

Fact Sheet: STD and HIV surveillance among Cuyahoga County Youth

This report summarizes Chlamydia, gonorrhea and syphilis surveillance trends among youth age 15 to 24 years when diagnosed for Cuyahoga County obtained from the STD Surveillance Unit and the HIV/STD Prevention Program of the Ohio Department of Health. Data from the HIV Surveillance Registry maintained at the Cleveland Department of Public Health is included. Analysis is provided by the City of Cleveland Department of Public Health in cooperation with the Cuyahoga County Board of Health.

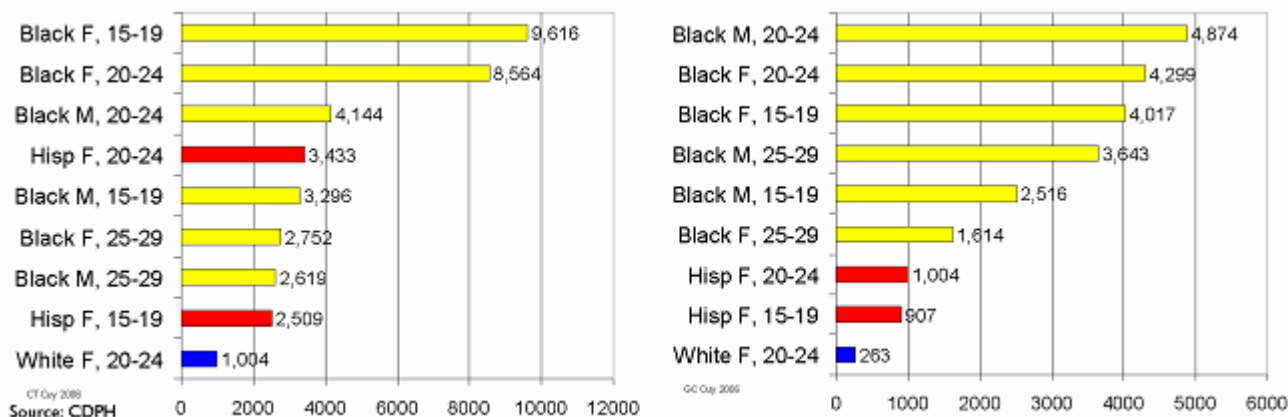
2006 Surveillance for Youth in Cuyahoga County

- 73% of Chlamydia infections were among youth age 15-24. 40% were age 15 to 19 years.
 - Highest rates are among non-Hispanic African Americans.
 - Figure 1 (left) Almost 10% of African Americans females age 15-24 were reported with Chlamydia. Similar rates reported for African American females age 20-24.
 - Roughly 1% of Hispanic females age 15 to 24.
 - Roughly 0.3% of White non-Hispanic females age 20 to 24.
 - 128 children age 14 and under were reported to be infected. Very few were exposed congenitally.
 - National surveys⁴ report STDs are endemic among African American females age 14 to 19. That is, 48% are infected with HPV, Chlamydia, genital herpes or trichomoniasis compared to 20% of White and Hispanic American teen females.

- 58% of gonorrhea infections were among youth age 15 to 24. 28% were age 15 to 19 years.
 - Highest rates are concentrated among young non-Hispanic African Americans and much less among Hispanic and White non-Hispanics.
 - Figure 1 (right): Roughly 4.5% of African Americans age 20 to 24 were reported.
 - Slightly lower rates were reported for African American female teens age 15 to 19.
 - 56 children age 14 and under were reported to be infected.

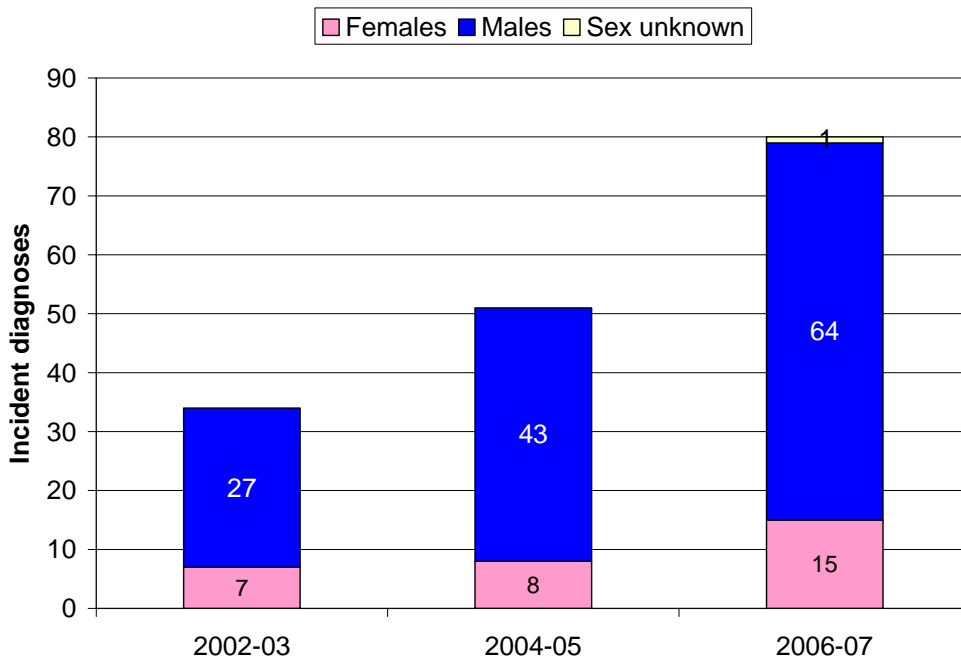
- Three of fourteen (21%) persons reported with primary or secondary syphilis in 2006 surveillance data were youth age 15 to 24.

