

# EPIDEMIOLOGY OF SEXUALLY TRANSMITTED DISEASE

*Coachella Valley, Riverside County, CA*

Epidemiology & Program Evaluation  
Riverside University Health System – Public Health

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# DEFINITIONS

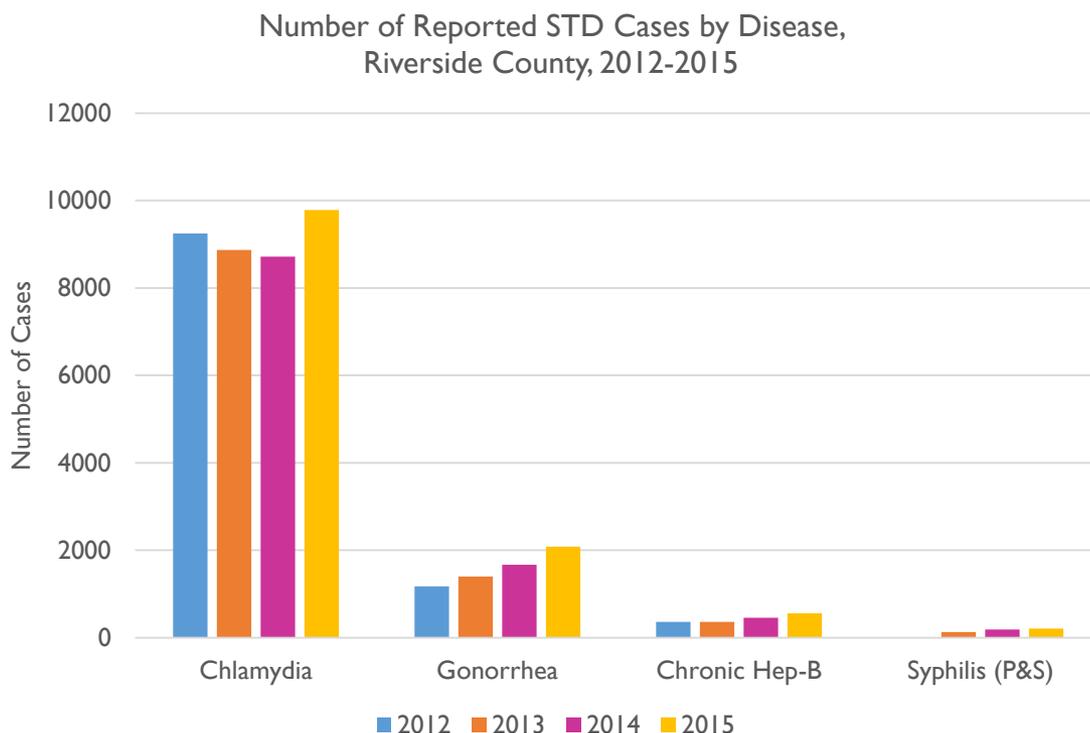
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- ▶ **STD: Sexually Transmitted Disease; specific to Chlamydia, Gonorrhea, Chronic Hepatitis-B, Syphilis (Primary & Secondary).**
  - ▶ *This presentation excludes HIV/AIDS data. For information on HIV/AIDS please refer to the current Riverside County HIV/AIDS profile which can be found at [rivcohealthdata.org](http://rivcohealthdata.org)*
- ▶ **Incidence: Newly diagnosed STD case in a population during a specific time period.**
  - ▶ *For this presentation, groupings of <5 cases will be noted as 0\* to maintain confidentiality*
- ▶ **Rate: Common method used to compare the burden of a disease across populations of different sizes**
  - ▶ *For this presentation, all rates will be calculated for 100,000 population*
- ▶ **Resolution Status: Current status of the disease incident. Resolution statuses of Confirmed, Probable, Suspect, Unknown, and Not a Case apply to these diseases.**
  - ▶ *To align with the state, final STD counts were calculated by including Confirmed, Probable, Suspect, and Unknown cases.*

