

REGIONAL FORENSIC SCIENCE CENTER SEDGWICK COUNTY, KANSAS

Timothy P. Rohrig, Ph.D. — Director Jaime L. Oeberst, M.D. — District Coroner-Chief Medical Examiner Shari L. Beck — Forensic Administrator/Chief Medical Investigator

FORENSIC PATHOLOGY DIVISION 2011 ANNUAL REPORT

HISTORY/OVERVIEW

The Regional Forensic Science Center officially opened on December 21st, 1995. The Center houses the Pathology Division (including the Office of the District Coroner) and the Forensic Science Laboratories. The Pathology Division is organized into three sections: Pathology Administration, Medical Investigations and the Autopsy Service.

As mandated by law, the District Coroner has the responsibility for investigating deaths within Sedgwick County that are a result of violence, unlawful means, suddenly when in apparent health, not regularly attended by a physician, any suspicious or unusual manner, when in police custody, or when the determination of the cause of death is held to be in the public interest. The primary goal of investigation and the postmortem examination is to determine cause and manner of death in order to generate a death certificate.

Cause of death is the injury or disease that results in death. Manner of death is determined by circumstances in which the death occurred and includes natural, accident, homicide, suicide, and undetermined. Undetermined manner of death is used when circumstances are unknown or are unclear.

Since 1998, the Pathology Division has seen a steady increase in the number of cases reported to the office and the number of postmortem examinations performed. There has been greater than a one and half fold increase in the number of reported cases and approximately a two and half fold increase in the number of required examinations and medical records review since 1998.

The Pathology Division has been accredited by the National Association of Medical Examiners (NAME) since 2001.

PATHOLOGY LEADERSHIP

District Coroner-Chief Medical Examiner Jaime L. Oeberst, M.D.

Chief Medical Investigator Shari L. Beck, F-ABMDI

Chief Pathology Assistant Patricia Bird



SIGNIFICANT ACHIEVEMENTS

Jaime L. Oeberst, M.D., District Corner/Chief Medical Examiner, continues to serve as a member of the State Child Death Review Board.

The Pathology Division underwent inspection for re-accreditation by the National Association of Medical Examiners in June 2011, and was granted full accreditation.

COUNTIES SERVED

In 2011, the Pathology Division provided service to Sedgwick County and 26 other counties in the state of Kansas [Figure 1].

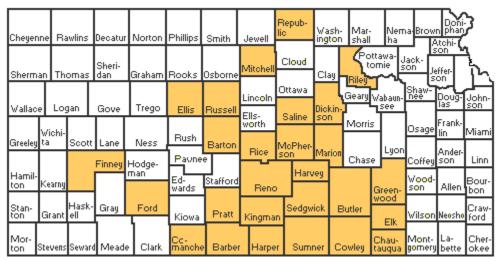
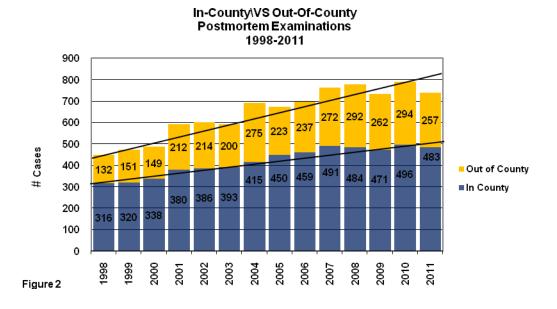


Figure 1

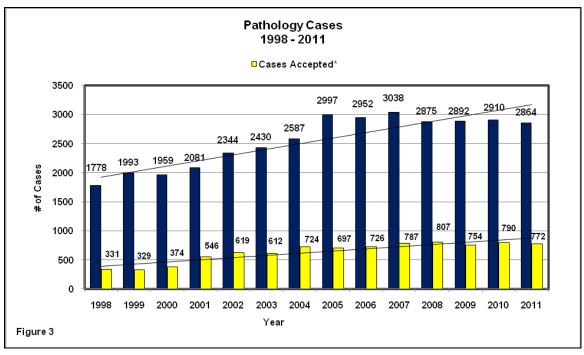
DISTRIBUTION OF CASES: IN-COUNTY VS OUT-OF-COUNTY

The Pathology Division serves as a resource to other counties in the state of Kansas. In 2011, 35% of the examinations were performed for other counties [Figure 2]. There has been a steady rise in both in and out of county cases.



