

# Chronic Hepatitis C, California, 2016

## ❖ Chronic Hepatitis C in California

- Cases and Rates of Newly Reported Cases (including Cases in State Prisons), 1994-2016
- Cases and Rates of Newly Reported Cases by Gender and Age, and by Race, 2014-2016
- Cases and Rates of Newly Reported Non-Incarcerated Cases by Local Health Jurisdiction and Incarcerated Cases in State Prisons, 2014-2016

## ❖ Chronic Hepatitis C in California State Prisons

- Cases and Rates of Newly Reported Cases in State Prisons, 1994-2016
- Cases and Rates of Newly Reported Cases by Age, and by Race, 2014-2016

# Chronic Hepatitis C - Cases and Rates of Newly Reported Cases\*, California, 1994–2016\*\*

Year	N Total	Rate	N Confirmed	N Probable
1994	1,123	3.6	1,123	0
1995	3,819	12.0	3,819	0
1996	5,291	16.6	5,290	1
1997	10,939	33.7	10,939	0
1998	17,176	52.3	17,176	0
1999	33,576	100.5	33,576	0
2000	37,466	110.2	37,466	0
2001	36,198	104.9	36,198	0
2002	32,377	92.7	32,377	0
2003	28,490	80.5	28,489	1
2004	31,938	89.3	31,938	0
2005	22,513	62.6	22,513	0
2006	28,014	77.3	28,014	0
2007	42,532	116.4	41,774	758
2008	48,173	130.7	47,567	606
2009	41,393	111.6	40,742	651
2010	34,688	92.9	34,646	42
2011	30,687	81.5	30,521	166
2012	23,967	63.0	23,259	708
2013	23,154	60.3	22,850	304
2014	33,298	86.0	32,689	609
2015	35,162	90.0	33,740	1,422
2016	38,656	98.2	26,963	11,693

\* Including cases in state prisons.

\*\* Cases with a report date of December 31, 2016 or earlier, and reported to California Department of Public Health as of June 30, 2017.

Notes: • Rates are per 100,000 population.

- A total of 640,630 confirmed and probable chronic hepatitis C infections were reported from 1994-2016. This does not represent the total number of people living with chronic hepatitis C in California. Additional analysis is needed to determine how many reported chronic hepatitis C cases are currently living.
- Probable and confirmed classifications are based on the Council of State and Territorial Epidemiologists (CSTE) case definition current at the year of report.

Source: California Department of Public Health, Sexually Transmitted Diseases (STD) Control Branch, Office of Viral Hepatitis Prevention

# Chronic Hepatitis C - Cases and Rates of Newly Reported Cases by Gender and Age, and by Race, California, 2014-2016

TOTAL	California Chronic Hepatitis C						Change in Rate from 2014 to 2016 <sup>4</sup>
	2014		2015		2016		
	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	
	33,298	86.0	35,162	90.0	38,656	98.2	
							14% ↑

BY GENDER & AGE	California Chronic Hepatitis C						Change in Rate from 2014 to 2016 <sup>4</sup>
	2014		2015		2016		
	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	
Female Total	11,591	59.5	12,305	62.7	14,164	71.6	20% †
Ages 0-14	72	1.9	64	1.7	82	2.2	16%
15-19	133	9.6	139	10.1	212	15.5	61% †
20-29	1,222	46.1	1,362	51.4	1,972	73.8	60% †
30-39	1,244	47.5	1,404	53.5	2,001	76.2	60% †
40-49	1,691	65.2	1,607	62.2	1,767	68.6	5%
50-59	3,671	141.2	3,740	143.2	3,698	141.9	0%
60+	3,515	90.3	3,953	97.7	4,386	104.6	16% †
Not Specified	43	—	36	—	46	—	—
Male Total	21,581	112.0	22,692	116.8	24,202	123.6	10% †
Ages 0-14	86	2.2	71	1.8	106	2.7	23%
15-19	150	10.4	155	10.7	232	16.2	56% †
20-29	2,721	94.9	3,201	111.5	3,964	137.0	44% †
30-39	2,976	110.2	3,149	115.8	3,950	144.5	31% †
40-49	3,572	136.9	3,424	131.9	3,405	131.4	-4%
50-59	6,383	253.7	6,327	249.5	5,966	235.0	-7% †
60+	5,601	174.2	6,267	186.9	6,451	185.3	6% †
Not Specified	92	—	98	—	128	—	—
Gender Not Specified	114	—	163	—	283	—	—

