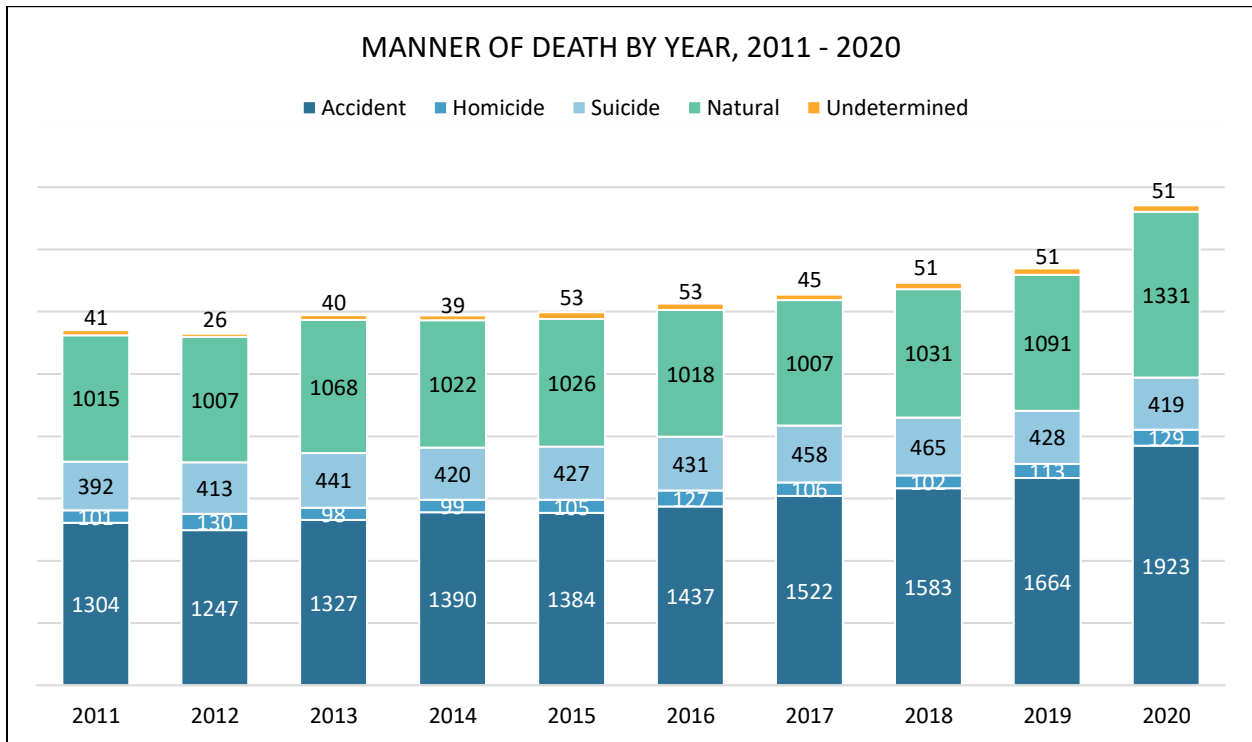




County of San Diego Department of the Medical Examiner

2020 Annual Report Executive Summary

Welcome, and thank you for your interest in this annual data summary. The information presented here and in the previous quarterly summaries this year, and that we make available through the County's [Open Data Portal](#)¹ represents an opportunity to learn about the injuries and illnesses that cause sudden and unexpected deaths among the population of San Diego County. Our purpose for presenting this data is ultimately to help improve or save future lives through addressing risk factors or common issues and trends that may be identified in the data or by comparison to the data of previous years.²



More than 25,000 deaths were registered in San Diego County in 2020, but the Medical Examiner was not involved with investigating the majority of those deaths which resulted from natural causes. California Health and Safety Code Section 102850 and Government Code Section 27491 outline which deaths should be reported to the Medical Examiner for evaluation.³ Generally, the deaths that the Medical Examiner has jurisdiction to investigate are those that are thought to have resulted from an injury, whether it be accidental, homicidal, or suicidal; due to trauma or an acute toxicity (“overdose”), or due to apparent undiagnosed natural causes, or other sudden, unexpected natural causes. In addition, if an injury or intoxication is thought to *contribute* to the death - even in a small way - the death falls under our jurisdiction to investigate. This applies when an individual dies of complications of a prior injury, even if that injury occurred many years prior to the death.

