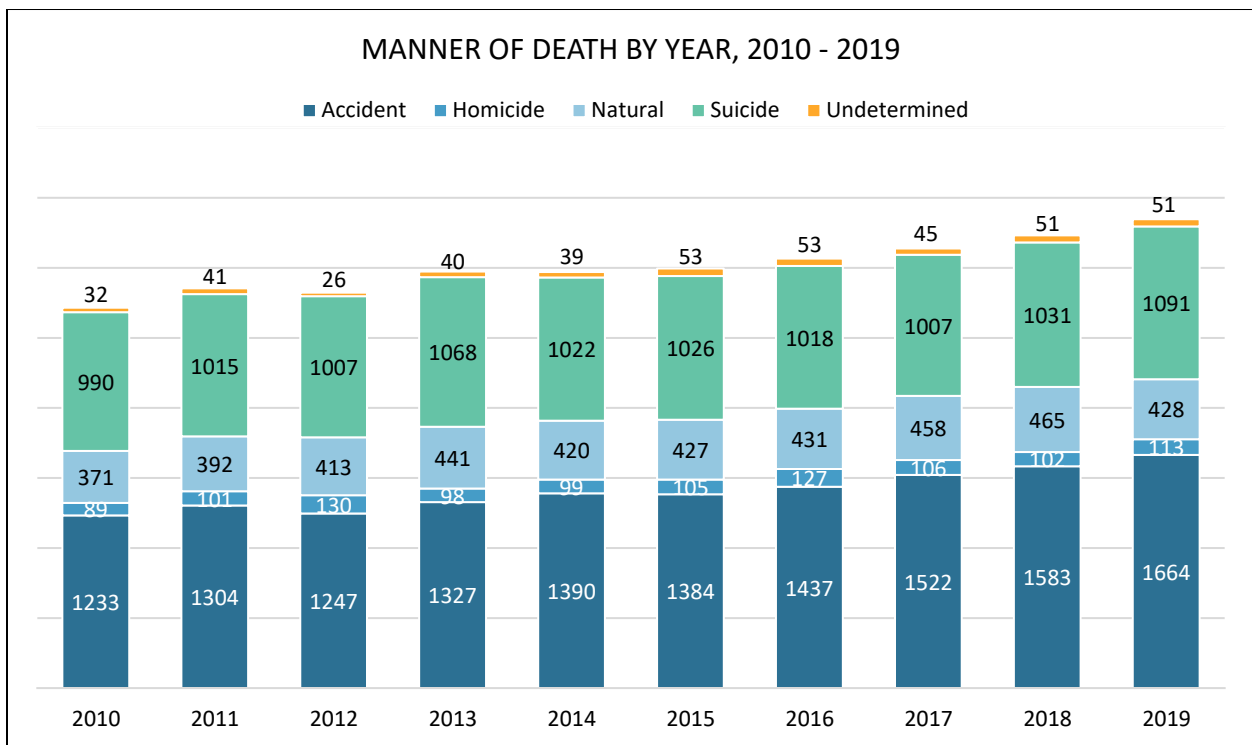




County of San Diego Department of the Medical Examiner

2019 Annual Report Executive Summary

On behalf of the Department of the Medical Examiner, 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 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, common issues and trends that may be identified in the data or by comparison to the data of previous years.²



It is the intent of the Department of the Medical Examiner to develop as much information on every case as resources permit and study 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 categories of study are child fatalities, elder and dependent adult abuse, domestic violence, deaths due to prescription drug and illicit opioid abuse, methamphetamine abuse, repetitive brain injuries, sudden unexpected death associated with epilepsy, schizophrenia and bipolar disorders, Alzheimer's dementia, autism, and suicides.

