OFFICE OF THE
CHIEF MEDICAL EXAMINER
ANNUAL REPORT

2012
JANUARY 1 – DECEMBER 31
STATE OF OKLAHOMA
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2012 ANNUAL REPORT

OFFICE OF THE CHIEF MEDICAL EXAMINER
901 N. STONEWALL
OKLAHOMA CITY, OKLAHOMA 73117

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FOREWORD

The Office of the Chief Medical Examiner of the State of Oklahoma has the sole responsibility for investigating sudden, violent, unexpected and suspicious deaths. Information gained from these medicolegal investigations is frequently required in the form of evidence and expert testimony in both criminal and civil legal proceedings.

When a death occurs on the job or appears to be work-related, the results of the medicolegal investigation are of direct benefit to the family in order that insurance claims may be appropriately settled. These examinations also help identify potentially unsafe consumer products. The public health function of the medical examiner’s office is further apparent in the investigation of cases in which poisons or infectious agents are implicated. The identification of such dangerous elements allows the prompt implementation of treatment and preventive measures through coordination with Oklahoma's Public Health Agencies and OSHA.

The staff of the Office of the Chief Medical Examiner recognizes and is sensitive to the personal tragedy surrounding an untimely or violent death. The staff members interrelate daily with families of victims and serve on many community related activities such as the Domestic Violence Fatality Review Board and the Child Death Review Board. Medicolegal education is offered to medical, dental, pharmacy, nursing students, physicians, police officers and lay groups having interest in topics to which the medical examiner relates. Cooperation with other state and federal agencies such as the Oklahoma State Department of Health and the Centers for Disease Control in Atlanta allows information generated by the medical examiner to be utilized in epidemiological surveillance and development of public health programs.

Most importantly, the Office of the Chief Medical Examiner represents a resource of impartial professionals and support staff providing continuous objective medicolegal investigations to the people of Oklahoma.
In 2012, there were 36,093 deaths reported in the State of Oklahoma. Of these, 21,811 were reported to the medical examiner by medical and law enforcement personnel. Based on the analysis of the scene and circumstances of death and the decedent’s medical history, the medical examiner assumed jurisdiction in 17,849 of these reported deaths. Of these, 15,366 were investigated because they were going to be cremated, shipped out of state or ultimately made unavailable for pathological study. Throughout the presentation and discussion of data that follows, except where stated, these cases are excluded.

Complete investigations and examinations were performed in 5,467 cases. 2,113 were investigated on-scene, 3,875 bodies were transported to the central or eastern medical examiner’s office, and 3 bodies remained unidentified. 1,274 cases were selected for autopsy. Autopsies by forensic pathologists were not performed in deaths where scene investigation, circumstances, medical history, and external examination of the body provided sufficient information for death certification.

Specific presentation of relevant tables regarding 2012 cases follows this brief summary.
OFFICE OF THE CHIEF MEDICAL EXAMINER
STATE OF OKLAHOMA

The Oklahoma Medical Examiner's system came into being in 1961. It was without funding until 1967. The Office of the Chief Medical Examiner of the State of Oklahoma operates under the control of the Board of Medicolegal Investigations through the provisions of the Oklahoma Statutes. The office is directed by the Chief Medical Examiner who is a licensed physician, trained and certified in forensic pathology, the branch of medicine concerned with the investigation of sudden, unexpected, violent or suspicious death. The office provides toxicological and pathological services to aid in the investigation of death defined by law as being subject to public inquiry.

In the State of Oklahoma, the medical examiner is an officer of the state who is charged with certain statutory powers and duties as well as the medical aspects of death investigations.

The law requires that all human deaths of the types listed below must be reported to the medical examiner and investigated by him.

1. Violent deaths, whether apparently homicidal, suicidal or accidental including but not limited to deaths due to thermal, chemical, electrical or radiation injury and deaths due to criminal abortions, whether self-induced or not.
2. Deaths under suspicious, unusual or unnatural means.
3. Deaths related to disease which might constitute a threat to public health.
4. Deaths unattended by a licensed medical or osteopathic physician for fatal or potentially fatal illness.
5. Deaths of persons after unexplained coma.
6. Deaths that are medically unexpected and that occur during a therapeutic procedure.
7. Deaths of any inmate occurring in any place of penal incarceration.
8. Deaths of persons whose bodies are to be cremated, buried at sea, transported out of state or otherwise made ultimately unavailable for pathological study.
FAMILY ASSISTANCE

The Office of the Chief Medical Examiner is the sole entity responsible for establishing the cause and manner of death for the State of Oklahoma in types of deaths specifically defined by Oklahoma Statute. Deaths caused by homicide; or those of a suspicious nature, obviously generate a substantial amount of interest from family members, friends, the general public and the media. The State of Oklahoma averages several hundred of these deaths per year.

