



County of San Diego Monthly STD Report

Volume 8, Issue 8: Data through April 2016; Report released August 15, 2016.



Table 1. STDs Reported Among County of San Diego Residents, by Month and Previous 12 Months Combined.

	2015		2016	
	Apr	Previous 12-Month Period*	Apr	Previous 12-Month Period*
Chlamydia	1379	15586	1597	18401
Female age 18-25	522	6309	614	7311
Female age ≤ 17	65	676	58	808
Male rectal chlamydia	49	506	59	646
Gonorrhea	297	3385	401	4163
Female age 18-25	43	482	59	543
Female age ≤ 17	7	60	7	81
Male rectal gonorrhea	25	443	53	582
Early Syphilis (adult total)	86	757	65	824
Primary	16	142	12	169
Secondary	37	279	24	314
Early latent	33	336	29	341
Congenital syphilis	1	4	0	8
HIV Infection [†]				
HIV (not AIDS)	37	445	50	469
AIDS	16	248	17	199

* Cumulative case count of the previous 12 months.

† New infections are reported either as HIV, or if an individual was also diagnosed with AIDS within one month, as AIDS.

Table 2. Selected STD Cases and Annualized Rates per 100,000 Population for San Diego County by Age and Race/Ethnicity, Year to Date.

	All Races*		Asian/PI		Black		Hispanic		White	
	cases	rate	cases	rate	cases	rate	cases	rate	cases	rate
All ages										
Chlamydia	6448	622.8	31	24.9	114	247.5	431	119.8	253	50.1
Gonorrhea	1608	155.3	24	19.3	148	321.3	356	99.0	321	63.5
Early Syphilis	287	27.7	9	7.2	23	49.9	104	28.9	118	23.4
Under 20 yrs										
Chlamydia	1047	390.5	4	13.4	16	132.8	63	49.7	22	22.1
Gonorrhea	127	47.4	2	6.7	13	107.9	37	29.2	10	10.1
Early Syphilis	13	4.8	2	6.7	0	0.0	10	7.9	1	1.0

Note: Rates calculated using 2015 SANDAG population estimates.

* Includes cases designated as "other," "unknown," or missing race/ethnicity.

Figure 1. Chlamydia and Gonorrhea Reported Among County of San Diego Residents, by 3-Month Period.

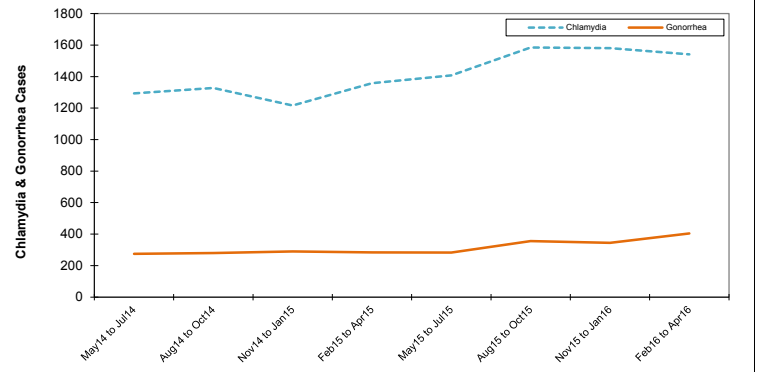
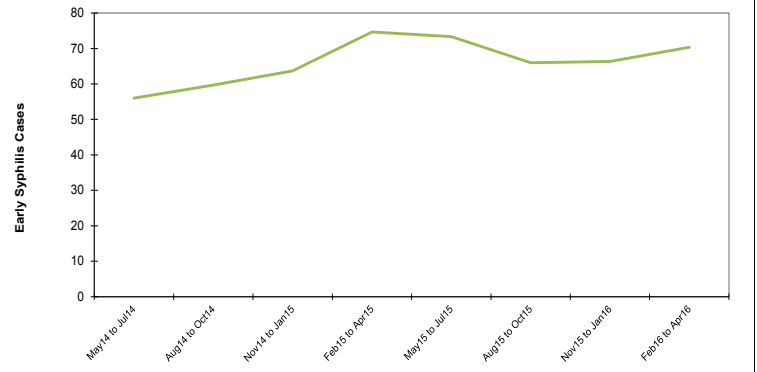


Figure 2. Early Syphilis Reported Among County of San Diego Residents, by 3-Month Period.



