

Atlas of Injuries

Among American Indians and Alaska Natives
in California
1991 - 2006

IHS **Injury Prevention**
Advocacy, Outreach and Results



Injuries among American Indians in California

1991-2006



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Injuries among American Indians in California (1991-2006)

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Injuries among American Indians in California

1991-2006

Executive Summary

Injuries (unintentional and intentional combined) are the leading cause of death among American Indians and Alaskan Natives (AI/AN) ages 1-44¹. Unintentional injury alone is the leading cause of death of AI/AN ages 5-44. Intentional injuries (self-inflicted and assault) are in the top 10 leading causes of death among AI/AN.

This atlas presents injury mortality and morbidity data from 1991 through 2006 for AI/AN in California. Major causes of injuries that are analyzed include: motor-vehicle injuries, assault/homicide, self-inflicted/suicide. Some injury cost data for California hospitalizations are also included.

From 1991 to 2006, injuries accounted for 2,457 (adjusted for racial misclassification) deaths of AI/AN and 12,130 hospitalizations of AI/AN in California. An analysis of these injuries revealed the following:

- Compared to all races, AI/AN have a higher fatality injury rate when adjusted for underreporting.
- Majority (~70%) of AI/AN fatal injuries were unintentional.
- AI/AN females (~26%) were more likely to be injured through falls when compared to AI/AN males.
- AI/AN males (~68%) were more likely to be injured through motor vehicle injuries when compared to AI/AN Females.
- Intentional injuries (assault/homicide and self-inflicted/suicide) were most prevalent among the 35-44 age group.
- Homicides/assault injuries were 11 times higher among AI/AN males when compared to female AI/AN.
- Self-inflicted poisoning injuries were higher among the female (~90%) AI/AN population when compared to male AI/AN.
- Injuries are the 3rd most expensive average cost per hospitalization when compared to other hospitalization causes.
- During the year 2004, unintentional injuries accounted for the majority of medical treatment cost (~81%), with only (~19%) spent on intentional injuries (assault and self-inflicted).
- Medical treatment cost for both fatal and non-fatal injuries among AI/AN increased 10 fold from 1991 to 2007.

Methods

What is a Rate?

A rate is defined as the number of events that happen during a period of time divided by the average (midpoint) population that is at risk. Rates are used to estimate the risk for a population over a period of time. In the calculations below, the total number of persons in the population at that time is considered the “person-time units.”

Calculating Injury Rates

Fatal or Nonfatal Injury Rate:

$$\frac{\text{Number of injuries (fatal or nonfatal) in county or state (YEAR(s))}}{\text{Total population in county or state (YEAR(s))}} * 100,000 = \text{Number of injury deaths or injury hospitalization per 100,000}$$

Example of a Specific Injury Fatality Rate:

$$\frac{\text{Number of Fatalities from burns injuries in county or state (YEAR(s))}}{\text{Total population in county or state (YEAR(s))}} * 100,000 = \text{Number of burn deaths per 100,000}$$

Definitions for Fatal and Non-fatal Injuries

Fatal Injury

A death certificate is issued as a result of an injury incident

Non-fatal Injury

A hospitalization is established as a result of an injury incident

Population At-Risk: State and County (1991-2006)

The analysis described in this injury atlas involves AI/AN in California over a sixteen-year period. The average population at risk for each year was calculated by using the actual counts for census years 1990 and 2000 and extrapolating the data evenly for the other years. Although the rate shown can be treated as the number of injuries per 100,000 people, it is a more accurate definition as the number of injuries per 100,000 persons per year.

Fatal (Mortality) Data:

Fatal injury data was compiled using the Web-based Injury Statistics Query and Reporting System (WISQARS) from the National Center for Injury Prevention, Control at the Center for Disease Control (CDC) and Prevention. For data prior to 1999, the International Classification of Disease (ICD)-9 codes were used to classify injuries. For injuries occurring in 1999 or later, ICD-10 codes were used to classify the injuries.

Comparison of ICD-9 and ICD-10 data

The CDC conducted a bridge-coding study in 2001 to assess the comparability of ICD-9 and ICD-10 codes². Results from the study indicate that self-inflicted, assault, and unintentional injuries, with exception of motor vehicles accidents and falls, were very similar or exactly comparable. A similar result was found in Canada's bridge-coding study for the comparability of ICD-9 and ICD-10 coding in 2005³.

Bridge-coding for Motor Vehicles Crashes

ICD-9 coding results in an assumption that if crashes involving vehicles are on a road or highway: resulting injuries are classified as a MV injury. The use of ICD-10 codes do not incorporate this assumption. Using ICD 10 coding, the above example would be categorized as "other land transport accident".

Bridge-coding for Falls

With ICD-9 coding: if the term "fracture" is listed on the death certificate without mention of an external cause, it would be classified as an "Accidental Fall" (E887). With ICD-10 coding, a fall is not assumed to be the source of the unspecified fracture and the example above would be coded as a "unspecified factor" (X59).

Nonfatal (Morbidity) Data:

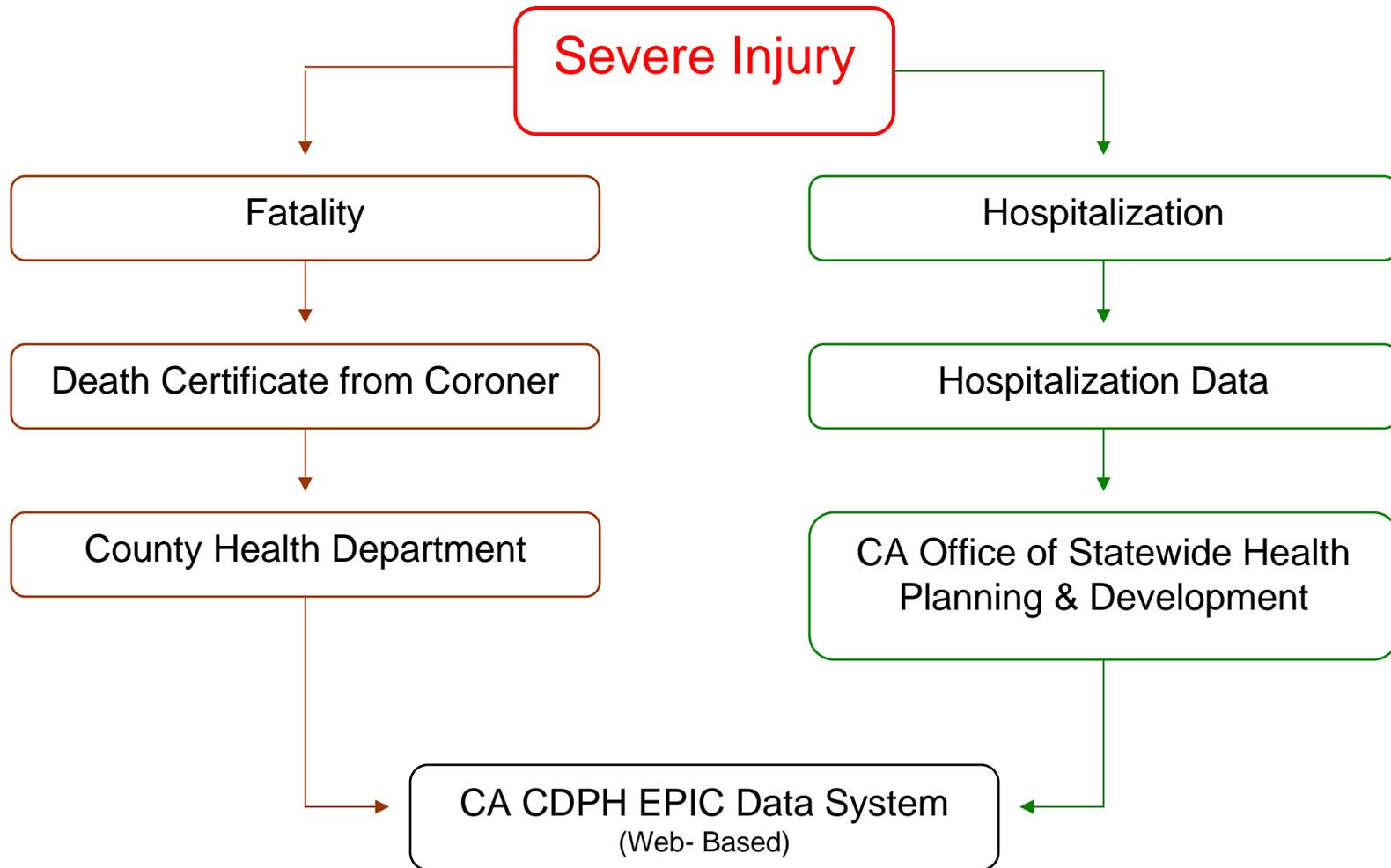
Nonfatal injury data was compiled using injury records from the California Department of Public Health, Epidemiology and Prevention Injury Control (EPIC) program. The county of residence instead of the county in which the injury occurred is used when hospitalization data are recorded. All data was coded using ICD-9 codes.

Medical Cost Data:

Medical Cost data was obtained using hospital discharge records of fatal and nonfatal injury from the Healthcare Information Resource Center, California Office of Statewide Health Planning and Development.

The California EPICenter: California Injury Data Online

The EPIC online service is maintained by the California Department of Public Health to fulfill a mission of providing accurate, timely, and objective information on injuries. It is the most complete source of injury data for California. The flow of information for the system is diagrammed below:



Significance

The overall small number of reported injuries for AI/AN living in some counties in California makes some comparisons of the data invalid. If there were not more than 20 events (injuries) when calculating rates, the rate is suspect for accuracy and generally should not be used for comparison purposes. In this report, statistically significant relationships were determined as valid for data sets with 20 or more reported injuries. The maps and charts in the report provide comparisons between statistically significant data unless otherwise noted. The tables in this report list all of the data available (both statistically and non-statistically significant) in detailed form.

Adjustment: Racial Misclassification

Under-reporting of injury fatalities to AI/AN is significant in California due to racial misclassification⁴. Several studies have documented racial misclassification of AI/AN decedents^(4,5,6). AI/AN in California who reside in urban counties are more likely to be misclassified⁵. All of the reasons for misclassification of race are not known, but persons classifying the race field in fatal and non-fatal injury records may use personal observations and/or the decedent's last name instead of verifying race with the victim.

A report was published in 1996 by the Indian Health Service on AI/AN racial misclassification based on 1986-1988 death certificates. An adjustment factor was calculated for each IHS area from the results of this study⁴.

The adjustment factor for the California Area IHS was determined to be:

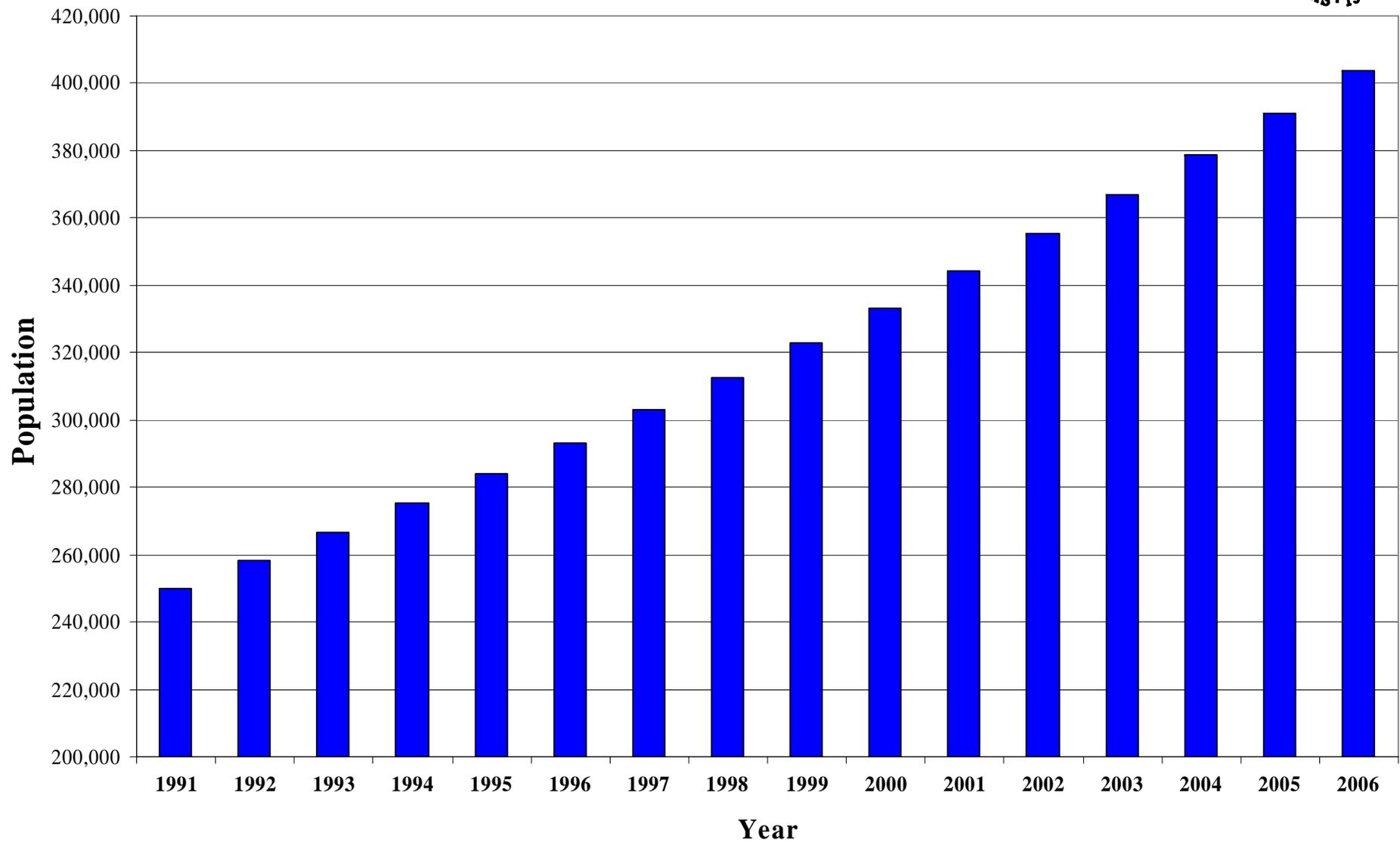
Reported number of deaths * 1.4375 = Adjusted number of deaths for racial misclassification

Limitations

All population estimates used in this report were based on the single reported race of AI/AN during the 1990 and 2000 census. For all years except year 2000, the AI/AN populations used in this report were estimated from the actual counts in census years 1990 and 2000.

The availability of fatal data was limited. Caution should be used when comparing fatal and non-fatal data because these data come from two different databases. Attempts were made to match up fatal and non-fatal data by ICD-9/10 codes for best accuracy, but certain injury categories did not match up exactly when comparing fatal and non-fatal data. These analysis include a footnote.

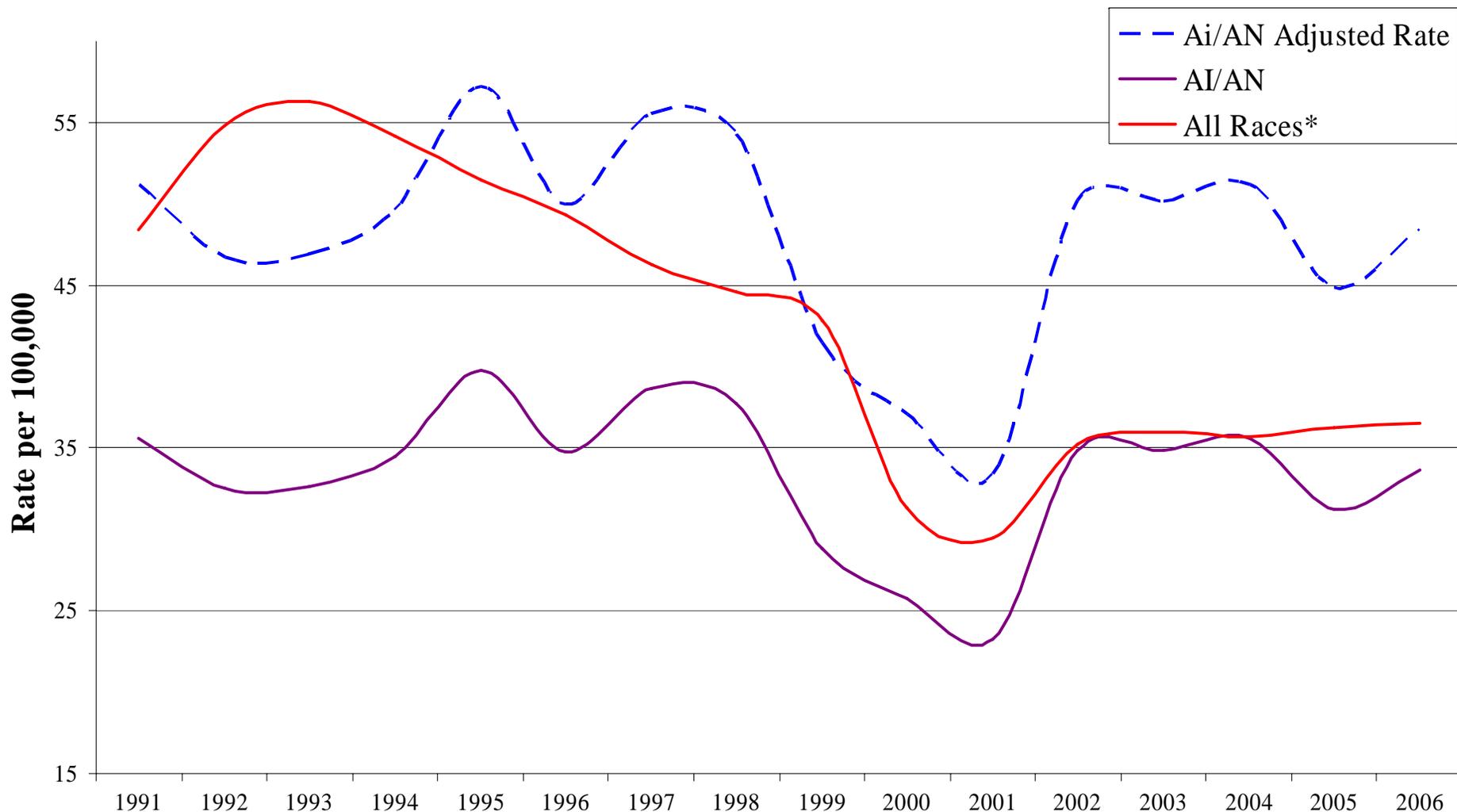
Population Estimate among AI/AN in California, 1991-2006



Population was calculated based on average rate of change between the Census year of 1990 and 2000 and are limited in accuracy.

