



# Sexually Transmitted Diseases in Yolo County, 2011-2015

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## EXECUTIVE SUMMARY

- Chlamydia cases continued to increase, with 815 cases occurring in Yolo County in 2015 compared to 727 in 2014.
- Syphilis (with 56 primary, secondary or latent stage cases) also increased substantially over 2014.
- In contrast, gonorrhea case counts remained stable with a similar number (n=189) in 2015 compared to 2014 (n=192).
- Chlamydia cases were concentrated in late teen and young adult age groups (15 to 19 and 20 to 24), whereas high rates for gonorrhea and syphilis occurred among young adults in their late twenties and early thirties.
- More than twice as many women were diagnosed with chlamydia as men. Most cases occurred in heterosexuals (94% of cases with sex partner data), whereas 30% of gonorrhea and 55% of syphilis cases were among men who have sex with men (MSM).
- Geographically, chlamydia rates increased between 2011 and 2015 in West Sacramento and Davis, and declined slightly in Winters and Woodland. The same trends were observed for gonorrhea. Sexually transmitted diseases (STD) rates were lower in rural areas of the county.

## CHLAMYDIA

The number of chlamydia cases in Yolo County continued its climb from 727 cases in 2014 to 815 in 2015, an increase of 12%. A similar percentage increase in case counts has also been observed statewide. The female-to-male ratio was 2.4:1, which is somewhat lower than the ratio of 3:1 in past years. The reduction in the female-to-male ratio likely reflects increased testing of sexually active males.

Rates were highest in the 15 to 19- and 20 to 24-year-old age groups (Table 1). Rates increased significantly in a linear trend between 2011 and 2015 for age groups 15 to 19, 20 to 24, 30 to 34, and persons aged 40 plus (Figure 1). These data show that chlamydia is not an STD that affects only teens and young adults.

Table 1. Chlamydia Cases per 100,000 Persons by Age, Yolo County 2015.

Age Group	Total Cases	Population Size (DOF)*	Rate per 100K	LCL†	UCL‡
15-19	188	18507	1016	876	1178
20-24	357	26593	1342	1207	1493
25-29	121	15026	805	671	966
30-34	75	14427	520	408	660
35-39	24	14076	171	139	208
40+	47	84869	55	40	74
Unknown/masked	3				
<b>County</b>	<b>815</b>	<b>185284</b>	<b>440</b>	<b>410</b>	<b>472</b>

\*Department of Finance (California)

†95% lower confidence limit

‡95% upper confidence limit

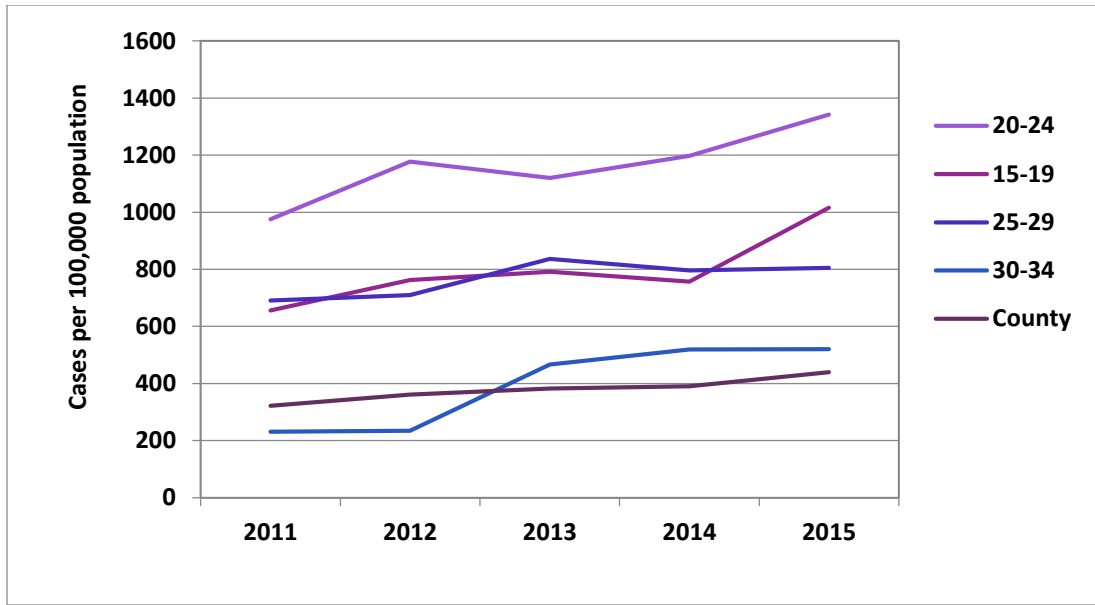


Figure 1. Trends in Yolo County Chlamydia Rates by Age, 2011-2015.