Note: All data are provisional. Case counts are based on the earliest of date of diagnosis, date of specimen collection, and treatment date. Totals for past months might change because of delays in reporting from labs and providers.

Editorial Note: Gonococcal Antimicrobial Susceptibility Trends

The threat of antibiotic-resistant *Neisseria gonorrhoeae*, or a gonorrhea “superbug,” is an issue of major public health importance that has prompted progressively more aggressive treatment strategies in recent years. The **Gonococcal Isolate Surveillance Project (GISP)** was established in 1986 to monitor antimicrobial susceptibility trends in *N. gonorrhoeae* in the United States (U.S.). GISP is a collaborative project among selected STD clinics, five regional laboratories, and the Centers for Disease Control and Prevention (CDC). Participating sites submit up to the first 25 urethral isolates of *N. gonorrhoeae* from men with symptomatic urethritis to regional laboratories each month[1]. The laboratories perform antimicrobial susceptibility testing by agar dilution for multiple agents, including but not limited to azithromycin, cefixime and ceftriaxone[2]. Results from the GISP have informed national strategies for gonorrhea treatment, including the **recommendation for dual treatment for all gonococcal infections, regardless of chlamydia test results, with a combination of intramuscular ceftriaxone plus oral azithromycin**[3].

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Editorial Note: Gonococcal Antimicrobial Susceptibility Trends (Continued)

The CDC recently published an analysis of 2013-14 GISP data in the *Morbidity and Mortality Weekly Report* (MMWR) that highlighted **increases in the prevalence of *N. gonorrhoeae* isolates with reduced susceptibility to azithromycin** (Azi-RS, defined as a minimum inhibitory concentration, or MIC, of ≥ 2.0 $\mu\text{g/mL}$). Although the overall percentage of Azi-RS isolates was low during 2000-2013, it increased from 0.6% in 2013 to 2.5% in 2014. Increase in Azi-RS prevalence was observed in all regions but was greatest in the Midwest, which is different from the epidemiology of other resistance phenotypes that typically emerge in Hawaii and then California. This difference in epidemiology of Azi-RS indicates possible domestic selection pressure, rather than importation from East Asia and other regions, which may be due to the frequent use of azithromycin to treat respiratory and other non-sexually transmitted infections in the U.S[4]. Preliminary 2015-2016 data from California GISP sites, which currently include San Diego, Los Angeles, Orange County, and San Francisco, indicate continuation of this trend, with Azi-RS prevalence of 1.10% in 2015 and 4.63% for January-April 2016 [preliminary unpublished data provided by the California Department of Public Health(CDPH)].

The prevalence of reduced susceptibility to ceftriaxone (Cro-RS, defined as MIC ≥ 0.125 $\mu\text{g/mL}$) has remained relatively low nationally (i.e., 0.1-0.4% during 2000-2014)[4] and in California (i.e., 0-0.69% during 2000-2015) [preliminary unpublished data from CDPH], possibly because more mutations are required to confer Cro-RS than are required to confer reduced susceptibility to the oral cephalosporin cefixime (Cfo-RS, defined as MIC ≥ 0.250 $\mu\text{g/mL}$). The prevalence of Cfo-RS increased from 2006 (0.1%) to 2010 (1.4%), decreased to 0.4% in 2013, and then increased to 0.8% in 2014. In California, prevalence of Cfo-RS was 3.86% in 2010 and decreased to 0.37% in 2015 [preliminary unpublished data provided by CDPH].

In conclusion, analysis of national and state gonococcal susceptibility surveillance data supports the effectiveness of treatment guideline changes, including **1) the use of dual therapy for all gonococcal infections; 2) the increase in recommended dosage of intramuscular ceftriaxone to 250 mg; and 3) the removal of oral cefixime and doxycycline from recommended treatment regimens**[3]. Although it is unclear whether the increasing prevalence of Azi-RS will continue, this observation heightens concerns about future efficacy of gonorrhea treatment, since azithromycin is part of recommended and alternative treatment regimens for gonorrhea[4]. Providers can help to preserve these treatment options by following CDC recommendations for gonorrhea testing and treatment[3], ensuring that all sexual partners of gonorrhea cases from the previous 60 days are evaluated and treated, and reporting gonorrhea cases to the health department within seven days of diagnosis and cases of suspected treatment failure within 24 hours[5]. For information about STD case reporting, please click [here](#).