More than 23,000 deaths occurred in San Diego County in 2019, 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

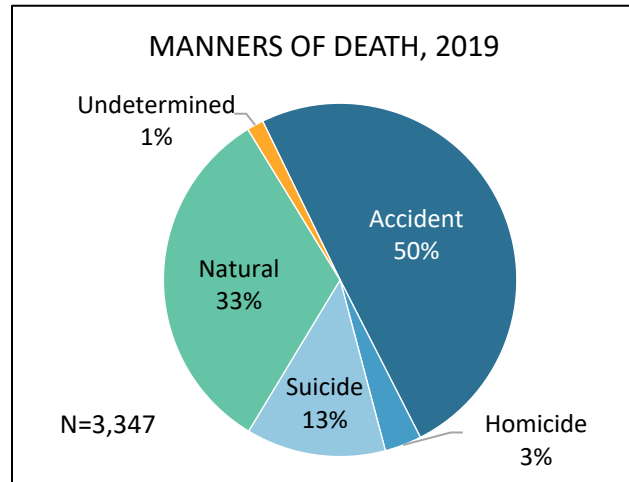
¹ See <https://data.sandiegocounty.gov/Safety/Medical-Examiner-Cases/ikvb-n4p7>

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.

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.

In 2019, 8,081 deaths were reported to the Department, and initial evaluation by Medical Examiner’s Investigators determined that 4,734 of the people likely died natural deaths and that their own doctor could sign their death certificate. We further investigated 3,347 deaths in 2019, 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.

DEATH RATES PER 100,000 OF POPULATION

Based on San Diego population counts for 2019⁴, males represent a higher rate of deaths per 100,000 of the population in *all* manners of death investigated by the Medical Examiner. Of the most common

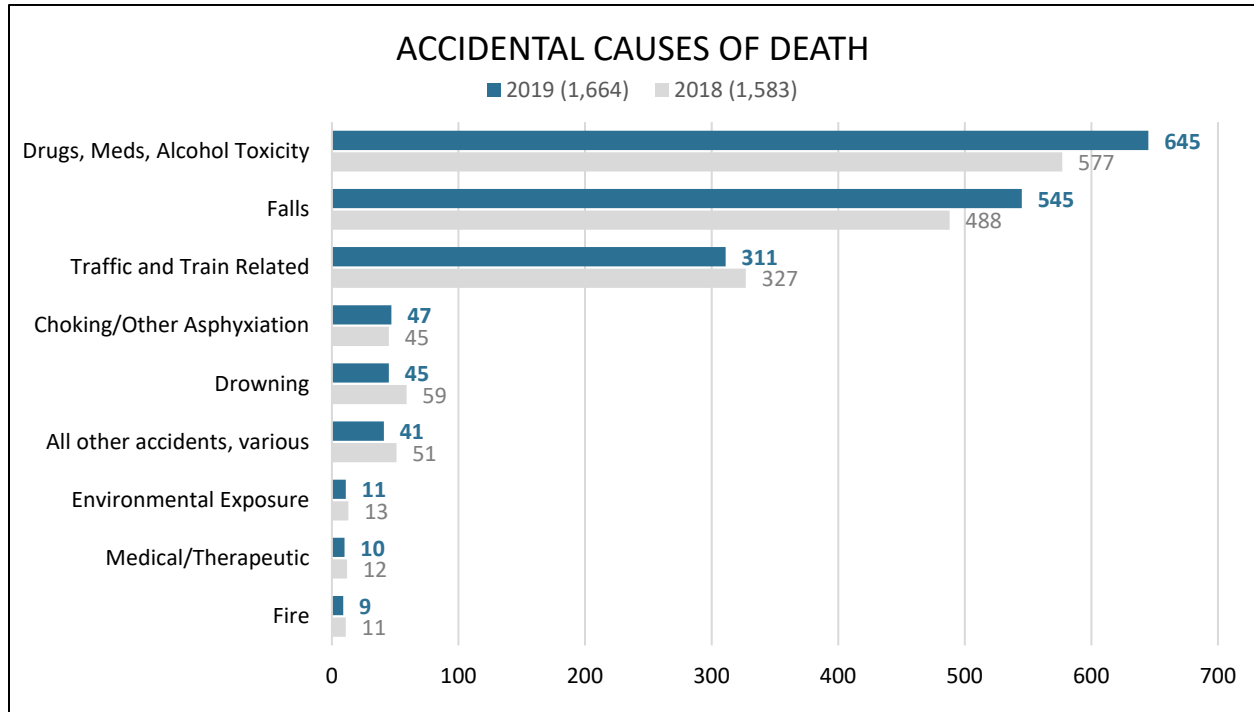
| Manner and Most Common Manner Type | Rate per 100,000 | | |
|------------------------------------|-----------------------------|-------------|------------|
| | Females | Males | |
| Accidents | 32.8 | 66.2 | |
| 88% of all Accidents | Drugs, Meds, and/or Alcohol | 9.0 | 29.3 |
| | Falls | 15.3 | 17.2 |
| | Traffic/Train | 4.8 | 13.8 |
| | Homicides | 1.7 | 5.0 |
| 55% of all Homicides | Firearm | 0.8 | 2.8 |
| Suicides | 5.4 | 20.1 | |
| 70% of all Suicides | Firearm | 1.3 | 8.6 |
| | Asphyxia | 1.8 | 6.2 |
| Natural | 19.0 | 45.9 | |
| 63% of Natural | Cardiovascular | 11.3 | 29.4 |

