

# Sexually Transmitted Diseases

**2005 Annual Report**

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## Executive Summary

Sexually transmitted diseases (STDs) continue to be a problem in Sonoma County. The diseases covered in this report include Chlamydia, Gonorrhea and primary and secondary (P&S) Syphilis, although AIDS, Chancroid, Non-Gonococcal Urethritis, and Pelvic Inflammatory Disease are also reportable conditions.<sup>1</sup> It is widely accepted that only one in four cases of diagnosed STDs are actually reported. Despite underreporting, current rates of nearly all STDs are resurging at an alarming rate. In addition to complications from the diseases themselves, STDs can increase the risk of HIV transmission. Of particular concern in Sonoma County:

### Chlamydia

- The rate of Chlamydia has been steadily increasing from a rate of 81.7 new cases per 100,000 population in 1999 to 165 new cases per 100,000 population in 2005.<sup>2</sup>
- In 2005, Women 20-24 years old had the highest incidence rate of Chlamydia.
- People of color, particularly Hispanics and African Americans are disproportionately affected by Chlamydia.

### Gonorrhea

- The 2005 rate of Gonorrhea, 37 cases per 100,000 persons, remains above the Healthy People 2010 goal of 19 cases per 100,000 population.<sup>3</sup> The upward trend in the rate of infections began in 1999.
- Both women and men 20-24 years old have the highest incidence rates of Gonorrhea.

### Primary and Secondary Syphilis

- Twelve cases of P&S Syphilis were reported in 2005, continuing an increasing trend from 1996-98 when no cases were reported.
- Since 2003, all cases of P&S Syphilis have been reported among males.
- The 2005 rate of P&S Syphilis in Sonoma County is 2.5 cases per 100,000 population, higher than the Healthy People 2010 goal of 0.2 cases per 100,000 population.<sup>4</sup>

In addition to rates of disease, the trend in total reported cases has also been increasing over time in Sonoma County (Table 1).

**Table 1 - Cases of Selected STDs by Year, Sonoma County 1995-2005**

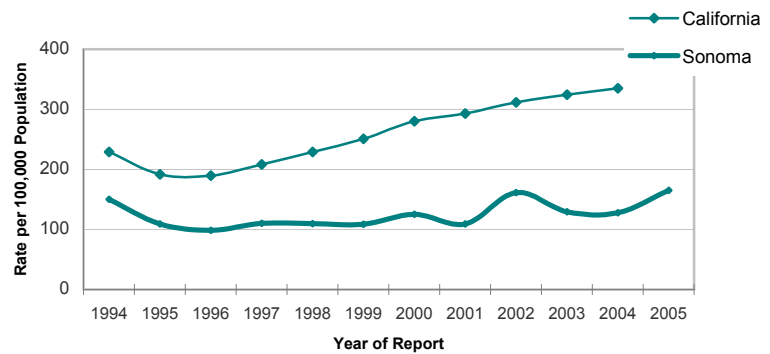
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Chlamydia	464	423	484	488	492	578	513	760	613	613	803
Gonorrhea	52	41	42	32	32	63	34	88	117	142	149
P&S Syphilis	1	0	0	3	1	2	1	18	13	6	12

# Chlamydia

Chlamydia is the most commonly reported STD in the United States. In particular, Chlamydia is a health problem for women. Up to 40% of women with untreated Chlamydia develop pelvic inflammatory disease (PID) and one in 5 women with PID become infertile.<sup>5</sup> In pregnant women, chlamydia can also cause significant and sometimes permanent damage to the unborn child. Because the majority of chlamydia infections cause no symptoms, this disease is significantly under-diagnosed. Consequently, the facts and figures presented below represent only a fraction of the true burden of disease in Sonoma County.

Although Sonoma’s case rate is lower than that of California, the rate appears to be increasing over the past six years (Figure 1). The 2005 rate of 165 cases per 100,000 persons represents a 30% increase over the 2004 rate. There are several possible factors contributing to this increase, including better testing methodology and improved screening.<sup>6</sup>