Figure 1. Populations with the highest Chlamydia (left) and gonorrhea (right) incidence rates in Cuyahoga County for 2006. Rates are expressed in reported cases per 100,000 population group.



- Co-infection with Chlamydia and gonorrhea is seen in about 1 in 8 clients at CDPH health clinics. Local and state surveillance reports between 11% and 14% of clients as co-infected³.
 - Nationally, co-infection occurs in 15% of teen females with an STD⁴.
- In 2006 through 2007, 80 young adults age 15 to 24 were reported having HIV or AIDS in Cuyahoga County. (Figure 2). This is a **57% increase in HIV/AIDS incidence** from 2004-2005 incidence.
- Most cases are African American, 71% were Cleveland residents.
 - 17 (21%) were teens age 15 to19
 - 14 males, 11 were African American
 - 3 females, 2 were African American
 - 53 (79%) were young adults age 20 to 24
 - 12 females, 10 were African American
 - 50 males, 37 were African American
 - 1 report did not report sex.
 - Risk behavior among males: 66% were MSM, 17% bisexual, 9% heterosexual, 6% unknown, 2% IDU. All females reported heterosexual risk behavior leading to HIV exposure.
 - Geographic areas reporting recent incidence are similar to those reporting Chlamydia, with the addition of zip code areas including Edgewater, Detroit-Shoreway, Ohio City and Tremont, Stockyards, Clark-Fulton, Old Brooklyn and Brooklyn Centre. Map 7 shows incidence for youth 13 to 24 for 2004-2006.

Figure 2. HIV/AIDS incidence among youth age 15 to 24 for Cuyahoga County, by sex and year of diagnosis



Geographic areas of concern

- Maps showing Chlamydia infection rates by zip codes reveal highest rates extending from 44114, Downtown Cleveland, northeast to 44132, Euclid and 44112, East Cleveland, and southeast to zip code 44128, Lee-Miles, Warrensville Heights and North Randall.
- Highest gonorrhea rates were seen in similar areas to Chlamydia incidence
 - See Appendix for maps of Chlamydia infection rates
 - Map 1. Zip codes with the highest Chlamydia rates are shaded.
 - Map 2. Municipal boundaries are shown over shaded zip code
 - Map 3. Cleveland neighborhoods (statistical planning areas) are shown over zip code areas.
 - Downtown, Glenville, Forest Hills, Euclid-Green, Hough, University, North & South Collinwood, and Lee-Miles had the highest rates among Cleveland neighborhoods.
 - See Appendix for maps of gonorrhea infection rates
 - Map 4. Zip codes with the highest gonorrhea rates are shaded.
 - Map 5. Municipal boundaries are shown over shaded zip code
 - Map 6. Cleveland neighborhoods (statistical planning areas) are shown over zip code areas.
 - Downtown, Glenville, Forest Hills, Euclid-Green, Hough, University, and Lee-Miles had the highest rates among Cleveland neighborhoods.
- Chlamydia rates increased at least 50% from 2004 to 2006, in zip codes with at least 25 cases, were:
 - 44143 (parts of Richmond Hts., Highland Hts., Mayfield)
 - 104% rate increase, to 44 cases
 - 44107 (Lakewood):
 - 85% rate increase, to 107 cases
 - 44130 (parts of Middleburg Hts., Parma Hts., Parma)
 - 57% rate increase, to 43 cases
 - 44134 (eastern Parma)
 - 52% rate increase, to 61 cases
 - 44117 (parts of Euclid, South Collinwood and
 - 44142 (48% increase)
 - See table in Appendix: “Chlamydia infections reported in 2004-2006...” Last column presents actual percent change. This table is also available at <http://www.clevelandhealth.info>
- Gonorrhea rates increased at least 25% from 2004 to 2006, in zip codes with at least 25 cases, were:
 - 44118 (parts of Cleveland Hts., East Cleveland, University Hts., Shaker Hts. and South Euclid)
 - 58% rate increase, to 79 cases
 - 44122 (Shaker Hts. Beachwood, Highland Hills):
 - 53% rate increase, to 39 cases
 - 44125 (parts of Cleveland, Cuyahoga Hts., Garfield Hts. and Valley View)
 - 38% rate increase, to 35 cases

