

Chlamydia

What is it/what causes it?

Chlamydial infections are caused by the bacterium *Chlamydia trachomatis*. *C. trachomatis* infections are easily cured with appropriate antibiotics. Though chlamydial infections are the most commonly reported communicable disease in Cook County Department of Public Health's (CCDPH) jurisdiction as well as the United States overall, underreporting is a significant problem because most individuals with chlamydial infections are asymptomatic and do not seek testing.¹

Why is it important?

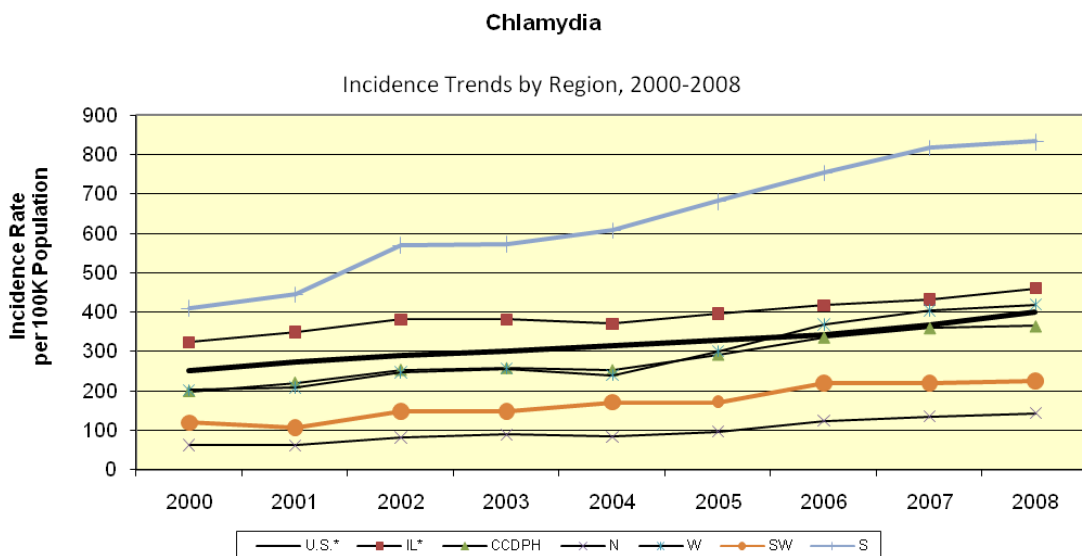
Because most people with chlamydial infections have no symptoms, many infections may go untreated. Untreated chlamydial infections, in turn, can lead to significant reproductive sequelae, including fallopian tube scarring and infertility in females and urethritis and epididymitis in males.¹

2000-2008

Between 2000 - 2008, chlamydia rates increased for the U.S., Illinois, and all four districts within CCDPH's jurisdiction. Rates in the South district increased more sharply than rates in the other regions. In 2008, the rate in the South District was 833.1 per 100,000 population; the rate in the West district was 417.8 per 100,000 population.

Although rates have increased between 2000 - 2008, it is not clear whether these increases are a result of more new *C. trachomatis* infections or whether they reflect increases in the ease and availability of testing for *C. trachomatis* or some combination of these factors.