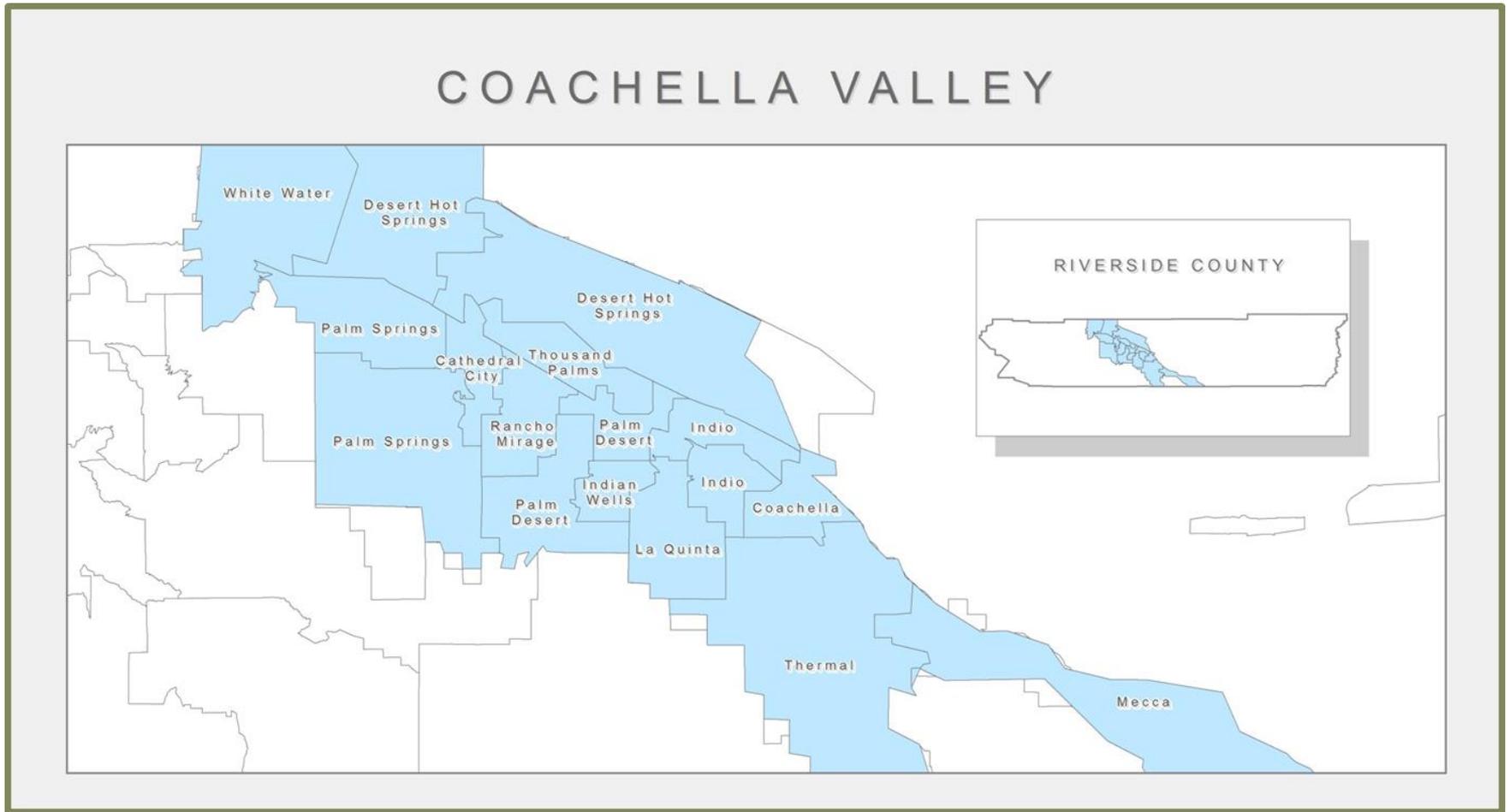


# RIVERSIDE COUNTY STD OVERVIEW

- ▶ Chlamydia has remained the most commonly reported communicable disease in Riverside County with the highest incidence among females 20-24 years.
- ▶ Incidence of reported gonorrhea has more than doubled since 2010. Rates per 100,000 population have risen among all races but remain highest in the Black population.
- ▶ Since 2010, the overall County incidence rate for syphilis (primary & secondary combined) has risen almost 50%. The City of Palm Springs, in the Eastern Region of Riverside County, continues to be a hotspot.