- 44106 (parts of Cleveland and Cleveland Hts.)
 - 35% rate increase, to 107 cases
- 44135 (Cleveland and Linndale)
 - 28% rate increase, to 49 cases
- See table in appendix: “Gonorrhea infections reported in 2004-2006...” Last column presents actual percent change. This table is also available at <http://www.clevelandhealth.info>

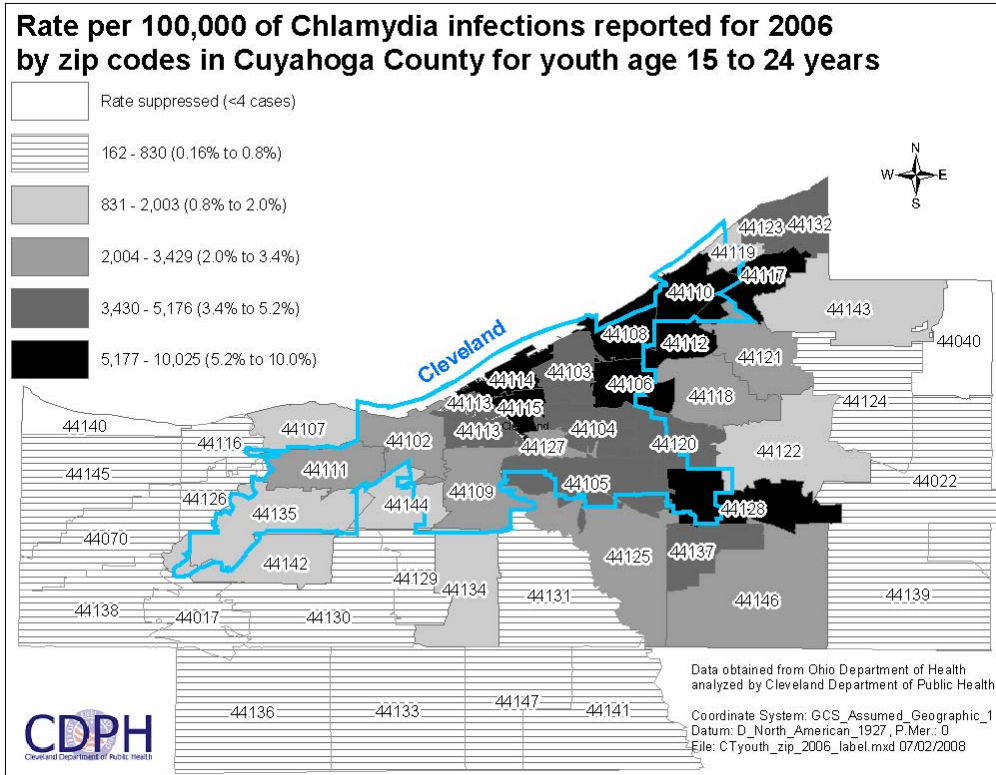
References:

- 1) Ohio Department of Health, STD Surveillance, HIV/STD Prevention Program. “2003 to 2007 Ohio Chlamydia Cases and Rates”.Data reported through 03/26/08. Last accessed July 2, 2008. Last available at <http://www.odh.ohio.gov/ASSETS/1B0E356E8748490A82E8866B37D421D5/CTCounty0307.pdf>
- 2) Ohio Department of Health, STD Surveillance, HIV/STD Prevention Program. “2003 to 2007 Ohio Gonorrhea Cases and Rates”.Data reported through 03/26/08. Last accessed July 2, 2008. Last available at <http://www.odh.ohio.gov/ASSETS/356CD81B3D574CC2AB70BD6EB43A84EE/GCCCounty0307.pdf>
- 3) Infertility Prevention Project, ODH. Personal communication.
- 4) S. Forhan et al, NHANES, CDC, March 2008