manner types of accidental deaths, those caused by drugs, medication, and/or alcohol account for the highest rate in males with 29.3 per 100,000. For females, the most common accidental death is due to falls at a rate of 15.3. In both homicides and suicides, firearms continue to be the leading method of death for males at a rate of 2.8 and 8.6, 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 1.8. 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 11.3 for women and 29.4 for men.

⁴ SANDAG, 2019 Population Estimates

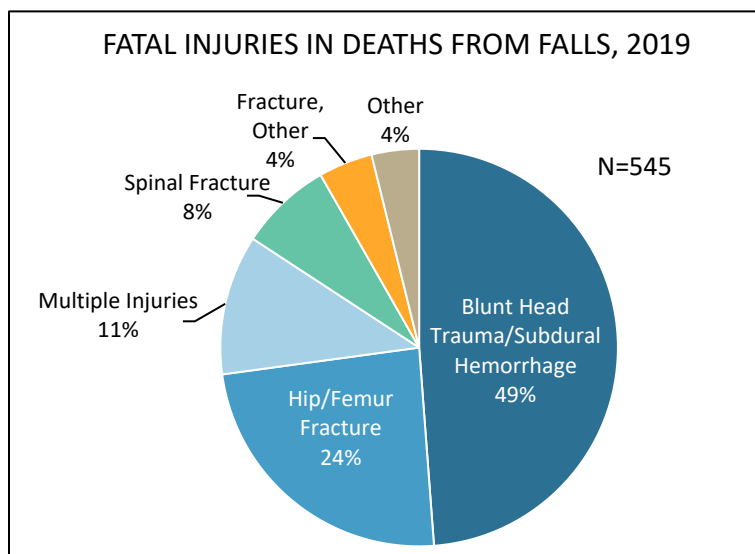
ACCIDENTAL CAUSES OF DEATH

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 39% of all accidental deaths. Accidental deaths due to falls accounted for 33%, with most occurring from injuries in the home, and traffic or train related accidental deaths represented 19% of these cases.