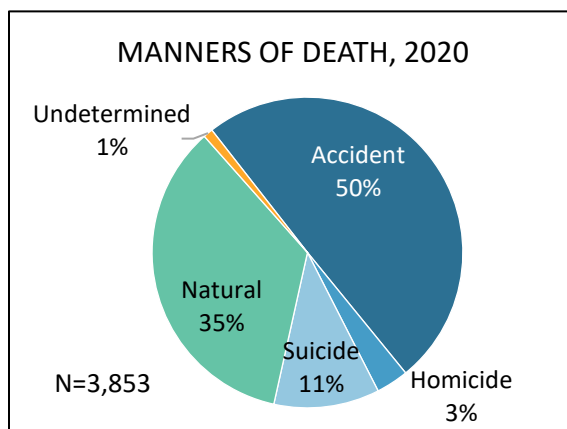
¹ See <https://data.sandiegocounty.gov/Safety/Medical-Examiner-Cases/jkvb-n4p7>

² Prior year annual reports and quarterly summaries may be accessed at <https://www.sandiegocounty.gov/content/sdc/me/press/stats.html>

³ All deaths that fall under section 27491 are also subject to whether the facts indicate the death occurred under natural circumstances and the physician of record has sufficient knowledge to reasonably state the cause of death occurred under natural circumstance. Therefore, not every death that falls under one of these categories will be investigated by the Department of the Medical Examiner. See Govt. Code § 27491.

In 2020, 10,538 deaths were reported to the department (2,457 more than in 2019), and initial evaluation by Medical Examiner’s Investigators determined that 6,685 of those people likely died natural deaths and that their own doctor could sign their death certificate. We further investigated 3,853 of those 10,538 deaths, and it is information about those deaths that we are able to report.

This annual summary is designed to provide an overview of decedent characteristics, as well as the frequency, cause and location of deaths in the county. As may be seen in the data that follow this summary, the San Diego County Medical Examiner works with many deaths of the types expected in any jurisdiction with a large urban and rural population—such deaths due to drug or alcohol-related causes, motor vehicle accidents, natural causes; deaths due to suicide or homicidal violence. In addition, the county’s variety of terrain, microclimates, and geography result in an even wider range of cases seen at our office, including deaths from exposure to hot and cold environmental conditions.



DEATH RATES PER 100,000 OF POPULATION

Based on San Diego population counts for 2020⁴, males represent a higher rate of deaths per 100,000 of the population in *all* manners of death investigated by the Medical Examiner. Of all accidental deaths, those caused by drugs, medication, and/or alcohol account for the highest rate in both males and females for 2020. In males, the accidental overdose rate was 43.7 per 100,000. This is a 49% increase compared to a rate of 29.3 in 2019. For females, the accidental overdose rate was 14.4 per 100,000, a 60% increase from a rate of 9.0 in 2019. In both homicides and suicides, firearms continue to be the leading method of death for males at a rate of 3.7 and 7.9, respectively. For females, firearms are the leading method of death in homicides at a rate of <1 per 100,000; in suicides, asphyxia is the most common at a rate of 2.2. Although the Medical Examiner only investigates a small percentage of natural deaths occurring in San