# COACHELLA VALLEY REGION MAP



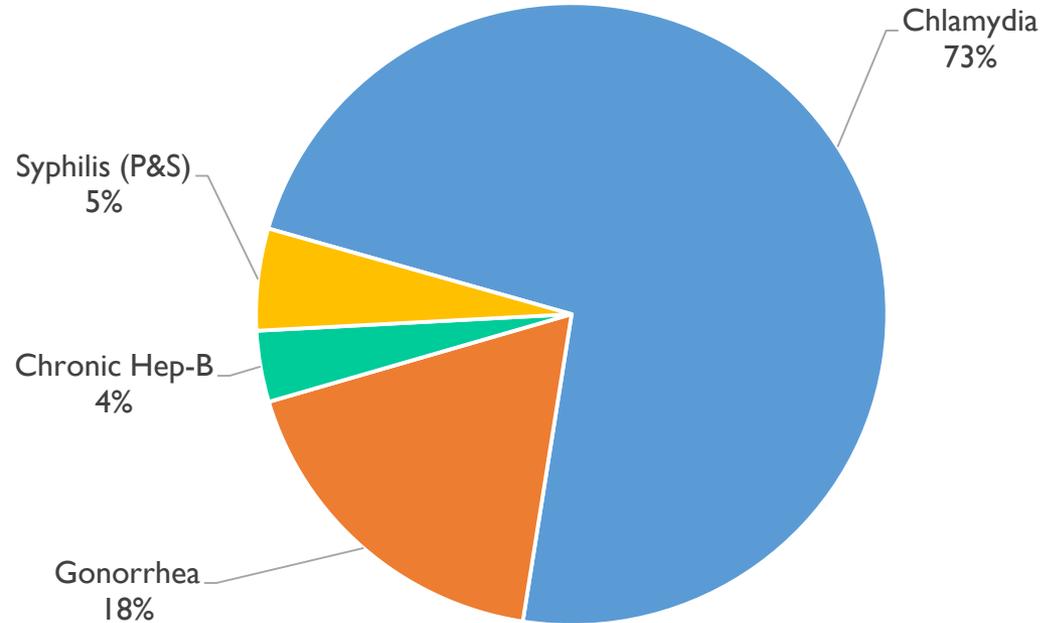
# COACHELLA VALLEY REGION – ZIP CODE KEY

	<b>Desert Hot Springs</b>	<b>Palm Springs/ North Palm Springs</b>	<b>Cathedral City</b>	<b>Rancho Mirage</b>	<b>Palm Desert Thousand Palms Indian Wells La Quinta</b>	<b>Indio Coachella Mecca Thermal</b>
	92240	92262	92234	92270	92211	92201
	92241	92264			92260	92203
		92258			92276	92236
					92210	92254
					92253	92274
<b>2015 ACS Population Estimate</b>	46,415	47,411	53,005	17,770	109,917	170,567

