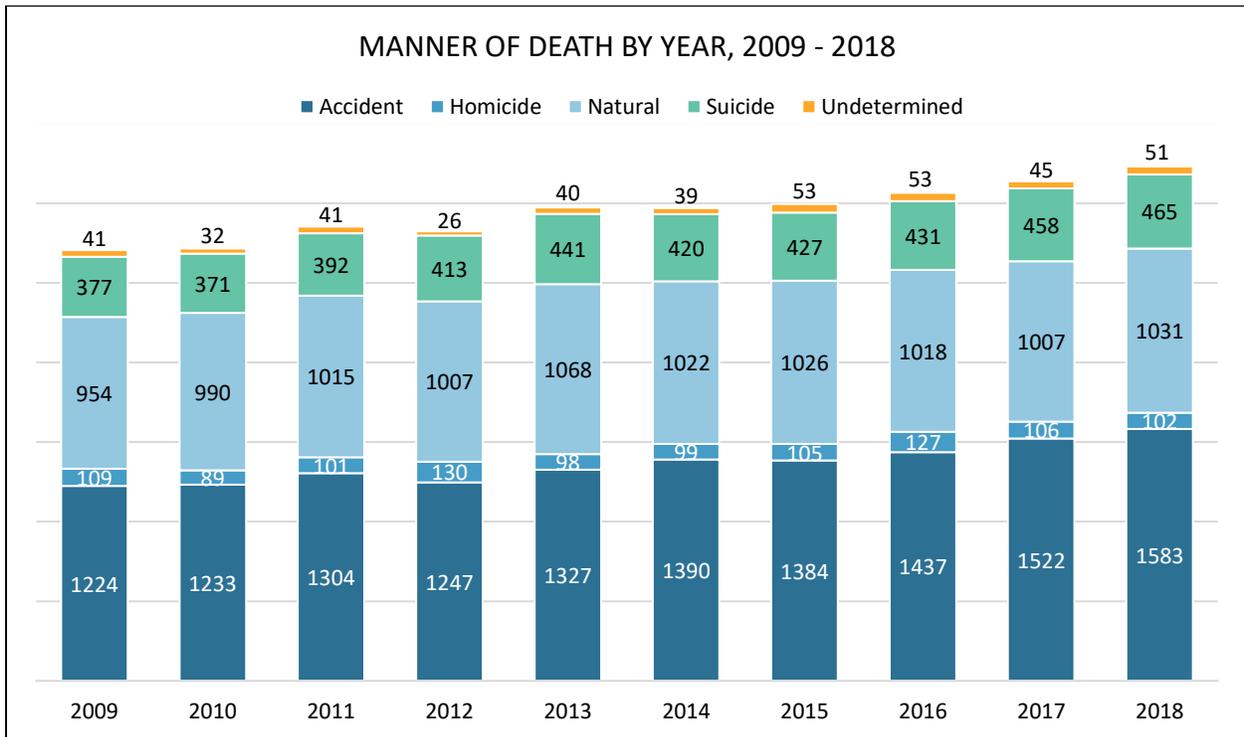




County of San Diego Department of the Medical Examiner

2018 Annual Report Executive Summary

Thank you for your interest in the data collected by the San Diego County Department of the Medical Examiner. The information that we present here and make available through the County's [Open Data Portal](#)¹ represents an opportunity to learn about injuries and illnesses that cause sudden and unexpected deaths among the population of San Diego County. This data can inform efforts to improve or save future lives by addressing risk factors and may also be compared to that of previous years to look for common issues and trends.²



It is the intent of the Department of the Medical Examiner to develop as much information on every case as resources permit and studying those cases in cohorts that reflect or are likely to reflect changing patterns important to public health and safety as well as risk factors for premature deaths. Current case categories for study are child fatalities including SIDS; elder abuse; domestic violence; prescription drug abuse; repetitive brain injuries; sudden unexpected death associated with epilepsy; schizophrenia and bipolar disorders; Alzheimer's, dementia, and autism; and suicides.