The highest rate by race-ethnicity was found among Black persons (1001 cases per 100,000), although the rate for Black persons has stabilized since 2012 (Table 2 and Figure 2). The case rate for Hispanics in 2015 was about twice that of Non-Hispanic (NH) White persons (502 vs. 283 per 100,000, respectively). Significantly increasing linear trends in the rates were noted for Asians/Pacific Islanders, NH-Whites and Hispanics (Figure 2) since 2011.

Table 2. Chlamydia Rates per 100,000 Persons aged 15+ by Race-Ethnicity, Yolo County, 2011-2015.

Race/Ethnicity	2011	2012	2013	2014	2015
American Indian/Alaska Native	219	871	213	211	818
Asian/Pacific Islander	117	174	163	166	267
Black	644	1049	943	919	1001
Hispanic	303	421	460	471	502
Other/multi	351	638	661	389	481
White	139	189	179	199	283
<b>County</b>	<b>339</b>	<b>352</b>	<b>412</b>	<b>418</b>	<b>458</b>

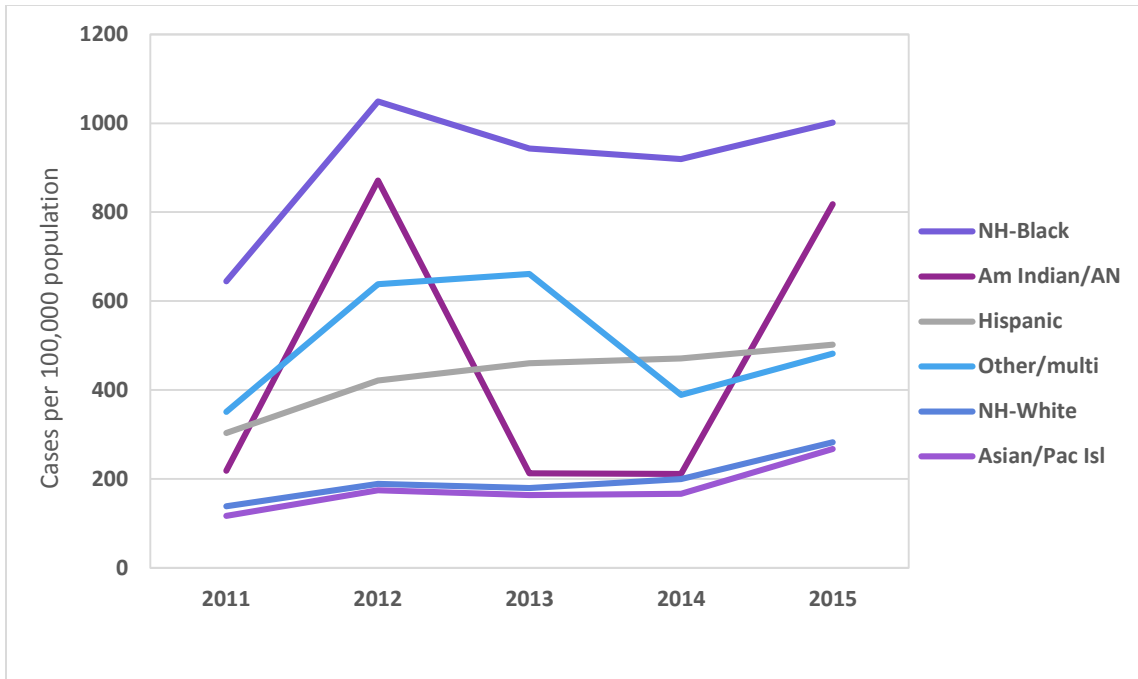


Figure 2. Trends in Yolo County Chlamydia Rates by Race-Ethnicity, 2011-2015.