DEATHS FROM ACCIDENTAL FALLS

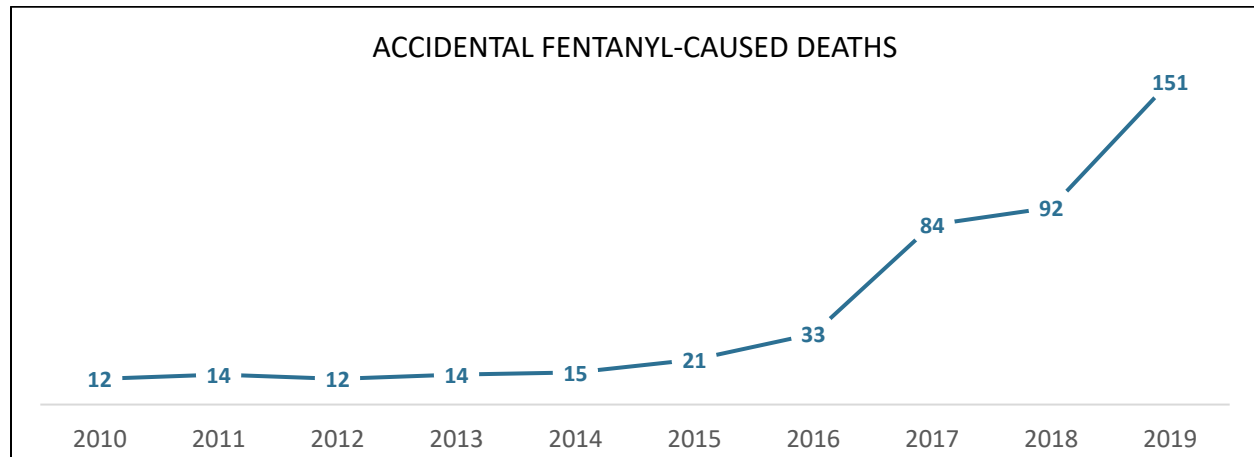
The majority of deaths associated with falls were from head injuries or fractured hips occurring in people that fell from a standing height. Many of those decedents were elderly, with an average age of 78.6 and



they also had pre-existing natural diseases that were factors in the deaths, often complicating the recovery from the injury. Over 50% (256) were found to have cardiovascular disease, Alzheimer’s, and/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 that hospital documentation, and not on the postmortem examination of the body.

ACCIDENTAL DEATHS WHERE FENTANYL WAS A CAUSATIVE FACTOR


There was a 63% increase in accidental fentanyl-caused deaths from 2018 to 2019. Fentanyl is an example of a 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. Most deaths due to fentanyl toxicity in recent years have resulted from the decedent using a counterfeit pill, often resembling oxycodone or alprazolam but containing a toxic amount of fentanyl instead.



As part of our death investigations we collect and inventory the decedent's prescription medications that we locate at the death 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 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 anyone else (especially children).

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.⁵ We encourage use of that information when it becomes available.

This report deals with aggregate numbers and statistics, but 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. 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