More than 22,000 deaths occurred in San Diego County in 2018, but the Medical Examiner is not involved with investigating the majority of those deaths which result 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

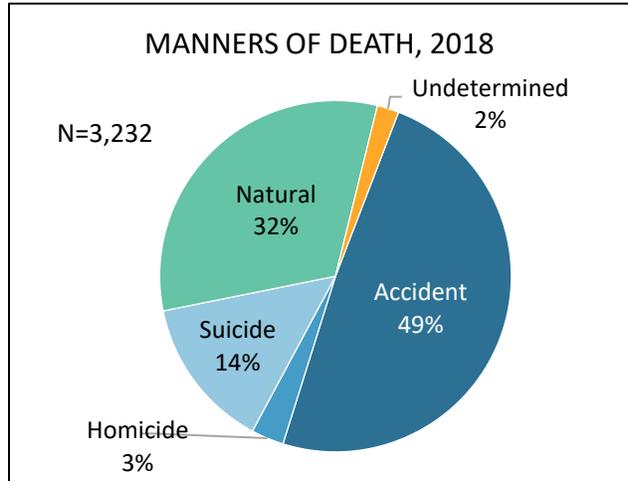
¹ See <https://data.sandiegocounty.gov/Safety/Medical-Examiner-Cases/jkvb-n4p7>

² Prior year annual reports and statistics 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.

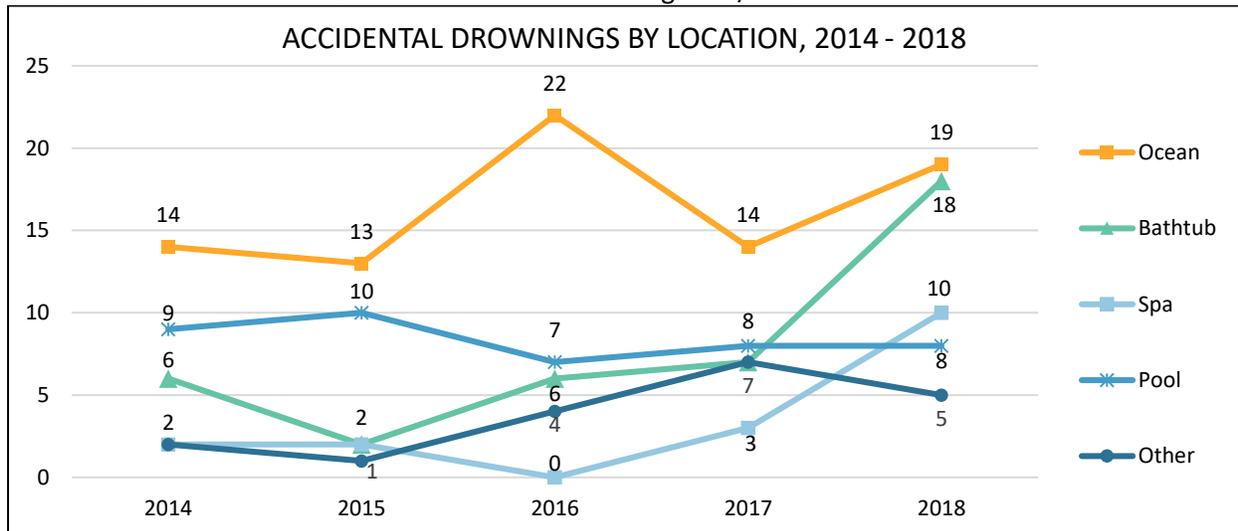
accidental, homicidal, or suicidal; due to trauma or an acute toxicity (“overdose”), or due to apparent undiagnosed natural causes, or other sudden, unexpected natural causes. In addition, if an injury or intoxication is known to *contribute* to the death - even in a small way - or is even merely suspected to have contributed to death, the death falls under our jurisdiction. This applies when an individual dies of complications of a prior injury, even if that injury occurred many years prior to the death.

In 2018, 8,346 deaths were reported to the Department, and initial evaluation by Medical Examiner’s Investigators determined that 5,115 of the people likely died natural deaths and that their own doctor could sign their death certificate. We further investigated 3,232 deaths in 2018, and it is information about those deaths that we are able to report.