Figure 1



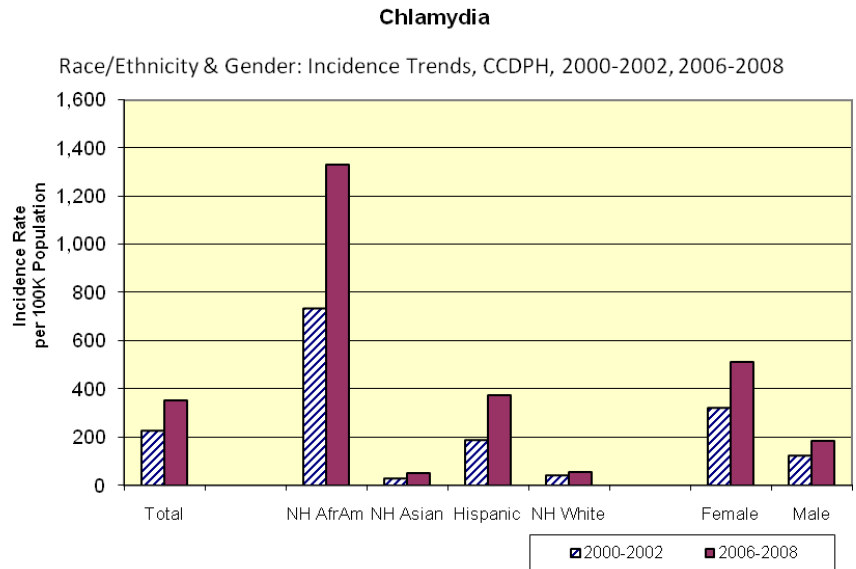
2000-2002 vs. 2006-2008

By Race and Gender

Chlamydia rates within CCDPH's jurisdiction increased from 224.4 per 100,000 population between 2000-2002 to 353.6 per 100,000 population between 2006-2008.

The overall chlamydia rate of 1,333.5 per 100,000 population in African Americans (2006-2008) was 3.6 times higher than the rate in Hispanics (375.1 per 100,000 population) and 25 times the rate in Whites and Asians (54.1 and 53.2 per 100,000 population, respectively).

Figure 2



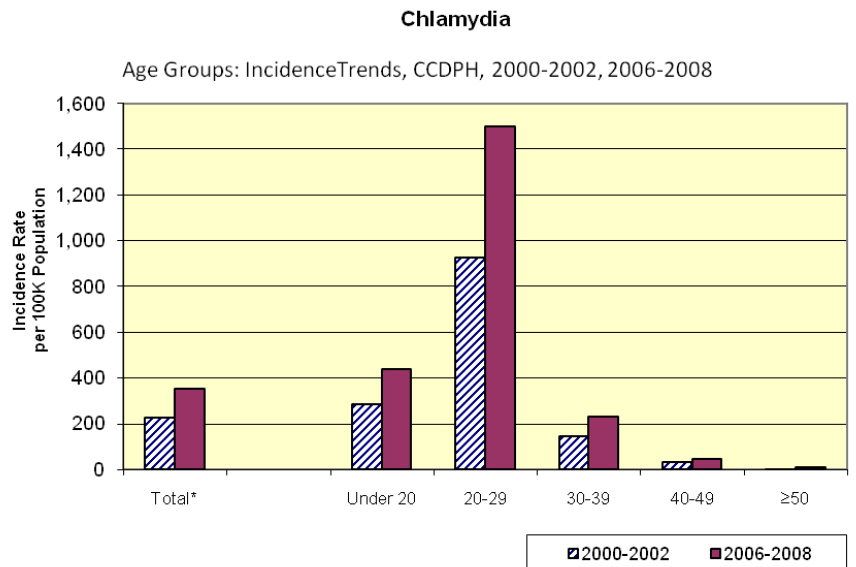
2000-2002 vs. 2006-2008

By Age Groups

In most age groups, chlamydia rates were higher between 2006-2008 than 2000-2002. In persons aged 15-19 years, the chlamydia rate increased 56% from 1,168.1 per 100,000 population during 2000-2002 to 1,825.9 per 100,000 population during 2006-2008.

Between 2006-2008, the highest chlamydia rate was in persons aged 20-24 years (2,161.8 per 100,000 population), and the second highest rate was in persons 15-19 years of age (1,825.9 per 100,000 population).

