

## Differences in Chlamydia and Gonorrhea Incidence between Riverside County and Select Southern California Counties

### Introduction

Chlamydia and gonorrhea are the most common reportable conditions in California. As a sexually transmitted infection (STI), chlamydia became a reportable disease in Riverside County in 1985, and has remained the most frequently reported disease since 1990. Gonorrhea was the third most frequently reported disease in Riverside County during 2007. Compared to regional counterparts, Riverside County has maintained low rates of chlamydia and gonorrhea. In this report Riverside County's chlamydia and gonorrhea morbidity is compared to surrounding counties to investigate factors contributing to the lower rates. Data for Orange, San Bernardino, and San Diego counties are used for comparison. These selected Southern California counties were chosen based upon their demographic similarities and proximity to Riverside County.

### Key Findings

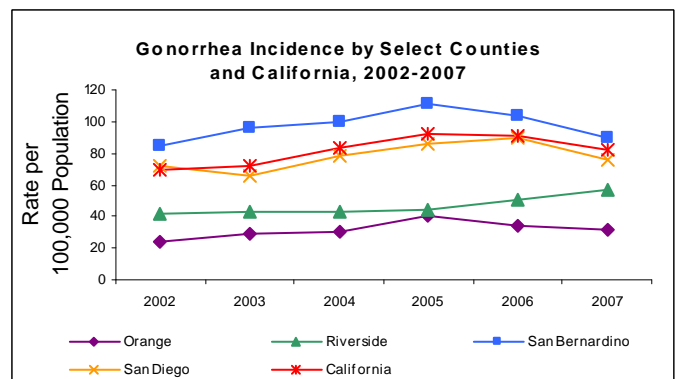
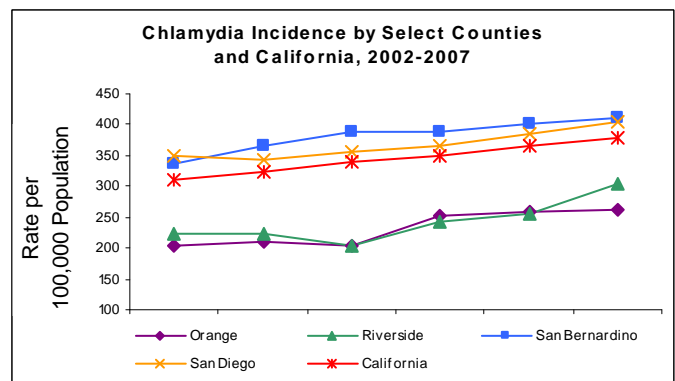
- Between 2005 and 2007, gonorrhea incidence rates increased 28% in Riverside County. At the same time Orange, San Bernardino, San Diego Counties, and California experienced decreases.
- In 2007, Riverside County reported fewer chlamydia cases (n=6,310) than all other select Southern California counties. San Diego County reported the most chlamydia cases (n=12,642).
- In Riverside County over 1,200 more chlamydia cases were reported in 2007, than during the previous year.

### Incidence of Chlamydia and Gonorrhea

Chlamydia and gonorrhea rates for Riverside County mirror those of Orange County. Both counties experience rates much lower than those of comparable Southern California counties. Although Riverside County has historically reported lower chlamydia rates, the county has recently experienced an increase.

Between 2002 and 2007, chlamydia rates in Riverside County increased 36%, the sharpest increase among all selected Southern California counties. Between 2005 and 2007, the selected Southern California counties experienced a gradual decline in Gonorrhea rates. However, during the same time frame, Riverside County experienced a 28% increase in gonorrhea incidence.

On average, males in Southern California counties have higher gonorrhea incidence rates compared to females. This differs from chlamydia, where females experience the higher incidence rates. The increased chlamydia rates among females have been linked to enhanced screening practices, access to routine reproductive care, and female biology.



\*Please note, the scales for the two graphs differ.