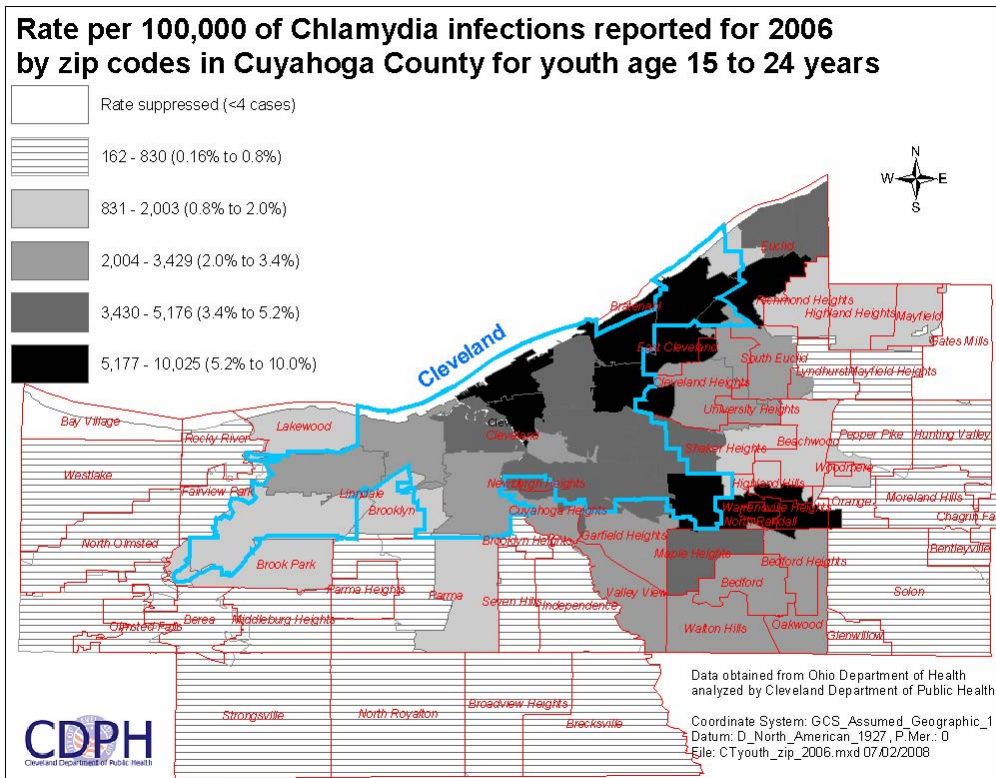
Contact Information

Please contact David Bruckman, Office of Biostatistics, for more information (216) 664-4353.

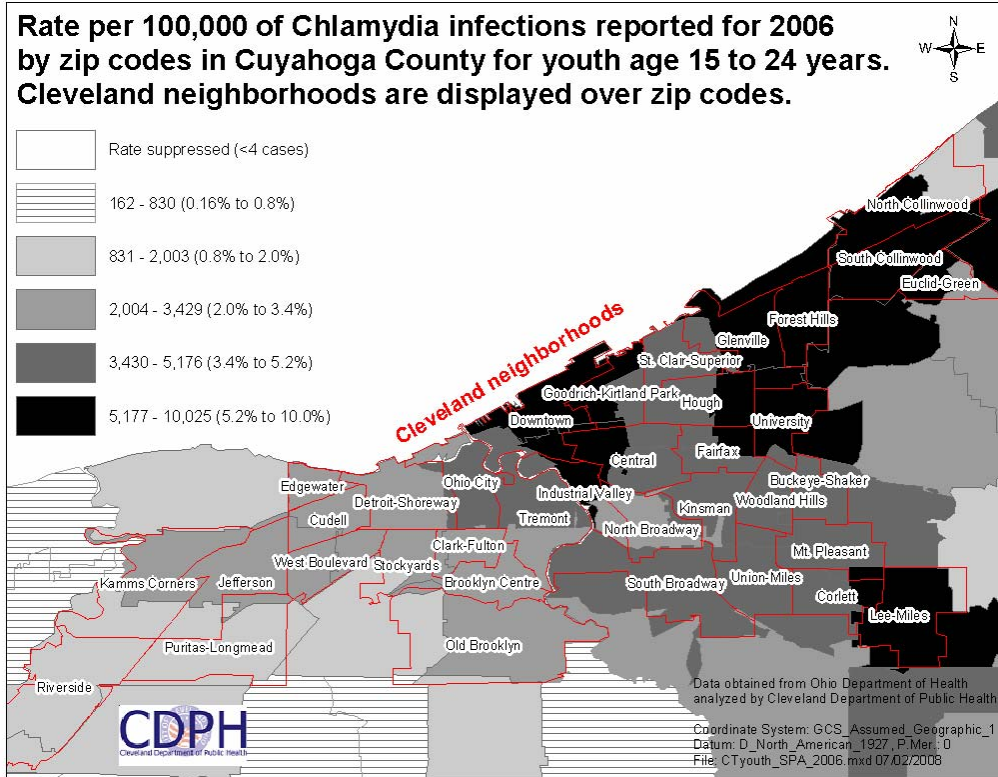
Map 1: Reported Chlamydia infection rates, zip codes identified