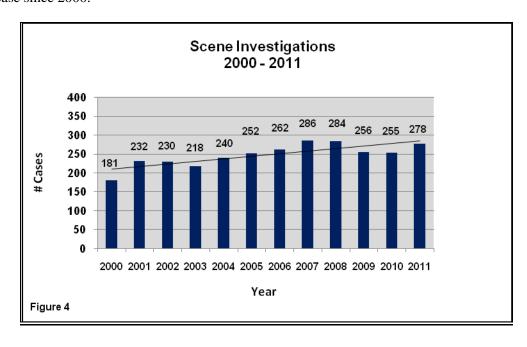
MEDICAL INVESTIGATIONS

The Pathology division has five medical investigators who are on duty year round, twenty-four hours a day, seven days a week. The Medical Investigator serves as the "eyes" and "ears" of the Coroner. The investigators triaged 2864 reported deaths. The District Coroner accepted jurisdiction or assisted in 772 cases [Figure 3] of the reported deaths. On average, since 2001, accepted cases constitute 26% of the total number reported to the office.



*Records Reviews, Autopsies, and External Examinations

Medical Investigators will attend the scene of a death when it occurs outside of a hospital setting. Pertinent circumstantial and physical observations are documented and photographed, and items of evidence are collected in accordance with state law, good forensic principles and accreditation requirements established by the National Association of Medical Examiners [NAME]. The number of scene investigations by medical investigators per year [Figure 4] has shown a steady increase since 2000.

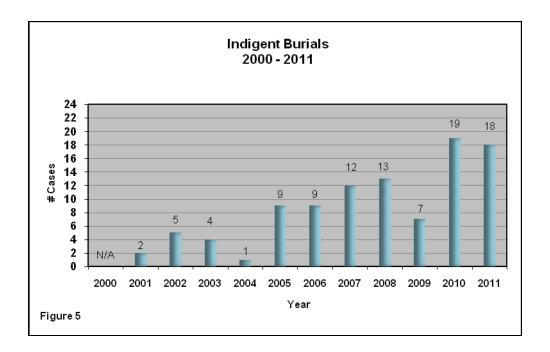


INDIGENT BURIALS

Pursuant to K.S.A. 22a-215, Sedgwick County is required to decently bury/cremate the bodies of unclaimed deceased persons. In accordance with this statute, a procedure has been established by the Center to facilitate the necessary arrangements regarding indigent burials/cremations. The Center maintains a contract with a local mortuary to handle the disposition of the remains.

Following notification of an indigent/unclaimed decedent, it becomes the responsibility of the Medical Investigations section to perform a diligent search for a family member or concerned party willing to claim the decedent. The following provisions accompany a claim; 1) When any family member or concerned party wishes to make any decision regarding burial arrangement, he/she must "claim" the body thereby assuming all responsibility for the provision of a burial, and 2) Sedgwick County will not be a guarantor of burial expenses for any body that has been claimed by a family member or concerned party.

There had been an exponential increase in the number of unclaimed bodies [Figure 5]. In 2010, 19 bodies remained unclaimed/indigent and in 2011, 18 bodies remained unclaimed/indigent.



UINIDENTIFIED BODIES

There were three unidentified bodies in 2011.

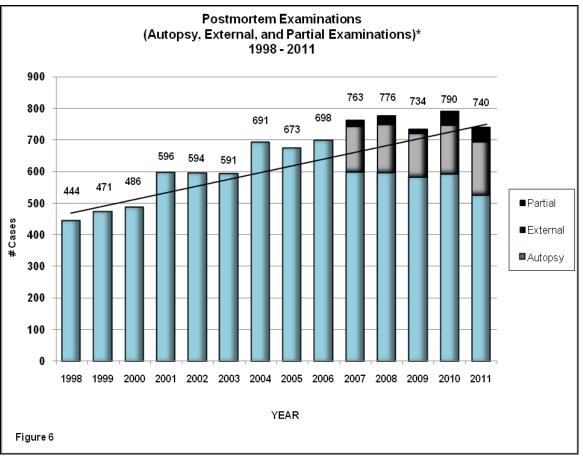
EXHUMATIONS

There was one exhumation in 2011. This individual was originally listed as unidentified in 1986. Following the exhumation and some additional DNA testing, this individual remains unidentified.