⁵ Prescription Drug Abuse Task Force reports and information may be found at <https://www.sandiegorxabusetaaskforce.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 | |
| Aircraft | 1 | | | | | 1 |
| Alcohol Related | 23 | | 112 | | | 135 |
| Anaphylactic reaction | 1 | | | | | 1 |
| Aneurysm - Intracranial | | | 1 | | | 1 |
| Asphyxia Total: | 47 | 6 | | 135 | | 188 |
| <i>Airway Obstruction</i> | 34 | 1 | | 1 | | 36 |
| <i>Hanging</i> | 1 | | | 123 | | 124 |
| <i>Other</i> | 5 | | | 2 | | 7 |
| <i>Positional</i> | 2 | | | | | 2 |
| <i>Strangulation</i> | 1 | 2 | | 1 | | 4 |
| <i>Suffocation</i> | 1 | 3 | | 8 | | 12 |
| <i>Traumatic</i> | 3 | | | | | 3 |
| Assault | | 1 | | | | 1 |
| Autoimmune/Systemic | | | 6 | | | 6 |
| Bicycle | 3 | | | | | 3 |
| Blunt Force | 13 | 16 | | | 4 | 33 |
| Boating | 2 | | | | | 2 |
| Burns - Thermal | | | | 1 | | 1 |
| Cancer | | | 44 | | | 44 |
| Carbon Monoxide | 5 | | | 6 | 1 | 12 |
| Cardiovascular | | | 685 | | | 685 |
| Central Nervous System | | | 28 | | | 28 |
| Chemical/Poison | 1 | | | | | 1 |
| Child Abuse | | 2 | | | | 2 |
| Chronic Drug Abuse | | | 9 | | | 9 |
| Cutting/Stabbing | | 19 | | 9 | | 28 |
| Diabetes Related | | | 34 | | | 34 |
| Drowning | 45 | 1 | | 4 | | 50 |
| Drug - Medication Total: | 622 | | | 41 | 2 | 665 |
| <i>Drugs & Alcohol</i> | 41 | | | 2 | | 43 |
| <i>Drugs & Meds</i> | 57 | | | 3 | | 60 |
| <i>Drugs of Abuse</i> | 436 | | | | | 436 |
| <i>Drugs, Meds, Alcohol</i> | 16 | | | | | 16 |
| <i>Medication</i> | 56 | | | 25 | 2 | 83 |
| <i>Meds & Alcohol</i> | 15 | | | 10 | | 25 |
| <i>Unknown</i> | 1 | | | 1 | | 2 |
| Electrocution | 1 | | | | | 1 |
| Endocrine | | | 2 | | | 2 |
| Environmental Exposure | 11 | | | | | 11 |
| Fall Total: | 545 | | | | 1 | 546 |
| <i>Blunt Head Trauma</i> | 199 | | | | | 199 |
| <i>Fracture, Other</i> | 24 | | | | | 24 |
| <i>Hip/Femur Fracture</i> | 131 | | | | | 131 |
| <i>Multiple Injuries</i> | 62 | | | | | 62 |
| <i>Other</i> | 21 | | | | 1 | 22 |
| <i>Spinal Fracture</i> | 41 | | | | | 41 |
| <i>Subdural Hematoma</i> | 67 | | | | | 67 |
| Family Paid Autopsy | | | 10 | | | 10 |
| Fire | 9 | | | 4 | | 13 |
| Firearm | | 62 | | 166 | | 228 |
| Gastrointestinal | | | 18 | | | 18 |
| Hematologic | | | 11 | | | 11 |
| Industrial | 1 | | | | | 1 |
| Infectious | 1 | | 29 | | | 30 |
| Intrauterine/Stillborn | | | 2 | | | 2 |
| Jumping | | | | 47 | | 47 |
| Liver Disease | | | 11 | | | 11 |

| Manner Type | Manner of Death | | | | | Totals |
|-----------------------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| Medical - Therapeutic | 10 | | | | | 10 |
| Motor Vehicle Total: | 301 | | | 6 | | 307 |
| Auto Rollover (solo) | 34 | | | | | 34 |
| Auto vs Auto | 61 | | | | | 61 |
| Auto vs Bicycle | 11 | | | | | 11 |
| Auto vs Fixed Object | 28 | | | 1 | | 29 |
| Auto vs Motorcycle | 16 | | | | | 16 |
| Auto vs Pedestrian | 98 | | | 5 | | 103 |
| Motorcycle | 35 | | | | | 35 |
| Off Road | 5 | | | | | 5 |
| Other | 7 | | | | | 7 |
| Unknown | 6 | | | | | 6 |
| Neglect | | 1 | | | | 1 |
| Obesity Related | | | 12 | | | 12 |
| Other | 12 | 1 | 8 | | | 21 |
| Pregnancy Related | | | 1 | | | 1 |
| Psychiatric Related | | | 2 | | | 2 |
| Pulmonary | | | 47 | | | 47 |
| Renal | | | 1 | | | 1 |
| Restraint Related | | 3 | | | | 3 |
| Seizures/Epilepsy | | | 10 | | | 10 |
| SIDS | | | 2 | | | 2 |
| Skeletal Remains | | | | | 2 | 2 |
| Train | 10 | | | 7 | 1 | 18 |
| Undetermined | | 1 | 6 | 2 | 40 | 49 |
| Totals | 1664 | 113 | 1091 | 428 | 51 | 3347 |
| | 49.7% | 3.4% | 32.6% | 12.8% | 1.5% | 100.0% |