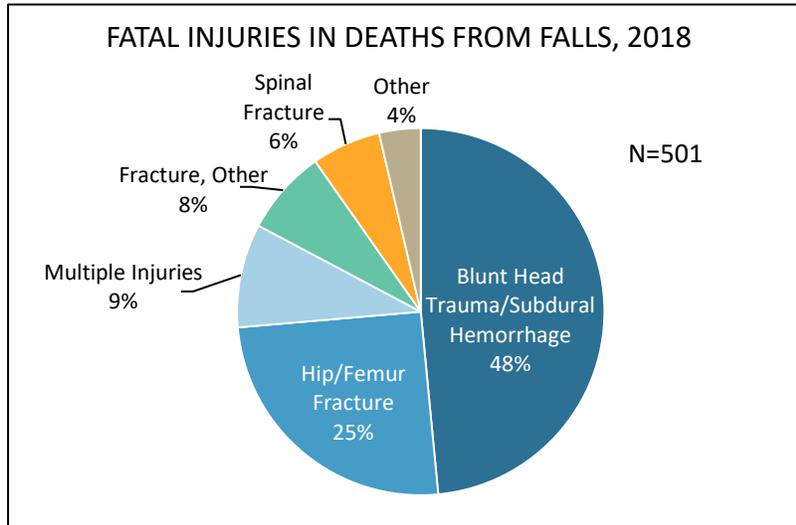
This annual summary is designed to provide an overview of decedent characteristics, as well as the frequency, cause and location of deaths in the county. As may be seen in the data that follow this summary, the San Diego County Medical Examiner works with many deaths of the types expected in any jurisdiction with a large urban and rural population—such deaths due to motor vehicle accidents, natural causes, alcohol or drug-related causes, or homicidal violence. In addition, the great 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.

Drownings can occur in our oceans, lakes, rivers or swimming pools. In addition to swimmers, drownings may involve scuba divers, people trapped in flood waters, or those involved in boating accidents. Because of our thriving seaport, the Medical Examiner may also have jurisdiction on deaths occurring on a boat or ship at sea that then stops in San Diego. Deaths involving attacks by marine life do occur (i.e. sharks), but are extremely rare, averaging less than one every 20 years. In 2018, the number of accidental drowning cases increased 51% (59) compared to 2017 (39), with those occurring in a bathtub or spa showing the most dramatic increases compared to previous years. In addition, 34% of drowning cases had a history of cardiovascular disease and 17% involved the use of drugs and/or alcohol.



DEATHS FROM ACCIDENTAL FALLS

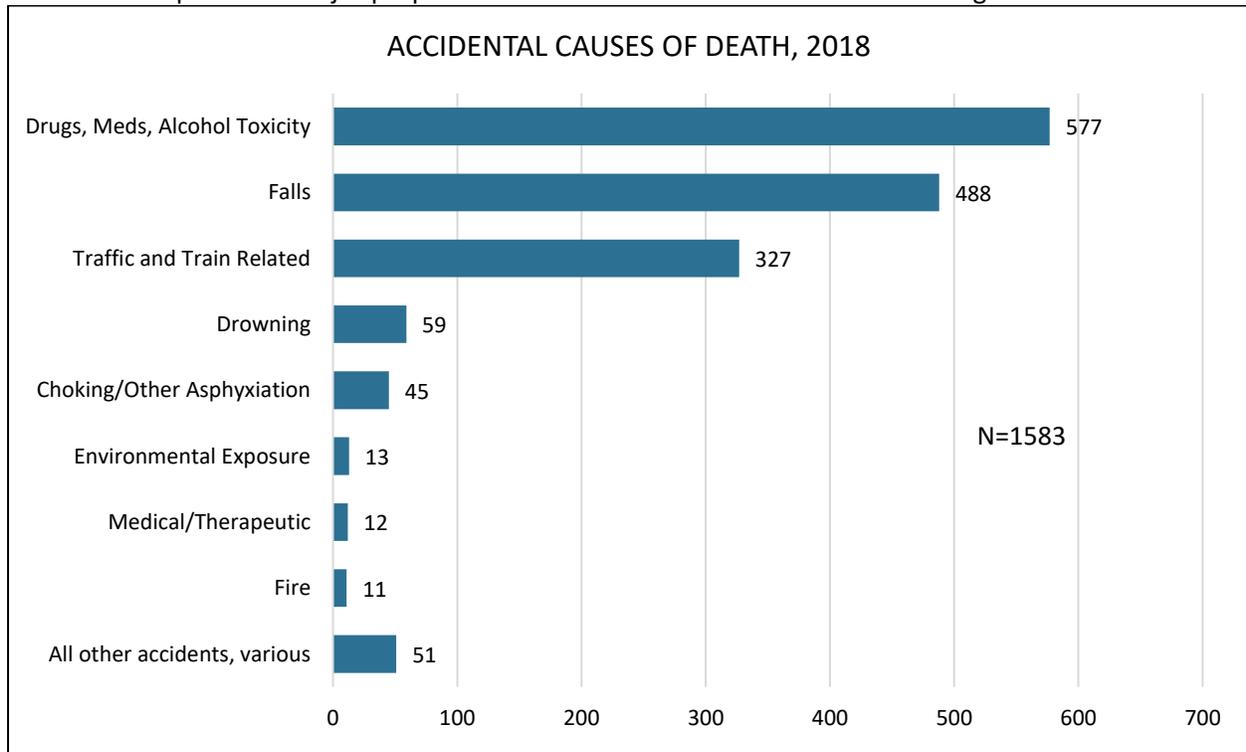
Deaths due to falls most commonly occur from injuries in the home, but may occur in urban areas, in the workplace, from our local bridges, or from mountain and beach cliffs. The majority of deaths associated with falls were from head injuries or fractured hips occurring in people that fell from a standing height.