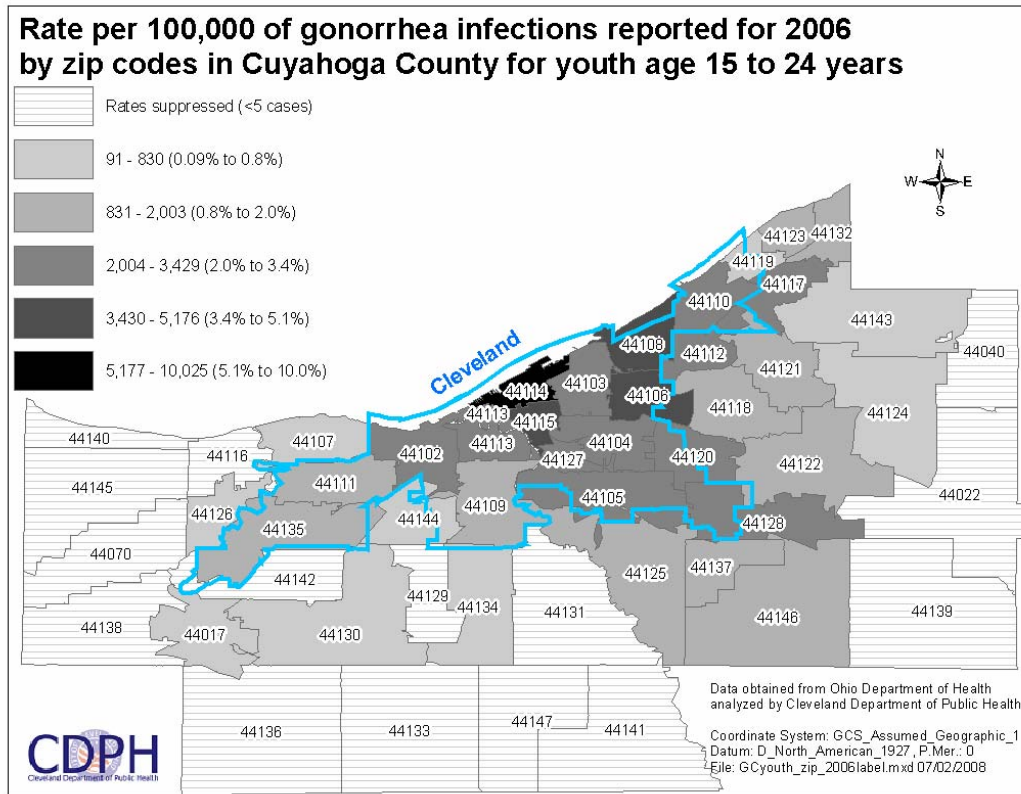
Map 2: Reported Chlamydia infection rates, municipality boundaries over zip codes



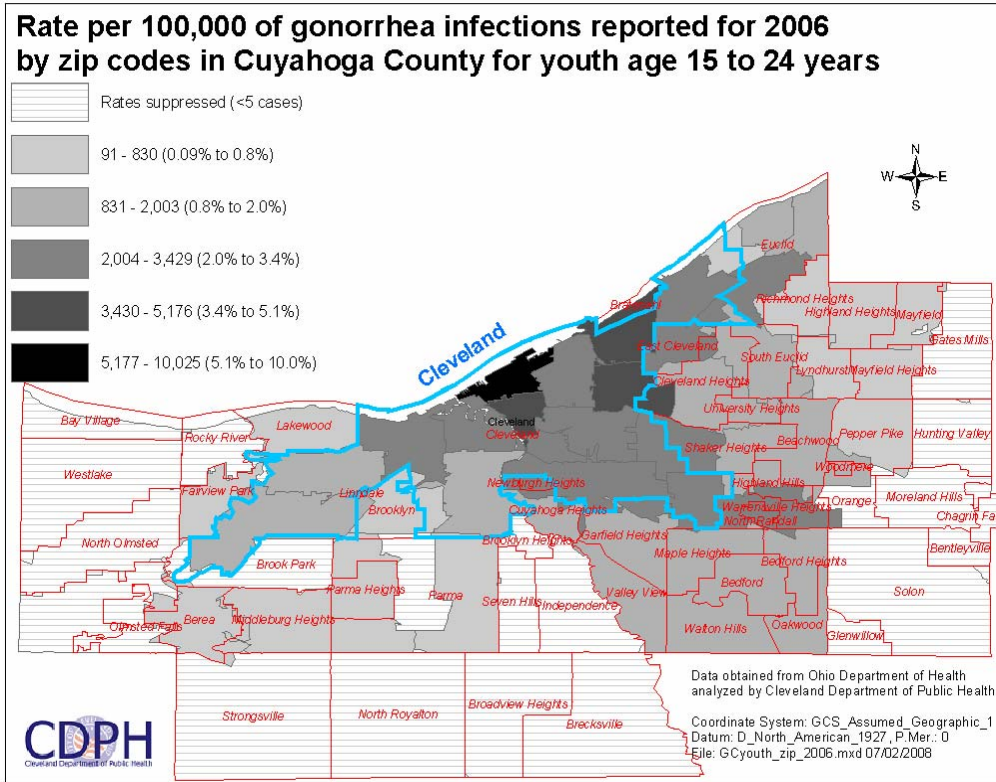
Map 3: Reported Chlamydia infection rates, Cleveland neighborhood boundaries over zip code areas