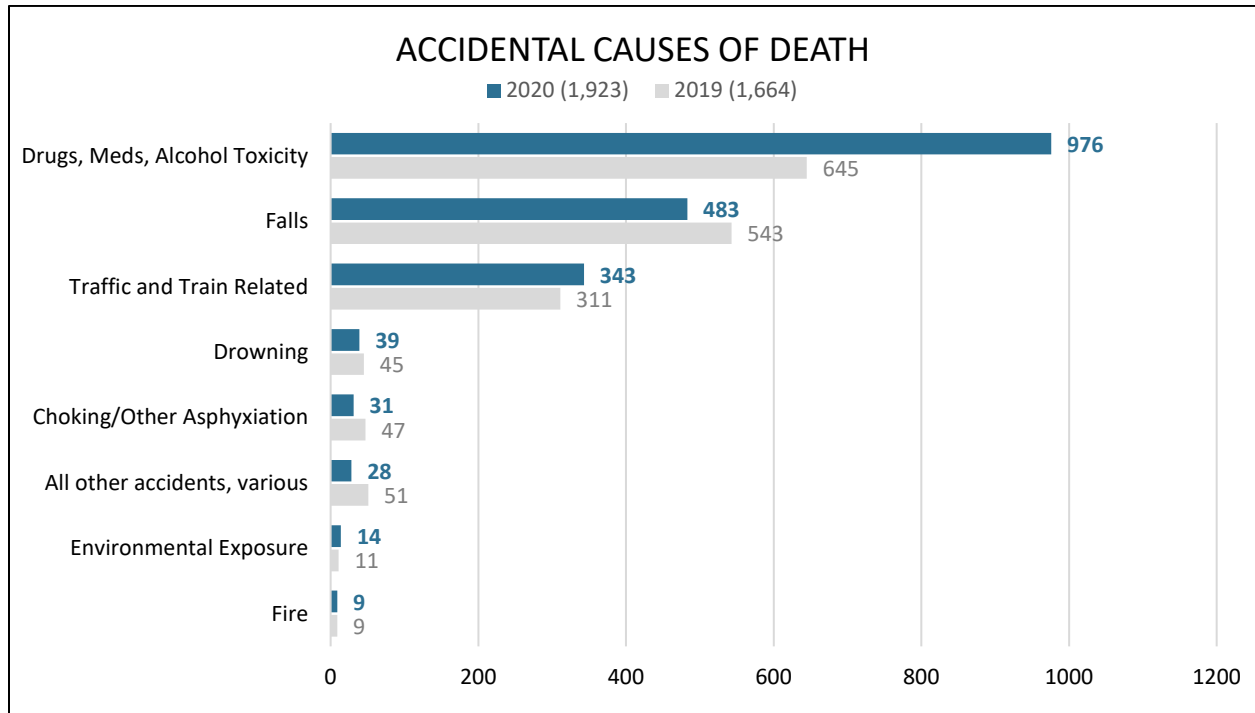
Diego County, of those that come under our jurisdiction, cardiovascular related deaths are the most common at a rate of 14.2 for women and 34.6 for men.

Manner and Most Common Manner Type	Rate per 100,000	
	Females	Males
Accidents	33.9	80.7
93% of all Accidents	Drugs, Meds, and/or Alcohol	43.7
	Falls	16.1
	Traffic/Train	15.5
		4.9
Homicides	1.5	6.2
60% of all Homicides	Firearm	3.7
		0.8
Suicides	5.4	19.5
69% of all Suicides	Firearm	7.9
	Asphyxia	6.2
Natural	23.5	55.9
62% of Natural	Cardiovascular	34.6
		14.2