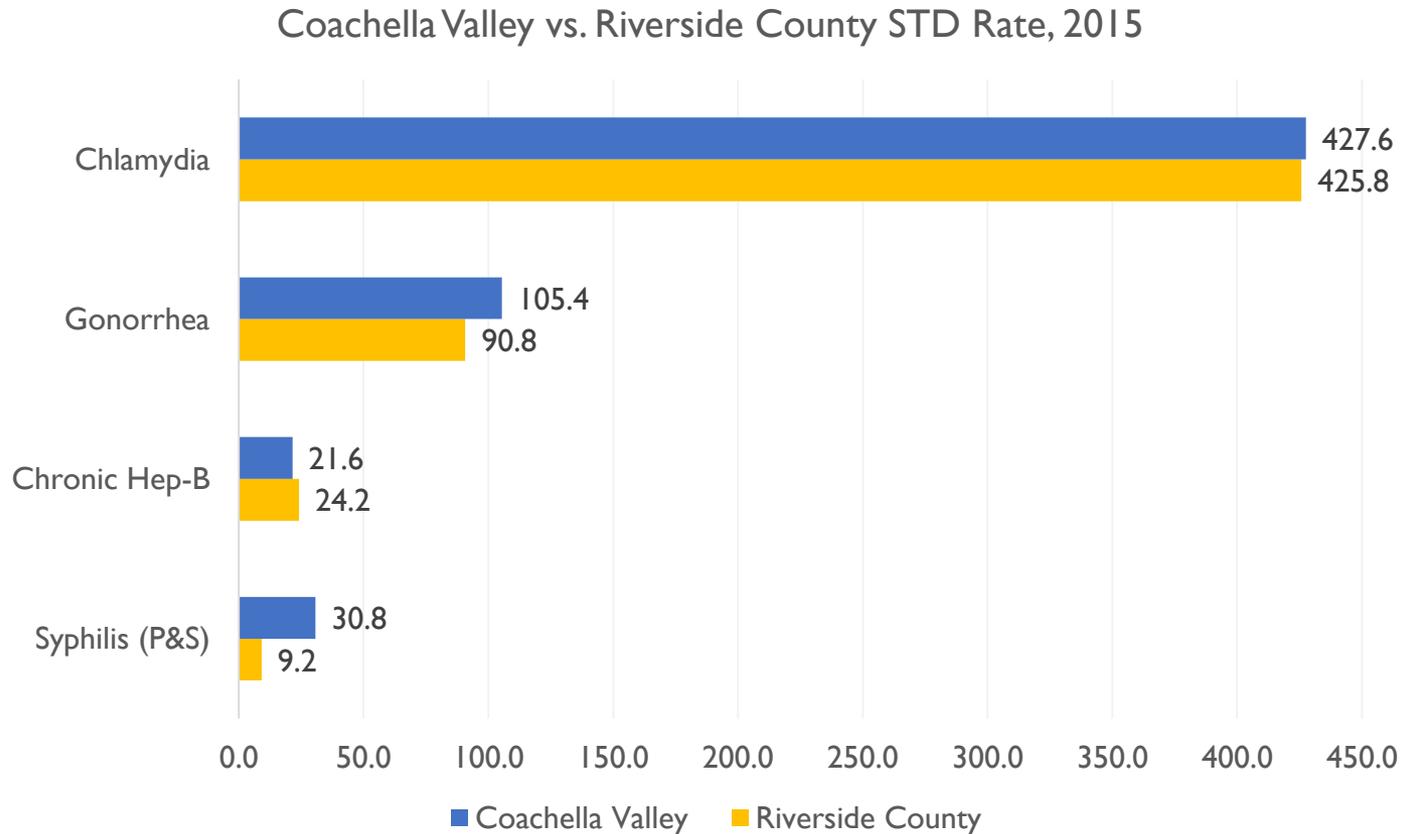
# COACHELLA VALLEY REGION: 2015 STD OVERVIEW

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- ▶ In 2015, 2,605 people were diagnosed with a STD in the Coachella Valley.
- ▶ 1 in 5 (20.6%) of all Riverside County residents diagnosed with a STD reside in the Coachella Valley.
- ▶ 73% of STD cases in the Coachella Valley are Chlamydia.