Figure 3

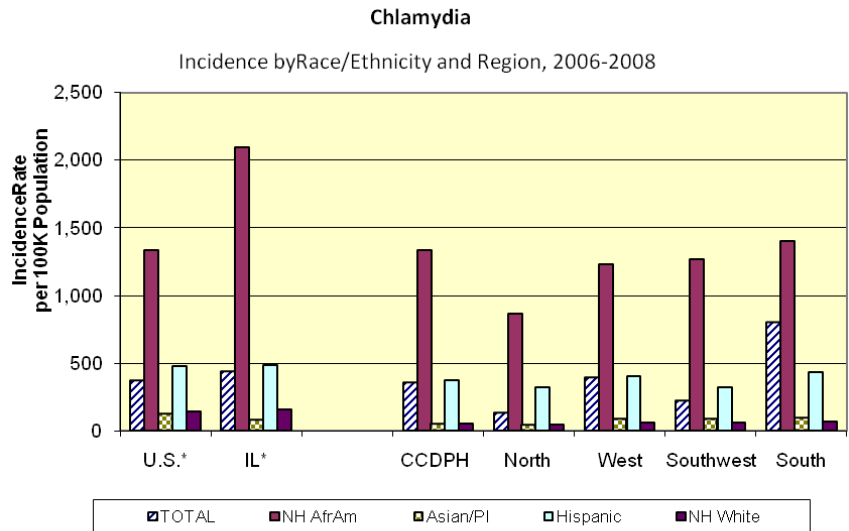


2006-2008

By Race/Ethnicity and Region

For years 2006-2008, disparity in rates by race/ethnicity was similar in the U.S., Illinois and each CCDPH district. Chlamydia rates were highest in African Americans. In the CCDPH jurisdiction, rates in African Americans ranged from a low of 865.6 per 100,000 population in the North district to 1,403.6 per 100,000 population in the South district.

Figure 4



By Gender and Region

In CCDPH's jurisdiction during 2006-2008, the chlamydia rate in females was 511.8 per 100,000 population, 2.8 times higher than the rate in males (185.1 per 100,000 population).

Females in the South district had the highest chlamydia rate (1,134.3 per 100,000 population).