CASE SUBMISSIONS

In 2011, 2864 deaths from Sedgwick County and referring counties were reported. For Sedgwick County deaths, analysis of the scene, circumstances of the death and the decedent's medical history were key factors in determining coroner's jurisdiction. Coroner's jurisdiction for the referring counties was determined by the referring county Coroner. Jurisdiction was assumed or assistance was provided in 740 cases, of which 524 received autopsies. Figure 6 shows the number of postmortem exams, that includes both autopsy, partial autopsies, and external examinations. External examinations are performed in cases where scene investigation, circumstances, and medical history and the exam are sufficient to certify the death.

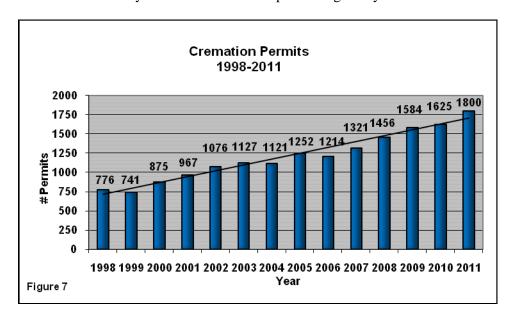
The District Coroner also performed autopsies or external examination for other counties within the state of Kansas.



*Until 2007, only the total number of examinations was tracked.

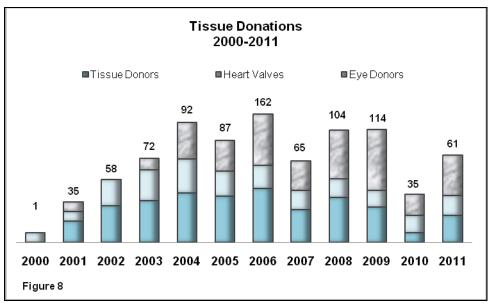
CREMATION PERMITS

In the state of Kansas, the Coroner is also charged with the investigation of death if the body is to be cremated. The investigation involves confirmation that the death certificate is appropriately executed, and that no further circumstances exist which may have contributed to the death. Often this involves interviews with medical personnel, families or other interested parties, and/or a review of medical records. If the cause of death is unclear or falls under the jurisdiction of the Coroner, a post mortem examination and issuance of a revised death certificate may be required. Figure 7 illustrates the steady increase of cremation permits signed by the Coroner.



TISSUE DONATIONS

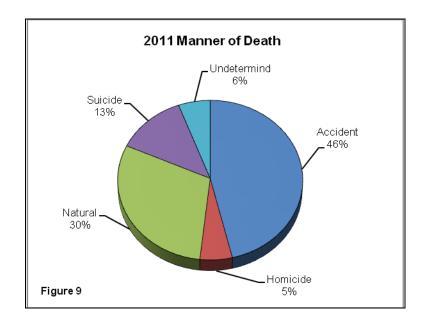
The Pathology Division works in cooperation with procurement agencies to facilitate organ and tissue donation in cases where the death falls under the jurisdiction of the coroner.

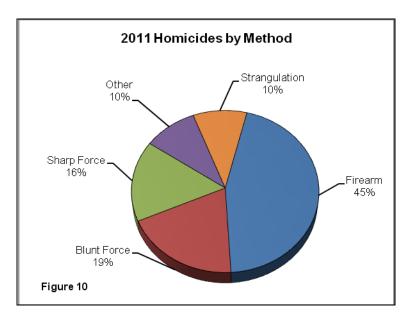


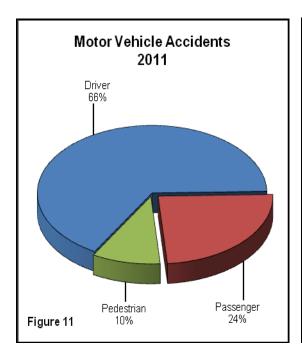
*Trend downward; 2010 is a reflection of inability to track numbers due to lack of in-house procurement associated with remodeling of the tissue suite.

