
Chronic Disease: Fact Sheet
Stroke

Sonoma County

Prepared by:

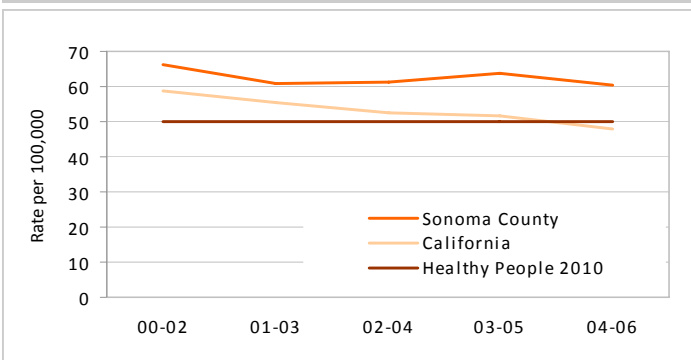
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January 2009

Stroke

Deaths

Figure 1—Stroke death rate*, 3 year moving average, Sonoma County and California, 2000-2006

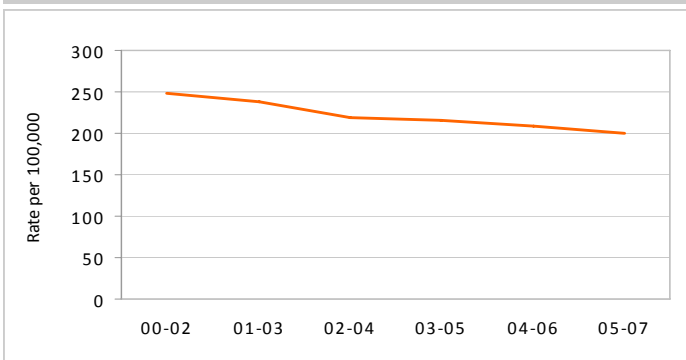


*Rate is age adjusted

Source: California Dept of Public Health, County Health Profiles, 2004-2006

Hospitalizations

Figure 2—Stroke hospitalization rate*, 3 year moving average, Sonoma County, 2000-2007



*Rate is age-adjusted

Source: CA OSHPD, non-public hospital discharge data 2000-2007

Table 1—Stroke death rates¹ by gender, race/ethnicity, age category and cause, Sonoma County 2004-2006

	Deaths		
	Annual Average	Percent	Age-adjusted Rate ²
Total	322	100%	60.6
Gender			
Male	117	36.2%	57.6
Female	206	63.8%	61.3
Race/ethnicity			
White, non-Hispanic	298	92.5%	63.0
Hispanic	10	3.2%	29.7
Asian/Pacific Islander	7	2.1%	45.1
African American	<5	*	*
American Indian/Alaska Native	<5	*	*
Age category³			
0-9	0	0%	0
10-19	<5	*	*
20-24	0	0%	0
25-34	<5	*	*
35-44	<5	*	*
45-54	8	2.4%	10.1
55-64	12	3.7%	20.9
65-74	31	9.6%	111.7
75-84	100	30.9%	468.2
85+	168	52.0%	1798.0
Cause			
Subarachnoid hemorrhage (ICD10 I60)	9	2.8%	1.7
Intracerebral & other cranial hemorrhage (ICD10 I61-I62)	43	13.4%	8.2
Cerebral infarction (ICD10 I63)	23	7.1%	4.4
Stroke, not specified as hemorrhage or infarction (ICD10 I64)	167	51.9%	31.1
Other cerebrovascular disease and their sequelae (ICD10 I67, I69)	80	24.8%	15.0

¹ Cause of death ICD10 I60-I69

² Rates are per 100,000

³ Rates are age-specific per 100,000

* Rates are unstable due to small numbers

Source: California Dept of Public Health, Death Statistical Master files, 2004-2006; CA Dept of Finance, population data with race and sex detail, 2004-2006, July 2007

Table 2—Stroke hospitalizations¹ by gender, race/ethnicity, age category and cause, Sonoma County 2005-2007

	Hospitalizations		
	Annual Average	Percent	Age-adjusted Rate ²
Total	1026	100%	200.6
Gender			
Male	489	47.7%	226.2
Female	537	52.3%	180.7
Race/ethnicity			
White, non-Hispanic	884	86.2%	200.7
Hispanic	65	6.3%	152.0
Asian/Pacific Islander	21	2.0%	109.9
African American	<20	*	*
American Indian/Alaska Native	<20	*	*
Age category³			
0-9	<20	*	*
10-19	<20	*	*
20-24	<20	*	*
25-34	<20	*	*
35-44	26	2.5%	40.2
45-54	76	7.4%	100.5
55-64	143	13.9%	236.0
65-74	187	18.2%	660.4
75-84	332	32.4%	1608.5
85+	245	23.9%	2603.4
Cause			
Subarachnoid hemorrhage (ICD9 430)	38	3.7%	7.5
Intracerebral & other cranial hemorrhage (ICD9 431-432)	134	13.1%	26.3
Occlusion/stenosis of precerebral arteries (ICD9 433)	168	16.4%	34.1
Occlusion of cerebral arteries (ICD9 434)	494	48.1%	95.4
Transient cerebral ischemia (ICD9 435)	97	9.5%	18.8
Other/ill-defined cerebrovascular disease (ICD9 436-437)	32	3.1%	6.3
Late effects of cerebrovascular disease (ICD 438)	63	6.1%	12.2