Relatives and friends of these decedents unfortunately can get lost in the whirlwind chaos of the aftermath of the victim’s death. When informed and confronted with their unexpected loss they can be left alone trying to determine what actually occurred and what to do next after a buildup of disbelief regarding the death of their loved one or friend.

As a result of several major catastrophes in Oklahoma and the everyday experiences of personal tragedies by numerous families, this Agency became painfully aware of the countless questions individuals seek. The search for prompt answers to their questions seems to never end.

Since 1999, with the assistance of a federal grant from the Victims of Crime Act (VOCA) through the U.S. Department of Justice and monitored by the Oklahoma District Attorney’s Council, the Office of the Chief Medical Examiner has been able to greatly expand its services to assist families and friends of those who suffer violent deaths with the creation of the Family Assistance Coordinators. The Central and Eastern Offices each have a coordinator available.

The coordinators ensure that medical and investigative information is provided to families and friends without delay. Efforts are made to get responses to their countless inquiries about medical questions, circumstances as to the cause of death and what to expect from a variety of other agencies they are introduced to because of death. The Family Assistance Coordinators keep in close contact with the families and friends as the case proceeds through the many facets of the death investigation.

In addition, the Family Assistance Coordinators keep families informed as to the potential monetary benefits available to them through the VOCA Grant. These benefits may assist families with the burdensome and frequently unexpected out-of-pocket expenses for funeral costs, economic losses, medical costs and professional grief counseling.

Coordinators also assist in informing families and friends of what they may encounter from their unexpected introduction into the criminal justice system. By communicating closely with other victim or community services, relatives and friends are better prepared for the sometimes cruel and unbelievable circumstances surrounding their loved one’s death.

As a result of this Agency’s dedication in dealing with the various family issues and questions which arise from traumatic deaths, a development of trust and dependability has been created between the Office of the Chief Medical Examiner and the families and friends it serves.
2012
36,093 TOTAL DEATHS IN OKLAHOMA
21,811 REPORTED TO THE MEDICAL EXAMINER

61% of all deaths in Oklahoma were reported to the Medical Examiner.

*2,984 of the cases cremated/transported out of state were also medical examiner cases for other reasons and were examined and/or autopsied.

0 autopsies were ordered by District Attorney(s) due to the death(s) occurring outside the state of Oklahoma.
MEDICAL EXAMINER CASES
ASSUMED JURISDICTION
TOTAL 5,467

- 290, Homicide 5%
- 672, Suicide 12%
- 332, Undetermined 6%
- 1810, Natural 33%
- 1614, Accidental 30%
- 749, Traffic 14%
0 autopsies were ordered by District Attorney(s) due to the death(s) occurring outside the state of Oklahoma.
MEDICAL EXAMINER CASES FOR EXTERNAL EXAMINATION ONLY (NO AUTOPSY)
TOTAL 4,193

- 1194, Accidental 28%
- 612, Suicide 15%
- 1539, Natural 37%
- 709, Traffic 17%
- 129, Undetermined 3%
- 10, Homicide 0%
HOMICIDE DEATHS - 290

- Abused Child: 9
- Asphyxia: 7
- Blunt Impact: 32
- Firearm: 200
- Other: 11
- Stabbing: 31
- Unknown: 0
SUICIDE DEATHS - 672

- ASPHYXIA: 9
- CARBON MONOXIDE: 9
- DRUGS/POISONS: 59
- FIREARM: 416
- HANGING: 153
- OTHER: 15
- STABBING: 11
ACCIDENTAL DEATHS - 1,614