Source: U.S. Census Bureau

Comparison of Fatal Injury Rates for AI/AN and All races California, 1991-2006



*All Races includes AI/AN

Source: CDC WISQARS

Top Ten Leading Cause of Death California, 1999-2006

Total Populations, All Races



AGE GROUPS											
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Congenital Anomalies 5,628	Unintentional Injury 1,466	Unintentional Injury 924	Unintentional Injury 1,109	Unintentional Injury 10,904	Unintentional Injury 9,845	Unintentional Injury 13,590	Malignant Neoplasms 39,486	Malignant Neoplasms 71,567	Heart Disease 452,548	Heart Disease 541,037
2	Short Gestation 3,272	Congenital Anomalies 597	Malignant Neoplasms 590	Malignant Neoplasms 628	Homicide 6,916	Homicide 4,863	Malignant Neoplasms 13,320	Heart Disease 27,419	Heart Disease 48,115	Malignant Neoplasms 299,386	Malignant Neoplasms 431,183
3	SIDS 1,307	Malignant Neoplasms 464	Congenital Anomalies 233	Homicide 259	Suicide 2,876	Suicide 3,939	Heart Disease 9,275	Unintentional Injury 13,920	Chronic Low. Respiratory Disease 8,689	Cerebrovascular 119,895	Cerebrovascular 137,059
4	Maternal Pregnancy Comp. 912	Homicide 287	Homicide 109	Congenital Anomalies 230	Malignant Neoplasms 1,893	Malignant Neoplasms 3,747	Suicide 4,961	Liver Disease 8,540	Cerebrovascular 8,549	Chronic Low. Respiratory Disease 90,572	Chronic Low. Respiratory Disease 103,557
5	Placenta Cord Membranes 775	Heart Disease 127	Heart Disease 93	Suicide 159	Heart Disease 692	Heart Disease 2,254	HIV 4,322	Cerebrovascular 5,524	Diabetes Mellitus 8,085	Influenza & Pneumonia 54,028	Unintentional Injury 79,622
6	Respiratory Distress 711	Influenza & Pneumonia 120	Influenza & Pneumonia 45	Heart Disease 135	Congenital Anomalies 466	HIV 1,327	Liver Disease 3,677	Suicide 5,150	Unintentional Injury 7,565	Alzheimer's Disease 48,262	Influenza & Pneumonia 59,540
7	Neonatal Hemorrhage 601	Perinatal Period 70	Chronic Low. Respiratory Disease 39	Chronic Low. Respiratory Disease 60	Cerebrovascular 170	Liver Disease 539	Homicide 2,953	Diabetes Mellitus 4,397	Liver Disease 7,223	Diabetes Mellitus 40,348	Diabetes Mellitus 55,076
8	Bacterial Sepsis 500	Chronic Low. Respiratory Disease 58	Benign Neoplasms 37	Cerebrovascular 40	Diabetes Mellitus 151	Cerebrovascular 519	Cerebrovascular 2,206	HIV 3,595	Suicide 3,188	Unintentional Injury 19,656	Alzheimer's Disease 48,708
9	Unintentional Injury 476	Septicemia 45	Perinatal Period 27	Influenza & Pneumonia 38	Chronic Low. Respiratory Disease 147	Diabetes Mellitus 461	Diabetes Mellitus 1,598	Chronic Low. Respiratory Disease 2,904	Influenza & Pneumonia 2,563	Hypertension 17,521	Liver Disease 29,875

Source: National Center for Health Statistics, (NCHS) Vital Statistics Systems

Top Ten Leading Cause of Death among AI/AN California, 1999-2006



AGE GROUPS											
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Congenital Anomalies 18	Unintentional Injury 14	Unintentional Injury 5	Unintentional Injury 10	Unintentional Injury 88	Unintentional Injury 107	Unintentional Injury 140	Malignant Neoplasm 201	Malignant Neoplasm 321	Heart Disease 1,294	Heart Disease 1,884
2	Short Gestation 12	Heart Disease 2	Anemias 1	Malignant Neoplasm 2	Homicide 29	Homicide 39	Liver Disease 91	Heart Disease 189	Heart Disease 301	Malignant Neoplasm 928	Malignant Neoplasm 1,547
3	SIDS 10	Malignant Neoplasm 2	Congenital Anomalies 1	Congenital Anomalies 1	Suicide 25	Suicide 29	Heart Disease 78	Liver Disease 140	Liver Disease 100	Chronic low. Respiratory Disease 328	Unintentional Injury 628
4	Unintentional Injury 7	Congenital Anomalies 1			Malignant Neoplasm 9	Malignant Neoplasm 16	Malignant Neoplasm 67	Unintentional Injury 134	Diabetes Mellitus 72	Crebrovascular 325	Crebrovascular 444
5	Intrauterine Hypoxia 6	Homicide 1			Heart Disease 4	Heart Disease 14	Suicide 40	Diabetes Mellitus 45	Chronic low. Respiratory Disease 70	Diabetes Mellitus 267	Liver Disease 435
6	Placenta Cord Membranes 4				Benign Neoplasm 3	Liver Disease 12	HIV 38	Crebrovascular 37	Crebrovascular 62	Influenza & Pneumonia 137	Chronic low. Respiratory Disease 429
7	Maternal Pregnancy Comp. 3				Chronic Low. Respiratory Disease 3	HIV 8	Diabetes Mellitus 23	Viral Hepatitis 28	Unintentional Injury 62	Alzheimer's Disease 91	Diabetes Mellitus 413
8					Congenital Anomalies 3	Diabetes Mellitus 6	Crebrovascular 16	HIV 22	Nephritis 33	Liver Disease 90	Influenza & Pneumonia 181
9					Complicated Pregnancy 2	Hypertension 3	Homicide 13	Chronic low. Respiratory Disease 21	Influenza & Pneumonia 25	Unintentional Injury 71	Suicide 124

Source: National Center for Health Statistics, (NCHS) Vital Statistics Systems

Fatal Injury Rates by Race/Ethnicity California, 1991-2006

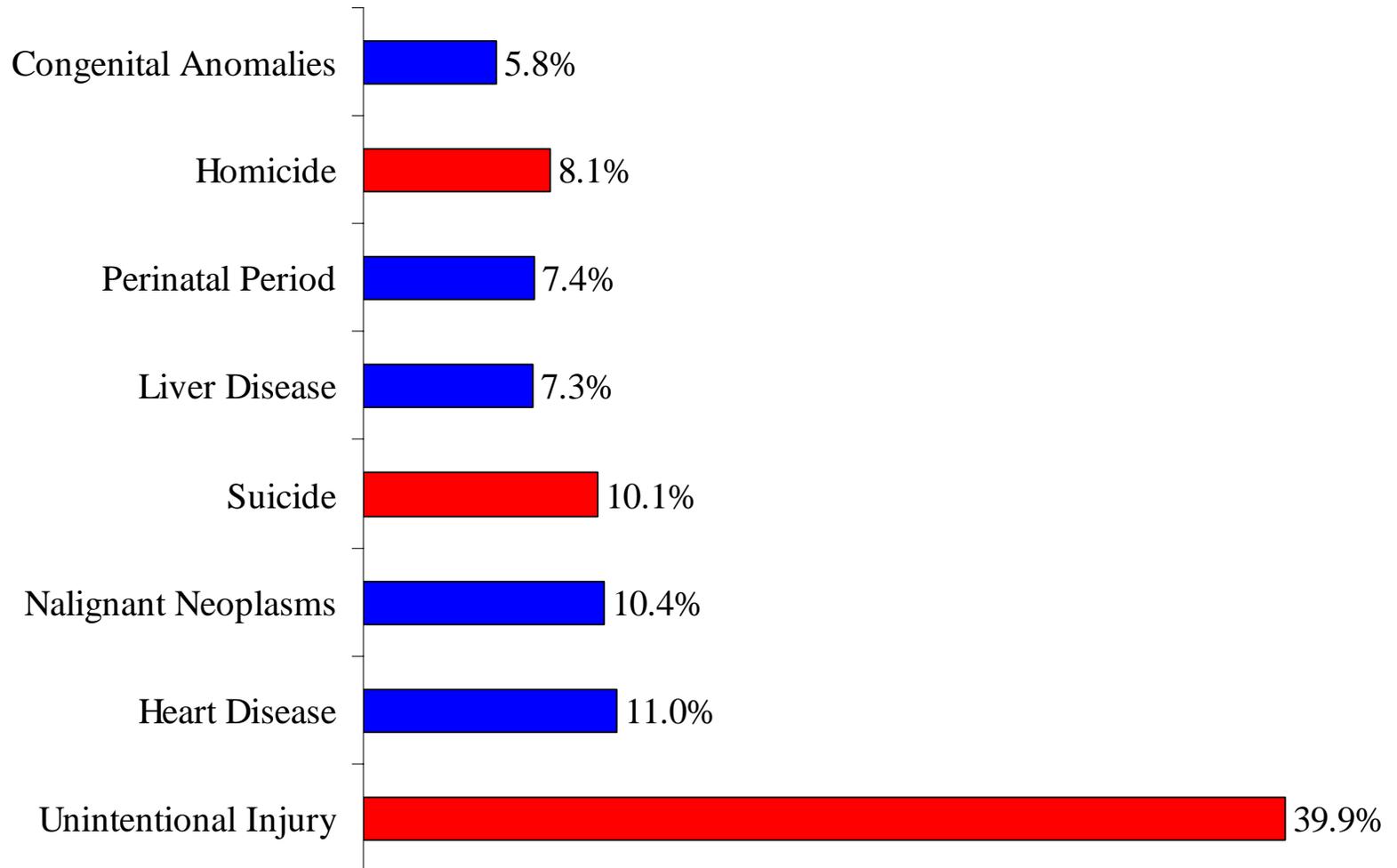


Year	American Indian/Alaska Native				White		Hispanic		Black		Asian/Pacific Islander	
	Unadjusted Number	Adjusted Number	Unadjusted Rate	Adjusted Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1991	89	128	35.6	51.2	9,629	56.4	4,320	53.5	2,213	93.8	920	29.4
1992	84	121	32.5	46.8	9,547	55.9	4,651	55.5	2,110	88.3	937	28.6
1993	87	125	32.6	46.9	9,715	57.4	5,737	54.5	2,388	94.3	993	29.1
1994	95	137	34.5	49.6	9,400	56.2	4,423	49.4	2,200	96.9	1,006	29.6
1995	113	162	39.8	57.2	9,009	54.5	4,433	47.6	2,000	83.1	985	27.2
1996	102	147	34.8	50.0	8,922	54.1	4,162	44.5	1,798	74.3	942	25.3
1997	117	168	38.6	55.5	8,640	52.5	3,765	38.4	1,596	65.4	1,066	27.8
1998	118	170	37.7	54.2	8,727	52.0	3,675	36.4	1,544	62.7	926	23.5
1999	93	134	28.8	51.4	8,422	50.9	3,703	35.4	1,412	54.0	940	23.3
2000	86	124	25.8	37.1	7,792	29.6	3,556	32.4	1,413	59.3	929	23.5
2001	80	115	23.2	33.4	7,323	27.3	3,549	31.1	1,412	58.7	933	22.7
2002	124	178	34.9	50.2	9,166	33.8	4,129	35.1	1,740	72.0	1,006	23.8
2003	128	184	34.9	50.2	9,452	34.5	4,394	36.3	1,679	69.2	1,112	25.7
2004	135	194	35.6	51.2	9,459	34.3	4,346	35.0	1,783	73.2	1,141	25.8
2005	122	175	31.2	44.8	9,411	33.9	4,759	37.5	1,893	77.7	1,117	24.8
2006	136	196	33.7	48.4	9,708	34.7	4,882	37.6	1,825	74.4	1,144	24.7

Adjusted Number and Adjusted Rates are made to compensate for misreporting of AI/AN race on state death certificates.

Source: CDC WISQARS

Years of Potential Life Lost (YPLL) among AI/AN, All Deaths, California, 1991-2006

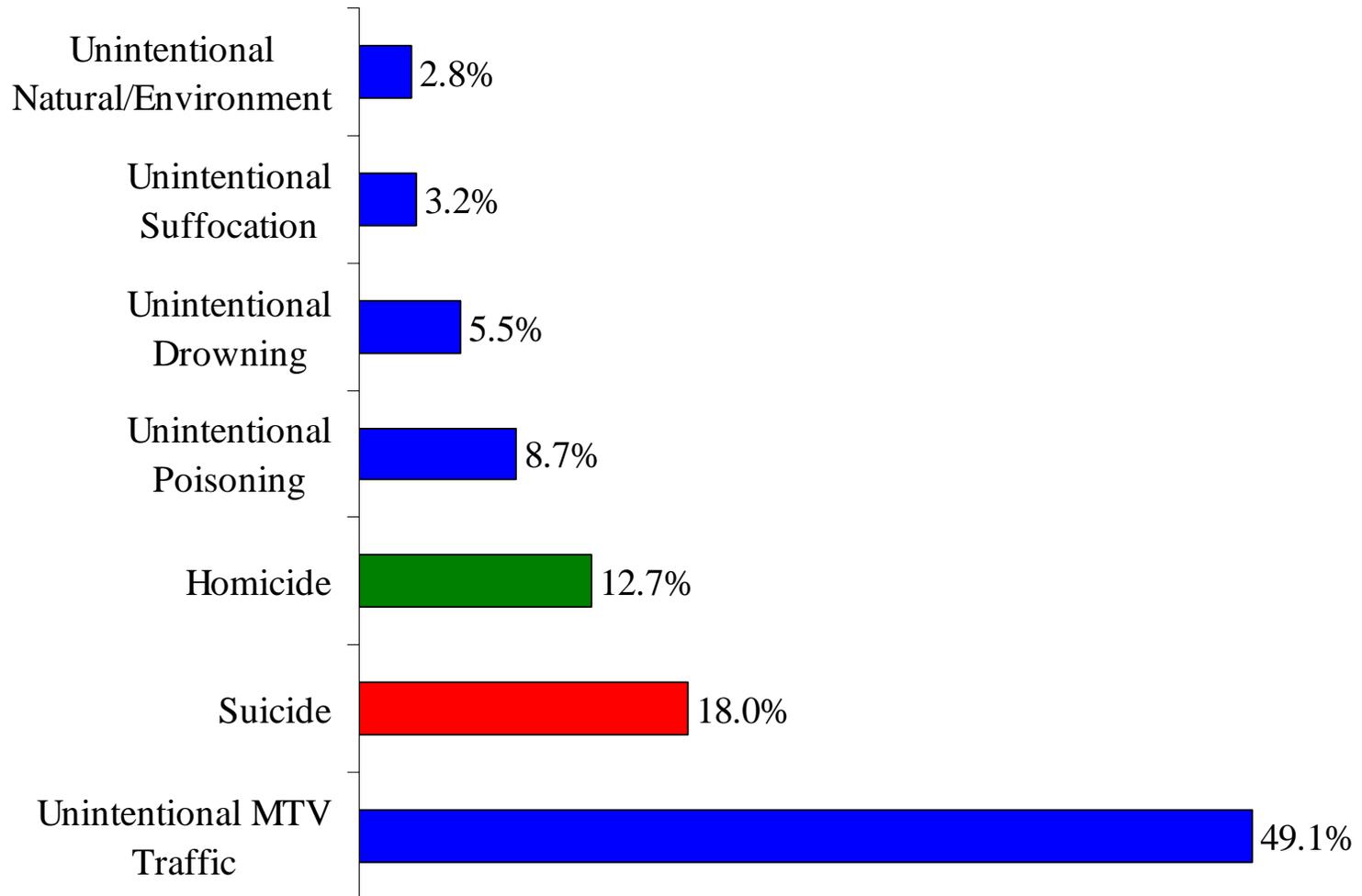


**Note: YPLL does not include people who died at the standard year (65) or older.*

Source: CDC WISQARS



Years of Potential Life Lost (YPLL) among AI/AN All Injury Deaths California, 1991-2006