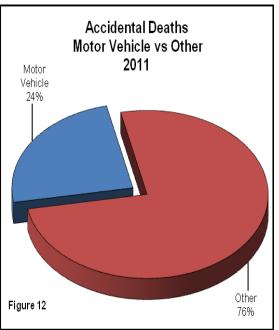
MANNER OF DEATH

In addition to determining cause of death, the District Coroner is responsible for determining the manner of death. Figure 9 shows the breakdown of the deaths by manner. Homicides are deaths that result from injuries that are a result of the actions by another person. Homicides constituted 4% of the cases for 2011. The majority (45%) of these deaths resulted from gunshot wounds [Figure 10]. Suicides are defined as deaths that result from a purposeful action to end one's own life. In 2011, 13% of the cases were certified as suicides. Deaths that were certified as accidents are those that result from an unintentional event or chain of events. This category includes most motor vehicle accidents, falls, and accidental drug overdoses. Natural deaths are those that are solely caused by natural disease and constituted 30% of the cases. The most common cause of death in cases of sudden, unexpected natural death is coronary artery disease. Cases that were classified as an undetermined manner of death constituted 6% of the total caseload.

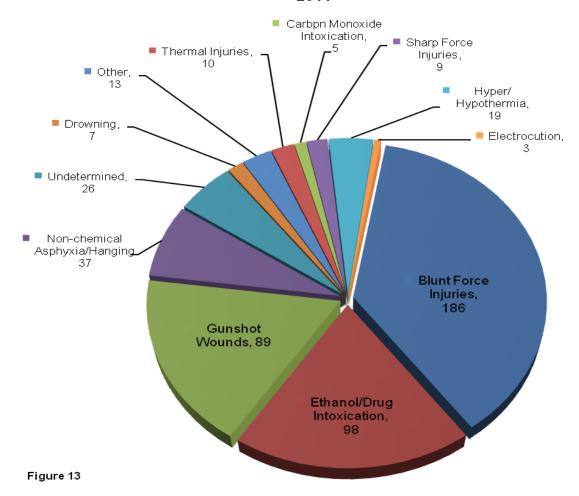






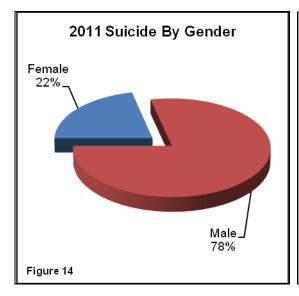


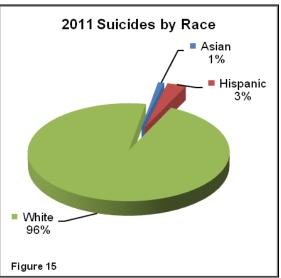
Cause of Death for Cases Where Manner is Other than Natural 2011

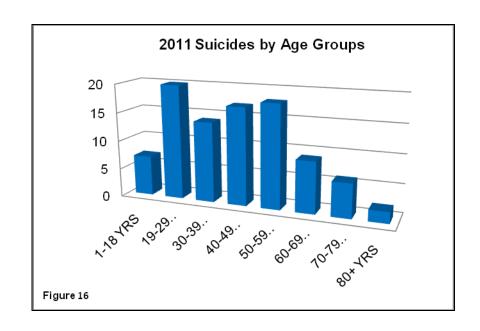


SUICIDES

In 2011, 93 cases were certified as suicide. The vast majority of suicides were white male adults [Figure 14, Figure 15, and Figure 16].

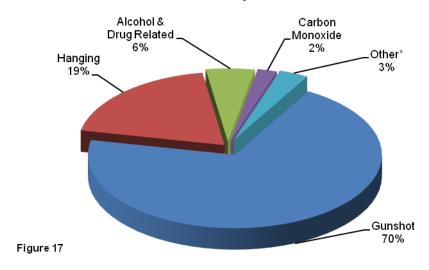






In 2011, the predominate suicide methods were firearms, hanging, and drug related deaths.

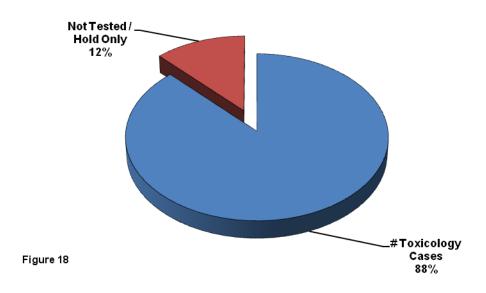
2011 Suicides by Method



TOXICOLOGY

In 2011, there were 739 cases in which specimens were collected for toxicological analyses. Not all cases require toxicological analyses [Fig. 18]; the majority of these are associated with extended hospital stays following the initial event.

2011 Toxicology Cases



Of the cases toxicological examination was performed, alcohol was detected [>0.02gm %] in 23% of the tested cases. Drugs were detected in 42% of the cases.