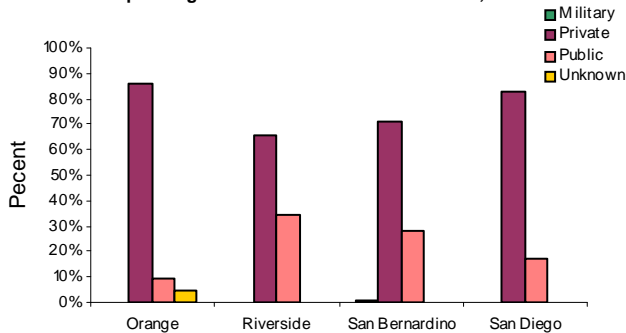
## Number of Sexual Partners

In 2005, California Health Interview Survey (CHIS) respondents were asked about the number of sexual partners they had over the last 12 months. Among selected counties, 6.7% of Orange, 8.4% of Riverside, 8.6% of San Bernardino, and 9.0% of San Diego County respondents reported having two or more sexual partners during the last year (CHIS, 2005).

## History of STI Screening and Condom Use

Among select Southern California counties, Riverside and Orange Counties had the fewest proportion of survey respondents with a history of STI tests within the past 12 months (16.9% and 16.6%, respectively) (CHIS, 2005). Respondents in San Bernardino County report the highest proportion of screening at 22%. When surveyed about condom use during most recent sexual encounter, Riverside County teens report the highest percentage of condom use (91.2%) and San Diego teens report the lowest percentage of condom use (76.9%) (CHIS, 2005).

**Chlamydia and Gonorrhea Case-Based Reporting Source for Select Counties, 2007**



## Usual Source of Medical Care and Case Reporting

Community/public clinics are more likely to screen and report cases of STIs compared to private providers.<sup>1</sup> In California, 22.5% of CHIS respondents report that for medical care they most often go to a community/public clinic. Among San Bernardino and San Diego County respondents, 24% seek care at community/public clinics most often; while Riverside and Orange County respondents report 19.6% and 15.8% seek care at community/public clinics (CHIS, 2005). In 2007, case-based reporting data showed that across select Southern California counties, the largest percentage of Chlamydia and Gonorrhea cases were reported by private facilities. Thirty-four percent of Riverside County cases were reported by public facilities, followed by San Bernardino (28%), San Diego (17.3%), and Orange Counties (9.3%).

## Conclusion and Limitations

Fewer Riverside County residents report STI screenings, report having two or more sex partners, and fewer report seeking care at community/public clinics when compared to select Southern California counties. However, a greater proportion of Riverside County residents report using a condom during their most recent sexual encounter. Data for incidence and health behaviors may be underestimates due to the nature of disease reporting and survey methodology. Interpretation from case-based reporting is limited by the lack of consistent reporting by many private providers and the amount of missing data from reporting documents.<sup>2</sup> The complexities of STI surveillance make accurate comparisons and analyses challenging. Further investigation of STI incidence should involve examination and analysis of clinical and case-based reporting data.

## From the Desk of Barbara Cole – Director, Disease Control

Sexually transmitted diseases (STDs) continue to present a significant public health concern in Riverside County. Left untreated, chlamydia can lead to complications such as pelvic inflammatory disease and infertility. Complications of untreated gonorrhea include fertility problems, heart problems, arthritis, and blindness. Both chlamydia and gonorrhea can be transmitted to a baby during childbirth if the mother is untreated. Although the rates for chlamydia and gonorrhea appear lower than that our surrounding areas, public health intervention remains crucial for maintaining control over STDs and other communicable diseases. The Department of Public Health is committed to protecting the health of the public through early detection, intervention, and treatment of communicable and STDs. By actively investigating and reporting cases, the Department aims to reduce the impact of STDs in Riverside County. Failure to investigate cases, ensure appropriate treatment, and facilitate evaluation of exposed individuals, can lead to ongoing disease transmission in the community and potential negative outcomes for the individual patient.

### Suggested Citation

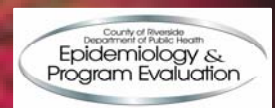
Penny, MA. *Differences in Chlamydia and Gonorrhea Incidence between Riverside County and Select Southern California Counties*. Riverside: Riverside County Department of Public Health, Epidemiology and Program Evaluation, 2007.

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### References:

- <sup>1</sup>Chow, JM. *The Epidemiology of Chlamydia in California*. California Department of Health Services. Sexually Transmitted Disease Control Branch. Division of Communicable Disease Control.
- <sup>2</sup>Division of STD/HIV Prevention. *Sexually Transmitted Disease Surveillance, 1993*. U.S. Department of Health and Human Services, Public Health Service. Atlanta: Centers for Disease Control and Prevention, December 1994.



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