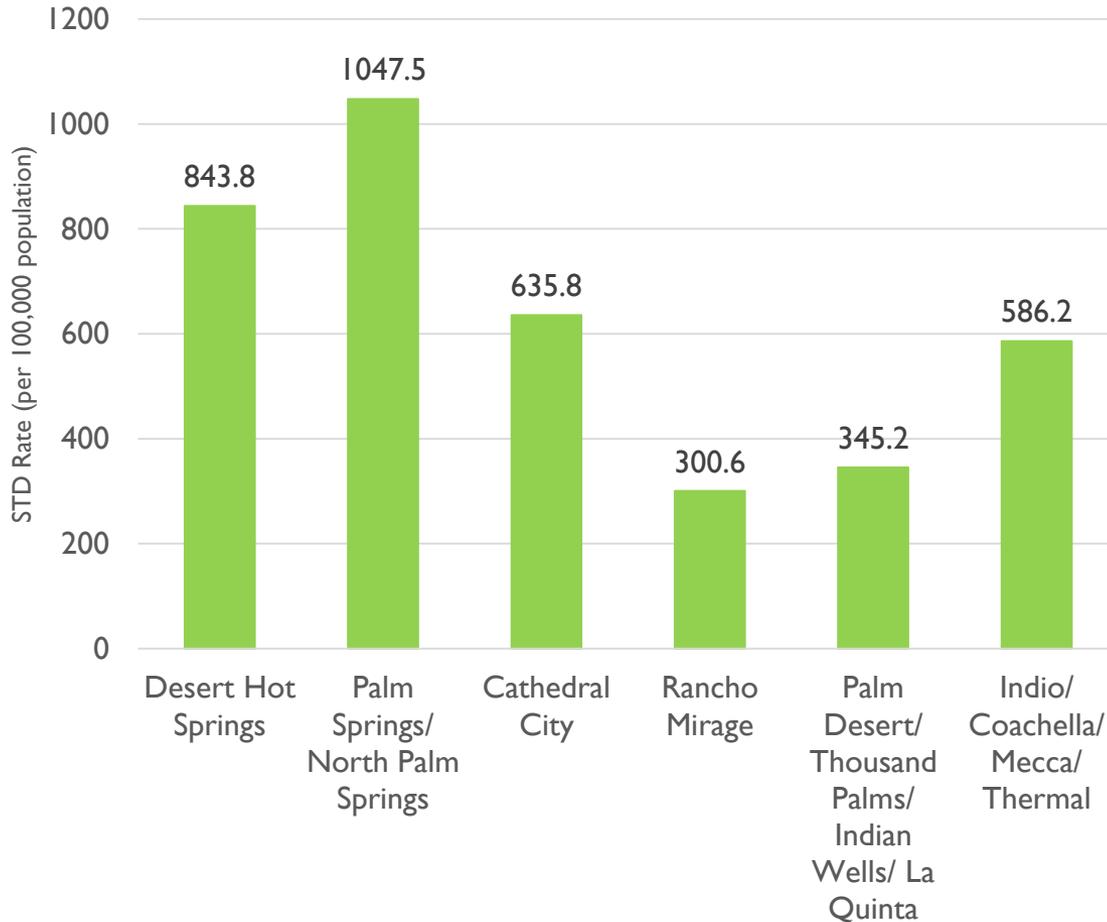


# COACHELLA VALLEY VS. RIVERSIDE COUNTY STD INCIDENCE, 2015



- ▶ Coachella Valley has a higher STD incidence rate of Syphilis (P&S) and Gonorrhea when compared to Riverside County. Rates for Chlamydia are approximately the same, while rates for Chronic Hep-B are slightly higher in overall Riverside County than Coachella Valley.

# COACHELLA VALLEY STD RATE BY REGION, 2015



- ▶ Within the Coachella Valley, The Palm Springs/ North Palm Springs Area has the highest STD incidence rate of 1047.5 per 100,000 population.
- ▶ Persons living in Rancho Mirage have the lowest STD incidence rate of 300.6 per 100,000 population.

# COACHELLA VALLEY STD INCIDENCE BY ZIP CODE, 2015

Region	Zip Code	Frequency	Rate
Desert Hot Springs	92240	353	983.9
	92241	27	294.9
Palm Springs North Palm Springs	92262	306	1146.4
	92264	175	885.9
	92258	11	2115.4
Cathedral City	92234	334	635.8
Rancho Mirage	92270	53	300.6
Palm Desert Thousand Palms Indian Wells La Quinta	92211	61	248.3
	92260	130	395.7
	92276	44	555.5
	92210	5	103.3
	92253	135	351.0
Indio Coachella Mecca Thermal	92201	473	740.0
	92203	80	291.3
	92236	278	646.0
	92254	68	552.8
	92274	72	380.2
Coachella Valley Region	Total	2605	596.8

- ▶ In the Coachella Valley, the STD incidence rate is 596.8 per 100,000 population.
- ▶ When stratified by zip code, 6 areas have a higher incidence rate than that of the overall Coachella Valley Region.
- ▶ The Palm Springs/North Palm Springs Area (92262 and 92258) have the highest incidence rate of 2115.4 and 1146.4, respectively.