- AIRCRAFT: 5
- ASPHYXIA: 39
- ATV: 13
- BOAT: 1
- CARBON MONOXIDE: 6
- DROWNING: 77
- DRUGS/POISONS: 729
- ELECTROCUTION: 9
- FALLING OBJECT: 7
- FALLS: 555
- FARM MACHINERY: 8
- FIRE/BURN/SMOKE: 73
- FIREARM: 8
- HORSE/BULL: 5
- HYPERTHERMIA: 14
- HYPOTHERMIA: 11
- IND MACHINERY: 15
- OTHER: 27
- SHARP FORCE: 1
- THERAPEUTIC: 3
- TRAIN: 4
- UNKNOWN: 4

0 100 200 300 400 500 600 700 800

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TRAFFIC DEATHS - 749

- AUTO: 316
- BICYCLE: 5
- HEAVY TRUCK: 28
- LIGHT TRUCK: 220
- MOTORCYCLE: 85
- OTHER: 13
- SUV: 54
- UNKNOWN: 24
- VEHICLE/TRAIN: 4
Deaths that are classified as natural are those that occur in conformity with the ordinary course of nature. They generally come under the jurisdiction of the medical examiner because they are sudden and unexpected, often in individuals who are not being followed for any known potentially lethal disease. Some come to the attention of the medical examiner because circumstances surrounding the death arouse suspicion. In 2012, 1,810 deaths were certified by the medical examiner as attributable to natural causes. Of these, 1,266 (70%) were attributed to cardiovascular disease.
CARDIOVASCULAR BY TYPE - 1,266

- AORTIC ANEURYSM: 1
- AORTIC DISSECTION: 4
- ARTERIOSCLEROTIC HEART DISEASE: 883
- CARDIAC DYSTRHYTHMIA/ARRHYTHMIA: 135
- CARDIOMYOPATHY/HYPERTROPHIC: 19
- CONGENITAL HEART DISEASE: 1
- CONGESTIVE HEART FAILURE: 38
- HYPERTENSIVE HEART DISEASE: 179
- INFLAMMATORY HEART DISEASE: 2
- OTHER: 3
- VALVULAR HEART DISEASE: 1
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<tr>
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<td>Stillborn</td>
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INFANT DEATHS CLASSIFIED BY MONTH
Sudden Infant Death Syndrome (SIDS) and Unknown Causes Only

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INFANT DEATHS CLASSIFIED BY GENDER
Sudden Infant Death Syndrome (SIDS) and Unknown Causes Only

![Bar chart showing the number of deaths by gender and cause.

- Female: 4 SIDS, 29 Unknown
- Male: 2 SIDS, 59 Unknown]
INFANT DEATHS CLASSIFIED BY RACE
Sudden Infant Death Syndrome (SIDS) and Unknown Causes Only

<table>
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<tr>
<th>Race</th>
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<td>AmINDIAN</td>
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INFANTS UNDER 12 MONTHS
Sudden Infant Death Syndrome (SIDS) and Unknown Causes Only

The bar graph shows the number of cases of SIDS and Unknown causes for infants under 12 months of age. The x-axis represents the age groups in months (< 2 M, 2 M, 3 M, 4 M, 5 M, 6 M, 7 M, 8 M, 9 M, 10 M, 11 M), and the y-axis represents the number of cases. The graph indicates a significant number of cases for infants less than 2 months old, with a peak at 2 months, followed by a steady decrease as the age increases. The Unknown causes show a lower number of cases compared to SIDS overall.
JURISDICTION ASSUMED
TEN YEAR COMPARISON
CASES AUTOPSIED
TEN YEAR COMPARISON

![Bar chart showing cases autopsied over ten years with specific numbers for each year: 1674, 1598, 1851, 1884, 1599, 1599, 1870, 1645, 1323, 1274.]
ACCIDENT CASES INCLUDING TRAFFIC
TEN YEAR COMPARISON
HOMICIDE CASES
TEN YEAR COMPARISON
NATURAL CASES
TEN YEAR COMPARISON

![Graph showing natural cases over ten years from 2002 to 2012 with specific numbers for each year: 1701, 1650, 1600, 1743, 1788, 1692, 1908, 1966, 1888, 1857, 1810. The y-axis represents the number of cases ranging from 0 to 2500.]
SUICIDE CASES
TEN YEAR COMPARISON
OUT OF STATE CASES
TEN YEAR COMPARISON

2002: 2125
2003: 2069
2004: 1955
2005: 2360
2006: 2371
2007: 2406
2008: 2468
2009: 2359
2010: 2384
2011: 2361
2012: 2356
TOP 25 DRUGS DETECTED