| Examinations | Manner of Death | | | | | Totals |
|---------------------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| Autopsy | 840 | 110 | 489 | 210 | 46 | 1695 |
| External | 824 | 3 | 602 | 218 | 5 | 1652 |
| Subtotal | 1664 | 113 | 1091 | 428 | 51 | 3347 |
| Jurisdiction Waived by ME | | | 4734 | | | 4734 |
| Totals | 1664 | 113 | 5825 | 428 | 51 | 8081 |

| Age | Manner of Death | | | | | Totals |
|---------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| 0-12 months | 9 | 2 | 6 | | 19 | 36 |
| 1-5 years | 10 | 2 | 7 | | 2 | 21 |
| 6-12 years | 4 | 4 | 2 | 1 | | 11 |
| 13-16 years | 10 | 3 | 2 | 6 | 1 | 22 |
| 17-19 years | 24 | 8 | 2 | 14 | | 48 |
| 20-29 years | 168 | 20 | 32 | 78 | 2 | 300 |
| 30-39 years | 198 | 24 | 66 | 66 | 4 | 358 |
| 40-49 years | 195 | 12 | 138 | 65 | 9 | 419 |
| 50-59 years | 264 | 20 | 217 | 75 | 4 | 580 |
| 60-69 years | 235 | 10 | 312 | 55 | 6 | 618 |
| 70-79 years | 183 | 7 | 190 | 39 | 2 | 421 |
| 80-89 years | 201 | 1 | 85 | 21 | 1 | 309 |
| >90 years | 163 | | 32 | 8 | 1 | 204 |
| Unknown | 1 | | 4 | | 5 | 10 |
| Totals | 1664 | 113 | 1091 | 428 | 51 | 3347 |

| Gender | Manner of Death | | | | | Totals |
|---------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| Female | 545 | 28 | 316 | 89 | 18 | 996 |
| Male | 1119 | 85 | 775 | 339 | 31 | 2349 |
| Unknown | | | | | 2 | 2 |
| Totals | 1664 | 113 | 1091 | 428 | 51 | 3347 |

| Race | Manner of Death | | | | | Totals |
|------------------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| Am. Indian North | 1 | | 2 | | | 3 |
| Asian | 1 | | | 2 | | 3 |
| Asian Indian | 2 | 1 | 4 | | | 7 |
| Asian Other | 2 | 1 | 5 | 1 | | 9 |
| Biracial / Multiracial | 63 | 4 | 20 | 19 | 4 | 110 |
| Black | 107 | 15 | 94 | 19 | 3 | 238 |
| Cambodian | 1 | 2 | 2 | | 1 | 6 |
| Chinese | 10 | 5 | 16 | 7 | 2 | 40 |
| Filipino | 39 | 2 | 23 | 5 | | 69 |
| Guamanian | 1 | | 2 | | | 3 |
| Hispanic | | 4 | | 1 | | 5 |
| Hispanic Cuban | 1 | | | | | 1 |
| Hispanic Mexican | 263 | 31 | 137 | 60 | 12 | 503 |
| Hispanic Other | 74 | 5 | 47 | 11 | 7 | 144 |
| Hispanic Puerto Rcn | 3 | 1 | 1 | | | 5 |
| Hmong | | | 1 | | | 1 |
| Indian | 1 | | | | | 1 |
| Japanese | 6 | | 8 | 4 | | 18 |
| Korean | 4 | | 2 | | | 6 |
| Laotian | 2 | | | | | 2 |
| Native American | 10 | | 9 | | 1 | 20 |
| Other | 17 | 1 | 10 | 4 | 1 | 33 |
| Pacific Islander | 3 | | 5 | 1 | | 9 |
| Samoan | 4 | | 7 | | | 11 |
| Unknown | 9 | | 4 | | 2 | 15 |
| Vietnamese | 11 | | 4 | 4 | | 19 |
| White | 1029 | 41 | 688 | 290 | 18 | 2066 |
| Totals | 1664 | 113 | 1091 | 428 | 51 | 3347 |