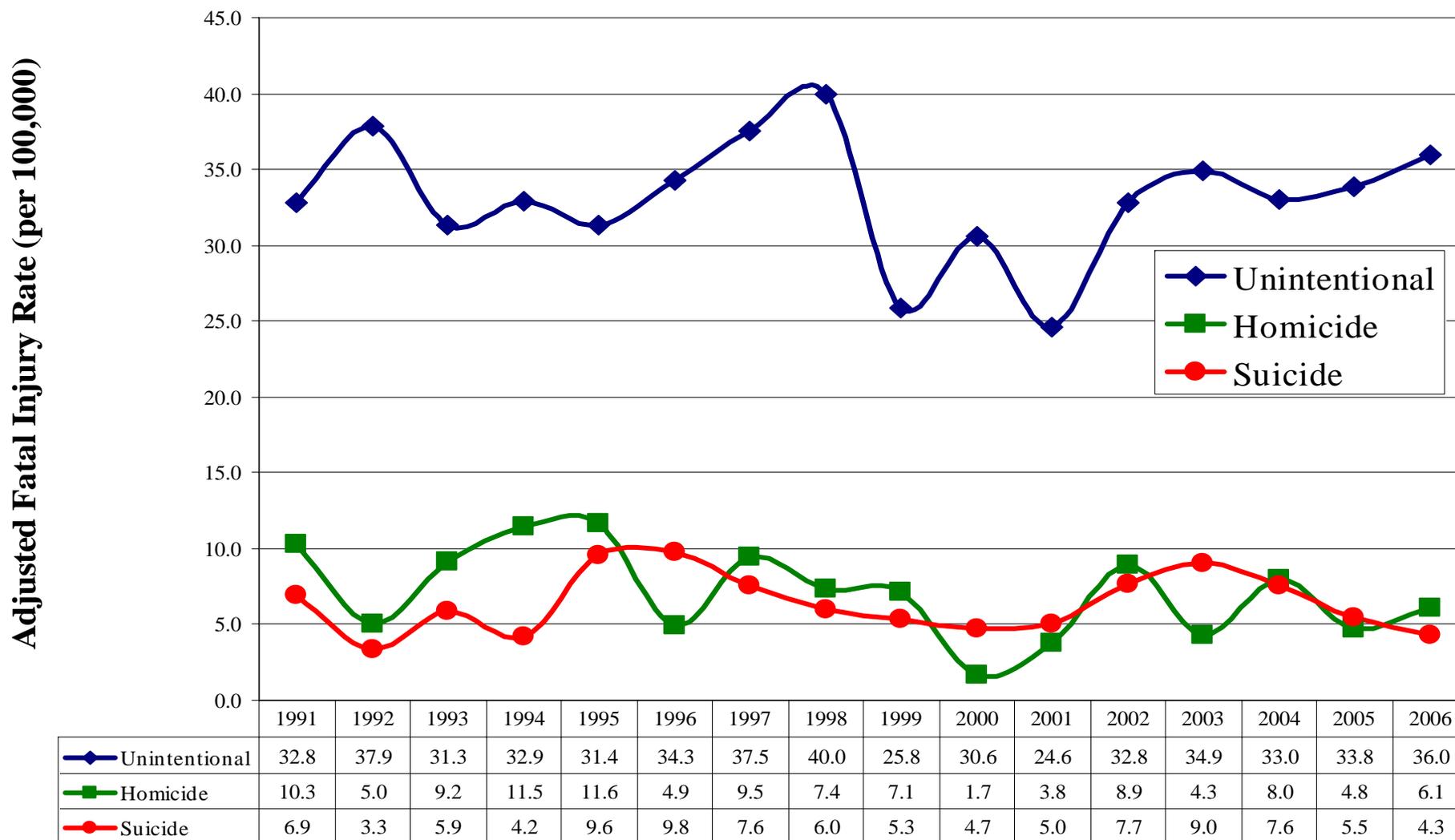


**Note: YPLL does not include people who died at the standard year (65) or older.*

Source: CDC WISQARS

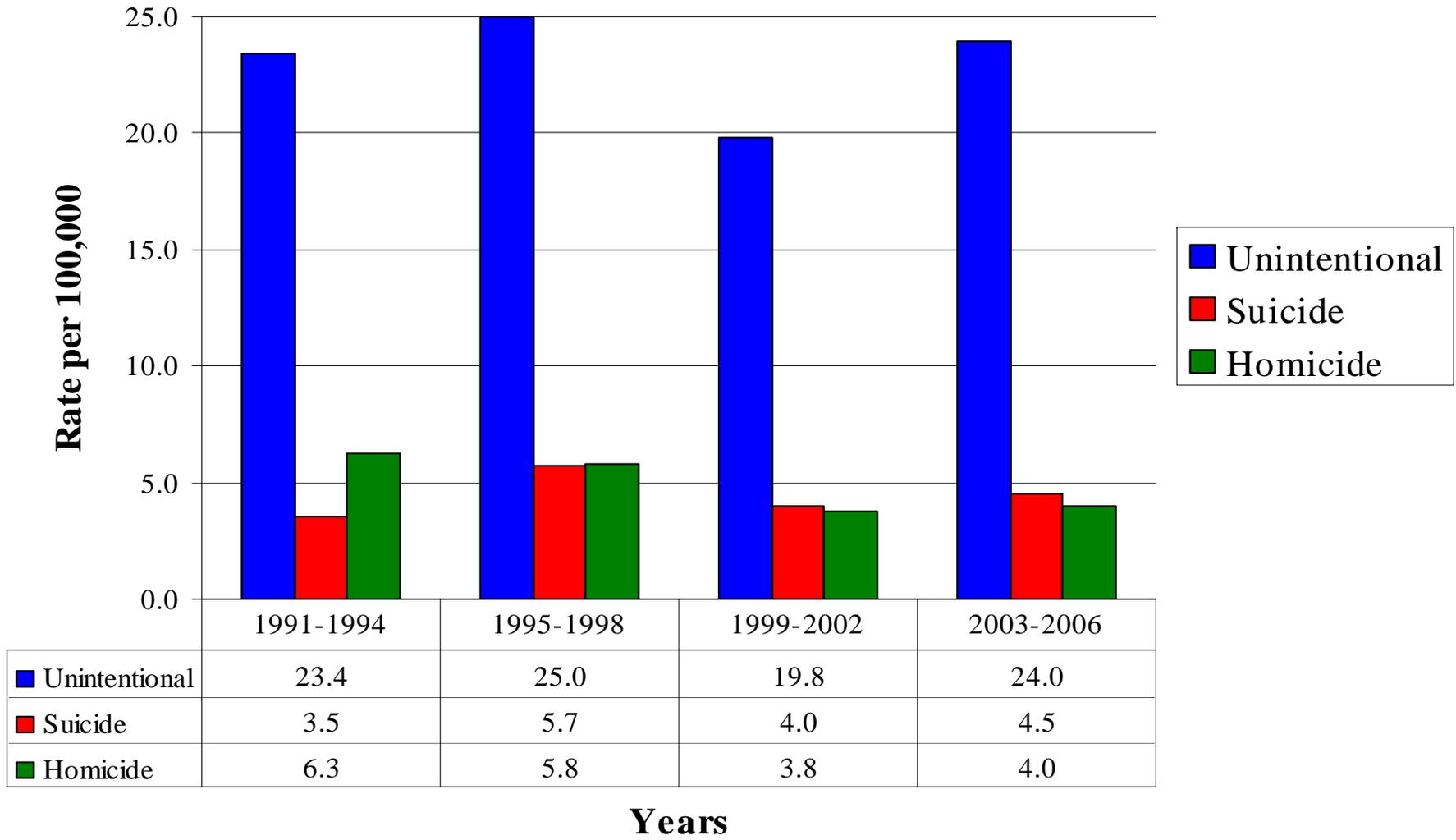


Type of Fatal Injury Rates among AI/AN, by year California, 1991-2006



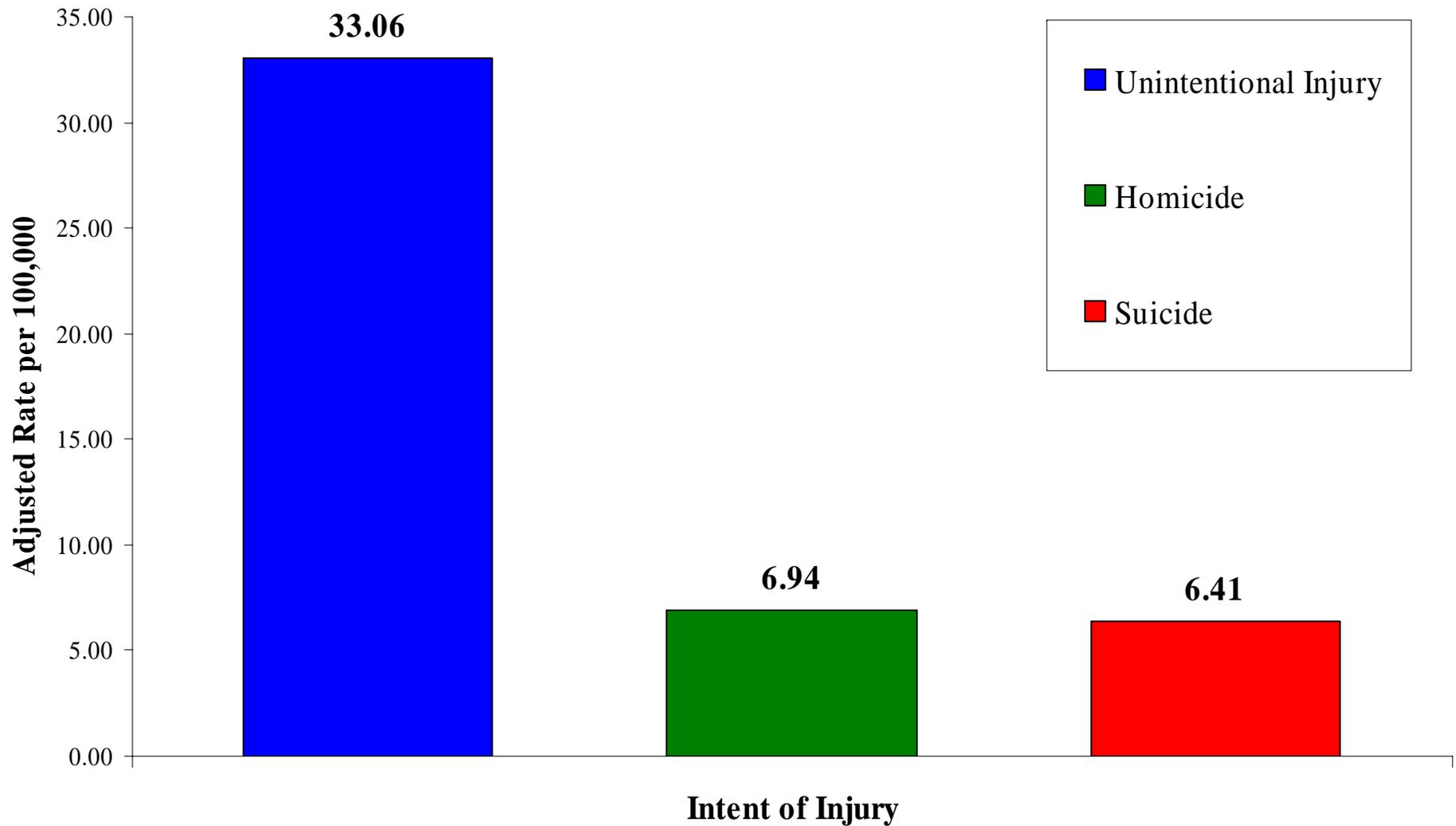
Source: CDC WISQARS

Type of Fatal Injury Rates among AI/AN per 4 Years California, 1991-2006



Source: CDC WISQARS

Fatal Injury Rates among AI/AN, by Intent California, 1991-2006



Source: CDC WISQARS

Fatal Injuries and Injury Rates among AI/AN California, 1991-2006



Year	AI/AN Population	Number of All Injuries		Rate of All Injuries (per 100,000)		Number of Unintentional Injuries		Rate of Unintentional Injuries (per 100,000)		Number of Homicide Injuries		Rate of Homicide Injuries (per 100,000)		Number of Suicide Injuries		Rate of Suicide Injuries (per 100,000)	
		Unadj	Adj	Unadj	Adj	Unadj	Adj	Unadj	Adj	Unadj	Adj	Unadj	Adj	Unadj	Adj	Unadj	Adj
1991	250,028	89	128	35.6	51.2	57	82	22.8	32.8	18	26	7.2 *	10.3	12	17	4.8 *	6.9
1992	258,147	84	121	32.5	46.8	68	98	26.3	37.9	9	13	3.5	5.0	6	9	2.3 *	3.3
1993	303,782	87	125	32.6	46.9	58	83	21.8	31.3	17	24	6.4 *	9.2	11	16	4.1 *	5.9
1994	308,233	95	137	34.5	49.6	63	91	22.9	32.9	22	32	8.0	11.5	8	12	2.9 *	4.2
1995	312,749	113	162	39.8	57.2	62	89	21.8	37.4	23	33	8.1	11.6	19	27	6.7 *	9.6
1996	317,331	102	147	34.8	50.0	70	101	23.9	34.3	10	14	3.4 *	4.9	20	29	6.8 *	9.8
1997	321,981	117	168	38.6	55.5	79	114	26.1	37.5	20	29	6.6 *	9.5	16	23	5.3 *	7.6
1998	326,699	118	170	37.7	54.2	87	125	27.8	40.0	16	23	5.1 *	7.4	13	19	4.2 *	6.0
1999	331,485	93	134	28.8	41.4	58	83	18.0	25.8	16	23	5.0 *	7.1	12	17	3.7 *	5.3
2000	336,342	86	124	25.8	37.1	71	102	21.3	30.6	4	6	1.2 *	1.7	11	16	3.3 *	4.7
2001	341,217	80	115	23.2	33.4	59	85	17.1	24.6	9	13	2.6 *	3.8	12	17	3.5 *	5.0
2002	346,271	124	178	34.9	50.2	81	116	22.8	32.8	22	32	6.2	8.9	19	27	5.3 *	7.7
2003	303,782	128	184	34.9	50.2	89	128	24.3	34.9	11	16	3.0 *	4.3	23	33	6.3	9.0
2004	378,799	135	194	35.6	51.2	87	125	23.0	33.0	21	30	5.5	8.0	20	29	5.3 *	7.6
2005	391,100	122	175	31.2	44.8	92	132	23.5	33.8	19	19	3.3 *	4.8	15	22	3.8 *	5.5
2006	403,800	136	196	33.7	48.4	101	145	25.0	36.0	17	24	4.2 *	6.1	12	17	3.0 *	4.3

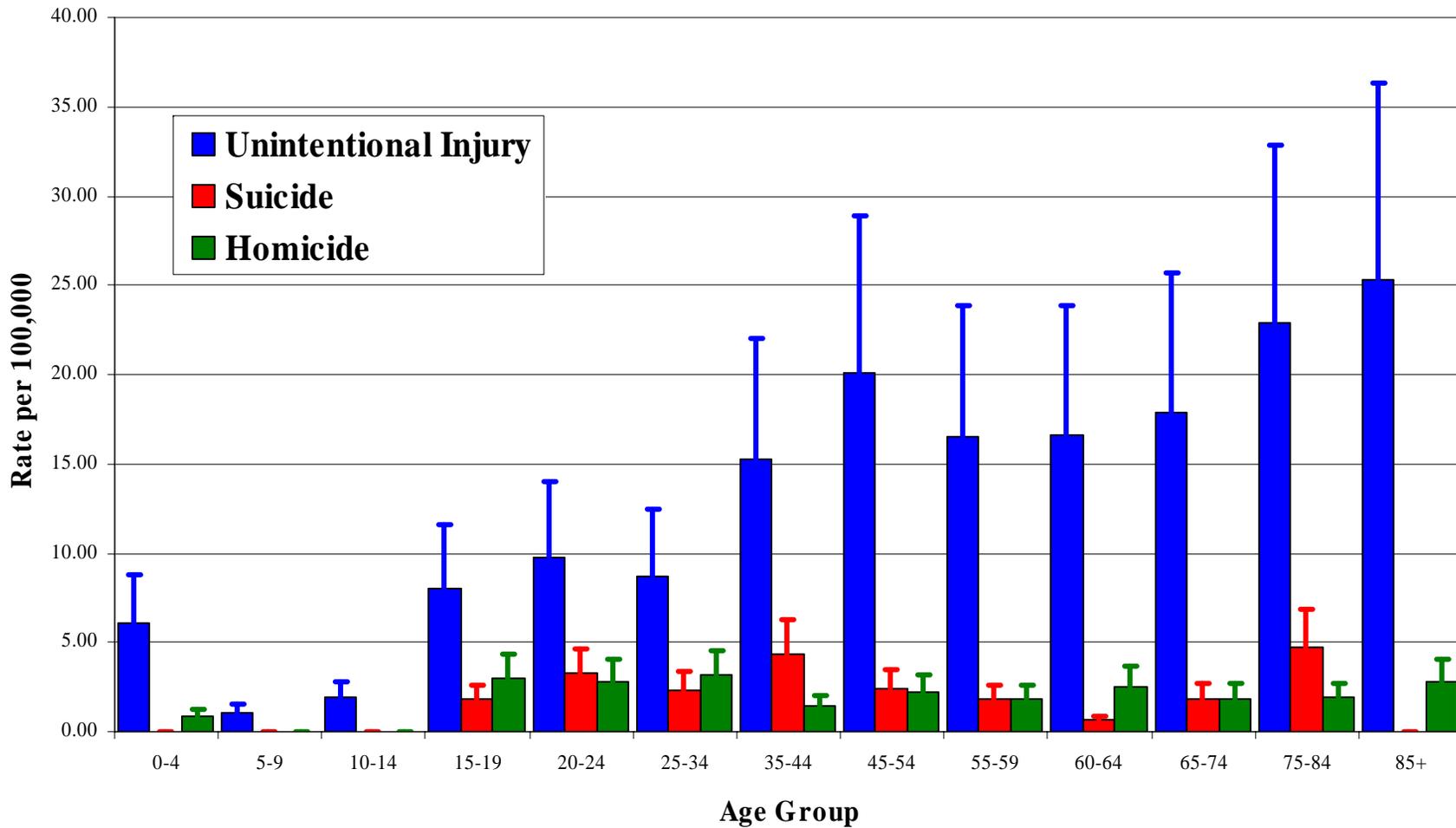
Population estimates for years other than year 2000 are calculated based on average rate of change and are limited in accuracy.

Adj - specifies a number or rate adjusted to compensate for misreporting of AI/AN race on state death certificates

* Rates based on 20 or fewer events may be unstable. Use with caution.

Source: CDC WISQARS

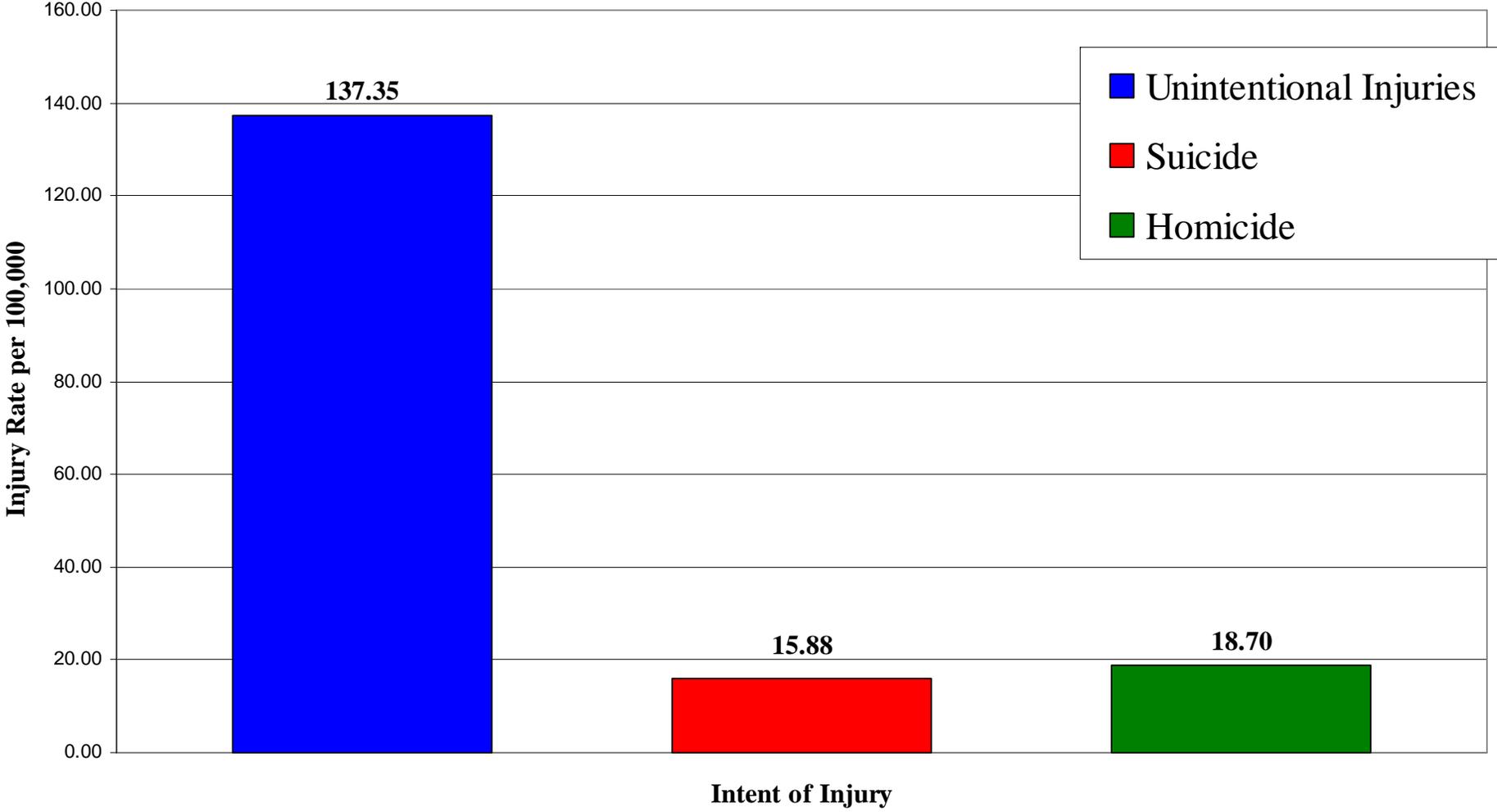
Fatal Injury Rate among AI/AN, by Age Group California, 1991-2006



Error bar levels include adjustment to compensate for misreporting of AI/AN race death certificates

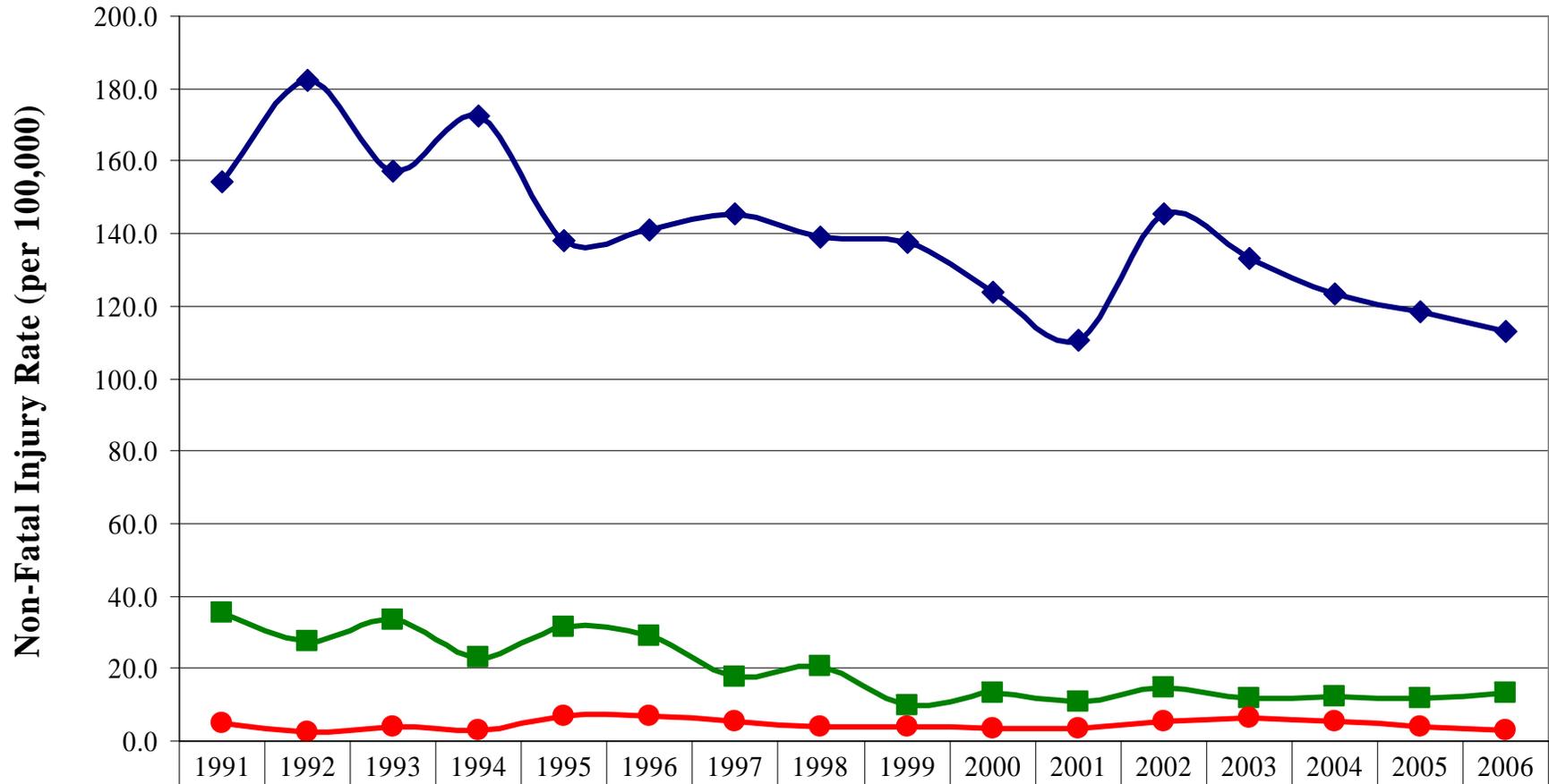
Source: CDC WISQARS

Non-Fatal Injuries among AI/AN, by Intent California, 1991-2006



Source: California Department of Public Health, Epidemiology and Prevention Injury Control

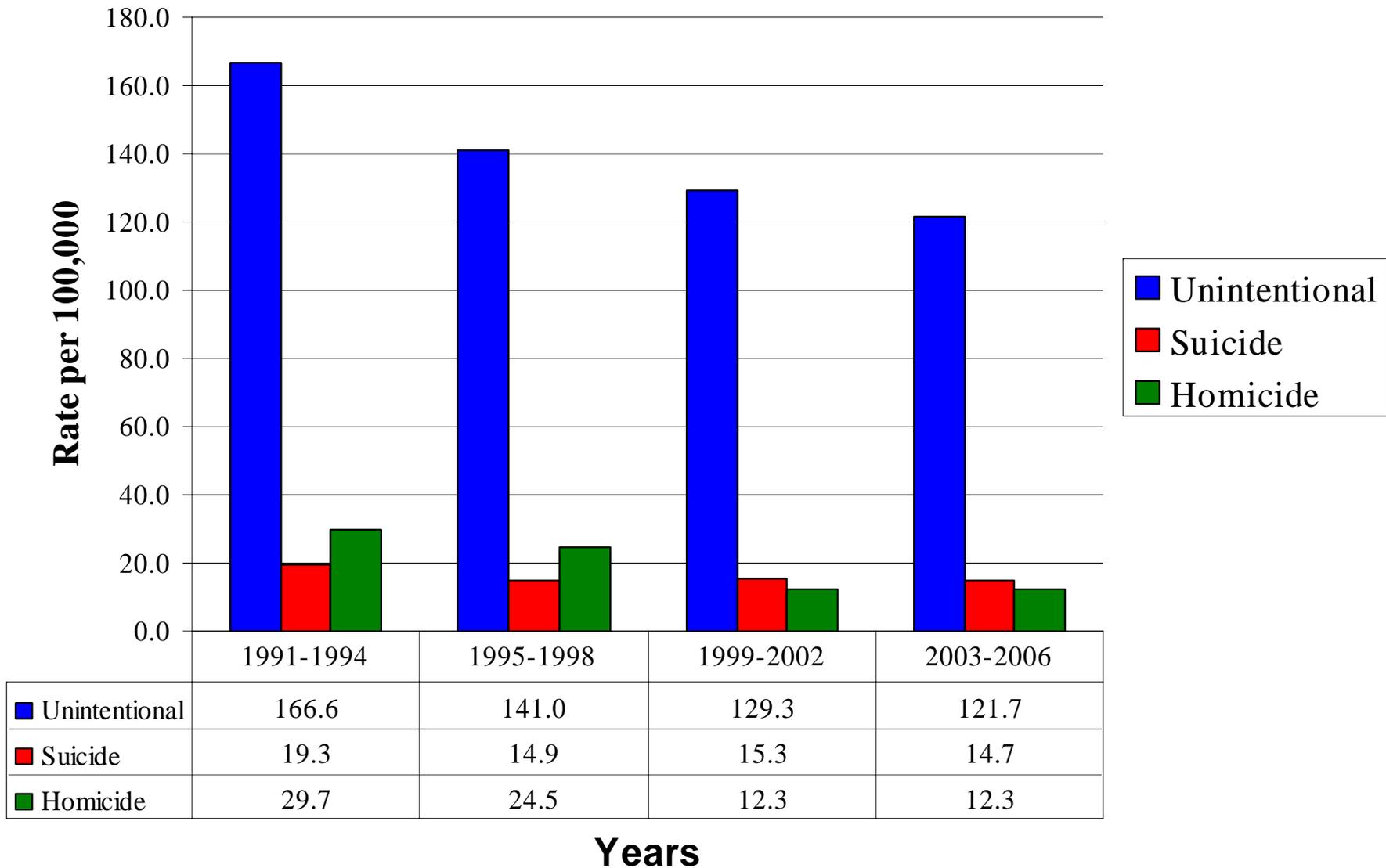
Type of Non-Fatal Injury Rates among AI/AN, by Year California, 1991-2006