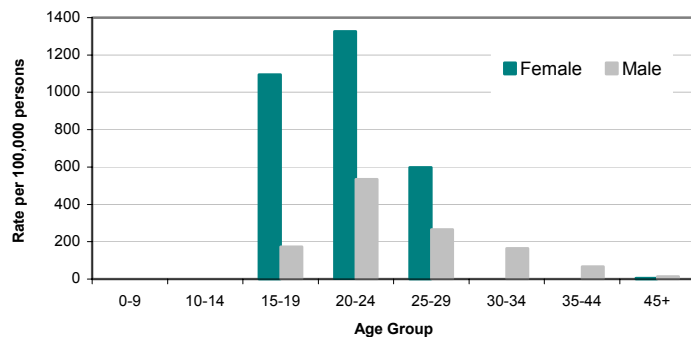
**Figure 1 - Chlamydia Case Rate**  
Sonoma County and California, 1994-2005



Women of childbearing age have significantly higher rates of Chlamydia compared to males, although these rates are biased since the majority of screening programs are directed towards women. In Sonoma County, groups with the highest rates are women aged 20-24 (1,326 cases/100,000) followed by women aged 15-19 (1,095 cases/100,000) (Figure 2). In males, the highest rate is also among men aged 20-24 (534 cases/100,000). Similar figures are reported on the state and national level. In 2004, women aged 20-24 had the highest rate in California (2,602 cases/100,000) and women aged 15-19 had the highest rate nationally (2,762 cases/100,000).<sup>7,8</sup>

Comparing the proportion of Chlamydia cases reported in 2005 by race and ethnicity to the population distribution of Sonoma County shows that Chlamydia affects Hispanic and African American men and women more than other groups (Table 2). Notably, the age-adjusted rate of Chlamydia infections in African-American Women is about five times higher than the rate in White, non-Hispanic women (783 vs. 162 cases/100,000, respectively). This is also seen in males, with an incidence rate in African-American men four times higher than then the rate in White, non-Hispanic men (252 vs. 60 cases/100,000, respectively).

**Figure 2 - Chlamydia: Age and Gender Specific Rates**  
Men and Women in Sonoma County, 2005



**Table 2 - Chlamydia: Race, Ethnicity and Gender-Specific Rates**  
*Age-Adjusted Rates per 100,000 Population, Sonoma County, 2005*

	Chlamydia			Population	
	Case	Percent	Rate	Number	Percent
<b>County Total*</b>	<b>803</b>	<b>100%</b>	<b>166.0</b>	<b>486,114</b>	<b>100%</b>
<b>Female Total</b>	<b>565</b>	<b>70%</b>	<b>244.2</b>	<b>245,303</b>	<b>50%</b>
White	248	44%	161.7	180,735	74%
Hispanic	184	33%	349.1	43,045	18%
Asian/Pacific Islander	16	3%	158.0	9,914	4%
African American	31	5%	783.4	3,241	1%
American Indian/Alaska Native	10	2%	348.9	2,742	1%
Unknown	76	13%	--	--	--
<b>Male Total</b>	<b>236</b>	<b>30%</b>	<b>94.1</b>	<b>240,811</b>	<b>50%</b>
White	98	42%	60.1	169,984	70%
Hispanic	90	38%	151.5	49,919	21%
Asian/Pacific Islander	6	2%	64.4	8,944	4%
African American	12	5%	251.9	4,059	2%
American Indian/Alaska Native	2	1%	62.5	2,564	1%
Unknown	28	12%	--	--	--

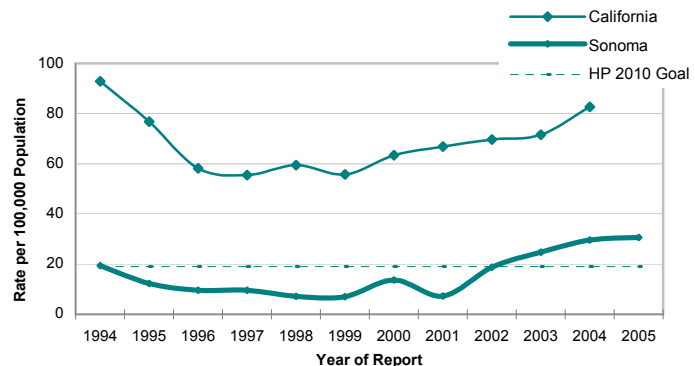
\*2 cases with unknown gender are excluded from the Male/Female strata.

The increased burden of Chlamydia on non-Whites is also reflected in the proportion of cases reporting Hispanic ethnicity or African American race. Eighteen percent of females and 21% of males in Sonoma County are Hispanic, yet Hispanic persons accounted for 33% of female cases and 38% of male cases in 2005. Similarly, 1-2% of the County population reports African American race, but both African American men and women account for 5% of cases.