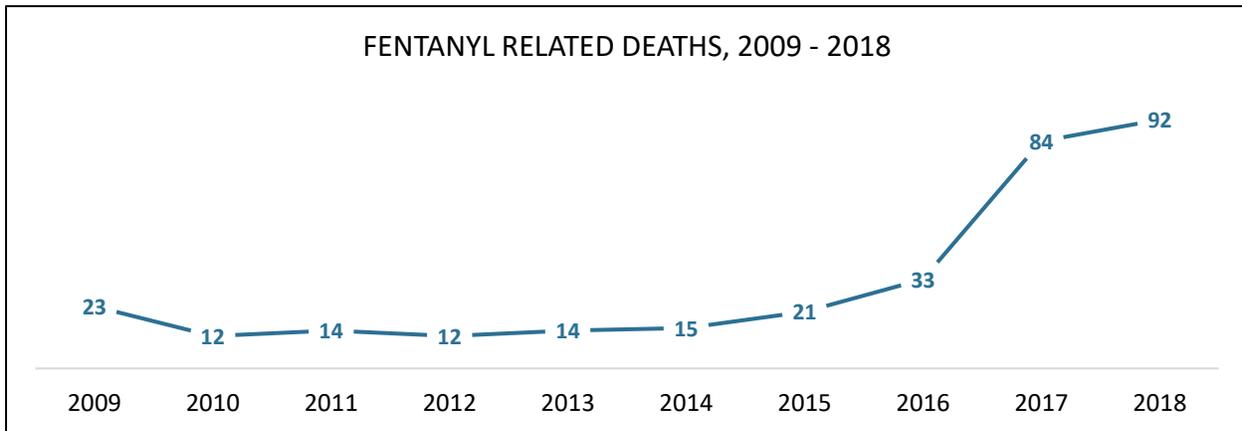
Many of those decedents were elderly and also had pre-existing natural diseases that were factors in the deaths. In the majority of those cases, the injuries and natural diseases were well-documented by hospital physicians, and the deaths were not unexpected, such that the Medical Examiner’s investigation and Cause of Death determination was based for the most part on that hospital documentation, and not on the postmortem examination of the body.

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 that we investigate.



There were more deaths due to fentanyl in 2018 than in 2017, which saw a significant increase from 2016 and the years before. Fentanyl is an example of a specific prescription drug that is now more likely to have been illicitly obtained when its use results in death; however, for consistency of our annual statistics, it is still grouped with prescription medicines.