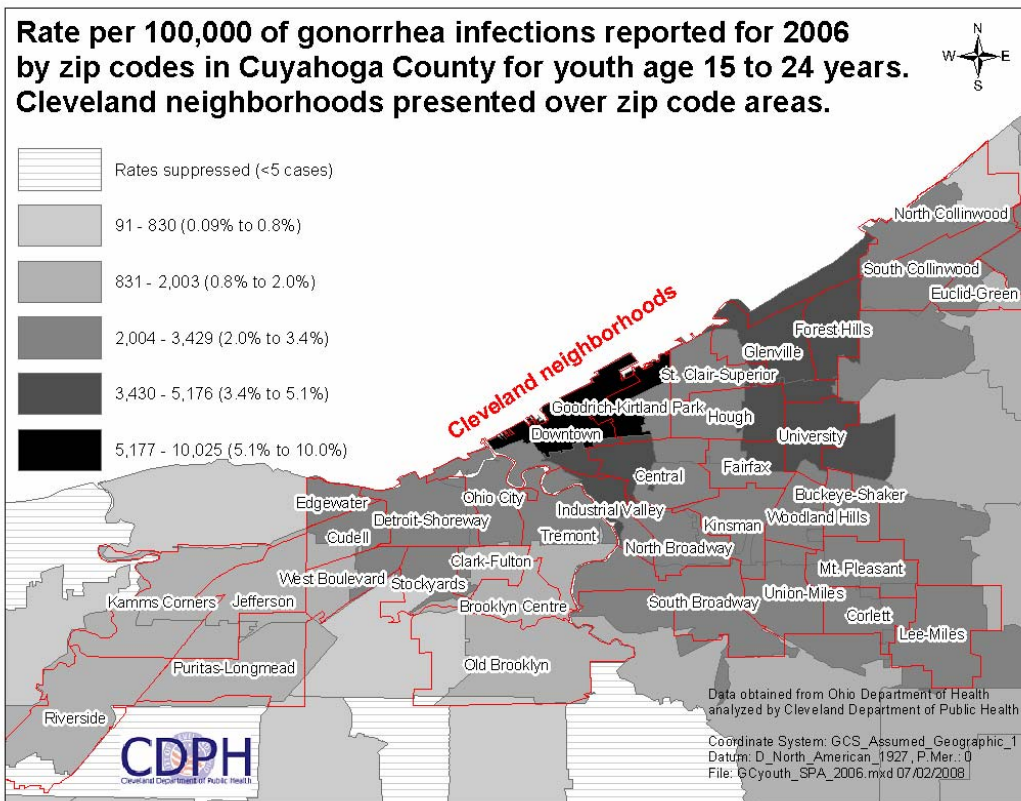
Map 4: Reported gonorrhea infection rates, zip codes identified



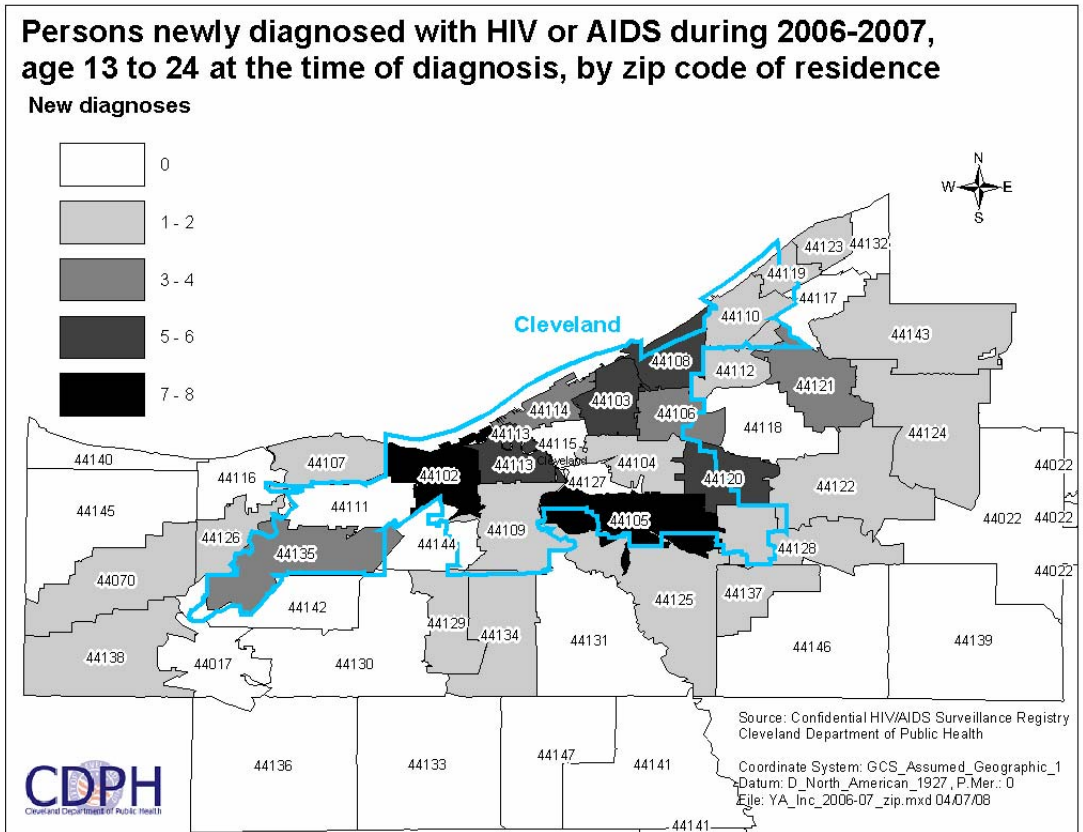
Map 5: Reported gonorrhea infection rates, municipality boundaries over zip codes