\*Incidence rate calculated per 100,000 population

# COACHELLA VALLEY STD RATE BY ZIP CODE & DISEASE, 2015

		Chlamydia	Gonorrhea	Chronic Hep-B	Syphilis (P&S)
Desert Hot Springs	92240	688.4	228.6	39.0	27.9
	92241	185.7	76.5	32.8	0.0
Palm Springs North Palm Springs	92262	588.2	325.9	63.7	168.6
	92264	344.2	268.3	101.2	172.1
	92258	1346.2	576.9	0.0	192.3
Cathedral City	92234	487.3	87.6	24.7	36.2
Rancho Mirage	92270	181.5	73.7	28.4	17.0
Palm Desert Thousand Palms Indian Wells La Quinta	92211	171.0	61.1	4.1	12.2
	92260	292.2	76.1	12.2	15.2
	92276	429.2	101.0	25.2	0.0
	92210	62.0	0.0	41.3	0.0
	92253	275.6	54.6	10.4	10.4
Indio Coachella Mecca Thermal	92201	627.4	98.6	6.3	7.8
	92203	240.3	18.2	18.2	14.6
	92236	573.9	65.1	0.0	7.0
	92254	479.7	56.9	8.1	8.1
	92274	343.2	31.7	5.3	0.0
Coachella Valley	Coachella Valley	436.0	107.5	22.0	31.4
Riverside County	Riverside County	425.8	90.8	24.2	9.2

\*Incidence rate calculated per 100,000 population

# COACHELLA VALLEY STD INCIDENCE BY AGE, 2015

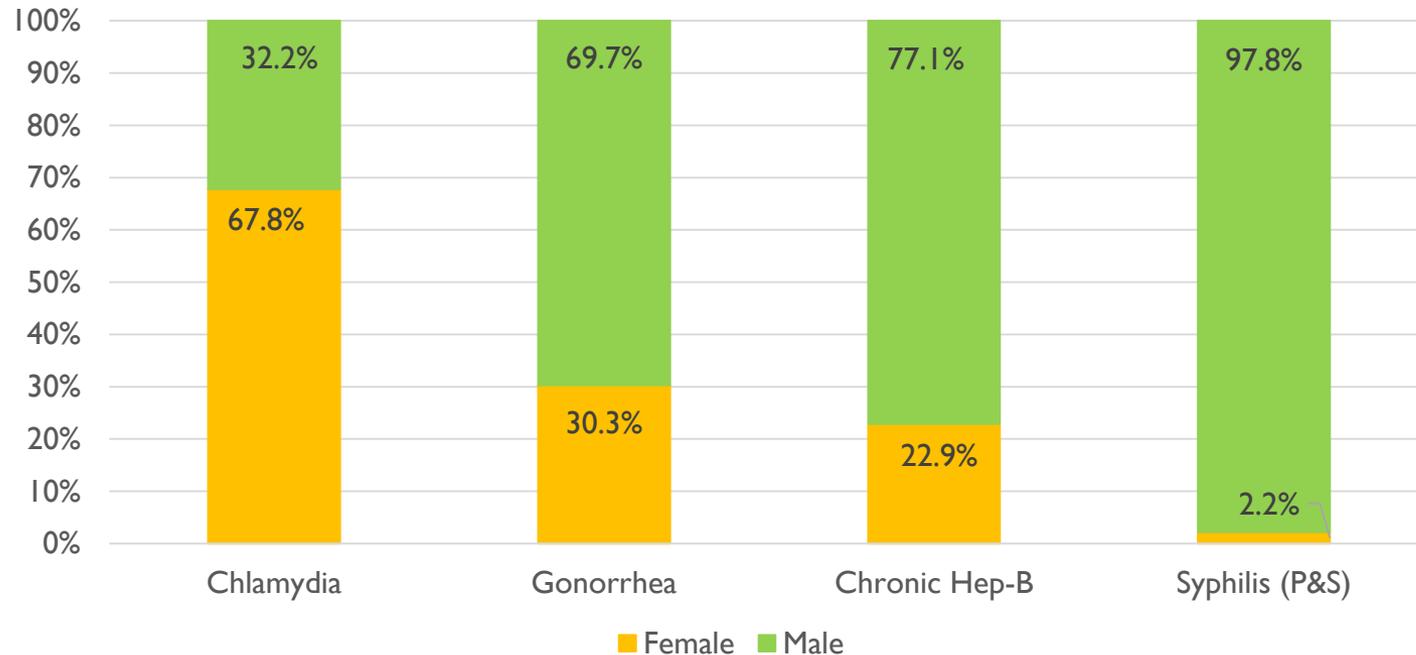
	0-19	20-44	45-64	65+
Chlamydia Cases	400	1315	166	15
Chlamydia Rate	335.3	1011.5	156.8	16.7
Gonorrhea Cases	49	313	97	8
Gonorrhea Rate	41.1	240.7	91.6	8.9
Chronic Hep-B Cases	0*	25	54	16
Chronic Hep-B Rate	0.8	19.2	51.0	17.8
Syphilis (P&S) Cases	0*	42	85	6
Syphilis (P&S) Rate	3.4	32.3	80.3	6.7
<b>Total STD Cases</b>	<b>454</b>	<b>1695</b>	<b>402</b>	<b>45</b>
<b>Total STD Rate</b>	<b>380.6</b>	<b>1303.7</b>	<b>379.7</b>	<b>50.0</b>