## Gonorrhea

Once decreasing across the nation, the incidence rate of Gonorrhea in California and Sonoma County has been steadily increasing since 1999 (Figure 4). In Sonoma County, the 2005 rate of 37 cases per 100,000 persons is now well above the Healthy People 2010 goal of 19 new cases per 100,000 population.<sup>9</sup> The increasing incidence of Gonorrhea cases is not nationwide and appears to be unique to the west coast.<sup>10</sup>

**Figure 3 - Gonorrhea Case Rate**  
*Sonoma County and California, 1994-2005*

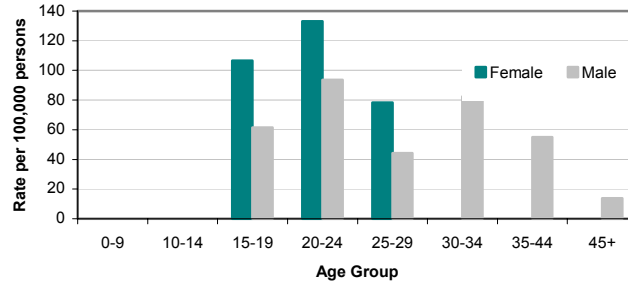


Gonorrhea affects young adults of both genders and is also prevalent among middle-aged men. The rates of gonorrhea are highest in women and men 20 to 24 years of age (133 cases/100,000, 94 cases/100,000) (Figure 5). Several factors contribute to the higher proportion of cases seen in men compared to women. First, the symptoms of gonorrheal infection in men are much more pronounced than in women, and most often will prompt a health care visit. Second, this disease

and other STDs have been resurging among gay and bisexual men, thereby increasing the proportion of males with Gonorrhea.<sup>11</sup>

Similar figures are reported on the state and national level. In 2004, women and men aged 20-24 had the highest age-specific rate in California (348 cases/100,000, 286 cases/100,000) and women aged 15-19 and men aged 20-24 had the highest age-specific rate nationally (611 cases/100,000, 431 cases/100,000).<sup>12,13</sup>

**Figure 4. Gonorrhea: Age and Gender Specific Rates Men and Women in Sonoma County, 2004**



Comparing the proportion of Gonorrhea cases reported in 2005 to the population distribution of Sonoma County, Gonorrhea affects African American males and females and Hispanic males more than other groups (Table 3). Hispanic males, representing 21% of male Sonoma County residents, account for 25% of male Gonorrhea cases. Similarly, only one percent of females and males in Sonoma County are African American, yet African American persons accounted for four percent of female cases and seven percent of male cases in 2005.

This trend is also reflected in the disease incidence. The age-adjusted rate of gonorrhea infection among African Americans is nearly three times higher than the rate for White, non-Hispanics, regardless of gender (Table 3). Although the small number of observations in these groups makes the rates unstable, this trend matches what is seen on the state and national level. Untreated, Gonorrhea can have devastating health affects for both men and women, including infertility (causing PID in women) and blood or joint infection.<sup>14</sup>

**Table 3 - Gonorrhea: Race, Ethnicity and Gender-Specific Rates Age-Adjusted Rates per 100,000 Population, Sonoma County, 2005**

	Rate	Gonorrhea		Population	
		Case	Percent	Number	Percent
<b>County Total*</b>	<b>30.9</b>	<b>149</b>	<b>100%</b>	<b>486,114</b>	<b>100%</b>
<b>Female Total</b>	<b>29.4*</b>	<b>68</b>	<b>46%</b>	<b>245,303</b>	<b>50%</b>
White	27.6	41	60%	180,735	74%
Hispanic	22.9	12	18%	43,045	18%
Asian/Pacific Islander	20.0	2	3%	9,914	4%
African American	91.6	3	4%	3,241	1%
American Indian/Alaska Native	33.8	1	1%	2,742	1%
Unknown	--	9	13%	--	--
<b>Male Total</b>	<b>32.8*</b>	<b>81</b>	<b>54%</b>	<b>240,811</b>	<b>50%</b>
White	24.2	39	48%	169,984	70%
Hispanic	34.0	20	25%	49,919	21%
Asian/Pacific Islander	9.7	1	1%	8,944	4%
African American	125.9	6	7%	4,059	2%
American Indian/Alaska Native	33.2	1	1%	2,564	1%
Unknown	--	14	17%	--	--