ACCIDENTAL CAUSES OF DEATH

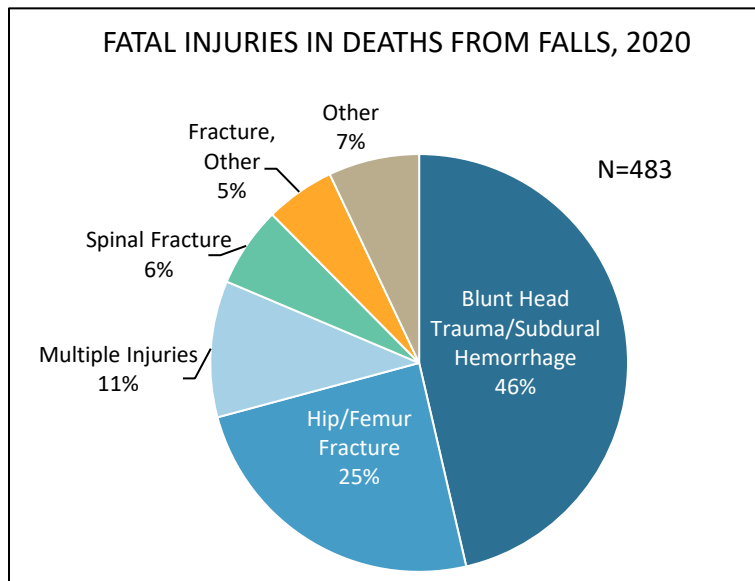
Abuse of illicit drugs, misuse of prescribed or illicitly obtained prescription medicines, and alcohol continue to represent a major proportion of the accidental deaths we investigate, accounting for 51% of all accidental deaths (compared to 39% in 2019). Accidental deaths due to falls accounted for 25% (compared to 33% in 2019), with most occurring from injuries in the home, and traffic or train related accidental deaths represented 18% of these cases (compared to 19% in 2019).

⁴ SANDAG, 2020 Population Estimates



DEATHS FROM ACCIDENTAL FALLS

The majority of deaths associated with falls were from head injuries or fractured hips occurring in people that fell from a standing height. Many of those decedents were elderly, with an average age of 79.4 and they also had pre-existing natural diseases that were factors in the deaths, often complicating the recovery from the injury.

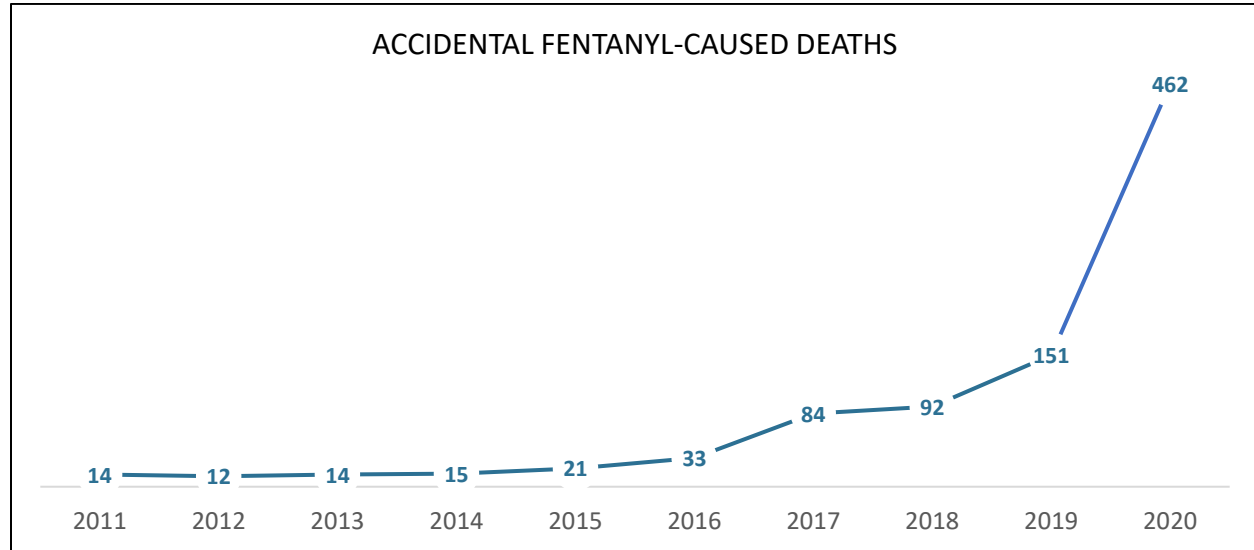


Approximately 57% (277) were found to have cardiovascular disease, diabetes, Alzheimer’s, and/or or dementia. In the majority of those cases, the injuries and natural diseases were well-documented by hospital physicians, and the deaths were not unexpected, such that the Medical Examiner’s investigation and Cause of Death determination was based for the most part on evaluation of that hospital documentation, and not on a post-mortem examination of the body.