YOUNG ADULT & ADOLESCENT (AGES 15-29)	California Chronic Hepatitis C						Change in Rate from 2014 to 2016 <sup>4</sup>
	2014		2015		2016		
	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	Cases <sup>2</sup>	Rate <sup>1</sup>	
Total	4,226	50.7	4,857	58.3	6,380	76.3	50% ↑

BY RACE/ETHNICITY	California Chronic Hepatitis C					
	2014		2015		2016	
	Cases	Percent <sup>3</sup>	Cases	Percent <sup>3</sup>	Cases	Percent <sup>3</sup>
American Indian/Alaska Native	135	1%	138	1%	146	1%
Asian/Pacific Islander	355	3%	345	3%	781	5%
African American/Black	1,114	11%	1,304	11%	1,426	9%
Hispanic/Latino	2,689	26%	2,462	21%	3,685	24%
White	5,328	52%	6,260	54%	7,219	48%
Other/Multi	565	6%	980	9%	1,796	12%
Unknown	23,112	69%	23,673	67%	23,603	61%
	California Population					
	2014		2015		2016	
	Number	Percent <sup>3</sup>	Number	Percent <sup>3</sup>	Number	Percent <sup>3</sup>
American Indian/Alaska Native	165,401	0%	165,508	0%	165,634	0%
Asian/Pacific Islander	5,177,252	13%	5,221,475	13%	5,256,234	13%
African American/Black	2,233,425	6%	2,247,328	6%	2,260,738	6%
Hispanic/Latino	15,007,149	39%	15,214,091	39%	15,412,728	39%
White	15,110,702	39%	15,132,564	39%	15,147,499	38%
Other/Multi	1,045,796	3%	1,079,243	3%	1,112,098	3%

<sup>1</sup> Overall county rates were calculated using mid-year (July 1) California Department of Finance county population estimates for each year.

<sup>2</sup> Case counts for California include transgender chronic hepatitis C cases. In California, 21 transgender chronic hepatitis C cases were newly reported from 2014-2016. Rates were not calculated for transgender persons because information on transgender identity was not consistently collected during 2014-2016.

<sup>3</sup> Percent calculations for race/ethnicity exclude individuals for whom age or race/ethnicity was "Unknown" from the denominator. Caution should be used when interpreting percentages by race/ethnicity, since race/ethnicity information was not reported for the majority of chronic viral hepatitis cases during 2014-2016.

<sup>4</sup> Positive percent changes in rates of newly reported chronic hepatitis C from 2014-2016 that exceed the statewide change in rate are highlighted red.

Notes: • Includes cases of chronic hepatitis C infection reported to California Department of Public Health as *confirmed* or *probable* based on the Council of State and Territorial Epidemiologists (CSTE) case definition current during the year of case report.

• Rates are per 100,000 population.

• Dash (—) indicates when a rate or percentage was not calculated. Rates by race/ethnicity were not calculated since race/ethnicity was not known for the majority of cases.

• Dagger (†) indicates the rate in 2016 is statistically different from the rate in 2014 with a 95% confidence limit.

• These data do NOT measure prevalence or incidence of chronic viral hepatitis infections in California due to the asymptomatic nature of chronic hepatitis C infections, varied levels of completeness of surveillance reporting, and because it remains unknown how many of the cases described in this report are currently living.