◆ Unintentional	154.4	182.1	157.2	172.2	138.3	141.1	145.3	139.1	137.5	123.6	110.7	145.2	133.0	123.3	118.4	113.2
■ Homicide	35.6	27.5	33.4	22.9	31.3	29.0	17.5	20.8	9.9	13.5	10.8	14.9	12.0	12.1	11.8	13.4
● Suicide	4.8	2.3	4.1	2.9	6.7	6.8	5.3	4.2	3.7	3.3	3.5	5.3	6.3	5.3	3.8	3.0

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Type of Non-Fatal Injury Rates among AI/AN per 4 Years California, 1991-2006



Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Non-Fatal Injuries and Injury Rates among AI/AN California, 1991-2006

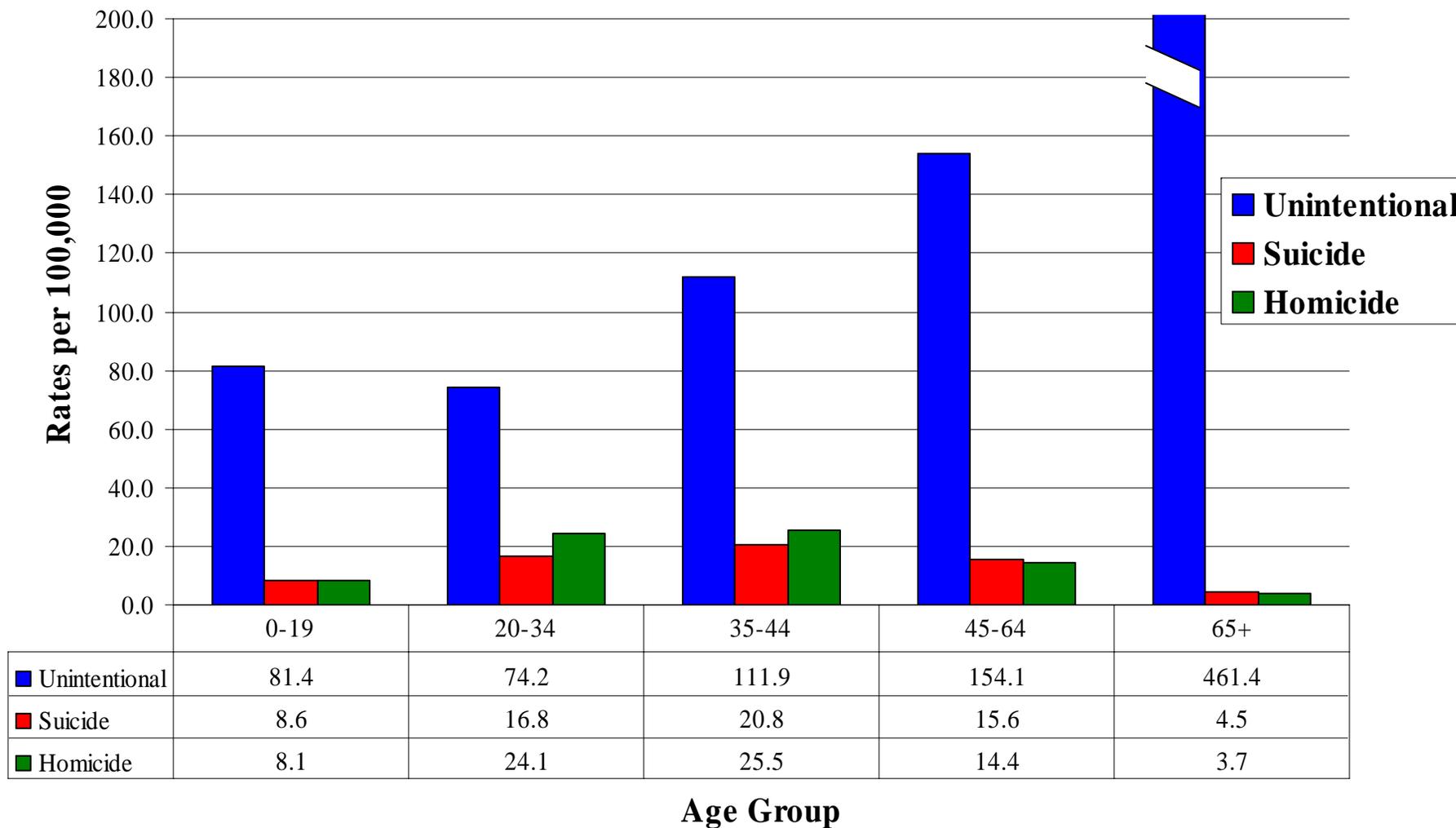


	AI/AN Population	Number of All Injuries	Rate of All Injuries (per 100,000)	Number of Unintentional Injuries	Rate of Unintentional Injuries (per 100,000)	Number of Homicide Injuries	Rate of Homicide Injuries (per 100,000)	Number of Suicide Injuries	Rate of Suicide Injuries (per 100,000)
1991	250,028	542	216.8	386	154.4	89	35.6	43	17.2
1992	258,147	608	235.5	470	182.1	71	37.5	41	15.9
1993	303,782	587	220.2	419	157.2	89	33.4	51	19.1
1994	308,233	638	231.8	474	172.2	63	22.9	68	24.7
1995	312,749	567	199.6	393	138.3	89	31.3	47	16.5
1996	317,331	598	203.9	414	141.1	85	29.0	52	17.7
1997	321,981	571	188.5	440	145.3	53	17.5	45	14.9
1998	326,699	574	183.6	435	139.1	65	20.8	34	10.9
1999	331,485	551	170.7	444	137.5	32	9.9	39	12.1
2000	336,342	540	162.0	412	123.6	45	13.5	54	16.2
2001	341,217	528	153.4	381	110.7	37	10.8	62	18.0
2002	346,271	490	137.9	516	145.2	53	14.9	53	14.9
2003	303,782	624	170.1	488	133.0	44	12.0	52	14.2
2004	378,799	643	169.7	467	123.3	46	12.1	61	16.1
2005	391,100	640	163.6	463	118.4	46	11.8	68	17.4
2006	403,800	601	148.8	457	113.2	54	13.4	46	11.4

Population estimates for years other than year 2000 are calculated based on average rate of change and are limited in accuracy.

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Non-Fatal Injury Rates among AI/AN, by Age Group California, 1991-2006



Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Age-Adjusted Non-Fatal Injuries and Injury Rates among AI/AN California, 1991-2006

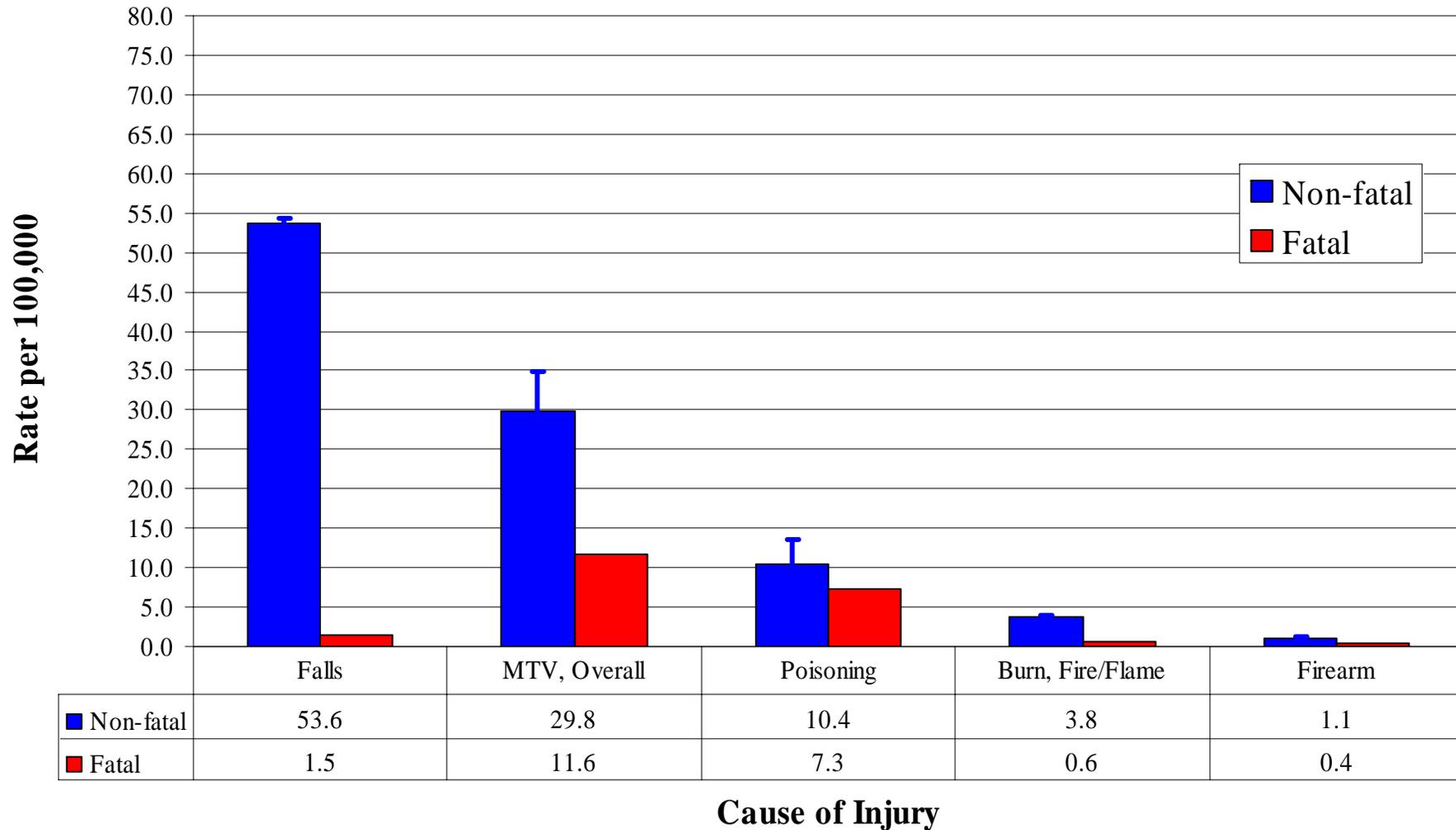


Age Group	Total AI/AN Population for 1991-06	Number of Unintentional Injuries	Unintentional Injury Rate (per 100,000)	Number of Self-Inflicted Injuries	Self-Inflicted Injury Rate (per 100,000)	Number of Assault Injuries	Assault Injury Rate (per 100,000)
0-4	344,805	424	123.0	1	0.3*	14	4.1*
5-9	471,034	298	63.3	2	0.4*	6	1.3*
10-14	520,042	320	61.5	38	7.3	7	1.4*
15-19	497,295	451	90.7	116	23.3	121	24.3
20-24	491,658	423	86.0	105	21.4	156	31.7
25-34	1,235,601	858	69.4	186	15.1	261	21.1
35-44	915,185	1024	111.9	190	20.8	233	25.5
45-54	666,504	930	139.5	117	17.6	107	16.1
55-59	217,273	357	164.3	26	12.0	28	12.9
60-64	156,817	317	202.2	19	12.1*	15	9.6*
65-74	212,392	679	319.7	9	4.2*	11	5.2*
75-84	104,876	599	571.2	4	3.8*	2	1.9*
85+	35,599	350	983.2	3	8.4*	0	0.0*

*Rates based on 20 or fewer events may be unstable. Use with caution.

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

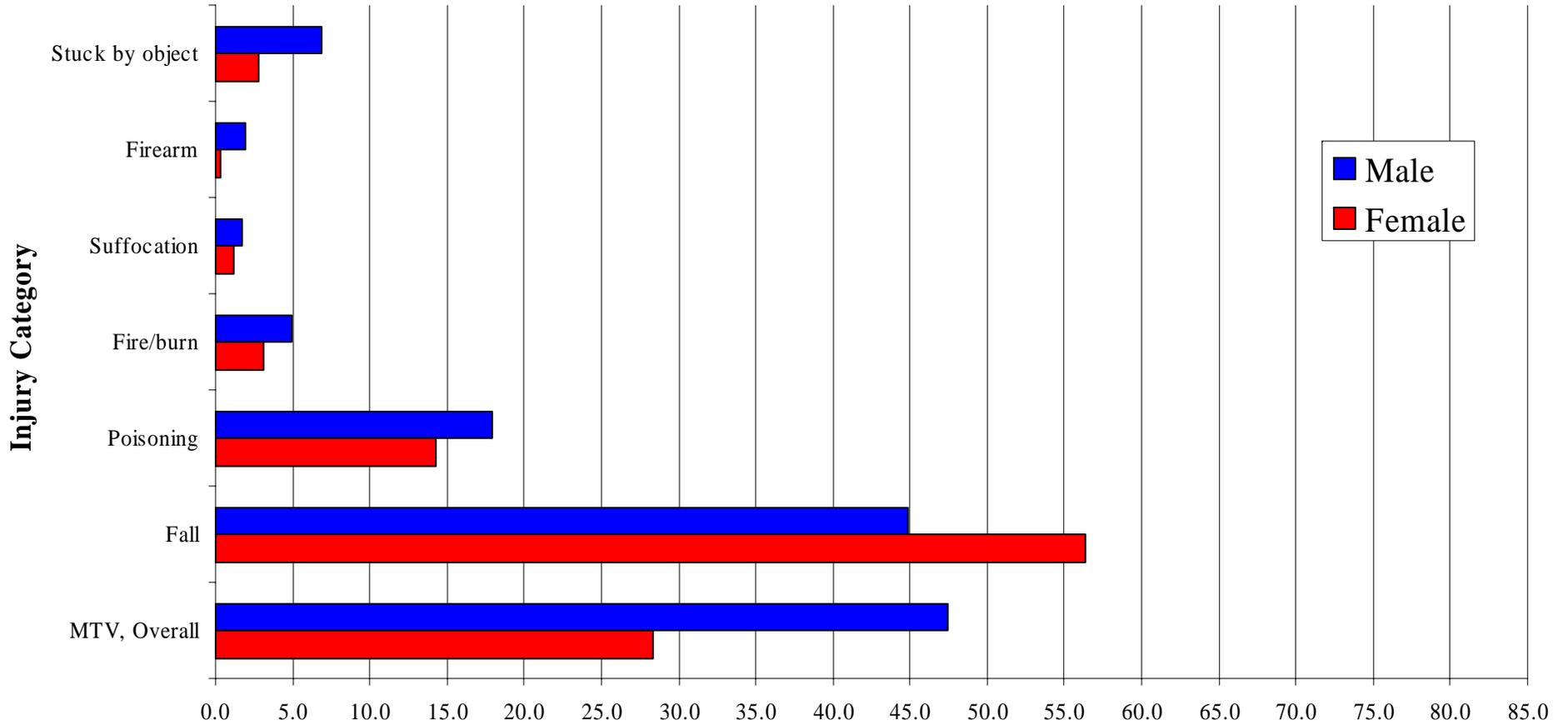
Unintentional Injury Rates among AI/AN, by Cause of Injury California, 1991-2006



Error bar levels include adjustment to compensate for misreporting of AI/AN race death certificates

Source: California Department of Public Health, Epidemiology and Prevention Injury Control (Non-Fatal) and CDC WISQARS (Fatal)

Unintentional Injury Rates among AI/AN, by Gender California, 1991-2006

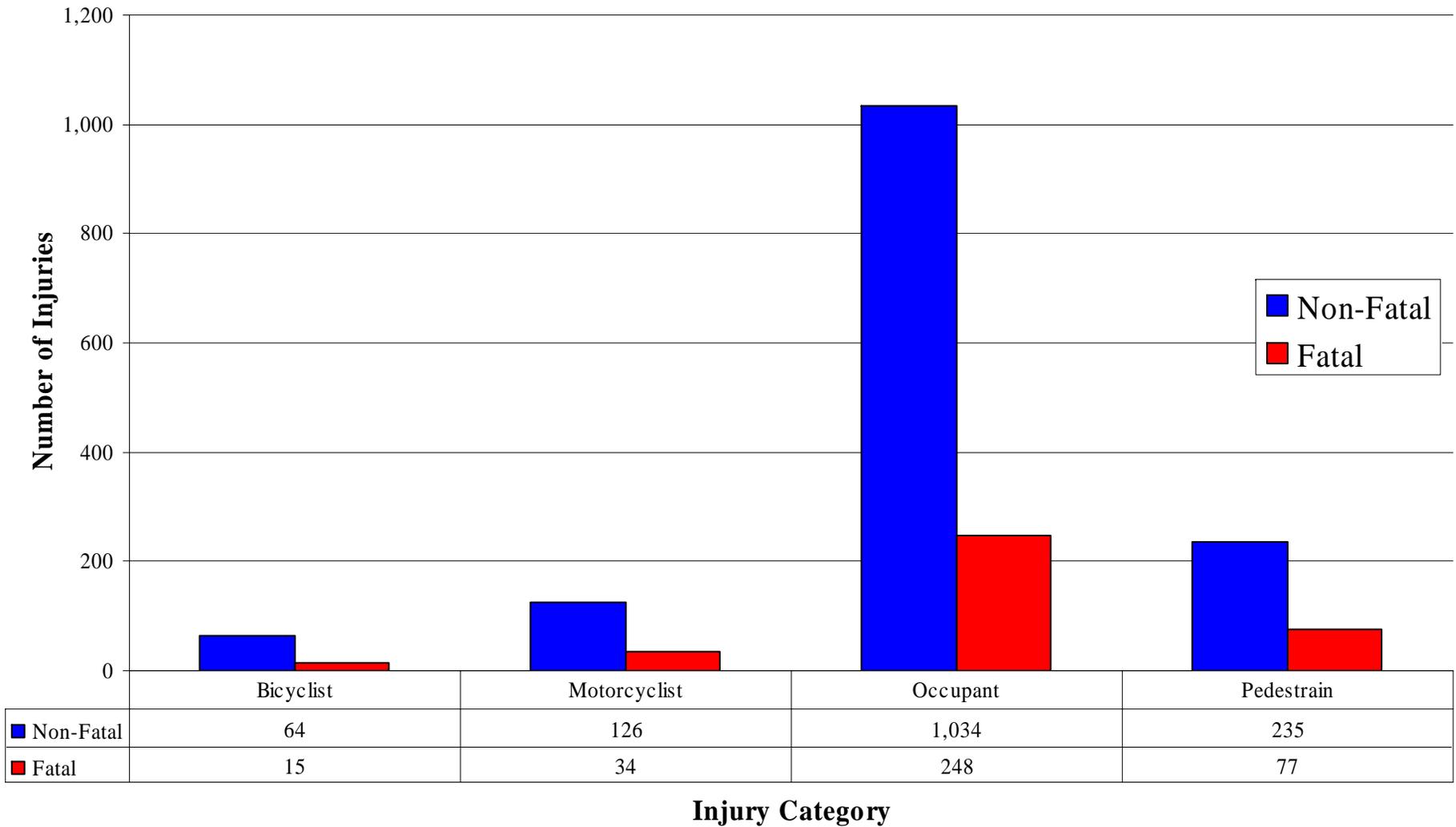


	MTV, Overall	Fall	Poisoning	Fire/burn	Suffocation	Firearm	Stuck by object
■ Male	47.5	44.8	17.9	4.9	1.7	2.0	6.9
■ Female	28.3	56.4	14.3	3.1	1.2	0.3	2.8

Injury Rate (per 100,000)

Source: California Department of Public Health, Epidemiology and Prevention Injury Control (Non-Fatal) and CDC WISQARS (Fatal)