ACCIDENTAL DEATHS DUE TO FENTANYL

There was a 206% increase in accidental fentanyl-caused deaths in our county from 2019 to 2020. In nearly all of the 462 accidental deaths due to overdose with fentanyl (either alone or with another drug), the fentanyl was not prescribed but was illegally obtained, often in the form of a counterfeit prescription

medicine like oxycodone or alprazolam. We also saw cases in which the decedents reportedly thought they purchased cocaine but died of fentanyl toxicity, with no cocaine. In another case someone purchased what they thought was heroin and died of fentanyl toxicity (there was no heroin in the substance that was purchased). Nearly 200 of those whose death was caused by an accidental drug overdose had both fentanyl and methamphetamine in their blood.



COVID-19 AND THE MEDICAL EXAMINER

Although most natural deaths need not be reported to the Medical Examiner, one of the conditions that requires that a natural death be reported is that the death is thought to have resulted from an infectious disease that could represent a public health hazard – like deaths due to COVID-19. The department was notified of the deaths caused by COVID-19, or in which COVID-19 was a contributing condition, but in most cases the decedent’s own doctor completed the death certificate without further investigation by the Medical Examiner. Nevertheless, our Investigations Division staff documented the thousands of reports of those deaths that occurred in our county and we worked with the Health and Human Services Agency’s Department of Public Health, comparing data to make sure that all deaths were accounted for.

Which decedents did the Medical Examiner test for COVID? Our testing criteria changed as the pandemic progressed. At first, we tested people with travel history or other factors that put them at risk, or that were symptomatic. When the disease became more prevalent, we added testing of not only those that were symptomatic, but those that died apparently natural deaths with risk factors and those whose recent health was not known. We also tested those with no symptoms or apparent risk factors but having autopsy findings consistent with COVID. We did not test for COVID in people for whom we no reason to believe that COVID would have been a contributing condition in their death (e.g. someone died with gunshot wounds or in a car accident). Throughout the pandemic and as of this report, we tested 685 decedents and received 96 positive results.

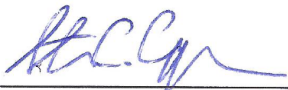
Who does the Medical Examiner count as a “COVID death” and who is not counted? We count a death as being due to COVID if the disease was a cause or contributing condition to the death. There were cases in which the decedent had a positive COVID test but had no sign or symptom of the disease and had an unrelated cause of death (like a drug overdose or trauma) – in those cases COVID was not listed as a factor in the death, and COVID did not appear on the death certificate.

Our department prepared for a surge of deaths, securing extra refrigerated storage, and working with the community to provide information and resources for the safe handling of decedents. The county supplied transportation pouches (“body bags”) to funeral homes and hospitals that ran out and temporarily could not get re-supplied, and our department helped 16 healthcare facilities and funeral homes store 296 decedents when their morgue capacities were exceeded.

SUMMARY

A data summary of the manners of death and their sub-classifications, as well as summary information of age, race/ethnicity, sex, and city of death is provided in the following pages, and more can be learned from the specific data on the Open Portal. The Medical Examiner also provides more detailed information about deaths due to drugs through the County’s Prescription Drug Abuse Task Force and Methamphetamine Strike Force every year.⁵ We encourage use of that information when it becomes available.