Chlamydia rates increased significantly in the cities of West Sacramento and Woodland between 2011 and 2015. However, the linear trend in Woodland tapered off in 2015 (Figure 3). A breakdown by census tract shows specific areas in West Sacramento and Woodland with the highest rates (Figure 4).

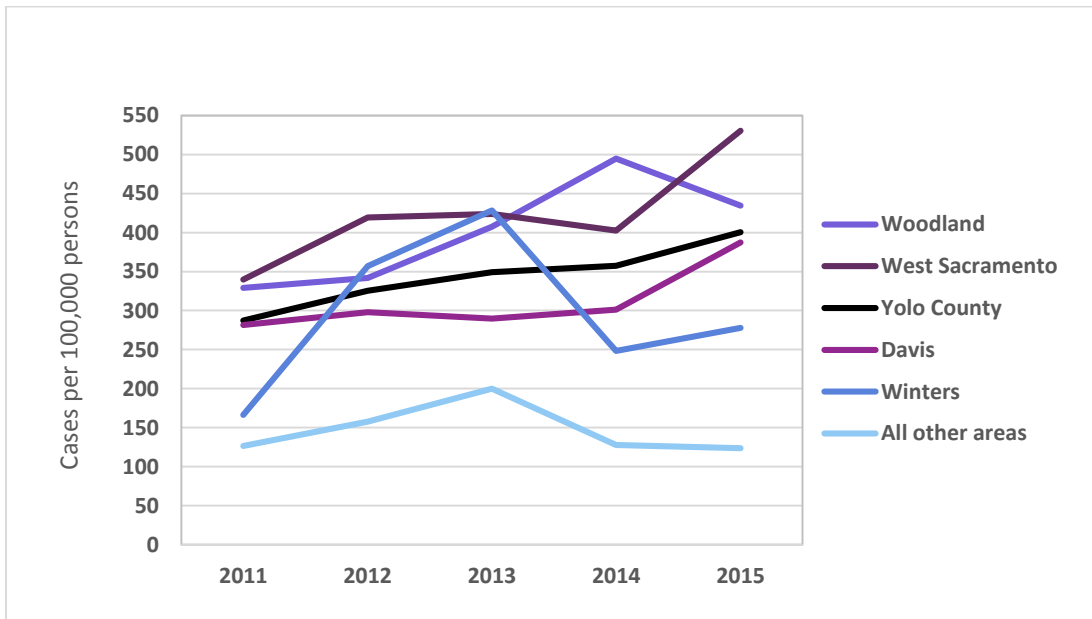


Figure 3. Trends in Chlamydia Rates by Yolo County City, 2011-2015.