| Death City | Manner of Death | | | | | Totals |
|--------------------|-----------------|------------|-------------|------------|--------------|-------------|
| | Accident | Homicide | Natural | Suicide | Undetermined | |
| Alpine | 5 | 1 | 4 | 1 | | 11 |
| Bonita | 4 | 1 | 3 | 1 | | 9 |
| Bonsall | 2 | | 1 | | | 3 |
| Borrego Springs | 2 | 1 | 4 | 4 | | 11 |
| Boulevard | 3 | | 1 | 2 | | 6 |
| Campo | 4 | | | 1 | | 5 |
| Cardiff by the Sea | 1 | 1 | | 2 | | 4 |
| Carlsbad | 23 | | 28 | 17 | | 68 |
| Chula Vista | 86 | 5 | 74 | 25 | 1 | 191 |
| Coronado | 9 | | 7 | 3 | 1 | 20 |
| Del Mar | 2 | | 2 | 1 | 1 | 6 |
| Descanso | 2 | | 1 | 1 | | 4 |
| Duarte | | | 1 | | | 1 |
| El Cajon | 58 | 2 | 52 | 16 | 1 | 129 |
| Encinitas | 24 | | 29 | 9 | 1 | 63 |
| Escondido | 206 | 7 | 67 | 39 | 3 | 322 |
| Fallbrook | 80 | 5 | 46 | 8 | 2 | 141 |
| Guatay | 2 | | | | | 2 |
| Imperial Beach | 11 | | 9 | 2 | | 22 |
| Jacumba | | | 1 | | | 1 |
| Jamul | 7 | | 4 | | | 11 |
| Julian | 3 | | 2 | 2 | 1 | 8 |
| La Jolla | 29 | 1 | 16 | 9 | | 55 |
| La Mesa | 46 | 6 | 33 | 5 | 1 | 91 |
| Lakeside | 7 | 1 | 14 | 6 | | 28 |
| Lemon Grove | 10 | | 9 | 2 | | 21 |
| National City | 25 | 1 | 26 | 5 | 2 | 59 |
| Oceanside | 68 | 4 | 53 | 35 | 2 | 162 |
| Pala | 3 | | 1 | 1 | | 5 |
| Palomar Mountain | | | | 1 | | 1 |
| Pauma Valley | 2 | | 1 | | | 3 |
| Pine Valley | | | | 2 | | 2 |
| Potrero | 4 | 1 | 2 | | | 7 |
| Poway | 18 | 3 | 21 | 4 | 1 | 47 |
| Ramona | 9 | | 7 | 10 | | 26 |
| Rancho Santa Fe | | | 2 | | | 2 |
| San Clemente | 1 | | | | | 1 |
| San Diego | 784 | 67 | 479 | 182 | 28 | 1540 |
| San Diego | | | 1 | | | 1 |
| San Marcos | 18 | 1 | 25 | 9 | 1 | 54 |
| San Ysidro | 8 | 3 | 3 | | 4 | 18 |
| Santa Ysabel | 4 | | 1 | | | 5 |
| Santee | 20 | | 23 | 6 | | 49 |
| Solana Beach | 2 | | | 1 | | 3 |
| Spring Valley | 17 | 1 | 8 | 3 | | 29 |
| Stockton | | | | | 1 | 1 |
| Tecate | 1 | | | | | 1 |
| Valley Center | 12 | 1 | 6 | 1 | | 20 |
| Vista | 38 | | 23 | 12 | | 73 |
| Warner Springs | 4 | | 1 | | | 5 |
| Totals | 1664 | 113 | 1091 | 428 | 51 | 3347 |