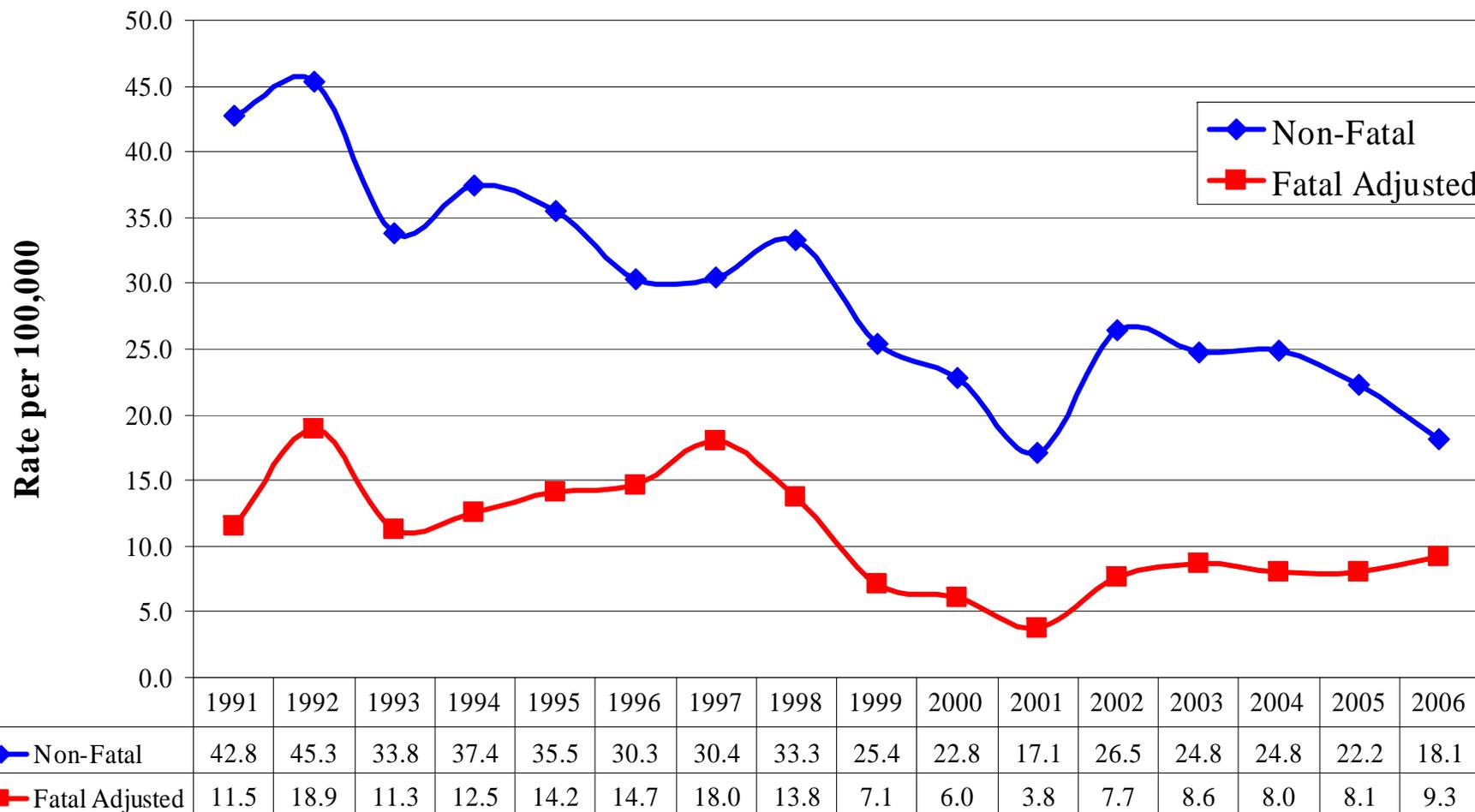
Motor Vehicle Injuries Involving AI/AN, by Injury Category California, 1991-2006



Source: California Department of Public Health, Epidemiology and Prevention Injury Control (Non-Fatal) and CDC WISQARS (Fatal)

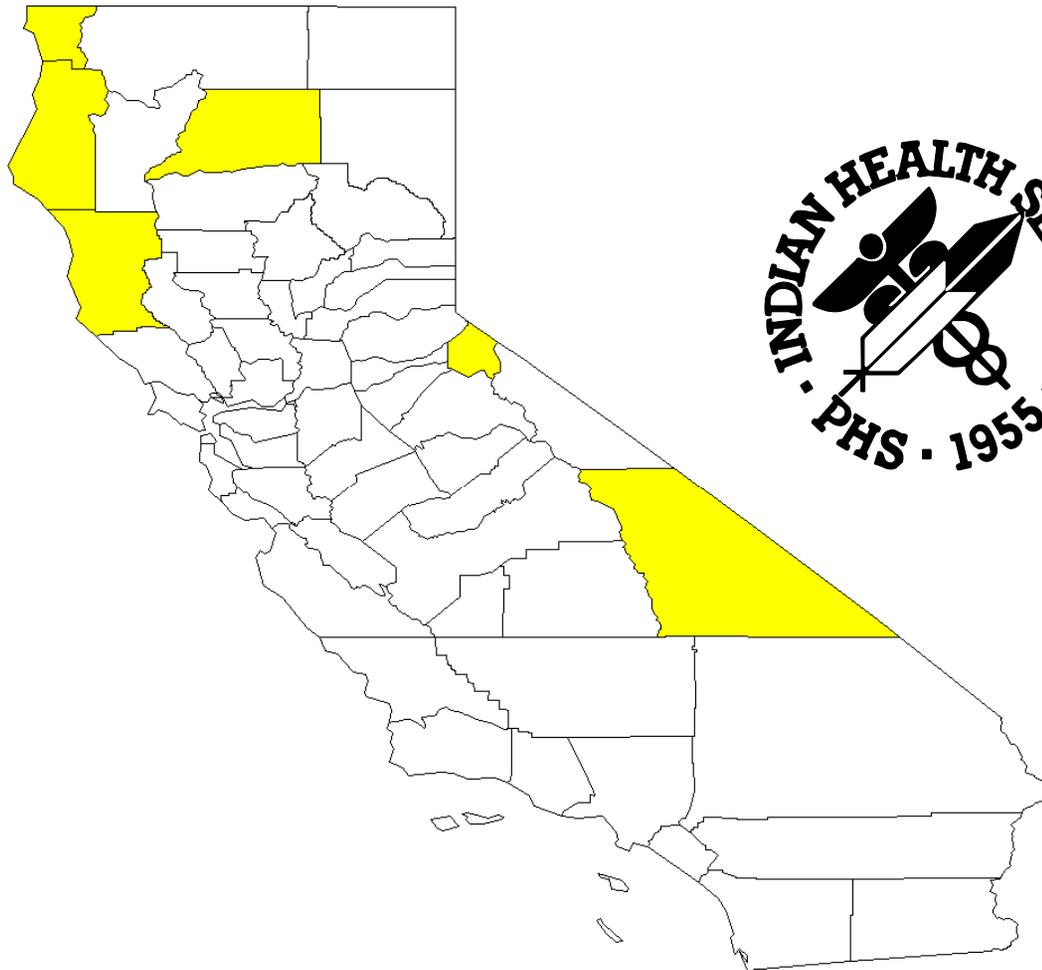


Motor Vehicle Injury Rate among AI/AN, by Year California, 1991-2006



Source: California Department of Public Health, Epidemiology and Prevention Injury Control (Non-Fatal) and CDC WISQARS (Fatal)

Non-Fatal Motor Vehicle Injuries among AI/AN, by County California, 1991-2006



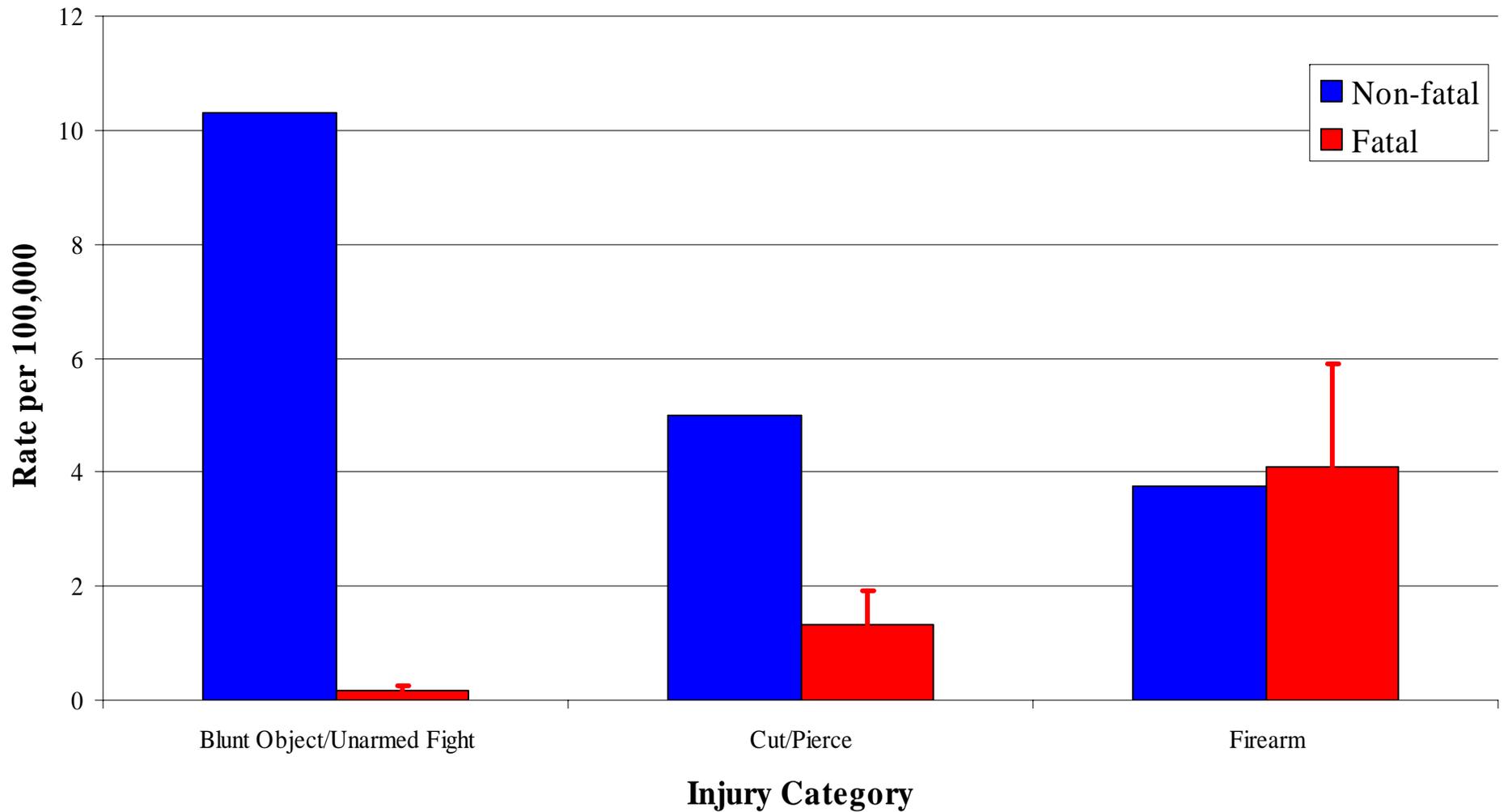
Above State Rate
93.81 California Rate*

Counties with AI/AN rate above state rate	
Alpine	99.16
Del Norte	127.81
Humboldt	183.49
Inyo	110.59
Mendocino	134.03
Shasta	100.15

*California Rate includes all races
AI/AN rates used are adjusted for underreporting

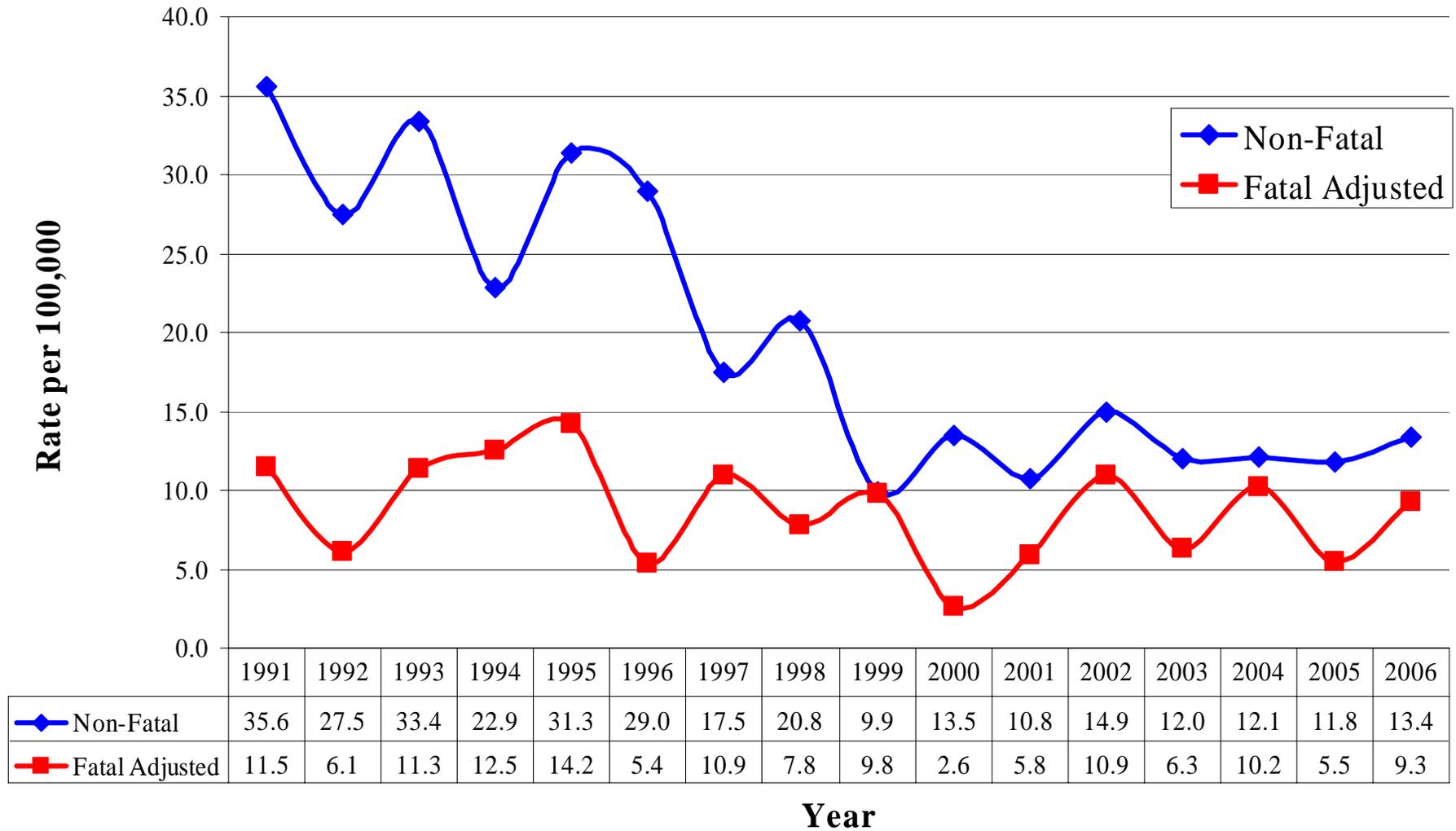
Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Assault/Homicide Injury Rates among AI/AN, by Cause California, 1991-2006



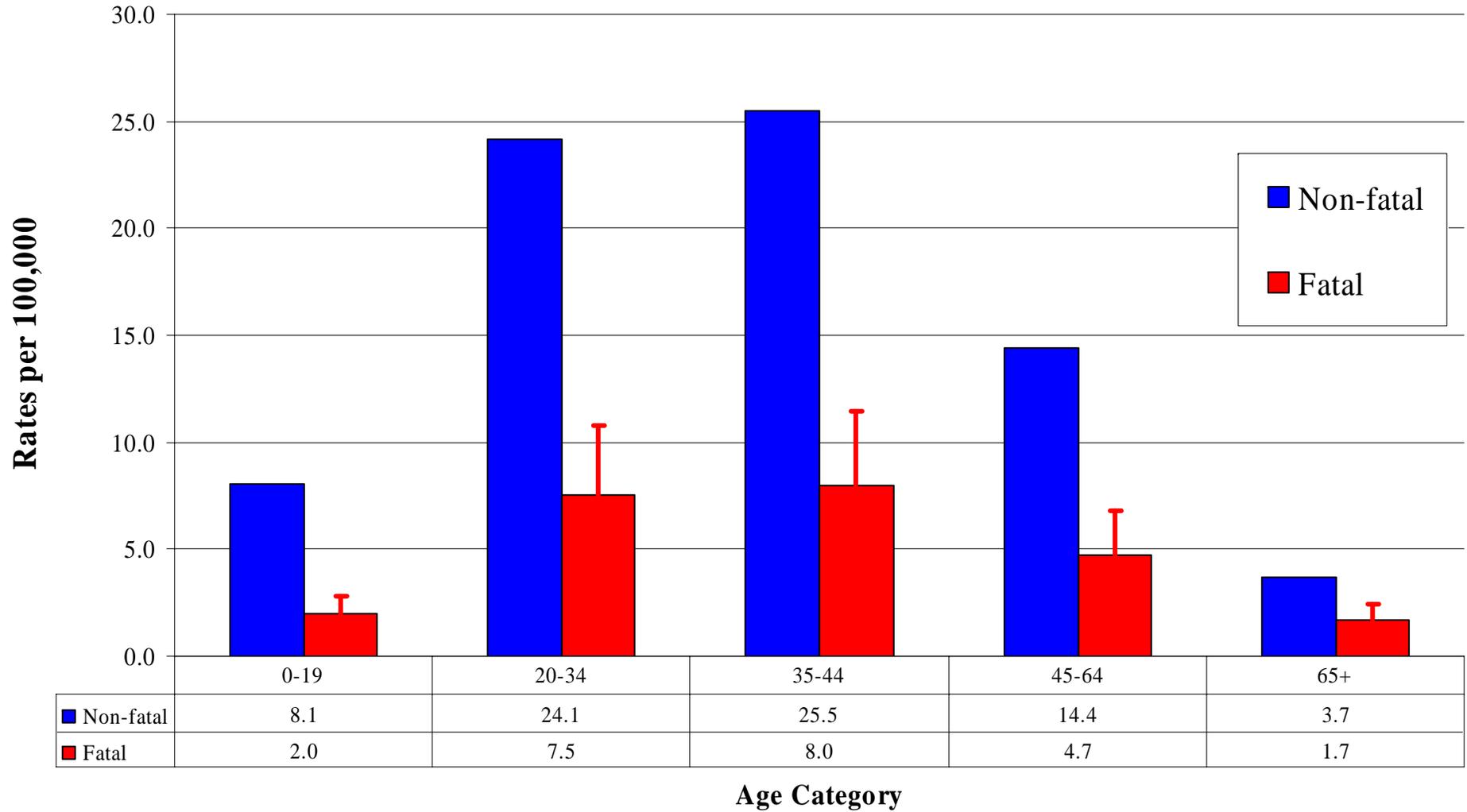
Error bar levels include adjustment to compensate for misreporting of AI/AN race on death certificates
 Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

Assault/Homicide Injury Rates among AI/AN, by Year California, 1991-2006



Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

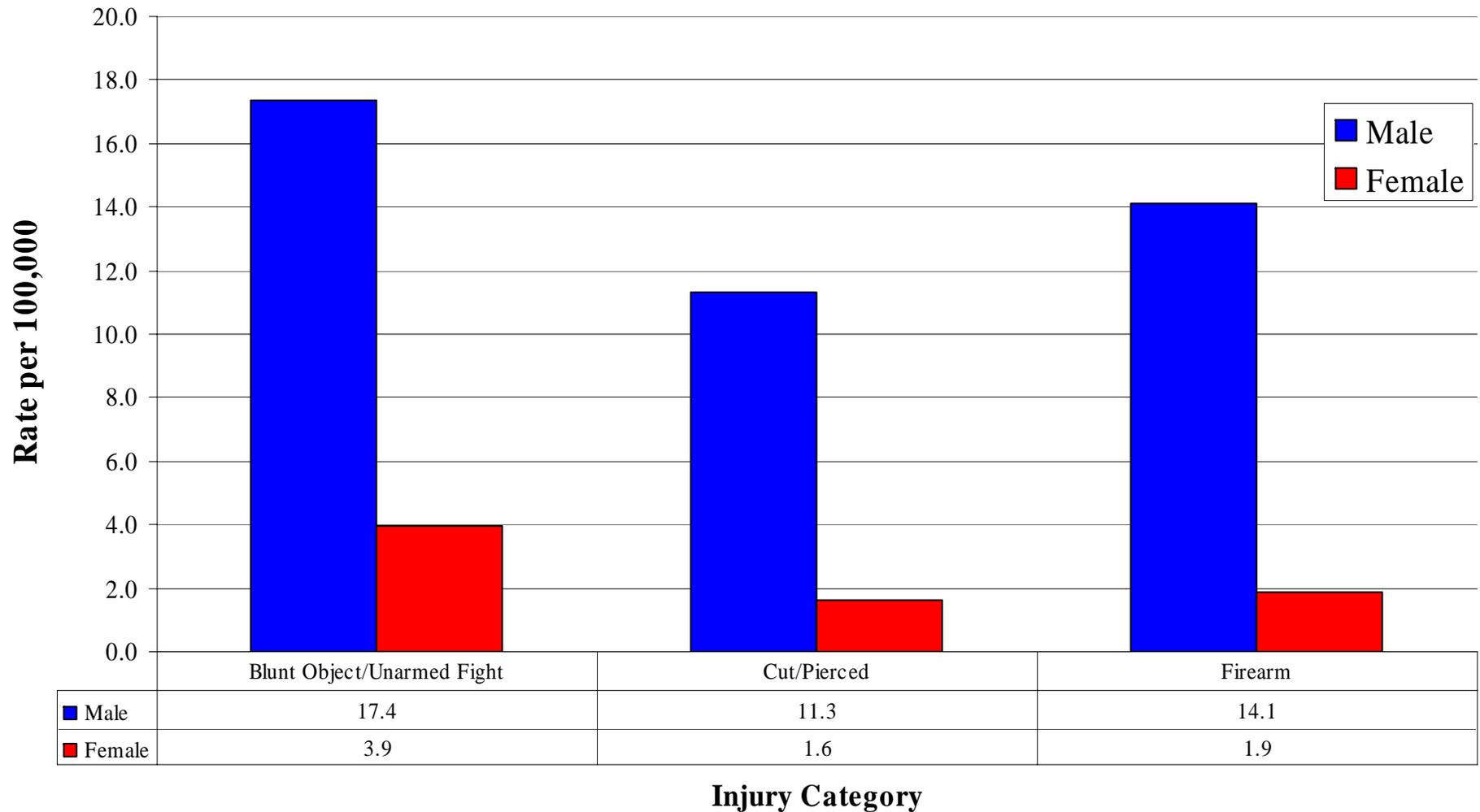
Assault/Homicide Rates among AI/AN, by Age California, 1991-2006