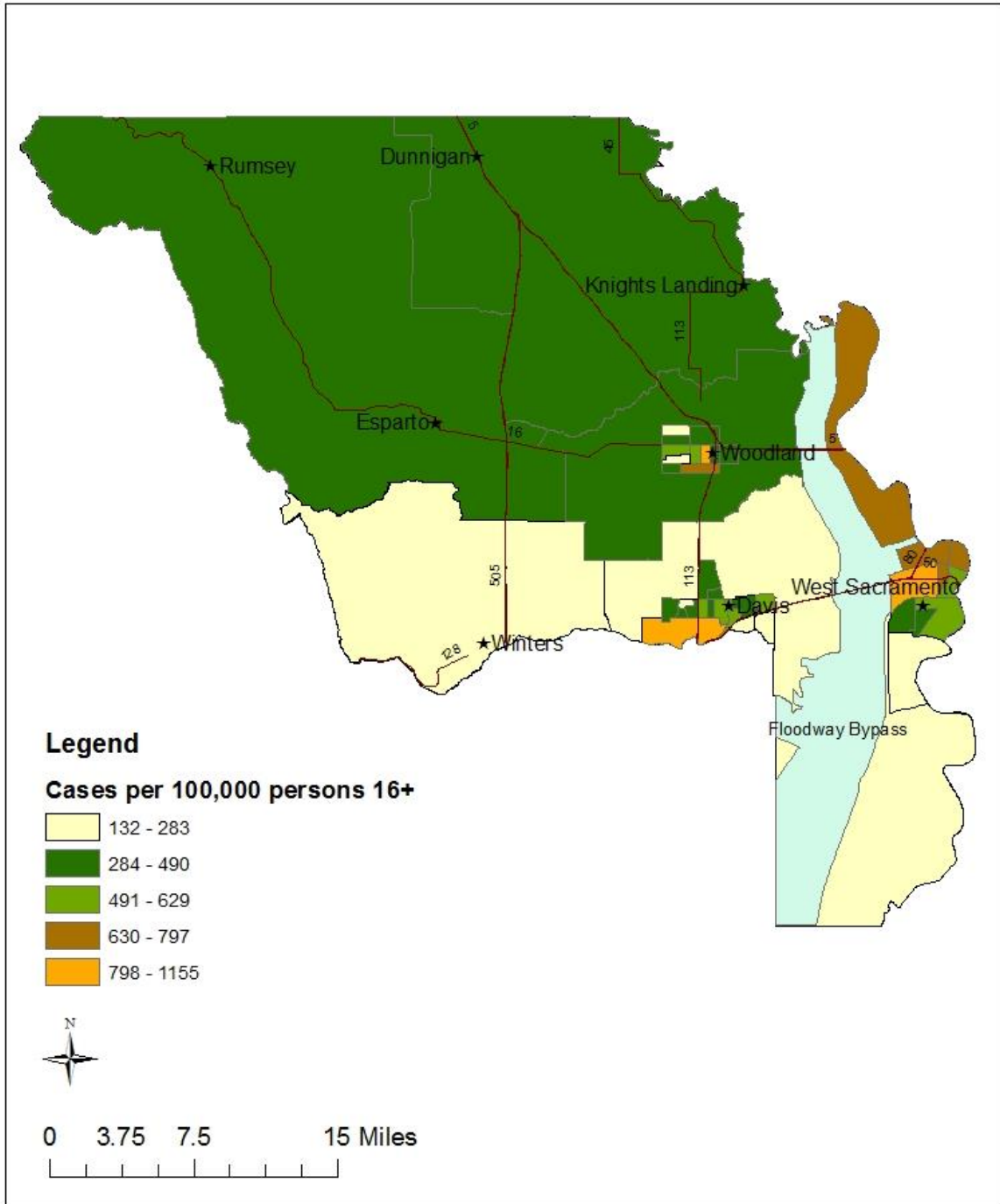


Figure 4. Chlamydia Rates by Census Tract, 2015.

## GONORRHEA

The number of gonorrhea cases (n=189) remained about the same as 2014. The female-to-male ratio was 0.7:1, reflecting the higher proportion of males with gonorrhea compared to chlamydia. Of those cases with sex partner data, about 30% occurred in MSM.

Rates were highest in the age groups 20 to 24, 25 to 29 and 30 to 34 (Table 4). Rates increased significantly in a linear trend between 2011 and 2015 for all age groups (Figure 5), although there was a drop in the case rate for 25 to 29-year-olds in 2015. The year 2015 is the only year in which the overall number of cases did not increase.

Table 4. Gonorrhea Cases per 100,000 Persons by Age, Yolo County 2015.

Age Group	2015 Cases	Population Size (DOF)*	Rate per 100,000	LCL†	UCL‡
15-19	30	18507	162	109	232
20-24	60	26593	226	174	293
25-29	34	15026	226	158	315
30-34	29	14427	201	136	287
35-39	13	14076	92	49	158
40+	23	84869	27	17	41
<b>County</b>	<b>189</b>	<b>173498</b>	<b>109</b>	<b>94</b>	<b>126</b>

\*Department of Finance (California)