Map 6: Reported gonorrhea infection rates, Cleveland neighborhood boundaries over zip code areas



Map 7: Reported HIV and AIDS incidence cases for 2006-2007



Chlamydia infections reported in 2004-2006 among youth age 15 to 24 years in Cuyahoga County by zip code. Case count, census-adjusted rate per 100,000 and percent change in rate for the years designated are provided.

Analysis: Cleveland Department of Public Health in cooperation with the Cuyahoga County Board of Health
Data provided by the STD Prevention Program, Ohio Department of Health

ZIP	Cases, 2004	Cases 2005	Cases 2006	Rate* per 100,000 for 2004	Rate* per 100,000 for 2005	Rate* per 100,000 for 2006	Percent Change in Rate from 2004 to 2005	Percent Change in Rate from 2005 to 2006	Percent Change in Rate from 2004 to 2006
44017	21	14	18	946.28	635.98	829.54	-32.79	30.43	-12.34
44022	8	6	8	289.05	218.55	295.62	-24.39	35.27	2.27
44070	20	22	15	444.89	493.35	341.25	10.89	-30.83	-23.29
44102	294	259	286	3446.45	3060.83	3428.89	-11.19	12.02	-0.51
44103	246	269	221	5174.81	5704.62	4754.61	10.24	-16.65	-8.12
44104	309	298	313	4996.3	4857.59	5176.03	-2.78	6.56	3.6
44105	403	412	404	4171.65	4299.47	4277.08	3.06	-0.52	2.53
44106	195	196	202	5406.96	5478.85	5728.4	1.33	4.55	5.94
44107	59	75	107	921.83	1181.34	1709.8	28.15	44.73	85.48
44108	446	386	422	6690.32	5837.33	6474.22	-12.75	10.91	-3.23
44109	184	191	164	2650.14	2773.32	2415.79	4.65	-12.89	-8.84
44110	245	232	255	5253.19	5014.88	5591.92	-4.54	11.51	6.45
44111	90	123	113	1603.74	2209.59	2059.36	37.78	-6.8	28.41
44112	354	329	366	6214.84	5822.88	6571.6	-6.31	12.86	5.74
44113	93	71	90	3731.91	2872.25	3693.64	-23.04	28.6	-1.03
44114	17	15	22	7574.53	6737.72	10025.18	-11.05	48.79	32.35
44115	108	97	124	7923.32	7174.14	9303.97	-9.46	29.69	17.43
44116	Suppressed	12	7	Suppressed	490.59	290.33	N/A	-40.82	N/A
44117	49	74	72	3466.89	5278.26	5210.03	52.25	-1.29	50.28
44118	133	167	177	2229.68	2822.42	3034.78	26.58	7.52	36.11
44119	40	45	31	2527.38	2866.41	2003.25	13.41	-30.11	-20.74
44120	312	309	291	4208.17	4201.58	4014.16	-0.16	-4.46	-4.61
44121	107	109	106	2215.22	2274.96	2244.41	2.7	-1.34	1.32
44122	68	55	73	1463.19	1193.08	1606.49	-18.46	34.65	9.79
44123	70	70	76	3190.43	3216.36	3542.65	0.81	10.14	11.04
44124	13	Suppressed	17	318.82	Suppressed	426.39	N/A	N/A	33.74
44125	68	66	81	1777.73	1739.47	2165.74	-2.15	24.51	21.83
44126	12	13	13	580.73	634.24	643.43	9.21	1.45	10.8
44127	57	78	41	3366.91	4644.79	2476.87	37.95	-46.67	-26.43
44128	244	212	242	5255.74	4603.57	5331.17	-12.41	15.81	1.44
44129	21	12	6	553.49	318.85	161.73	-42.39	-49.28	-70.78
44130	28	15	43	498.25	269.09	782.57	-45.99	190.82	57.06
44131	5	Suppressed	8	203.08	Suppressed	332.32	N/A	N/A	63.64
44132	77	51	71	3897.89	2602.7	3675.87	-33.23	41.23	-5.7
44133	17	8	12	428.5	203.29	309.35	-52.56	52.17	-27.81
44134	41	56	61	831.5	1144.94	1265.24	37.7	10.51	52.16
44135	88	68	74	2300.02	1791.73	1978.08	-22.1	10.4	-14
44136	17	21	23	256.46	319.38	354.87	24.53	11.11	38.37
44137	110	113	143	2864.16	2966.18	3808.05	3.56	28.38	32.96
44138	8	14	11	330.92	583.81	465.35	76.42	-20.29	40.63
44139	13	9	14	324.2	226.27	357.08	-30.21	57.81	10.14
44140	5	8	Suppressed	215.09	346.93	Suppressed	61.3	N/A	N/A
44141	Suppressed	Suppressed	6	Suppressed	Suppressed	318.91	N/A	N/A	N/A
44142	18	22	26	659.34	812.41	974.03	23.22	19.89	47.73
44143	22	30	44	745.86	1025.35	1525.64	37.47	48.79	104.55
44144	31	28	31	1356.68	1235.34	1387.52	-8.94	12.32	2.27
44145	14	14	13	335.31	338.03	318.43	0.81	-5.8	-5.03
44146	87	74	86	2373.5	2035.24	2399.56	-14.25	17.9	1.1
44147	5	8	9	226.49	365.33	416.95	61.3	14.13	84.09
No zip code provided	83	135	122	N/A	N/A	N/A	N/A	N/A	N/A