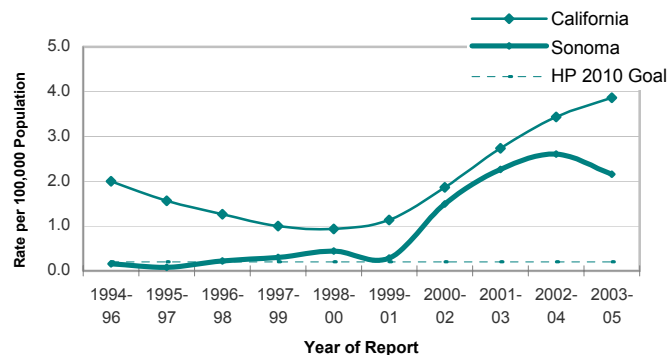
## P&S Syphilis

From 1996 - 1998, no cases of P&S Syphilis were reported in Sonoma County. Unfortunately, the nationwide trend towards increasingly low levels of disease has dramatically reversed, starting in 2000 in California and 2001 in Sonoma County. The 2005 rate of disease in Sonoma County is 2.5 cases per 100,000 population, significantly higher than the Healthy People 2010 goal of 0.2 cases per 100,000 population.<sup>15</sup>

Since 2003, all cases of P&S Syphilis reported in Sonoma County have been male. In 2005, the majority of cases were among males aged 35-44.

This is similar to California overall where the rate of P&S Syphilis in males is 11 times higher than the rate in females.<sup>16</sup> Among all California males, the age group with the highest case rate is also those aged 35-44.<sup>17</sup> The majority of the 2005 P&S syphilis cases were reported among White and Hispanic males (Table 4).

**Figure 5. Syphilis Case Rate - Three-year Rolling Average Sonoma County and California, 1994 - 2005**



**Table 4 - Syphilis: Race, Ethnicity and Gender-Specific Rates**  
Age-Adjusted Rates per 100,000 Population, Sonoma County, 2005

	Rate	Syphilis		Population	
		Case	Percent	Number	Percent
<b>County Total</b>	<b>2.6</b>	<b>12</b>	<b>100%</b>	<b>486,114</b>	<b>100%</b>
<b>Male Total</b>	<b>5.1</b>	<b>12</b>	<b>100%</b>	<b>240,811</b>	<b>50%</b>
White	7.3	7	58%	169,984	70%
Hispanic	3.8	4	33%	49,919	21%
Asian/Pacific Islander	--	0	0%	8,944	4%
African American	--	0	0%	4,059	2%
American Indian/Alaska Native	--	0	0%	2,564	1%
Unknown	--	1	8%	--	--

Syphilis has been targeted nationally for eradication. This disease is easy to diagnose and cure. In addition to improving community health overall, the effect of syphilis eradication would significantly reduce two other significant health events, namely the increased risk of transmission of HIV and the devastating effects on the fetus when exposed in utero.

Responding to the rise in rates of Syphilis in the community of men who have sex with men (MSM), Public Health launched a campaign of outreach and education. The goal was to inform MSM about the epidemic, and encourage individuals to be tested for STDs on a regular basis if they shared risk of exposure. This campaign consisted of flyers and informational cards that were distributed in the community, and educational sessions oriented to community members and service providers. Also, in January 2003, Public Health opened a "male" STD clinic that has been very popular.

## References

1. Unless otherwise noted, all data in this chapter came from the California Department of Health Services, Automated Vital Statistic System.
2. See Chin J, ed. *Control of Communicable Diseases Manual 2000* for definitions of the communicable diseases listed in this chapter.
3. U.S. Department of Health and Human Services. *Healthy People 2010*. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office, November 2000.
4. *Ibid.*
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6. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance, 2004*. Atlanta, GA: U.S. Department of Health and Human Services, September 2005.
7. California Department of Health Services. *Chlamydia 2001-2005 Provisional Tables*. (2006, May 11). Retrieved June 15, 2005 from <http://www.dhs.ca.gov/ps/dcdc/STD/datables.htm>.
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16. California Department of Health Services. *Primary and Secondary Syphilis 2001-2005 Provisional Tables*. (2006, May 11). Retrieved June 15, 2005 from <http://www.dhs.ca.gov/ps/dcdc/STD/datables.htm>.
17. *Ibid*