¹ Primary diagnosis ICD9 430-438 ² Rates are per 100,000

³ Rates are age-specific per 100,000 * Rates are unstable due to small numbers or have been masked due to confidentiality purposes

Source: CA OSHPD, non-public hospital discharge data 2005-2007; CA Dept of Finance, population data with race and sex detail, 2005-2007, Jul07

Stroke

Risk Factors

Table 3—Percent of adults who reported diagnoses or behaviors that put them at risk for stroke, Sonoma County 2005 and 2007

	Ever diagnosed with:				Risk behaviors			
	Heart disease ¹	High blood pressure ¹	High blood cholesterol ^{^2}	Diabetes mellitus ¹	Current smoker ¹	Overweight or obese (BMI ≥25) ¹	No moderate or vigorous physical activity ²	Eats less than 5 servings fruits/veggies a day ²
Sonoma County	6.2%	24.1%	23.4%	6.0%	13.1%	58.8%	62.4%	44.4%
California	6.3%	26.1%	22.1%	7.4%	14.8%	56.6%	68.6%	51.3%
Gender								
Male	8.6%	23.9%	20.5%	6.6%	15.4%	73.3%	63.0%	33.8%
Female	4.0%	24.0%	26.0%	5.5%	10.9%	48.8%	61.9%	54.6%
Age								
18-64 years	3.3%	3.3%	22.6%	4.1%	13.9%	60.7%	61.6%	44.7%
65+ years	21.6%	21.6%	27.1%	16.3%	8.4%	48.4%	66.6%	43.0%
Poverty level								
<199% FPL	5.7%	26.7%	30.3%	10.7%	20.3%	68.6%	67.1%	50.0%
200+ FPL	6.4%	23.1%	21.2%	4.7%	10.9%	56.1%	60.9%	46.6%
Education								
HS and less	5.1%	27.2%	24.1%	7.6%	18.9%	64.6%	73.2%	52.4%
Some college/AA	6.0%	25.9%	27.3%	4.6%	11.8%	57.1%	59.9%	38.5%
BA and higher	7.5%	19.4%	20.0%	5.4%	8.0%	53.9%	53.4%	40.5%

¹2005-2007 pooled data

²2005 data

[^]Of those who had blood cholesterol checked in past five years

Source: California Health Interview Survey, 2005 and 2007

Screening practices

Table 4—Percent of adults who responded that they had blood cholesterol checked in the past five years, Sonoma County 2005

	Percent
Sonoma County	83.2%
California	85.6%
Gender	
Male	81.4%
Female	84.9%
Age	
18-64 yrs	80.8%
65+ yrs	95.7%
Poverty level	
<199% FPL	81.4%
200+ FPL	83.7%
Education	
HS and less	82.8%
Some college/AA	87.3%
BA and higher	80.9%

Source: California Health Interview Survey, 2005

Highlights

- The stroke death rate decreased significantly for California from 2000-2002 to 2004-2006 but there was no change in the Sonoma County rate.
- For 2004-2006 the stroke death rate for Sonoma County was significantly higher than the rate for California.
- For 2004-2006 the stroke death rate was significantly higher for White, non-Hispanic residents of Sonoma County than for other race/ethnicities. Deaths from stroke were disproportionately high for White, non-Hispanics—93% of deaths but 85% of the population ≥45 years.
- The rate of stroke hospitalizations (as primary diagnosis) decreased significantly from 2000-2002 to 2005-2007.
- For 2005-2007 the stroke hospitalization rate was significantly higher for males than females of Sonoma County.
- In 2005 Sonoma County residents had lower rates of adults who reported eating less than five fruits or vegetables/day and having no moderate or vigorous physical activity than California.
- A higher proportion of older adults (65+ years) reported ever being diagnosed with high blood pressure or diabetes than adults 18-64 yrs.
- The proportion of adults with a high school (HS) or less education who reported being a current smoker was significantly higher than those with a BA or higher. Adults with a HS or less education had a higher rate of no moderate/vigorous physical activity than those with a BA or higher.
- The proportion of males who reported being overweight or obese was significantly higher than females. Also, adults who were 199% or less of the federal poverty level (FPL) had a significantly higher rate of (reported) overweight or obese than those 200% or higher than FPL. Those with a HS or less education also had significantly higher rates of (reported) overweight/obese than those with a BA or higher. Older adults were significantly less likely to report being overweight or obese than those 18-64 years.