S syphilis who were interviewed, were co-infected, with HIV.

Figure 5. Percentage of P&S syphilis cases co-infected with HIV (n= 1,758/4,872), by sexual orientation and sex, Georgia, 2008-2012.



Data Sources

State STD Data:
Numbers are based on cases diagnosed with a STD as of December 31, 2012 and entered as of June 5, 2013. Numbers have not been adjusted for reporting delays. Numbers are taken from Georgia's State Electronic Notifiable Disease Surveillance System (SendSS).

Rates are based on population data obtained from the 2010 U.S .Census accessed at : DPH, OASIS http://oasis.state.ga.us/oasis/

References:

[1] CDC's Sexually Transmitted Disease Surveillance, 2011: http://www.cdc.gov/std/stats11/

[2] 2011 Sexually Transmitted Disease Surveillance, Chlamydia Statistics: http://www.cdc.gov/std/chlamydia/stats.htm

[3] STDs & Infertility: http://www.cdc.gov/std/infertility/default.htm

[4] Syphilis & MSM (Men Who Have Sex With Men), CDC Fact Sheet: http://www.cdc.gov/std/syphilis/STDFact-MSM-Syphilis.htm

[5] African Americans Sexually Transmitted Diseases, CDC Fact Sheet: http://www.cdc.gov/nchhstp/newsroom/docs/AAs-and-STD-Fact-Sheet.pdf

[6] Update to CDC's *Sexually Transmitted Diseases Treatment Guidelines, 2010*: Oral Cephalosporins No Longer a Recommended Treatment for Gonococcal Infections: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6131a3.htm?s_cid=mm6131a3_w

[7] Syphilis and HIV: A Dangerous Duo Affecting Gay and Bisexual Men: http://blog.aids.gov/2012/12/syphilis-and-hiv-a-dangerous-duo-affecting-gay-and-bisexual-men.html

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2012 STD Data Summary

Overview by Health District

Table 4. Reported Number of STDs and Incidence Rates by Health District, Georgia, 2012.

District	Chlamydia			Gonorrhea			P&S Syphilis		
	Cases	Rate[1]	Rank[2]	Cases	Rate	Rank	Cases	Rate	Rank
1-1 Northwest (Rome)	1,476	230.2	17	390	60.8	16	5	0.8	17
1-2 North Georgia (Dalton)	1,046	236.4	16	148	33.4	18	11	2.5	14
2 North (Gainesville)	1,193	190.2	18	199	31.7	17	6	1.0	16
3-1 Cobb/Douglas	3,509	422.3	14	873	105.1	10	66	7.9	6
3-2 Fulton	7,071	744.6	2	3,235	340.7	1	440	46.3	1
3-3 Clayton County (Jonesboro)	1,715	655.8	9	527	201.5	6	44	16.8	3
3-4 East Metro (Lawrenceville)	4,205	415.7	15	889	87.9	15	49	4.8	11
3-5 DeKalb	5,535	790.8	1	1,969	281.3	2	172	24.6	2
4-4 LaGrange	3,456	428.0	13	809	100.2	13	27	3.3	13
5-1 South Central (Dublin)	815	529.1	11	184	119.5	11	11	7.1	7
5-2 North Central (Macon)	3,542	675.6	7	1,236	235.8	5	32	6.1	9
6 East Central (Augusta)	3,265	702.4	6	842	181.1	7	25	5.4	10
7 West Central (Columbus)	2,735	730.9	4	999	267.0	3	32	8.6	5
8-1 South (Valdosta)	1,890	736.9	3	605	235.9	4	16	6.2	8
8-2 Southwest (Albany)	2,410	675.3	8	721	202.0	8	38	10.6	4
9-1 Coastal (Savannah)	4,157	715.3	5	976	167.9	9	25	4.3	12
9-2 Southeast (Waycross)	2,074	562.8	10	405	109.9	14	5	1.4	15
10 Northeast (Athens)	2,242	484.3	12	409	88.3	12	<5	0.6	18

[1] Rates are per 100,00 population

[2] Rankings are based on highest rates of disease

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