When a death occurs at home, the person that died may leave behind several medications, many of which are often controlled substances. As part of our investigation, we collect and inventory all of the decedent's prescription medications that we locate at the scene. This task serves three functions. First, by inventorying the remaining medications, including dosage and dates, we can gain an understanding as to whether medication overuse or non-compliance occurred. Second, medications can offer clues to an individual's medical or social history and provide names of prescribing physicians who may know critical information about the person's history. Lastly, we remove medications from the home, eliminating the possibility of inappropriate use by other members of the household (especially children), or the possibility that the medications will become part of illegal trafficking. Medication disposal occurs at regular intervals after a period of secure storage at our office.

A brief summary of the deaths due to drugs and alcohol is part of this Annual Summary, and more can be learned from the specific data on the Open Portal. The Medical Examiner also provides more detailed information through the County's Prescription Drug Abuse Task Force and Methamphetamine Strike Force later in the year.⁴ We encourage use of that information when it becomes available.

Although this report deals with aggregate numbers and statistics, every case represents an individual's death, mourned by family and loved ones. That individuality can be seen in the [Open Data Portal](#)⁵ information as well. We dedicate our work to those we serve: to the people, living and deceased, who have passed through our doors, to their families, and to the people of the County of San Diego.



GLENN N. WAGNER, D.O.
Chief Medical Examiner

⁴ 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/>.

⁵ See <https://data.sandiegocounty.gov/Safety/Medical-Examiner-Cases/jkvb-n4p7>

Manner Type	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Aircraft	8					8
AIDS Related			1			1
Alcohol Related	23		108			131
Alzheimer's Disease			1			1
Anaphylactic Reaction	1					1
Animal Related	1					1
Asphyxia:						
Airway Obstruction	29					29
Aspiration	1					1
Autoerotic	1					1
Hanging				135		135
Other	1			3		4
Positional	5					5
Strangulation				3		3
Suffocation	6			13		19
Traumatic	2					2
Asphyxia Total	45			154		199
Assault		8				8
Asthma			1			1
Autoimmune/Systemic			6			6
Bicycle	3					3
Blunt Force	12	9			5	26
Cancer			33			33
Carbon Monoxide	2			4		6
Cardiovascular			650			650
Central Nervous System			47			47
Chemical/Poison	1			2		3
Chronic Drug Abuse			5			5
Cutting/Stabbing	1	19		14		34
Diabetes related			25			25
Drowning	59			7		66
Drug-Medication:						
Drugs & Alcohol	33			4		37
Drugs & Meds	53			2		55
Drugs, Meds, Alcohol	14					14
Drugs of Abuse	359			1		360
Medications	71			42	2	115
Meds & Alcohol	24			6	1	31
Total Drug-Medication	554			55	3	612
Electrocution	2					2
Endocrine			2			2
Exposure	13					13
Falls:						
Blunt Head Trauma	162					162
Fracture, Other	37					37
Hip/Femur Fracture	124					124
Multiple Injuries	45					45
Other	18					18
Spinal Fracture	30					30
Subdural Hematoma	72					72
Falls Total	488					488
Family Paid Autopsy			13			13
Fetal Demise			1			1
Fire	11			2		13
Firearm		61		174		235
Gastrointestinal			14			14
Hematologic			4			4
Homicidal Violence, NOS		1				1
Industrial	2					2
Infant/Perinatal (not SIDS)			1			1

Manner Type, cont'd	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Infectious			24			24
Inhalation	5			1		6
Jumping				36		36
Liver disease (non-alcoholic)			5			5
Medical/Therapeutic	12					12
Motor Vehicle:						
Auto (Solo)	39					39
Auto vs. Auto	64			1		65
Auto vs. Bicycle	9					9
Auto vs. Fixed Object	38			1		39
Auto vs. Motorcycle	13					13
Auto vs. Pedestrian	107			3		110
Motorcycle	35					35
Off Road	4					4
Other	3					3
Unknown	4					4
Total Motor Vehicle	316			5		321
Obesity Related			15			15
Other	12		19			31
Pregnancy Related			2			2
Psychiatric Related			1			1
Pulmonary Disease			34			34
Renal			6			6
Restraint Related		4				4
Scalding	1					1
Scuba Diving	1					1
Seizures/Epilepsy			10			10
SIDS			2			2
Train	8			11		19
Undetermined	2		1		43	46
Totals	1583	102	1031	465	51	3232
	49.0%	3.2%	31.9%	14.4%	1.6%	100.0%