Source: California Department of Public Health, Sexually Transmitted Diseases (STD) Control Branch, Office of Viral Hepatitis Prevention

**Chronic Hepatitis C - Cases and Rates of Newly Reported Non-Incarcerated Cases by Local Health Jurisdiction and Incarcerated Cases in State Prisons, California, 2014-2016**

Local Health Jurisdiction (LHJ)	2014		2015		2016		Change in rate from 2014-2016	Rank in 2016
	N	Rate	N	Rate	N	Rate		
CALIFORNIA	33,298	86.0	35,162	90.0	38,656	98.2	14% †	–
State Prisons	3,399	2,818.2	3,129	2,716.1	3,459	2,943.7	4%	–
Lake	73	112.0	100	153.4	139	213.4	91% †	1
Del Norte	41	167.9	46	188.7	48	193.8	15%	2
Humboldt	272	201.9	325	240.6	246	180.8	-10%	3
San Francisco	1,112	130.3	1,115	129.2	1,360	156.1	20% †	4
Lassen	56	237.6	53	224.8	35	151.2	-36%	5
Shasta	207	115.5	188	105.2	269	150.9	31% †	6
Tuolumne	53	106.0	63	125.5	75	150.2	42%	7
Mariposa	32	176.5	28	154.8	26	144.0	-18%	8
Mendocino	159	179.6	108	122.1	128	143.8	-20%	9
Yuba	72	96.0	83	109.8	104	136.6	42%	10
Trinity	22	161.6	17	125.4	18	133.5	-17%	11
Siskiyou	70	156.9	67	150.6	59	133.0	-15%	12
Calaveras	39	86.6	34	75.7	55	122.8	42%	13
Alameda	346	21.6	1,265	78.1	1,989	121.4	462% †	14
Butte	403	180.0	223	99.4	269	119.5	-34% †	15
Sacramento	1,185	80.7	1,971	132.7	1,758	117.1	45% †	16
Berkeley *	77	65.0	140	116.8	139	115.2	77% †	17
Inyo	10	–	13	69.7	21	112.6	–	18
Sonoma	505	101.4	457	91.2	564	111.9	10%	19
Stanislaus	418	78.6	460	85.4	588	107.9	37% †	20
Solano	185	44.1	470	111.1	446	104.3	137% †	21
Santa Cruz	305	112.3	319	116.1	288	104.3	-7%	22
Nevada	69	70.2	77	78.4	101	102.5	46%	23
Amador	33	95.7	33	96.0	35	101.8	6%	24
Kern	834	97.3	830	96.0	880	101.1	4%	25
Plumas	30	152.3	18	91.9	19	97.5	-36%	26
Tehama	82	128.4	43	67.2	62	96.7	-25%	27
Los Angeles	9,944	98.2	9,434	92.7	9,831	96.1	-2%	28
Pasadena *	109	77.5	118	83.8	136	96.0	24%	29
Napa	117	83.2	122	86.2	135	94.9	14%	30
Long Beach *	509	106.2	460	95.6	454	94.2	-11%	31
Marin	234	91.0	269	104.1	242	93.4	3%	32
Sutter	109	112.3	86	88.1	89	90.6	-19%	33
Santa Barbara	302	68.6	359	80.7	400	89.2	30% †	34
Imperial	157	89.0	145	81.4	156	86.8	-2%	35
Orange	1,561	49.7	1,993	63.0	2,656	83.5	68% †	36
Merced	224	83.7	174	64.5	226	82.9	-1%	37
San Bernardino	1,469	69.7	1,355	63.7	1,691	78.9	13% †	38
Contra Costa	766	69.5	778	69.7	890	78.8	13%	39
Fresno	574	59.4	601	61.5	752	76.3	28% †	40
San Luis Obispo	229	84.3	185	67.8	208	75.8	-10%	41
Glenn	15	52.0	16	55.2	22	75.7	46%	42
San Joaquin	410	57.4	546	75.3	548	74.4	30% †	43
Yolo	147	70.1	205	96.4	160	73.8	5%	44
Riverside	1,392	60.6	1,363	58.8	1,700	72.3	19% †	45
San Diego	1,823	56.2	2,052	62.7	2,318	70.3	25% †	46
Santa Clara	1,405	74.3	989	51.6	1,342	69.5	-6%	47
Ventura	377	44.5	423	49.6	589	68.9	55% †	48
Madera	97	65.9	99	66.7	100	66.9	2%	49
Tulare	271	58.9	257	55.5	306	65.4	11%	50
Placer	269	73.1	256	69.1	230	61.2	-16%	51
San Benito	33	57.7	17	29.5	34	58.6	2%	52
El Dorado	121	66.3	139	75.9	107	58.1	-12%	53
Kings	83	61.1	82	59.8	76	55.4	-9%	54
San Mateo	816	107.9	1,304	170.6	390	50.8	-53% †	55
Monterey	217	51.5	246	57.6	219	50.7	-2%	56
Alpine	0	–	0	–	0	–	–	–
Colusa	5	–	11	49.4	10	–	–	–
Modoc	9	–	17	178.8	7	–	–	–
Mono	8	–	11	79.6	6	–	–	–
Sierra	6	–	2	–	4	–	–	–