Error bar levels include adjustment to compensate for misreporting of AI/AN race death certificates

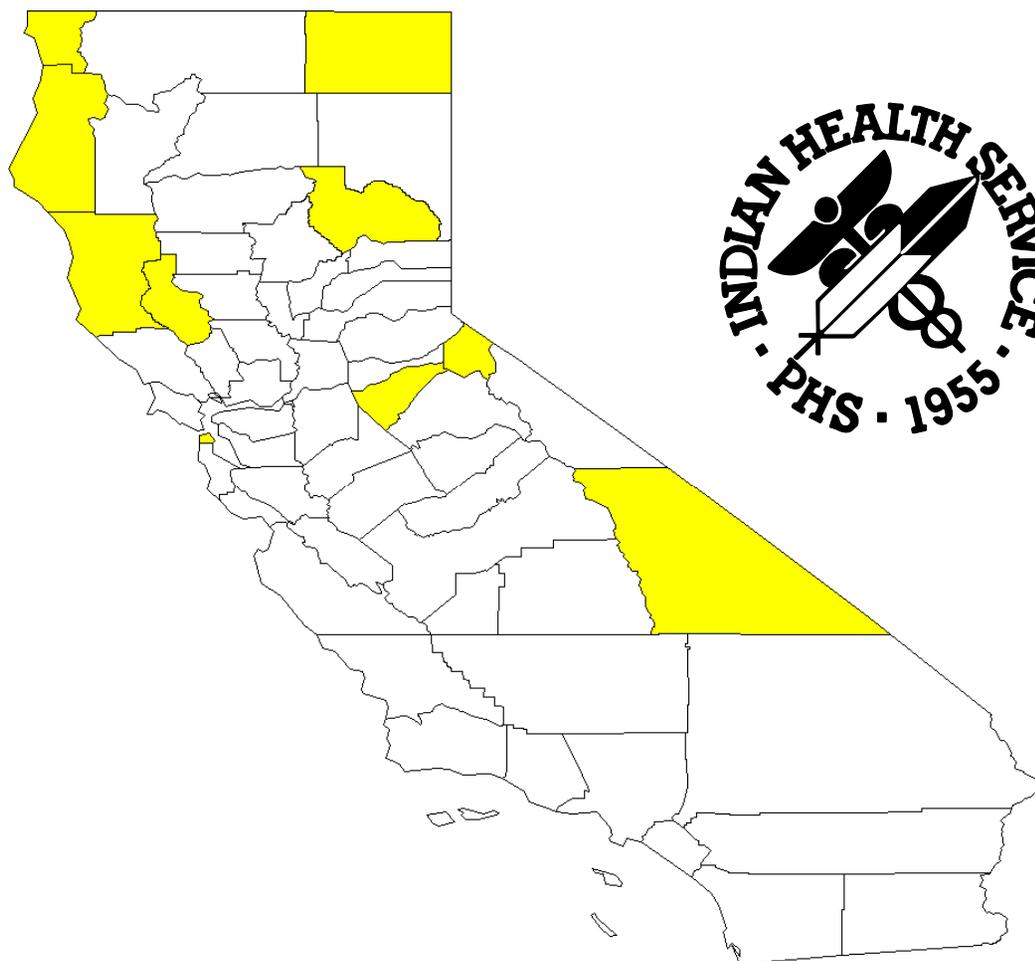
Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

Assault/Homicide Injury Rates among AI/AN, by Gender California, 1991-2006



Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

Non-Fatal Assault/Homicide Injuries among AI/AN, by County California, 1991-2006



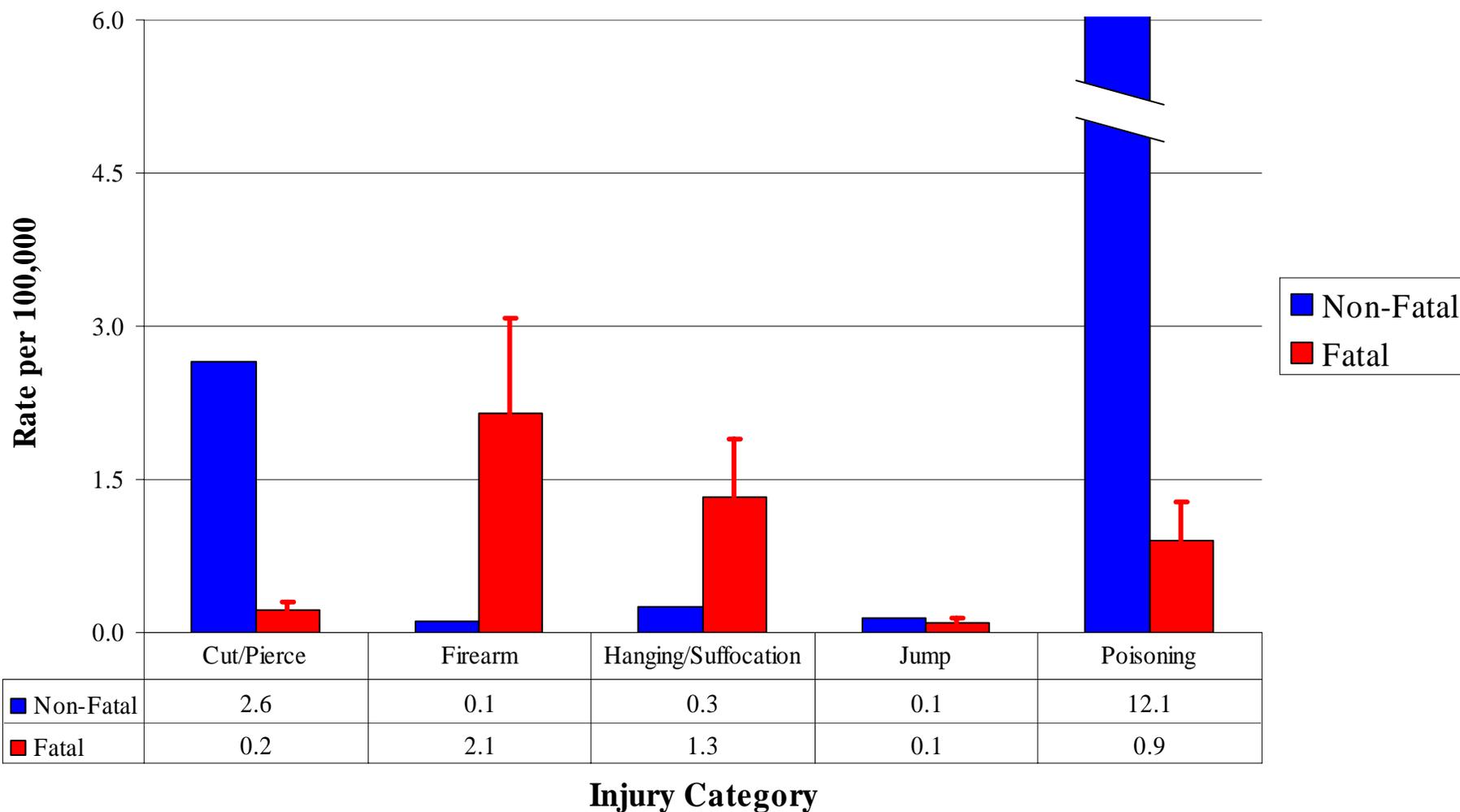
Above State Rate
46.97 California Rate*

Counties with AI/AN rate above state rate	
Alpine	66.11
Calaveras	54.98
Del Norte	84.80
Humboldt	83.63
Inyo	62.51
Lake	63.69
Mendocino	86.32
Modoc	130.56
Plumas	58.48
San Francisco	89.00

*California Rate includes all races
AI/AN rates used are adjusted for underreporting

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Self-Inflicted Injuries among AI/AN, by Cause California, 1991-2006

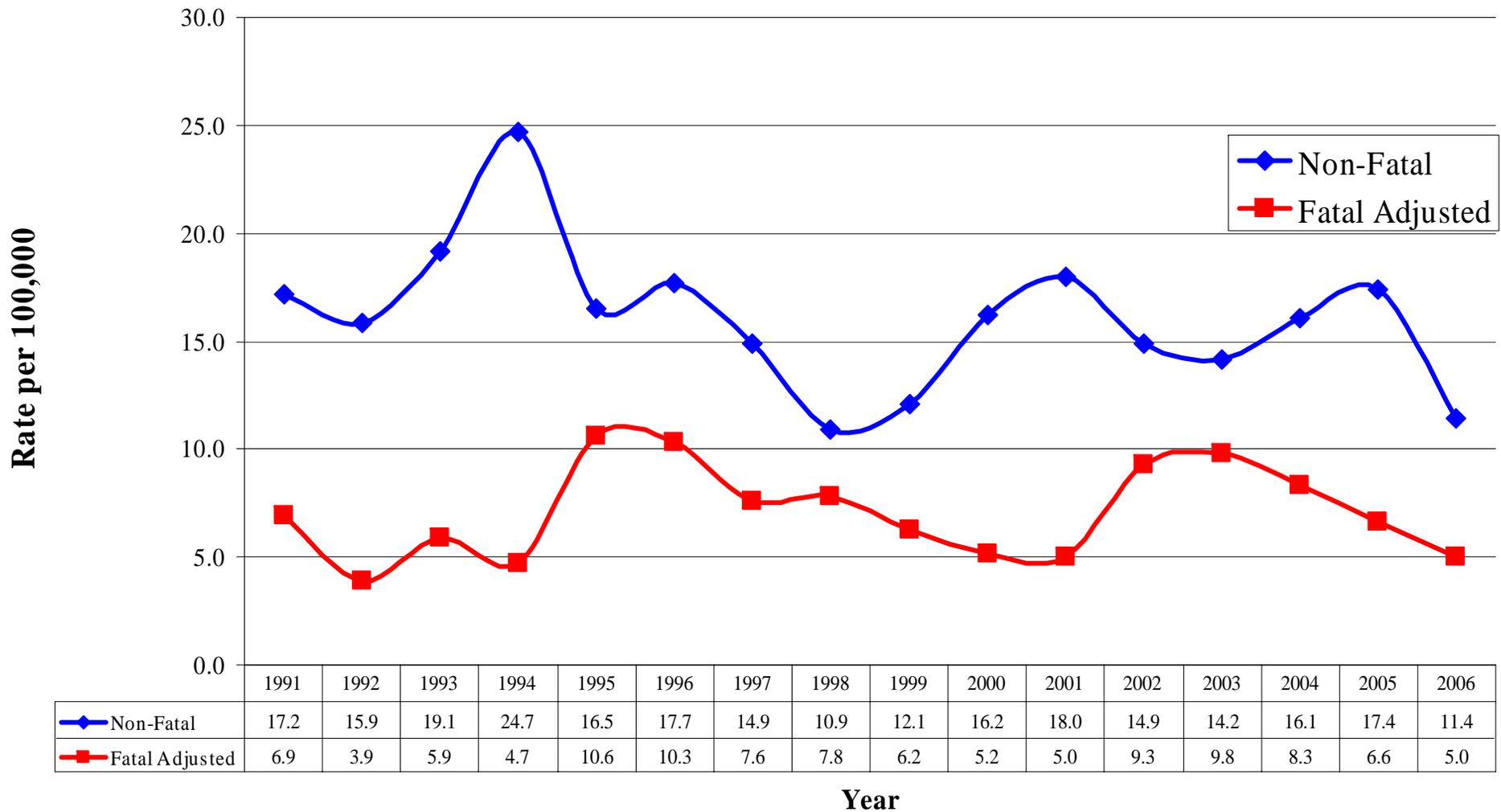


Note: Fatal data does not include hanging. The EPICenter (Non-Fatal) uses the term “Falls” and CDC WISQARS (Fatal) uses the term “Jump,” ICD 9/10 codes are matched up.

Error bar levels include adjustment to compensate for misreporting of AI/AN race death certificates

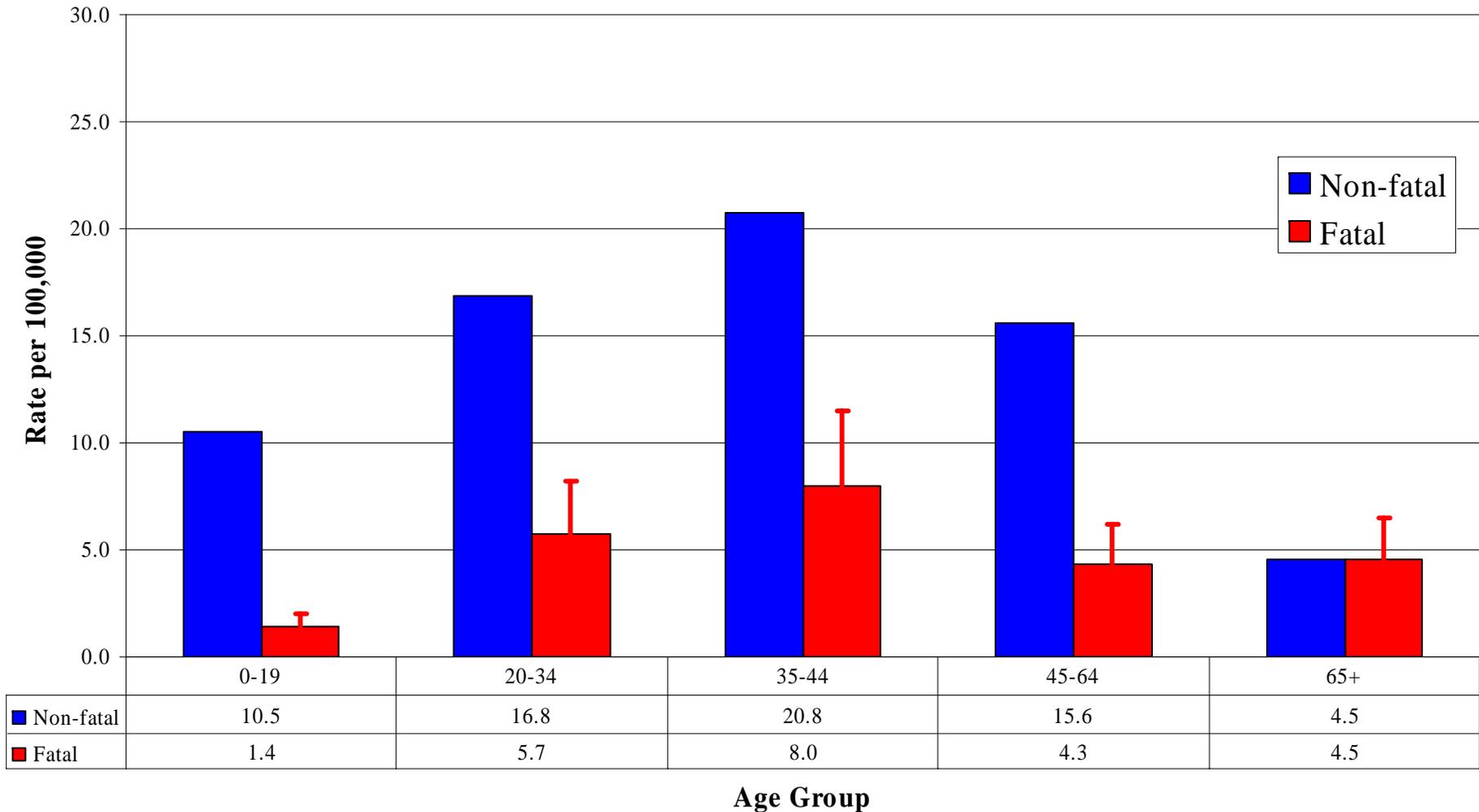
Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

Self-Inflicted Injuries Rates among AI/AN, by Year California, 1991-2006



Adjustments are made to compensate for misreporting of AI/AN race death certificates
 Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

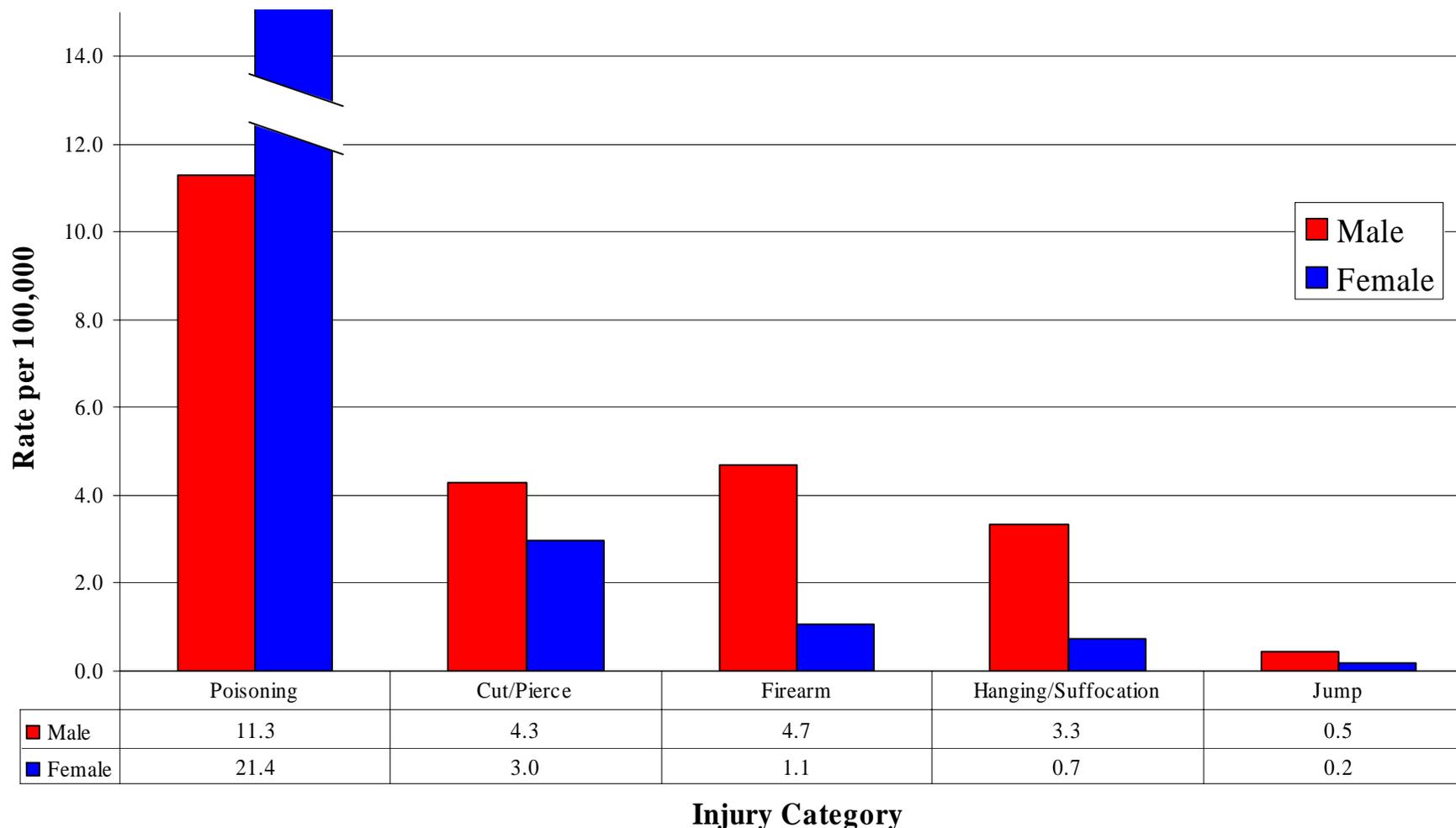
Self-Inflicted Injury Rates among AI/AN, by Age California, 1991-2006



Error bar levels include adjustment to compensate for misreporting of AI/AN race death certificates
 Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)



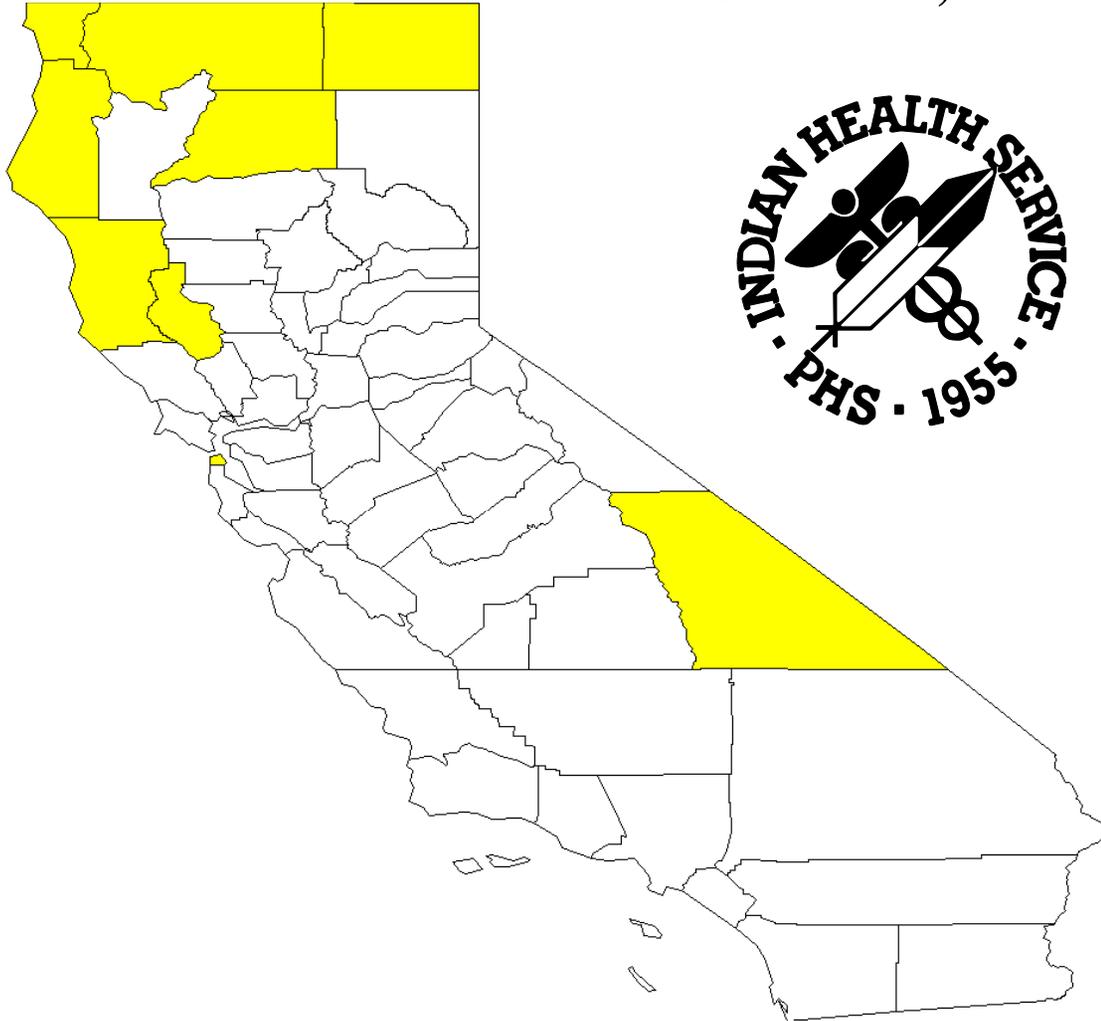
Self-Inflicted Injury Rates among AI/AN, by Gender California, 1991-2006



Note: Fatal data does not include hanging. EPIC (Non-Fatal data) uses the term “Falls” and CDC WISQARS (Fatal data) uses the term “Jump,” ICD 9/10 codes are bridged.