Examinations	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Autopsy	885	98	502	238	46	1769
External	698	4	529	227	5	1463
Jurisdiction Waived by M.E.			5115			5115
Totals	1583	102	6146	465	51	8347

Age	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
0-12 months	10		6		8	24
1-5 years	5	1	2		1	9
6-12 years	5		3			8
13-16 years	1	1	1	8	1	12
17-19 years	18	2	1	11	1	33
20-29 years	167	30	21	65	5	288
30-39 years	171	27	47	70	5	320
40-49 years	165	12	122	69	7	375
50-59 years	303	13	236	83	8	643
60-69 years	224	11	301	83	6	625
70-79 years	163	4	161	44	2	374
80-89 years	191	1	96	27	1	316
90+ years	158		32	5		195
Unknown	2		2		6	10
Totals	1583	102	1031	465	51	3232

Gender	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Female	574	22	314	101	23	1034
Male	1009	80	717	364	26	2196
Unknown					2	2
Totals	1583	102	1031	465	51	3232

Race	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Am Indian - North	1					1
Am Indian - South	1					1
Asian Indian	4		3	2		9
Biracial/Multiracial	15	4	3	6	1	29
Black	98	21	95	9	6	229
Cambodian	2		1			3
Chinese	13		4	7		24
Filipino	42	1	26	6	3	78
Guamanian	2					2
Hawaiian	2		1			3
Hispanic Cuban	1					1
Hispanic Mexican	216	31	111	57	9	424
Hispanic Other	70	6	46	16	1	139
Hispanic Puerto Rican	8	1	2			11
Hmong		1				1
Japanese	11		12	3		26
Korean	6		6	2	1	15
Laotian	2	1	2			5
Native American	16	2	4	3		25
Other	25	2	14	5	1	47
Pacific Islander	3		3	1		7
Samoan	1			2		3
Unknown	1		2		5	8
Vietnamese	8	1	5	6		20
White	1035	31	691	340	24	2121
Totals	1583	102	1031	465	51	3232

Death City	Manner of Death					Totals
	Accident	Homicide	Natural	Suicide	Undetermined	
Alpine	4	1	5	4		14
Bonita	2		2			4
Bonsall	2		1			3
Borrego Springs	5		2	3		10
Boulevard	5	1		2	3	11
Camp Pendleton	1					1
Campo	3		1			4
Cardiff by the Sea	3		1	1		5
Carlsbad	33	1	21	23		78
Chula Vista	114	9	82	25	2	232
Coronado	8	1	5	1	1	16
Del Mar	2		2	2		6
Descanso	1					1
Dulzura	1		1	1	3	6
El Cajon	36	3	48	19	1	107
Encinitas	21		19	9	1	50
Escondido	119	10	58	21	2	210
Fallbrook	13		10	6		29
Guatay				1		1
Imperial Beach	7		8	3		18
Jacumba	4					4
Jamul	57	3	20	4		84
Julian	10		2			12
La Jolla	31	2	21	7	3	64
La Mesa	107	5	55	17	3	187
Lakeside	19		9	4		32
Lemon Grove	5	2	10	7		24
Loma Linda			1			1
Mount Laguna	1		1	1		3
National City	26	3	20	4	2	55
Oceanside	110	9	91	27	4	241
Pala	4			1		5
Pauma Valley	1	1	1	1		4
Pine Valley	1		1	2		4
Potrero	3		2	1	1	7
Poway	31		12	5	1	49
Ramona	15	2	4	9		30
Ranchita			1			1
Rancho Santa Fe			5	2		7
San Clemente	1		1		1	3
San Diego	628	45	394	193	17	1277
San Marcos	16		13	11	2	42
San Ysidro	4		3	2		9
Santa Ysabel	2		2			4
Santee	17		36	11	1	65
Solana Beach	3		1	3		7
Spring Valley	14		9	10		33
Valley Center	38	1	8	6		53
Vista	53	3	41	15	2	114
Warner Springs	2		1	1	1	5
Totals	1583	102	1031	465	51	3232