Figure 5

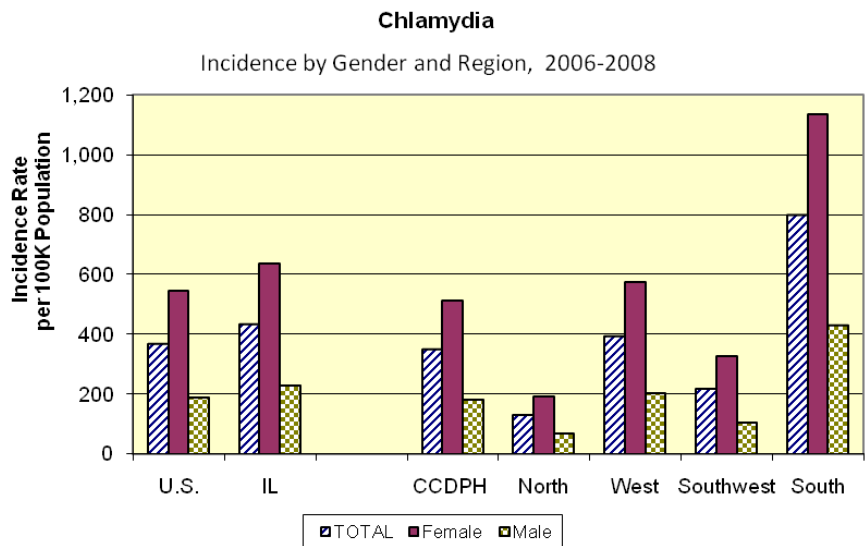


Table 1

Chlamydia
Incidence by Region
2000-2008

	2000		2001		2002		2003		2004		2005		2006		2007		2008	
	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*
U.S.	709,452	251.4	783,242	274.5	834,555	289.4	877,478	301.7	929,462	316.5	976,445	329.4	1,033,911	344.3	1,108,374	367.5	1,210,523	401.3
IL	40,350	324.3	43,716	349.2	48,101	381.7	48,294	381.7	47,185	371.1	50,559	396.1	53,586	417.6	55,470	431.6	59,169	460.4
CCDPH	4,478	198.7	4,975	220.8	5,714	253.6	5,811	257.9	5,695	252.8	6,585	292.3	7,574	336.1	8,110	359.9	8,219	364.8
North	569	62.2	560	61.2	745	81.5	804	87.9	753	82.4	876	95.8	1,126	123.2	1,235	135.1	1,302	142.4
West	1,028	202.2	1,060	208.5	1,257	247.3	1,302	256.1	1,217	239.4	1,524	299.8	1,866	367.1	2,049	403.1	2,124	417.8
Swest	418	118.4	373	105.7	520	147.3	518	146.8	602	170.6	600	170.0	770	218.2	772	218.8	793	224.7
South	1,955	409.3	2,121	444.1	2,722	569.9	2,735	572.7	2,902	607.6	3,254	681.3	3,599	753.6	3,904	817.4	3,979	833.1

* Rates based on 2000 Census population for CCDPH; for U.S. and Illinois, rates based on CDC Wonder online database.

Table 2

Chlamydia

Incidence Trends, CCDPH By Race/Ethnicity, Gender, & Age Groups
2000-2002, 2006-2008

CCDPH				
	2000-2002		2006-2008	
	n	rate*	n	rate*
Total	15,167	224.4	23,903	353.6
Race/Ethnicity				
<i>NH AfrAm</i>	6,785	733.2	12,340	1,333.5
<i>Asian/PI</i>	101	29.0	185	53.2
<i>Hispanic</i>	1,701	187.7	3,399	375.1
<i>NH White</i>	1,746	38.2	2,473	54.1
Gender				
<i>Female</i>	11,109	318.6	17,845	511.8
<i>Male</i>	4,053	123.8	6,058	185.1
Age Groups (Years)				
<15	230	15.7	228	15.5
15-19	5,258	1,168.1	8,219	1,825.9
20-24	5,474	1,400.9	8,447	2,161.8
25-29	2,233	507.2	4,026	914.4
30-39	1,462	144.7	2,330	230.6
40-49	325	30.9	492	46.8
50+	185	9.5	161	8.3

Note: NH = non-Hispanic; PI = Pacific Islander.

* Rates based on 2000 census population for CCDPH.

Table 3

Chlamydia
Incidence by Race/Ethnicity&Gender by Region
2006-2008

	U.S.		IL		CCDPH		North		West		Southwest		South	
	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*	n	rate*
TOTAL	3,349,808	371.1	168,225	436.5	23,903	353.6	3,663	133.5	6,039	396.0	2,335	220.5	11,482	801.4
Race/Ethnicity†														
<i>NH/AfrAm</i>	1,137,228	1,332.7	90,576	2,096.5	12,340	1,333.5	477	865.6	2,279	1,229.5	925	1,270.3	8,591	1,403.6
<i>Asian/PI</i>	43,213	126.3	1,110	81.6	185	53.2	123	44.3	29	85.3	18	90.5	15	93.3
<i>Hispanic</i>	462,232	479.6	19,488	486.0	3,399	375.1	893	319.9	1,743	403.7	295	321.8	448	432.1
<i>NH/White</i>	705,746	141.8	31,973	153.4	2,473	54.1	990	46.5	505	57.9	522	59.8	453	64.8
Gender														
<i>Female</i>	2,494,452	544.9	124,550	637.0	17,845	511.8	2,724	194.3	4,495	575.3	1,794	326.1	8,541	1,134.3
<i>Male</i>	846,746	190.4	43,669	230.0	6,058	185.1	939	70.0	1,544	207.6	541	106.4	2,941	432.6

Note: NH = non-Hispanic; PI = Pacific Islander.

* Rates based on 2000 census population for all regions except U.S.; U.S. rates from CDC Wonder online database.

† Excludes persons <15 years of age for US and IL totals and rates.

ⁱ STD Facts – Chlamydia. Available at <http://www.cdc.gov/std/chlamydia/STDFact-Chlamydia.htm> (last accessed 3/25/2011).