Source: California EPICenter (Non-Fatal) and CDC WISQARS (Fatal)

Non-Fatal Self-Inflicted Injuries among AI/AN, by County California, 1991-2006



Above State Rate
47.26
California Rate*

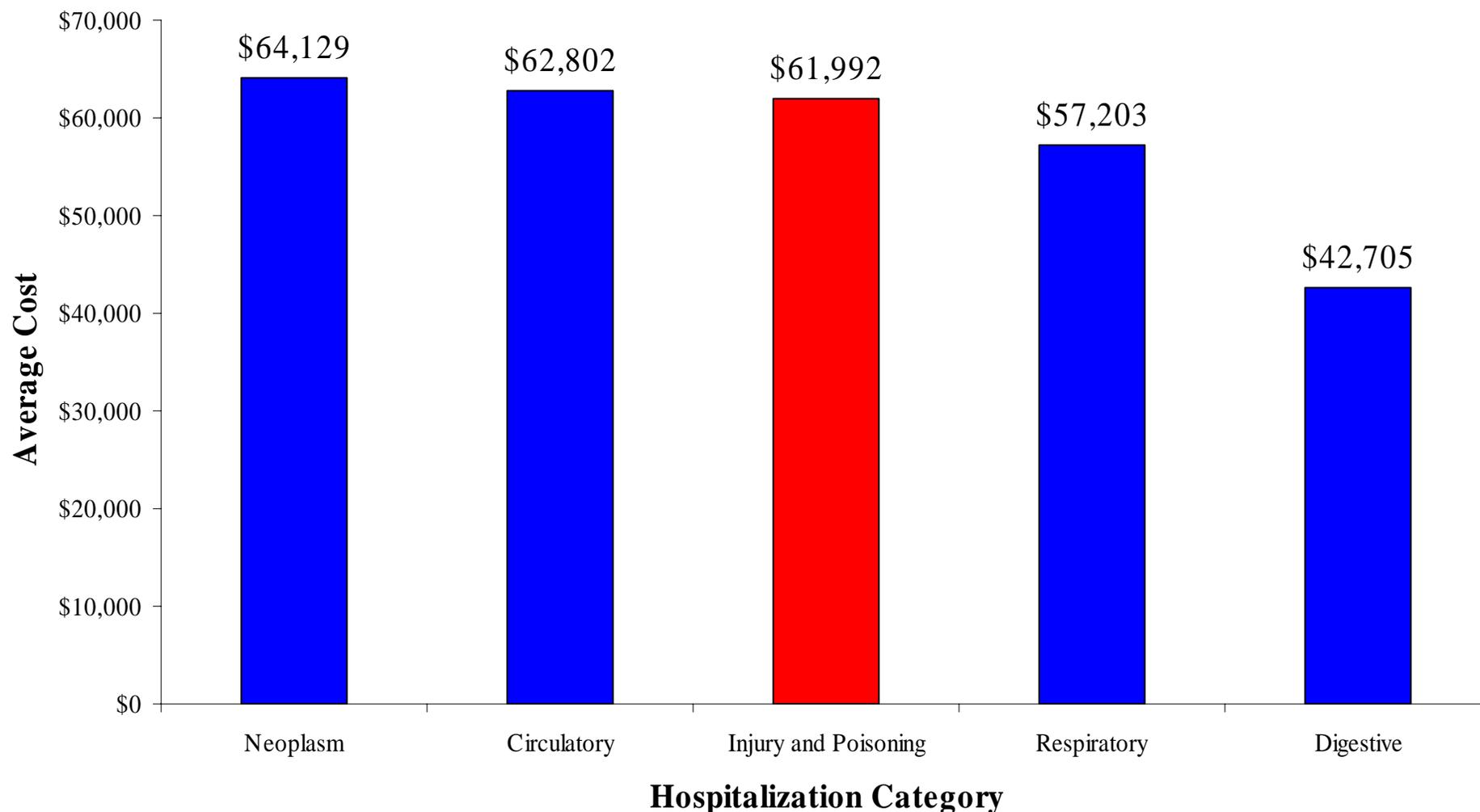
Counties with AI/AN rate above state rate	
Del Norte	51.12
Humboldt	58.67
Inyo	91.36
Lake	84.91
Mendocino	68.15
Modoc	65.28
San Francisco	57.05
Shasta	48.15
Siskiyou	58.87

*California Rate includes all races
AI/AN rates used are adjusted for underreporting

Source: California Department of Public Health, Epidemiology and Prevention Injury Control



Average Cost per Hospitalization All Races, California 2007-2008

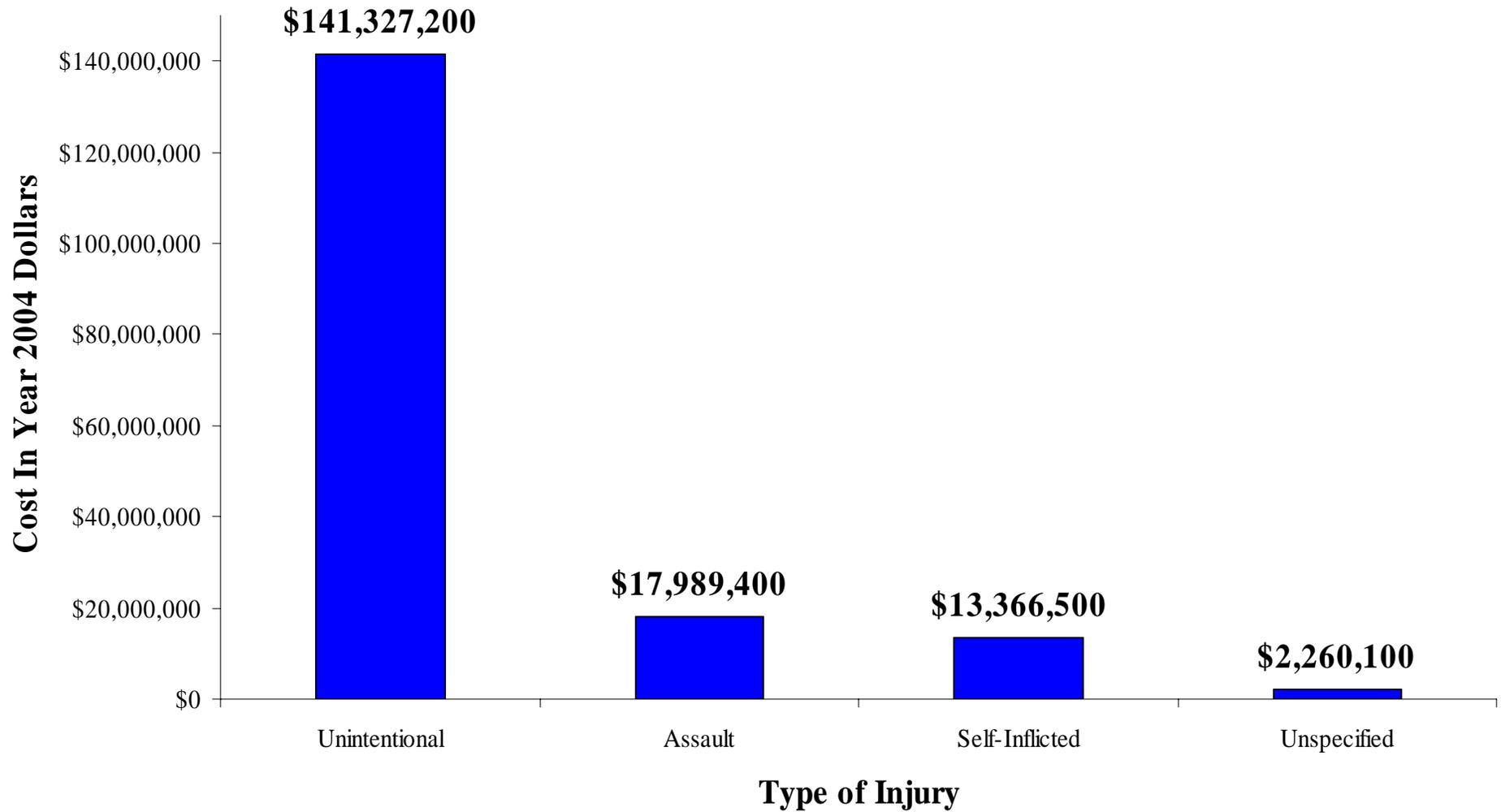


Categories based on Principal Diagnosis codes from ICD-9-CM coding manual sections

Average cost is calculated by dividing the Total Charges by the Number of Discharges for the time period

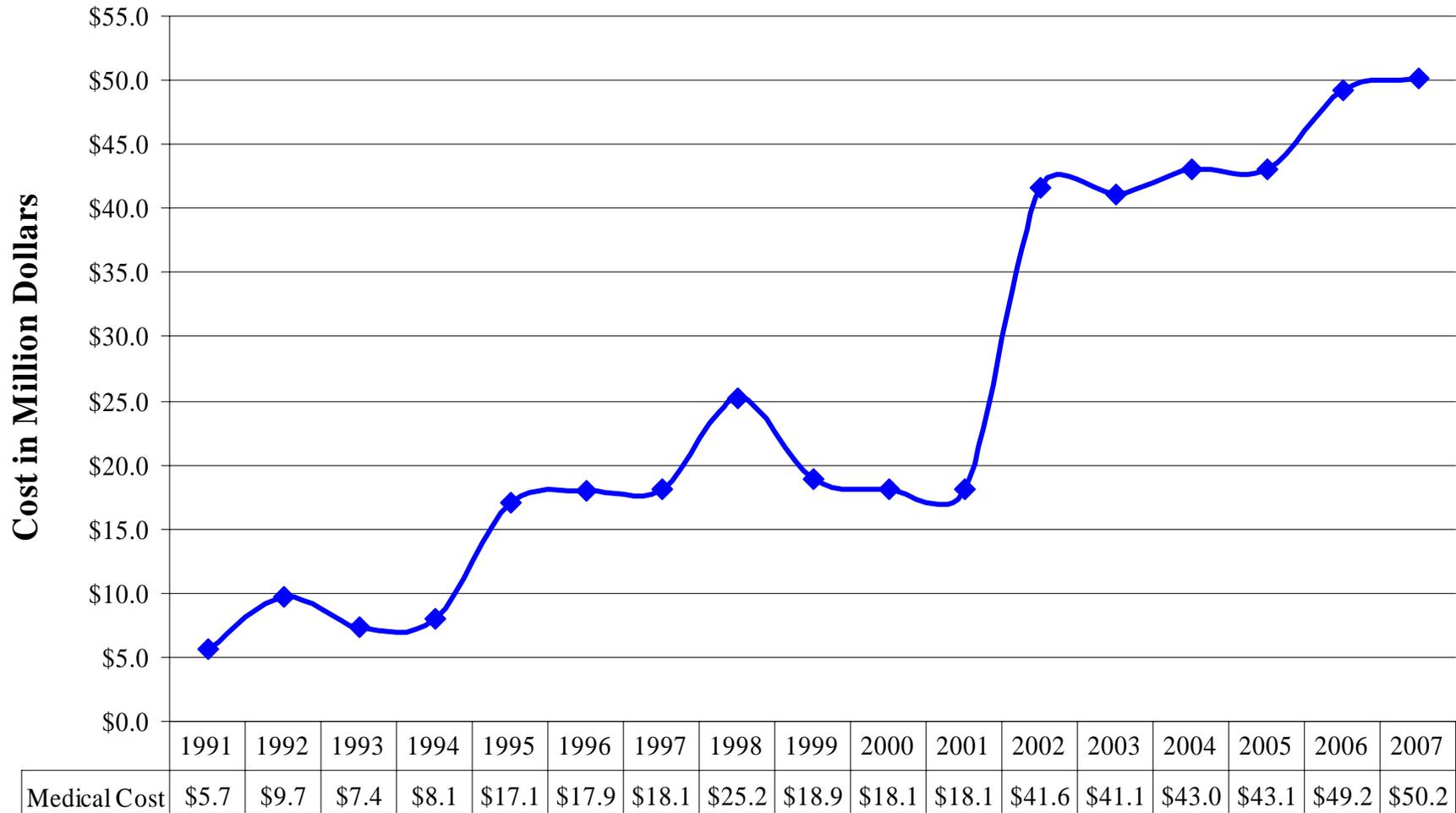
Source: California Office of Statewide Health Planning and Development

Medical Cost of Fatal Injuries, All Races California, 2004



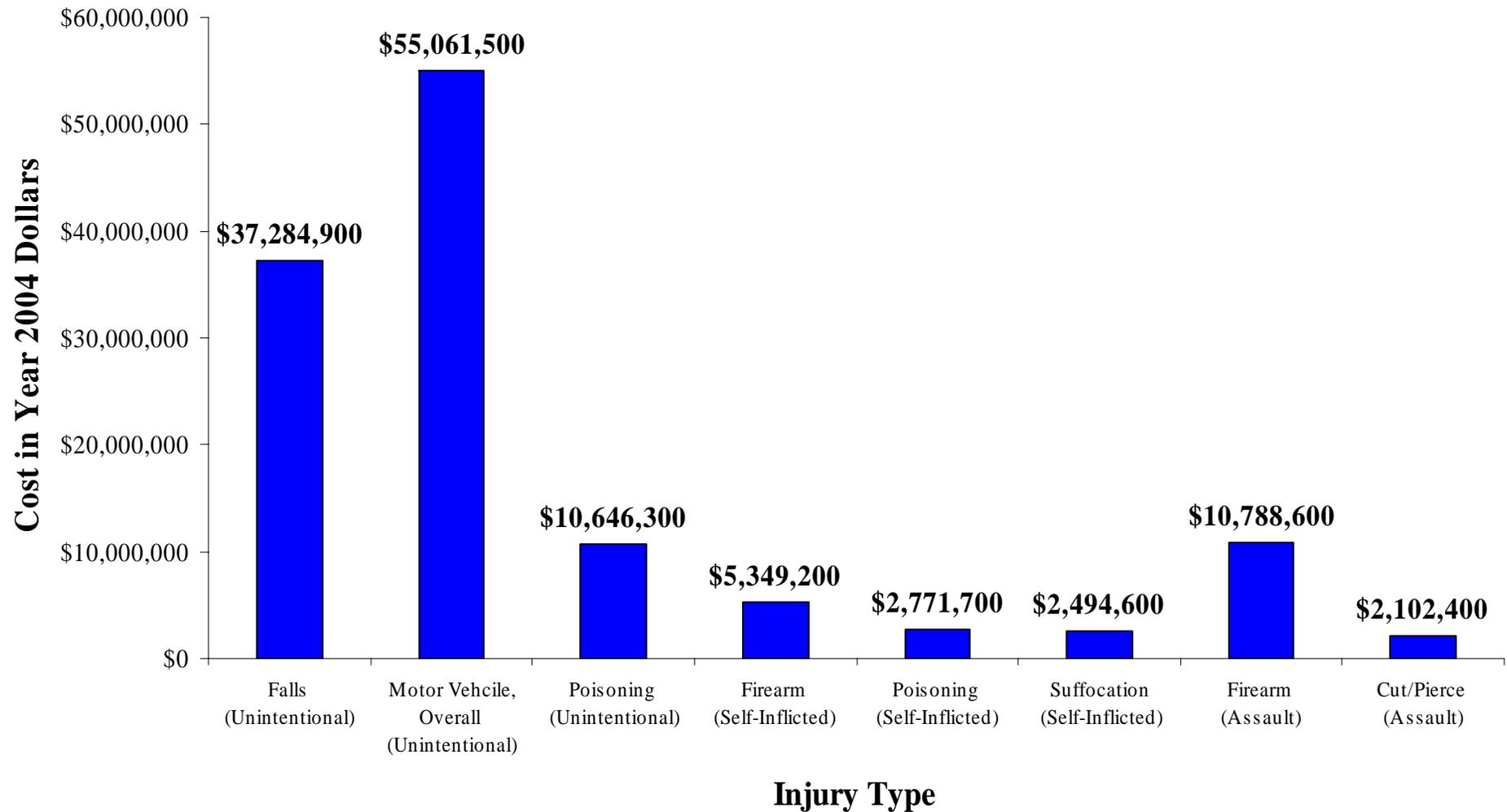
Source: Children's Safety Network National Injury and Violence Prevention Resource Center

Medical Costs for Fatal and Non-Fatal Injuries among AI/AN California, 1991-2007



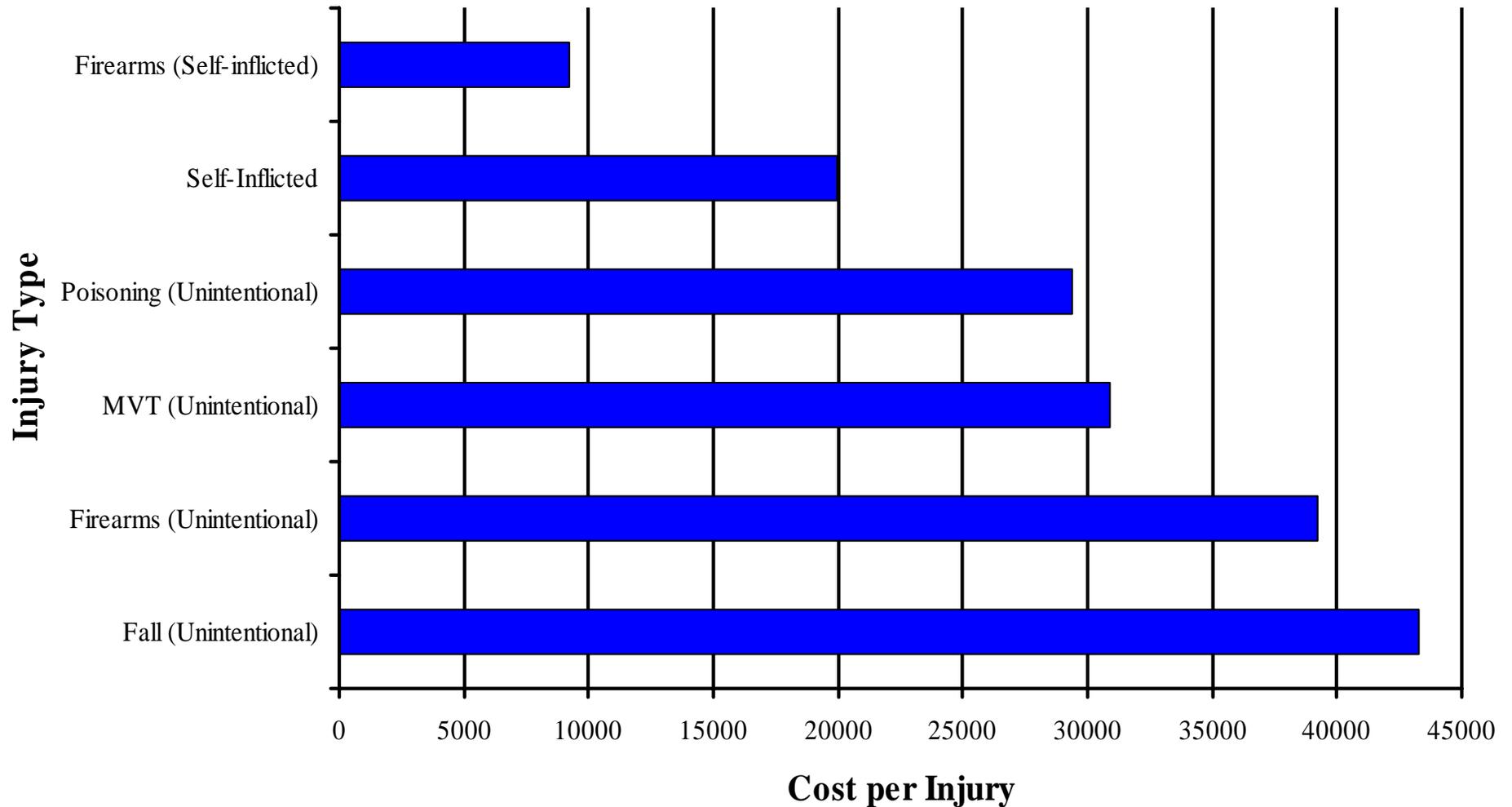
Source: California Office of Statewide Health Planning and Development