0\* is used to indicate <5 cases

\*Incidence rate calculated per 100,000 population

- ▶ The highest incidence rate of persons with a STD is among those 20-44 years old.
- ▶ Specifically, the highest STD incidence rate for Chlamydia is among those 20-44 years old.
- ▶ Overall, Chlamydia has the highest incidence rate among all age groups except in those 65 and older.

# COACHELLA VALLEY STD INCIDENCE, BY SEX, 2015



- ▶ In the Coachella Valley, most STD infections are significantly more prevalent among Males. Specifically, 98% of Syphilis (P&S) cases are among Males.
- ▶ However, Chlamydia is most commonly seen among Females. In 2015, 68% of Chlamydia cases were among women.



# COACHELLA VALLEY STD INCIDENCE AND RATE BY RACE/ETHNICITY, 2015

	Asian/PI	Black	Hispanic	White
Chlamydia Cases	24	63	1162	333
Chlamydia Rate	188.3	579.9	487.5	189.8
Gonorrhea Cases	6	24	177	177
Gonorrhea Rate	47.1	220.9	74.3	100.9
Chronic Hep-B Cases	11	0*	20	24
Chronic Hep-B Rate	86.3	27.6	8.4	13.7
Syphilis (P&S) Cases	0*	0*	32	93
Syphilis (P&S) Rate	23.5	18.4	13.4	53.0
<b>Total STD Cases</b>	<b>44</b>	<b>92</b>	<b>1391</b>	<b>627</b>
<b>Total STD Rate</b>	<b>345.3</b>	<b>846.8</b>	<b>583.5</b>	<b>357.3</b>

- ▶ 53.7% of Coachella Valley residents diagnosed with a STD are Hispanic.
- ▶ Overall, African Americans (or Non-Hispanic Blacks) have the highest STD incidence rate of 846.8
- ▶ African Americans (or Non-Hispanic Blacks) the highest incidence rates for the following STDs:
  - ▶ Chlamydia: 579.9
  - ▶ Gonorrhea: 220.9
- ▶ Whites have the highest incidence rate of Syphilis (P&S) with an incidence rate of 53.0.
- ▶ Among Chronic Hep-B cases, Asian/PI have the highest incidence rate of 86.3.

0\* is used to indicate <5 cases

\*Incidence rate calculated per 100,000 population

# DATA SOURCES

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- ▶ Unless otherwise noted, all STD statistics come from the STD cases reported to Riverside County Department of Public Health.
- ▶ Population:
  - ▶ U.S. Census Bureau, 2015 Census and 2015 Population Estimate
  - ▶ 2011-2015 U.S. Census Bureau, American Community Survey 5-Year Estimates
  - ▶ County of Riverside Department of Public Health Communicable Disease Report 2015

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