\* City Health Department numbers are included in their respective county totals.

Notes:

- Rates are per 100,000 population.
- State prison cases were removed from local health jurisdiction totals to be included as a separate category. Rates for state prisons were calculated using the total state prison population.
- Dash (–) indicates the rate was not calculated because the local health jurisdiction reported 10 or fewer cases and the relative standard error for the rate is 30% or more. Rates for these local health jurisdictions are considered to be too statistically unreliable for presentation.
- Dagger (†) indicates the rate in 2016 is statistically different from the rate in 2014 with a 95% confidence limit.
- Positive percent changes in rates of newly reported chronic hepatitis C from 2014-2016 that exceed the statewide change in rate are highlighted red. Caution should be used when interpreting county-specific rates of newly reported cases for counties of population size fewer than 100,000; rates fluctuate widely due to their small population size.

Source: California Department of Public Health, Sexually Transmitted Diseases (STD) Control Branch, Office of Viral Hepatitis Prevention

**Chronic Hepatitis C - Cases and Rates of Newly Reported Cases in State Prisons, California, 1994–2016\***

Year	N Total	Rate	N Confirmed	N Probable
1994	1	0.8	1	0
1995	32	25.3	32	0
1996	124	91.0	124	0
1997	720	486.9	720	0
1998	1,716	1,130.0	1,716	0
1999	2,929	1,883.6	2,929	0
2000	3,404	2,195.4	3,404	0
2001	4,146	2,684.0	4,146	0
2002	3,536	2,321.4	3,536	0
2003	2,716	1,757.2	2,716	0
2004	2,936	1,849.2	2,936	0
2005	2,714	1,700.5	2,714	0
2006	3,631	2,167.5	3,631	0
2007	5,968	3,577.8	5,966	2
2008	7,736	4,795.8	7,734	2
2009	6,322	4,062.9	6,314	8
2010	5,373	3,509.9	5,373	0
2011	4,122	2,744.3	4,120	2
2012	2,756	2,197.7	2,719	37
2013	3,139	2,545.0	3,126	13
2014	3,399	2,818.2	3,384	15
2015	3,129	2,716.1	3,098	31
2016	3,459	2,943.7	3,045	414

\*Cases with a report date of December 31, 2016 or earlier, and reported to California Department of Public Health as of June 30, 2017.

Notes: • Rates are per 100,000 population.

• A total of 74,008 *confirmed* and *probable* chronic hepatitis C infections in state prisons were reported from 1994-2016. This does not represent the total number of people in California state prisons living with chronic hepatitis C. Additional analysis is needed to determine how many reported chronic hepatitis C cases are currently living and are currently incarcerated.