Medical Cost of Fatal Injury among All Races, by Injury Type California, 2004



Source: Children's Safety Network National Injury and Violence Prevention Resource Center

Estimated Medical Cost per Incident, by Injury Type California, 1997 (All Races)



Source: Children's Safety Network National Injury and Violence Prevention Resource Center

AI/AN Population by California County



County	County Population in 2000	County Population AI/AN in 2000	County	County Population in 2000	County Population AI/AN in 2000
Alameda	1,443,741	9,146	Kern	661,645	9,999
Alpine	1,208	228	Kings	129,461	2,178
Amador	35,100	626	Lake	58,309	1,772
Butte	203,171	3,866	Lassen	33,828	1,104
Calaveras	40,554	705	Los Angeles	9,519,338	76,988
Colusa	18,804	439	Madera	123,109	3,212
Contra Costa	948,816	5,830	Marin	247,289	1,061
Del Norte	27,507	1,770	Mariposa	17,130	602
El Dorado	156,299	1,566	Mendocino	86,265	4,103
Fresno	799,407	12,790	Merced	210,554	2,510
Glenn	26,453	552	Modoc	9,449	398
Humboldt	126,518	7,241	Mono	12,853	309
Imperial	142,361	2,666	Monterey	401,762	4,202
Inyo	17,945	1,802	Napa	124,279	1,045

Source: U.S. 2000 CENSUS

AI/AN Population by California County



County	County Population in 2000	County Population AI/AN in 2000	County	County Population in 2000	County Population AI/AN in 2000
Nevada	92,033	814	Santa Cruz	255,602	2,461
Orange	2,846,289	19,906	Shasta	163,256	4,528
Placer	248,399	2,031	Sierra	3,555	67
Plumas	20,824	530	Siskiyou	44,301	1,726
Riverside	1,545,387	18,168	Solano	394,542	3,110
Sacramento	1,223,499	13,359	Sonoma	458,614	5,389
San Benito	53,234	616	Stanislaus	446,997	5,676
San Bernardino	1,709,434	19,915	Tehama	56,039	1,178
San Diego	2,813,833	24,337	Trinity	13,022	631
San Francisco	776,733	3,458	Tulare	368,021	5,737
San Joaquin	563,598	6,377	Tuolumne	54,501	992
San Luis Obispo	246,681	2,335	Ventura	753,197	7,106
San Mateo	707,161	3,140	Yolo	168,660	1,953
Santa Barbara	399,347	4,784	Yuba	60,219	1,569
Santa Clara	1,682,585	11,350	Santa Cruz	255,602	2,461

Source: U.S. 2000 CENSUS

Top Five Fatal Injuries, All Races and Ages California, 1991-2006



Rank	1991	1992	1993	1994	1995	1996	1997	1998
1	Homicide/ Assault 4,019	Homicide/ Assault 4,050	Homicide/ Assault 4,167	Homicide/ Assault 3,789	Suicide/Self- Inflicted 3,815	Suicide/Self- Inflicted 3,393	Suicide/Self- Inflicted 3,417	Suicide/Self- Inflicted 3,211
2	Suicide/Self- Inflicted 3,752	Suicide/Self- Inflicted 3,686	Suicide/Self- Inflicted 3,811	Suicide/Self- Inflicted 3,678	Homicide/ Assault 3,584	Homicide/ Assault 2,971	Homicide/ Assault 2,735	Homicide/ Assault 2,236
3	Unintentional - MVT, Occupant 2,782	Unintentional - MVT, Occupant 2,571	Unintentional - MVT, Occupant 2,532	Unintentional - MVT, Occupant 2,686	Unintentional - MVT, Occupant 2,663	Unintentional - MVT, Occupant 2,589	Unintentional - MVT, Occupant 2,195	Unintentional - MVT, Occupant 2,159
4	Unintentional - Poisoning 1,227	Unintentional - Poisoning 1,733	Unintentional - Poisoning 1,995	Unintentional - Poisoning 1,824	Unintentional - Poisoning 1,981	Unintentional - Poisoning 1,958	Unintentional - Poisoning 1,772	Unintentional - Poisoning 1,773
5	Unintentional - Fall 961	Unintentional - Fall 908	Unintentional - Fall 882	Unintentional - Fall 908	Unintentional - Fall 988	Unintentional - Fall 969	Unintentional - Fall 1,052	Unintentional - Fall 1,116

Rank	1999	2000	2001	2002	2003	2004	2005	2006
1	Suicide/Self- Inflicted 3,036	Suicide/Self- Inflicted 3,105	Suicide/Self- Inflicted 3,240	Suicide/Self- Inflicted 3,198	Suicide/Self- Inflicted 3,389	Suicide/Self- Inflicted 3,343	Suicide/Self- Inflicted 3,176	Suicide/Self- Inflicted 3,283
2	Unintentional - Poisoning 2,219	Homicide/ Assault 2,052	Homicide/ Assault 2,253	Homicide/ Assault 2,411	Unintentional - Poisoning 2,493	Unintentional - Poisoning 2,525	Unintentional - Poisoning 2,613	Unintentional - Poisoning 2,829
3	Homicide/ Assault 2,007	Unintentional - Poisoning 1,879	Unintentional - Poisoning 1,981	Unintentional - Poisoning 2,376	Homicide/ Assault 2,434	Homicide/ Assault 2,444	Homicide/ Assault 2,487	Homicide/ Assault 2,532
4	Unintentional - MVT, Occupant 1,439	Unintentional - MVT, Occupant 1,528	Unintentional - MVT, Occupant 1,557	Unintentional - MVT, Occupant 1,628	Unintentional - MVT, Occupant 1,706	Unintentional - Fall 1,640	Unintentional - Fall 1,650	Unintentional - Fall 1,739
5	Unintentional - Fall 1,201	Unintentional - Fall 1,251	Unintentional - Fall 1,299	Unintentional - Fall 1,472	Unintentional - Fall 1,501	Unintentional - MVT, Occupant 1,602	Unintentional - MVT, Occupant 1,499	Unintentional - MVT, Occupant 1,474

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Top Five Non-Fatal Injuries, All Races and Ages California, 1991-2006



Rank	1991	1992	1993	1994	1995	1996	1997	1998
1	Unintentional - Fall 80,339	Unintentional - Fall 81,189	Unintentional - Fall 79,538	Unintentional - Fall 81,994	Unintentional - Fall 84,266	Unintentional - Fall 86,631	Unintentional - Fall 90,816	Unintentional - Fall 93,318
2	Unintentional - MVT, Occupant 23,998	Homicides/ Assault 22,735	Homicides/ Assault 21,143	Unintentional - MVT, Occupant 21,040	Unintentional - MVT, Occupant 20,672	Unintentional - MVT, Occupant 20,115	Unintentional - MVT, Occupant 19,746	Unintentional - MVT, Occupant 20,361
3	Homicides/ Assault 22,867	Unintentional - MVT, Occupant 22,539	Unintentional - MVT, Occupant 20,658	Homicide/ Assault 19,151	Homicide/ Assault 18,248	Suicide/Self-Inflicted 16,141	Suicide/Self-Inflicted 16,562	Suicide/Self-Inflicted 15,675
4	Suicide/Self-Inflicted 15,904	Suicide/Self-Inflicted 16,237	Suicide/Self-Inflicted 15,859	Suicide/Self-Inflicted 16,631	Suicide/Self-Inflicted 16,697	Homicide/ Assault 16,107	Homicide/ Assault 15,258	Homicide/ Assault 14,093
5	Unintentional - Poisoning 8,048	Unintentional - Poisoning 9,096	Unintentional - Poisoning 9,541	Unintentional - Poisoning 10,157	Unintentional - Poisoning 9,792	Unintentional - Poisoning 10,208	Unintentional - Poisoning 10,263	Unintentional - Poisoning 10,075
Rank	1999	2000	2001	2002	2003	2004	2005	2006
1	Unintentional - Fall 94,119	Unintentional - Fall 95,387	Unintentional - Fall 96,936	Unintentional - Fall 98,216	Unintentional - Fall 101,170	Unintentional - Fall 101,282	Unintentional - Fall 102,282	Unintentional - Fall 102,505
2	Unintentional - MVT, Occupant 20,128	Unintentional - MVT, Occupant 20,995	Unintentional - MVT, Occupant 20,897	Unintentional - MVT, Occupant 21,909	Unintentional - MVT, Occupant 22,153	Unintentional - MVT, Occupant 22,011	Unintentional - MVT, Occupant 21,116	Unintentional - MVT, Occupant 20,153
3	Suicide/Self-Inflicted 14,938	Suicide/Self-Inflicted 16,461	Suicide/Self-Inflicted 16,927	Suicide/Self-Inflicted 17,141	Suicide/Self-Inflicted 16,965	Suicide/Self-Inflicted 16,562	Suicide/Self-Inflicted 16,403	Suicide/Self-Inflicted 15,562
4	Homicide/ Assault 12,694	Homicide/ Assault 13,131	Homicide/ Assault 13,158	Homicide/ Assault 13,573	Homicide/ Assault 13,984	Homicide/ Assault 14,066	Homicide/ Assault 14,470	Homicide/ Assault 14,362
5	Unintentional - Poisoning 9,859	Unintentional - Poisoning 9,675	Unintentional - Poisoning 9,917	Unintentional - Poisoning 10,653	Unintentional - Poisoning 11,453	Unintentional - Poisoning 11,549	Unintentional - Poisoning 11,608	Unintentional - Poisoning 11,775

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Definitions		ICD-9	ICD-10
Assault/Homicide	Any deliberate injury caused by another person or persons.	E960-E969	Y04-Y07, X85-X95
Firearm (Accidental)	Unintentional injury due to a firearm.	E922	W32-W34
ICD-9 E-Code	(The International Classification of Diseases, 9th Revision) Code for External Causes of Injury. A standardized method to classify different causes of injury. (Fatal data <1999).		
ICD-10 E-Code	(The International Classification of Diseases, 10th Revision) Code for External Causes of Injury. A standardized Method to classify different causes of injury (Fatal Data > 1999).		
Injury Rate Rank	The 58 counties in California were ranked by injury rate, by County highest (1) to lowest.		
Motor Vehicle Injuries	Any unintentional injury caused by or due to a motor vehicle.	E810.0-E825.9	V20-V79
Self-inflicted Injury and Suicide	Any deliberate self-inflicted injury	E950.0-E959	X60-X84
Unintentional Falls	Any type of slip, trip, stumble, or fall that causes unintentional injury or death. This includes cases where the fall was intentional but the injury was not (ex: sports)	E890.0-E899	W00-W019
Unintentional Poisonings	Any exposure to a chemical substance that causes injury. This includes alcohol poisonings and unintentional drug overdoses.	E850.0-E869.9	X40-X49

For more specific code descriptions see “ Injury Classification Codes” on the following pages

Injury Classification Codes (ICD-9 and ICD-10)

Cause of Injury	ICD-9-E Codes	ICD-10 VWXY Codes
Unintentional-Burn, Fire/Flame	890-891 (.0-.9), 892, 893 (.0-.9), 894-899	X00-X09
Unintentional-Burn, Hot Object/Substance	924 (.0-.9)	X10-X19
Unintentional-Cut/Pierce	920 (.0-.9)	W25-W29, W45
Unintentional-Drowning/Submersion	830 (.0-.9), 832 (.0-.9), 910 (.0-.9)	W65-W74
Unintentional-Fall	880-881 (.0-.9), 882, 883-884 (.0-.9), 885, 885(.1-.9), 886 (.0-.9), 888	W00-W19
Unintentional-Firearms	922 (.0-.9)	W32-W34
Unintentional-Machinery	919 (.0-.9)	W24, W30-W31
Unintentional-Motor Vehicle Traffic, Occupant	810-819 (.0,.1)	V30-V79(.4-.9), V81.1, V82.1, V83-V86(.0-.3)
Unintentional-Motor Vehicle Traffic, Motorcyclist	810-819(.2,.3)	V20-V28(.3-.9), V29(.4-.9)
Unintentional-Motor Vehicle Traffic, Bicyclist	810-819(.6)	V12-V14(.3-.9), V19(.4-.6)
Unintentional-Motor Vehicle Traffic, Pedestrian	810-819(.7)	V02-V04(.1,.9), V09.2
Unintentional-Motor Vehicle Traffic, Other	810-819(.4,.5,.8)	V80(.3-.5)
Unintentional-Motor Vehicle Traffic, Unspecified	810-819(.9)	V87(.0-.8), V89.2
Unintentional-Bicyclist, Other	800-807(.3), 820-825(.6), 826(.1,.9), 827-829(.1)	V10-V11(.0-.9), V12-V14(.0-.2), V15-V18(.0-.9), V19(.0,.1,.3,.9)
Unintentional-Pedestrian, Other	800-807(.2), 820-825(.7), 826-829(.0)	V01(.0-.9), V02-V04(.0), V05-V06(.0-.9), V19(.0-.3,.8,.9)
Unintentional-Transport, Other	800-807(.0,.1,.8,.9), 820-825(.0-.5,.8,.9), 826(.2-.8), 827-829(.2-.9), 831(.0-.9), 833-845(.0-.9)	V20-V28(.0-.2), V29(.0-.3), V30-V79(.0-.3) V80(.0-.2,.6-.9), V81-V82(.0,.2-.9), V83-V86(.4-.9), V87.9, V88(.0-.9) V89(.0,.1,.3,.9), V90-V99
Unintentional-Natural/Environment	900-902(.0-.9), 903, 904-906(.0-.9), 907, 908-909(.0-.9), 928(.0-.2)	W42-W43, W53-W64, W92-W99, X20-X39, X51-X57

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Injury Classification Codes (ICD-9 and ICD-10)

Cause of Injury	ICD-9-E Codes	ICD-10 VWXY Codes
Unintentional, Overexertion	927	X50
Unintentional, Poisoning	850(.0-.9), 851, 852-866(.0-.9), 867, 868-869(.0-.9)	X40-X49
Unintentional, Struck by Object	916, 917(.0-.9)	W20-W22, W50-W52
Unintentional-Other	846-848, 887, 914-915, 918, 921(.0-.9), 922.5, 923(.0-.9), 925-926(.0-.9), 928(.3,.8-.9)	W23, W35-W41, W44, W49, W85-W91, X58-X59
Unintentional-Suffocation	911-912, 913(.0-.9)	W75-W84
Self-Inflicted/Suicide - Cut/Pierce	956	X78
Self-Inflicted/Suicide - Firearm	955(.0-.4)	X72-X74
Self-Inflicted/Suicide - Hanging/Suffocation	953(.0-.9)	X70
Self-Inflicted/Suicide - Jump	957(.0-.9), 958	X80-X81
Self-Inflicted/Suicide - Poisoning	950-952(.0-.9)	X60-X69
Self-Inflicted/Suicide - Other	954, 955(.5-.9), 958(.1-.9)	X71, X75-X77, X79, X82-X84
Assault/Homicide - Abuse and Neglect	967(.0-.9), 698.4	Y06(.0-.9), Y07(.0-.9)
Assault/Homicide - Blunt Object	968.2	Y00
Assault/Homicide - Cut/Pierce	966	X99
Assault/Homicide - Fight, Unarmed	960	Y04
Assault/Homicide - Firearm	965(.0-.4)	X93-X95
Assault/Homicide - Other	960.1, 961, 962(.0-.9), 963-964 965(.5-.9), 968(.0-.1,.3,.7,.5-.9), 979(.0-.9)	X85-92, X96-X98, Y01-Y03, Y05, Y08-Y09
Legal Intervention/War	970-976, 978, 990-991(.0-.9), 992-996, 997(.0-.9), 998	Y35-Y36(.0-.9)

Source: California Department of Public Health, Epidemiology and Prevention Injury Control

Injury Classification Codes (ICD-9 and ICD-10)

Cause of Injury	ICD-9-E Codes	ICD-10 VWXY Codes
Undetermined Intent	980-983(.0-.9), 984, 985(.0-.7), 986, 987-988(.0-.9)	Y10-Y34
Late Effects	929(.0-.9), 959, 969, 977, 989-999(.0-.1)	Y85(.0-.9), Y86, Y87(.0-.2), Y89(.0-.9)
Special Definitions Used In State of California EPIC Data		
Motor Vehicle Traffic, Drivers Only	810-819(.0)	V30-V79(.5), V83-V86(.0)
Violent Injuries (Combination of all types of Assault/ Homicide groups above)	960(.0-.1), 961, 962(.0-.9), 963-964, 965(.0-.9), 966, 967-968(.0-.9), 979(.0-.9)	X85-Y05, Y06-Y07(.0-.9), Y08-Y09
Abuse of Females by their Spouse or Partner	967.3	Y06-Y07(.0)

References

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Appendix: Additional Sources for Injury Data and Information

This list comprises many of the major National, State, and non-government sources of injury and injury prevention data and resources. Many others exist that for specific topics (Occupational, Head and Neck Injury, etc). For more information on data sources, contact the California Area IHS Injury Prevention specialist at (916) 930-3981 or visit the IHS Injury Prevention Program web page at <http://www.ihs.gov/MedicalPrograms/InjuryPrevention/index.cfm>.



Epidemiology and Prevention for Injury Control

<http://www.cdph.ca.gov/programs/EPIC/>
California Department of Health Services
P.O. Box 997413
Sacramento, CA 95814

The EPIC's mission is to provide accurate, timely and objective information on injuries. It is the most complete source of injury data for California. Custom data tables to answer specific questions about injuries in California and its 58 counties can be created using EPIC. EPIC's fatal injury data comes from the California Death Statistical Master File and data for hospitalized nonfatal injuries comes from the Office of Statewide Health Planning and Development (OSHPD) patient discharge data.



Department of Finance

<http://www.dof.ca.gov>
Demographic Research Unit
915 L Street
Sacramento CA, 95814
(916) 323-4086

The Demographic Research Unit of the California Department of Finance is designated as the official source of demographic data for State planning and budgeting.



U.S. Census Bureau

Web address: <http://www.census.gov>

E-mail: ipc@census.gov

The Census Bureau serves as the leading source of quality data about the nation's people and economy. Their goal is to provide the best mix of timeliness, relevancy, quality, and cost for the data collected and services they provide.



National Center for Injury Prevention and Control (NCIPC)

Mail stop K65

4770 Buford Highway NE

Atlanta, GA 30341-3724

Phone: 770-488-1506

Email: ohcinfo@cdc.gov

Web address: <http://www.cdc.gov/ncipc>

(Web-based Injury Statistics Query and Reporting System) is an interactive database system that provides customized reports of injury-related data. The NCIPC mission is to “reduce morbidity, disability, mortality, and costs associated with injuries.”

WISQARS covers the years 1981-2001 and are available by Year, Age, Race/Ethnicity, Gender, and State in five report formats:

- Fatal Injury Reports
- Nonfatal Injury Reports
- Leading Causes of Death Reports
- Leading Causes of Nonfatal Injury Reports
- Years of Potential Life Lost (YPLL)



National Center for Health Statistics

6525 Belcrest Road

Hyattsville, MD 20782-2003

Phone: 301-458-4636

www.cdc.gov/nchs

Email: ospinfo@cdc.gov

The NCHS has data on vital events (birth, death, etc.) as well as information on health status, lifestyle and exposure to unhealthy influences, the onset and diagnosis of illness and disability, and the use of health care. NCHS produces a number of databases including:

- National Health Interview Survey (NHIS), which collects data on illness, injury, and chronic diseases from a survey of approximately 42,000 U.S. households
- National Vital Statistics System (NVSS), which is the official source for national vital statistics
- National Health Care Survey (NHCS). which has a combination of four surveys: National Hospital Discharge Survey (NHDS): collecting data on diagnosis, procedures, and length-of-stay for non-Federal Patients



National Highway Traffic Safety Administration (NHTSA)

Region IX Office 201 Mission Street, Suite 2230

San Francisco, CA 94105

Phone: 415-744-3089 Fax: 415-744-2532

<http://www.nhtsa.dot.gov/>

NHTSA's mission is to reduce deaths, injuries, and economic losses resulting from motor vehicle crashes. They provide a number of publications as well as research and program funding for programs focused on traffic safety. NHTSA is responsible for the Fatality Analysis Reporting System (FARS), an online database on all vehicle crashes in the United States that occur on a public roadway and involve a fatality in the crash. Data include occupant injury time and location of incident, weather conditions, restraint use, blood alcohol licensing files, driver record data, death certificates, and hospital records. FARS can be accessed at <http://www.fars.nhtsa.dot.gov>.