†95% lower confidence limit

‡95% upper confidence limit

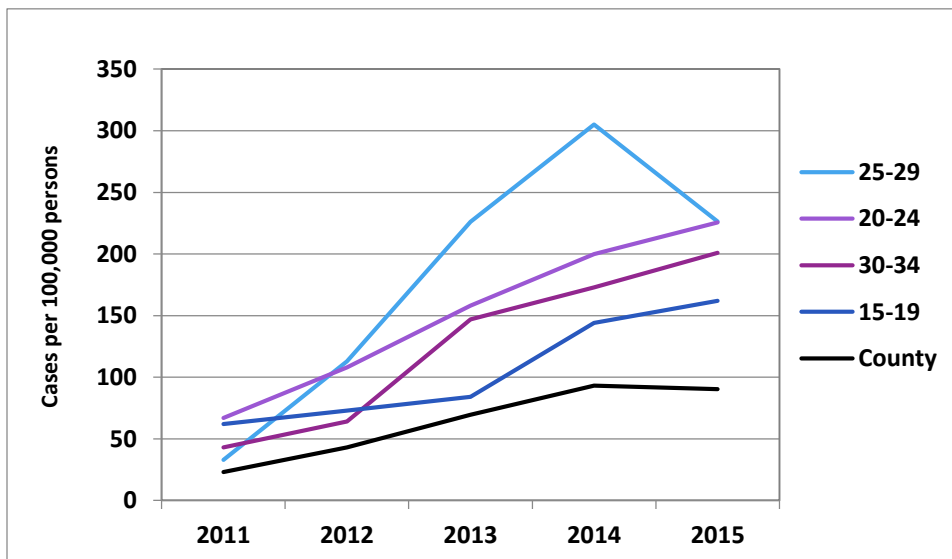


Figure 5. Trends in Yolo County Gonorrhea Rates by Age, 2011-2015.



Gonorrhea rates have significantly increased among Asian, Black, Hispanic and NH-White persons, i.e., in almost every racial or ethnic group (Table 5 and Figure 6). American Indian, Black and Hispanic persons had the highest rates, with the rate for Black persons being almost six times higher than that for NH-White persons.

Table 5. Gonorrhea Rates per 100,000 Persons Aged 15+ by Race-Ethnicity, Yolo County, 2011-2015.

Race-Ethnicity	2011	2012	2013	2014	2015
American Indian/Alaska Native	0	0	213	211	102
Asian/Pac Islander	8	8	20	16	52
Black	23	306	205	430	408
Hispanic	22	33	84	93	107
Other/multirace	22	43	140	97	93
White	14	44	58	71	71
<b>Yolo County</b>	<b>27</b>	<b>52</b>	<b>84</b>	<b>111</b>	<b>106</b>

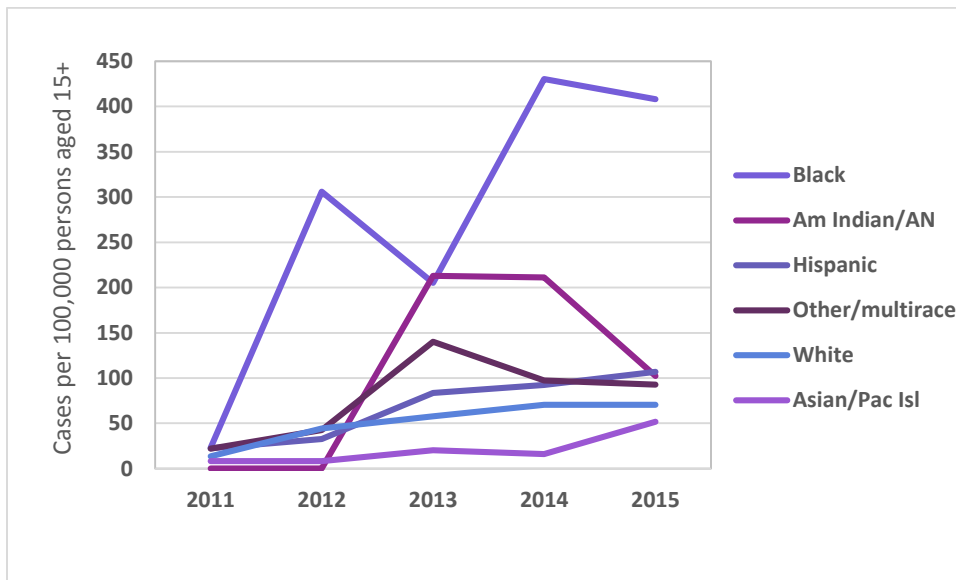


Figure 6. Trends in Yolo County Gonorrhea Rates by Race-Ethnicity, 2011-2015.

Compared to 2014, the gonorrhea rate per 100,000 persons increased in the cities of Davis and West Sacramento) (Figure 7), whereas it declined in Woodland and rural communities in the western and southern areas of the county. There was an increasing linear trend for the cities of Davis, West Sacramento and Woodland from 2011-2015, despite a decline of 34% in the rate for Woodland in 2015 compared to 2014.