• Probable and confirmed classifications are based on the Council of State and Territorial Epidemiologists (CSTE) case definition current at the year of report.

Source: California Department of Public Health, Sexually Transmitted Diseases (STD) Control Branch, Office of Viral Hepatitis Prevention

### Chronic Hepatitis C - Cases and Rates of Newly Reported Cases in State Prisons by Age, and by Race, California, 2014-2016

TOTAL	Prison Chronic Hepatitis C						Change in Rate from 2014 to 2016
	2014		2015		2016		
	Cases <sup>1</sup>	Reporting Rate <sup>2</sup>	Cases <sup>1</sup>	Reporting Rate <sup>2</sup>	Cases <sup>1</sup>	Reporting Rate <sup>2</sup>	
	3,399	2818.2	3,129	2716.1	3,459	2943.7	
							4%

BY AGE		Prison Chronic Hepatitis C						Change in Rate from 2014 to 2016 <sup>3</sup>
		2014		2015		2016		
		Cases	Reporting Rate <sup>2</sup>	Cases	Reporting Rate <sup>2</sup>	Cases	Reporting Rate <sup>2</sup>	
Ages	15-29	1,192	3,752.4	1,119	3,700.8	1,400	4,564.4	22% †
	30-39	1,033	3,003.3	987	2,983.2	1,112	3,266.5	9%
	40-49	601	2,182.6	535	2,117.6	463	1,837.6	-16% †
	50+	558	2,073.7	485	1,822.3	479	1,735.9	-16% †

BY RACE/ETHNICITY	Prison Chronic Hepatitis C		California Prison Population	
	2014 - 2016		2014 - 2016	
	Cases	Percent <sup>4</sup>	Percent <sup>4</sup>	
American Indian/Alaska Native	135	2%	1%	
Asian/Pacific Islander	53	1%	1%	
African American/Black	489	6%	29%	
Hispanic/Latino	4,591	54%	41%	
White	3,138	37%	23%	
Other/Multi	91	1%	5%	
Unknown	1,490	15%	—	

<sup>1</sup> Case counts for the California state prison system include nine cases with age less than 15 and 14 cases with demographic data not specified during 2014-2016.

<sup>2</sup> Rates of newly reported chronic hepatitis C cases among persons incarcerated in state prisons were calculated using data from the California Department of Corrections and Rehabilitation (CDCR). Prison census data are stratified by specific demographic groups (e.g., age and race) from CDCR and include persons incarcerated in state prison institutions, camps, and state hospitals. These data do not include cases reported in local jails, federal prisons, or immigration detention centers.

<sup>3</sup> Positive percent changes in rates of newly reported chronic hepatitis C from 2014-2016 that exceed change in rate for all cases reported from prison are highlighted red.

<sup>4</sup> Percent calculations for race/ethnicity exclude individuals for whom age or race/ethnicity was "Unknown" from the denominator. Percentages are shown instead of rates due to small population sizes and to enable comparisons with statewide percentages.

Notes: • Rates are per 100,000 population.

• Includes cases of chronic hepatitis C infection reported to California Department of Public Health as confirmed or probable based on the Council of State and Territorial Epidemiologists (CSTE) case definition current during the year of case report.

• Dash (—) indicates when a rate or percentage was not calculated.

• Dagger (†) indicates the rate in 2016 is statistically different from the rate in 2014 with a 95% confidence limit.

• These data do NOT measure prevalence or incidence of chronic viral hepatitis infections in California state prisons due to the asymptomatic nature of chronic hepatitis C infections, varied testing practices, and because it remains unknown how many of the cases described in this report are currently living and incarcerated in a state prison.

Source: California Department of Public Health, Sexually Transmitted Diseases (STD) Control Branch, Office of Viral Hepatitis Prevention