Data are suppressed when there were less than 5 cases per cell, or when the difference between the case counts and the population denominator for that zip code is less than 20. N/A: not available

Rates with less than 10 cases should be interpreted with caution. Comparison of rates where the case counts are less than 10 are not recommended. Denominators determined using US Census data, proportionately adjusted for annual changes in county pop'n.

Zip codes are presented as reported to local and state public health officials. Data for zip codes 44100, 44101, 44194, 44199 were excluded from this report. Data for zip codes 44023, 44040 had less than 5 cases each year. Results were suppressed and not shown in the table

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Released July 2, 2008. Office of Biostatistics, Cleveland Department of Public Health

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44017	Suppressed	0	12	Suppressed	0	553.03	N/A	N/A	N/A
44070	Suppressed	5	Suppressed	Suppressed	112.13	Suppressed	N/A	N/A	N/A
44102	199	117	171	2332.8	1382.69	2050.14	-40.73	48.27	-12.12
44103	148	154	138	3113.3	3265.84	2968.94	4.9	-9.09	-4.64
44104	184	197	206	2975.14	3211.23	3406.59	7.94	6.08	14.5
44105	214	234	247	2215.22	2441.93	2614.95	10.23	7.09	18.04
44106	104	111	137	2883.71	3102.82	3885.1	7.6	25.21	34.73
44107	16	15	38	249.99	236.27	607.22	-5.49	157	142.9
44108	256	266	245	3840.19	4022.62	3758.73	4.75	-6.56	-2.12
44109	79	75	78	1137.83	1089	1148.97	-4.29	5.51	0.98
44110	149	152	141	3194.8	3285.61	3092	2.84	-5.89	-3.22
44111	46	41	55	819.69	736.53	1002.35	-10.15	36.09	22.28
44112	193	183	182	3388.32	3238.86	3267.84	-4.41	0.89	-3.56
44113	52	39	50	2086.66	1577.71	2052.02	-24.39	30.06	-1.66
44114	6	11	17	2673.36	4940.99	7746.73	84.82	56.78	189.77
44115	56	52	60	4108.39	3845.93	4501.92	-6.39	17.06	9.58
44117	26	33	47	1839.58	2353.82	3400.99	27.95	44.49	84.88
44118	51	73	79	854.99	1233.75	1354.51	44.3	9.79	58.42
44119	17	18	11	1074.14	1146.56	710.83	6.74	-38	-33.82
44120	174	144	175	2346.87	1958.02	2414.02	-16.57	23.29	2.86
44121	42	38	54	869.53	793.11	1143.38	-8.79	44.16	31.49
44122	26	15	39	559.45	325.39	858.26	-41.84	163.77	53.41
44123	29	28	32	1321.75	1286.54	1491.64	-2.66	15.94	12.85
44124	Suppressed	0	5	Suppressed	0	125.41	N/A	N/A	N/A
44125	26	26	35	679.72	685.25	935.81	0.81	36.57	37.68
44126	Suppressed	Suppressed	6	Suppressed	Suppressed	296.97	N/A	N/A	N/A
44127	31	49	37	1831.13	2917.88	2235.22	59.35	-23.4	22.07
44128	108	108	116	2326.31	2345.21	2555.43	0.81	8.96	9.85
44130	Suppressed	6	5	Suppressed	107.64	91	.	-15.46	.
44132	27	27	30	1366.79	1377.9	1553.18	0.81	12.72	13.64
44134	Suppressed	13	13	Suppressed	265.79	269.64	.	1.45	.
44135	39	27	49	1019.32	711.42	1309.81	-30.21	84.11	28.5
44137	50	57	50	1301.89	1496.21	1331.49	14.93	-11.01	2.27
44142	Suppressed	6	Suppressed	Suppressed	221.57	Suppressed	N/A	N/A	N/A
44143	10	14	16	339.03	478.5	554.78	41.14	15.94	63.64
44144	7	9	13	306.35	397.07	581.86	29.62	46.54	89.94
44146	20	25	42	545.63	687.58	1171.88	26.02	70.43	114.77
99999	28	54	45	N/A	N/A	N/A	.	.	.

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