Figure 8 shows (shaded in orange) the census tracts in Davis, West Sacramento and Woodland with the highest gonorrhea rates.

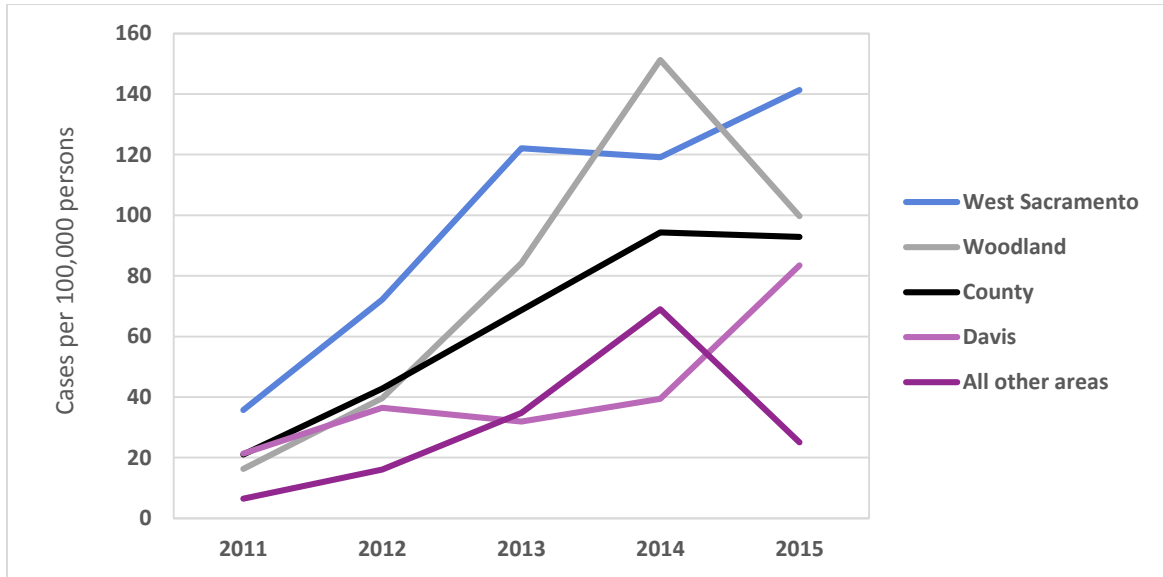


Figure 7. Trends in Gonorrhea Rates by Yolo County City, 2011-2015.