While this report presents aggregate numbers and statistics, we are very aware that every case represents an individual that is mourned by family and loved ones. That individuality can be seen in the [Open Data Portal](#)⁶ information as well. Every single investigation is valuable, whether to the decedent’s family or to attorneys or an insurance company, but what we can learn from all deaths together is valuable to understanding health and safety issues in our community.



STEVEN C. CAMPMAN, M.D.
Chief Medical Examiner

⁵ Prescription Drug Abuse Task Force reports and information may be found at <https://www.sandiegorexabusetaaskforce.org/> and Methamphetamine Strike Force reports and information may be found at <https://www.no2meth.org/>.

⁶ See <https://data.sandiegocounty.gov/Safety/Medical-Examiner-Cases/jkvb-n4p7>

Manner Type	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
AIDS Related			2			2
Aircraft	1					1
Alcohol Related			134			134
Anaphylactic Reaction	2					2
Animal Related	1					1
Asphyxia Total:	31	4		142		177
<i>Airway obstruction</i>	23			1		24
<i>Hanging</i>				130		130
<i>Mechanical</i>	1					1
<i>Other</i>				2		2
<i>Positional</i>	2					2
<i>Strangulation</i>		4				4
<i>Suffocation</i>	3			9		12
<i>Traumatic</i>	2					2
Assault		5				5
Autoimmune/Systemic			2			2
Bicycle	4					4
Blunt Force	2	10			1	13
Boating	2					2
Burns - Thermal, Chemical				1		1
Cancer			38			38
Carbon Monoxide	1			3		4
Cardiovascular			820			820
Central Nervous System			32			32
Chemical/Poison	1			5		6
Chronic Drug Abuse			8			8
Cutting/Stabbing		28		9		37
Diabetes Related			43			43
Drowning	39			3	1	43
Drug - Medication - Alcohol:	976			48		1024
<i>Alcohol</i>	44					44
<i>Drugs & Alcohol</i>	76			3		79
<i>Drugs & Meds</i>	93			7		100
<i>Drugs of Abuse</i>	670			2		672
<i>Drugs, Meds, Alcohol</i>	24					24
<i>Medication</i>	53			28		81
<i>Meds & Alcohol</i>	16			8		24
Drug Related		2				2
Endocrine			4			4
Explosion	1					1
Environmental Exposure	14					14
Fall	483					483
<i>Abdominal Injuries</i>	1					1
<i>Blunt head trauma</i>	190					190
<i>Fracture, other</i>	26					26
<i>Hip/Femur Fracture</i>	118					118
<i>Multiple injuries</i>	51					51
<i>Other</i>	33					33
<i>Spinal fracture</i>	30					30
<i>Subdural hematoma</i>	34					34
Family Paid Autopsy			12			12
Fire	9			3		12
Firearm		77		149		226
Gastrointestinal			25			25
Hematologic			4			4
Industrial	4					4
Infectious			99			99

Manner Type	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Inhalation	3			1		4
Intrauterine/Stillborn			6			6
Jumping				44		44
Liver Disease			7			7
Medical - Therapeutic	1					1
Motor Vehicle	336	2		5	1	344
Auto Rollover (solo)	54	1				55
Auto vs Auto	59					59
Auto vs Bicycle	12					12
Auto vs Fixed Object	49			2		51
Auto vs Motorcycle	16					16
Auto vs Pedestrian	100	1		2	1	104
Motorcycle	30					30
Off Road	3					3
Other	13			1		14
Obesity Related			15			15
Other	8	1	8			17
Pregnancy Related			1			1
Prematurity			1			1
Pulmonary			55			55
Renal			3			3
Seizures/Epilepsy			5			5
SIDS			1			1
Skeletal Remains					4	4
Train	3			6		9
Undetermined	1		6		44	51
Totals	1923	129	1331	419	51	3853
	49.9%	3.3%	34.5%	10.9%	1.3%	100.0%

Examinations	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Autopsy	1084	127	508	172	44	1935
External	839	2	823	247	7	1918
Subtotal	1923	129	1331	419	51	3853
Jurisdiction Waived by ME			6685			6685
Totals	1923	129	8016	419	51	10538

Age	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
0-12 months	6	1	9		11	27
1-5 years	5		3		1	9
6-12 years	5		1	1		7
13-16	11	6		10		27
17-19	40	11	1	10		62
20-29	240	32	28	73	2	375
30-39	283	34	73	77	5	472
40-49	234	18	126	61	6	445
50-59	338	13	324	65	6	746
60-69	291	10	369	57	7	734
70-79	149	3	245	35	5	437
80-89	191	1	101	23	1	317
>90	130		50	6		186
Unknown			1	1	7	9
Totals	1923	129	1331	419	51	3853

Gender	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Female	562	25	389	90	16	1082
Male	1360	104	942	329	31	2766
Unknown	1				4	5
Totals	1923	129	1331	419	51	3853

Race	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Am. Indian Central		1				1
Am. Indian South	1		1	1		3
Asian	12		11	3		26
Asian Indian	8		2	2		12
Asian Other	1		1			2
Biracial / Multiracial	101	11	31	17	3	163
Black	155	22	127	17	6	327
Cambodian	2	1	1	1		5
Chinese	8		10	3		21
Filipino	39	2	40	18	1	100
Guamanian	1		2	1		4
Hawaiian	1		2			3
Hispanic	6		1			7
Hispanic Cuban	2		2	1		5
Hispanic Mexican	306	40	194	49	11	600
Hispanic Other	93	11	58	13	3	178
Hispanic Puerto Rcn	5	1	1			7
Japanese	5	1	8		1	15
Korean	6		3	2		11
Laotian	4		3	1		8
Native American	12		4	2		18
Other	19		7	1		27
Pacific Islander	1		7			8
Samoan	6		3			9
Unknown	5	1	6	1	7	20
Vietnamese	13	2	7	6		28
White	1111	36	799	280	19	2245
Totals	1923	129	1331	419	51	3853

Death City	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Alpine	7		5	2		14
Bonita	2		4			6
Bonsall	2		2			4
Borrego Springs	7		1	1		9
Boulevard	4		2	1	1	8
Camp Pendleton	3			1		4
Campo	5		1		2	8
Cardiff by the Sea	1		1	2		4
Carlsbad	107	3	62	20	2	194
Chula Vista	94	7	149	13	7	270
Coronado	11		6	4		21
Del Mar	3		3			6
Descanso			1			1
Dulzura	2		1		2	5
El Cajon	70	3	51	11	3	138
Encinitas	30		27	9		66
Escondido	184	12	73	23	2	294
Fallbrook	23	2	14	2		41
Guatay	1			1		2
Imperial Beach	7		8	2		17
Jacumba	5	1	1	2	1	10
Jamul	6		5	1	1	13
Julian	6		5	4		15
La Jolla	117	4	45	12	2	180
La Mesa	45	3	46	9		103
Lakeside	21		20	10		51
Lemon Grove	10	3	14	4		31
Los Angeles			1			1
Mount Laguna	3				1	4
National City	30	4	29	3	2	68
Ocean Beach	1					1
Oceanside	94	3	94	25	5	221
Pala	4					4
Pauma Valley	2		1			3
Pine Valley	1		1	3		5
Potrero	2		2			4
Poway	17		16	3		36
Ramona	16		13	4		33
Rancho Santa Fe	5		2	1		8
San Diego	822	77	514	205	17	1635
San Marcos	31	1	15	10		57
San Ysidro	12	3	8	2		25
Santa Ysabel	3					3
Santee	33		31	10		74
Solana Beach	4		2			6
Spring Valley	15	2	14	5	2	38
Tecate			1			1
Temecula	1					1
Valley Center	15		5	3	1	24
Vista	39	1	33	11		84
Warner Springs			2			2
Totals	1923	129	1331	419	51	3853