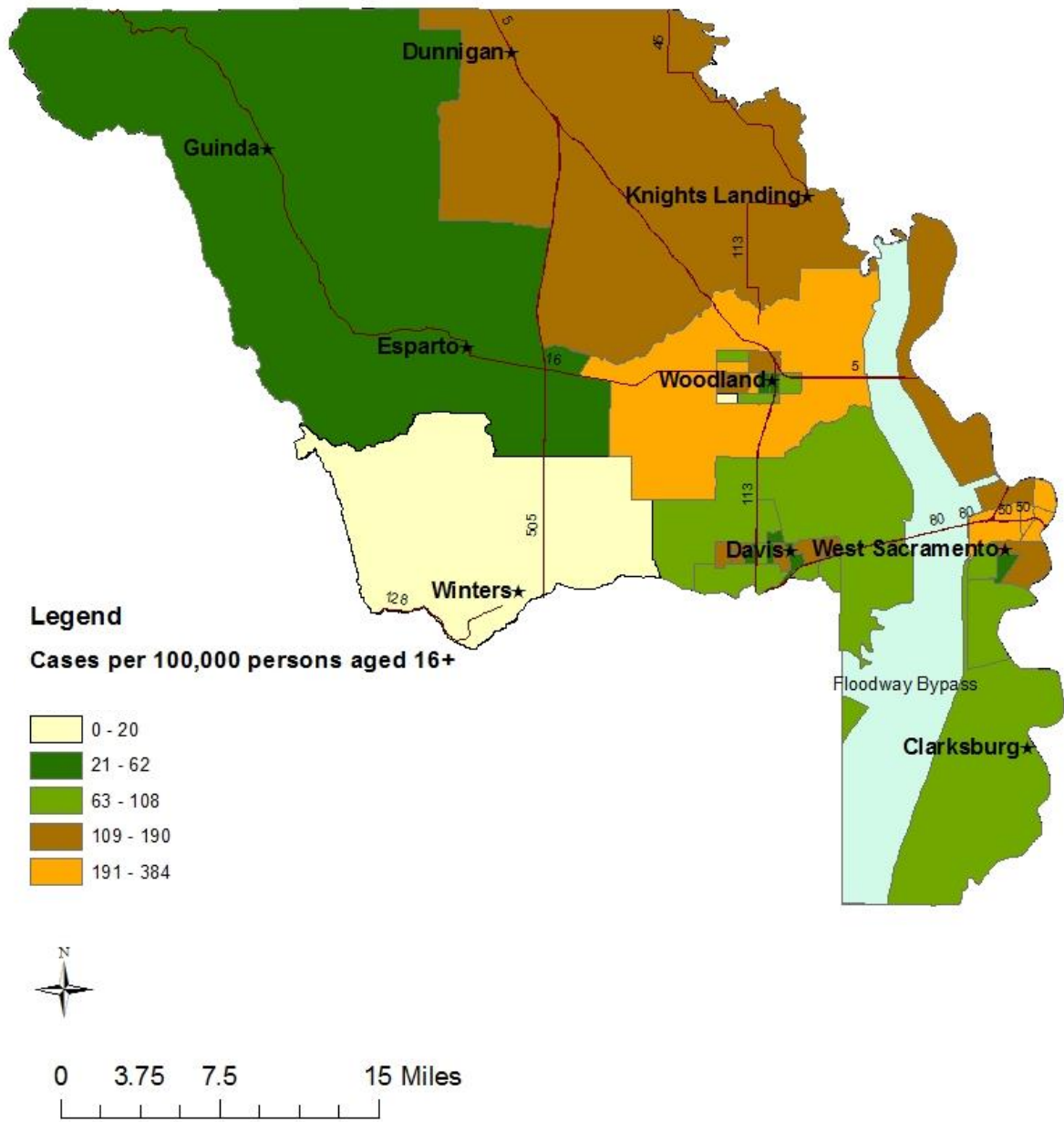


Figure 8. Gonorrhea Rates by Census Tract, 2015.

## SYPHILIS

Syphilis cases, excluding reactors, increased by 65% in 2015 (n=56 cases) compared to 2014 (n=34 cases), shown in Tables 6 and 7. Over half (55%) of the cases with sex partner data in 2015 were among MSM.

Table 6. Syphilis Case Classification, 2015.

Classification	Count (2015)
Syphilis (Early Latent)	11
Syphilis (Late Latent)	2
Syphilis (Latent, Unknown Duration)	22
Syphilis (Primary)	6
Syphilis (Secondary)	15
Syphilis Stage Unknown/Reactor*	30
<b>Total</b>	<b>86</b>

\*Rates not calculated for reactors, persons who were previously infected.

Table 7. Syphilis Cases by Year, Yolo County 2011-2015.

Year	Cases	Population Size	Rate per 100,000
2011	27	202630	13.3
2012	28	204314	13.7
2013	18	205688	8.8
2014	34	207312	16.4
2015	56	209108	26.8

Syphilis rates were highest in 25 to 29-year-olds and 30 to 34-year-olds (Table 8).

Table 8. Syphilis Rates per 100,000 Persons by Age Group, Yolo County 2015.

Age Group	Cases	Population Size	Rate per 100,000
15-24	12	45100	26.6
25-29	11	15026	73.2
30-34	7	14427	48.5
35-44	6	26305	22.8
45+	20	72640	27.5
<b>County</b>	<b>56</b>	<b>173498</b>	<b>32.3</b>

Persons of Black or other races had the highest syphilis rates and Asians the lowest (Table 9).

Table 9. Syphilis Cases per 100,000 Persons Aged 15+ by Race-Ethnicity, Yolo County 2011-15.

<b>Race-Ethnicity</b>	<b>2011-15</b>	<b>Population Size (5 years)</b>	<b>Rate per 100,000</b>
American Indian	1	5598	17.9
Asian	12	136498	8.8
Black	15	28863	52.0
Hispanic	45	315498	14.3
Other/multi	9	35490	25.4
White	44	507194	8.7
Unknown	37		
<b>County</b>	<b>163</b>	<b>1029141</b>	<b>15.8</b>