HENNEPIN COUNTY MEDICAL EXAMINER 2018 ANNUAL REPORT







Hennepin County Medical Examiner — Annual Report for 2018 Content

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LETTER FROM THE CHIEF MEDICAL EXAMINER

Thank you for your interest in our 2018 Hennepin County Medical Examiner's Office Annual Report. We deliver forensic death investigation and autopsy services to three counties—Hennepin, Scott, and Dakota. We also provide forensic autopsy services on a referral basis to counties throughout Minnesota and Wisconsin.

The Hennepin County Medical Examiner's Office is accredited by the National Association of Medical Examiners and administers an Accreditation Council for Graduate Medical Education approved fellowship program in forensic pathology.

All physicians at the Hennepin County Medical Examiner's Office are certified by the American Board of Pathology in Anatomical and Forensic Pathology. Other board certifications— Neuropathology and Clinical Pathology—are also represented among the physician staff. Death investigators are certified by the American Board of Medicolegal Death Investigators.

2018 saw many changes throughout the office. Minneapolis hosted Super Bowl LII, and due to our location, had a direct impact on the way we did our work for several weeks. We provided seamless service to our citizens and partner agencies during that time.

We were inspected by the National Association of Medical Examiners and received continued accreditation (since 1978), signifying our commitment to national standards and excellence. Working with our partners at the University of Minnesota, we trained over thirteen future physicians.

I invite you to learn more about our office as highlighted in the pages that follow. This report reflects a statistical breakdown of the total caseload of the three counties and people we are proud to continue to serve— those in Hennepin, Scott, and Dakota.

Respectfully,

Andrew Baker, MD Chief Medical Examiner

Hennepin County Medical Examiner's Office



Proudly Serving Hennepin, Dakota, and Scott Counties

Hennepin County Medical Examiner

Mission

To investigate and determine cause and manner of death in all cases within the jurisdiction of the office in compliance with Minnesota statutes, and to advance the knowledge of death investigative professionals and partnering agencies through training and education to improve health, safety and quality of life.

Vision

The Medical Examiner envisions a standard of excellence whereby death investigative professionals conduct thorough, accurate death investigations by harnessing innovative technologies and solutions in a regional office that serves a diverse population with timely, accurate and compassionate investigations run by professional staff equipped with state-of-the-art technology and resources.

Jurisdiction map

The Hennepin County Medical Examiner's Office has jurisdiction to investigate all sudden or unexpected deaths in Hennepin, Dakota and Scott counties.

Population by county (2018)

- Scott 147,191
- Dakota 425,040
- Hennepin 1,258,000

Area by county, in square miles

- Scott 368
- Dakota 587
- Hennepin 607

Number of cities, by county

Scott

7 cities and multiple townships and unincorporated communities

Dakota

21 cities and multiple townships and unincorporated communities

Hennepin

45 cities and 1 unorganized territory (Fort Snelling)



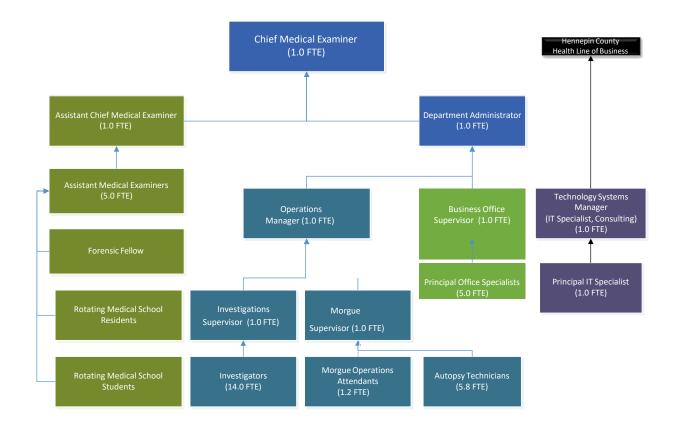
Andrew M. Baker, M.D., Chief Medical Examiner of Hennepin, Dakota and Scott counties.



Twp. Twp. Sciota Northfield Twp.



Hennepin County Medical Examiner 2018 Organizational Chart



Hennepin County Medical Examiner's Department Organizational Chart 2018: 38.0 FTE Note: Designations without an FTE listed are not included in the permanent FTE count for the department

Medical Examiner's Office

Health

2018 BUDGET Proposed Budget

Mission:

To investigate deaths via the highest standards, to support families and the community, and to advance the knowledge of death investigative professionals to improve health, safety, and quality of life.

Department Description:

The Medical Examiner is responsible for investigation of all known or suspected homicides, suicides, accidental deaths, drug related deaths, medically unattended deaths, and deaths which might constitute a threat to public health and safety that occur under the Hennepin County Medical Examiner's jurisdiction. This jurisdiction includes the counties of Hennepin, Dakota and Scott. The office is also required to investigate the deaths of all persons dying in counties under the jurisdiction of the Medical Examiner who are to be cremated. The goal of the Medical Examiner is to assist families, law enforcement agencies, and the legal system by determining a scientifically unbiased and logical cause and manner of death. Furthermore, the Medical Examiner's Office provides autopsy and consultation services to several Minnesota and Wisconsin counties on a referral basis.

Budget Summary:	2016 Actual	2017 Budget	2018 Budget
Budgeted Property Tax Requirement*	\$3,720,150	\$3,969,781	\$4,231,474
Other Taxes	0	0	0
Federal	0	0	0
State	0	0	0
Local	1,534,398	1,580,833	1,571,810
Investment Earnings	0	0	0
Fees for Services	121,975	121,975	121,975
Fines and Forfeitures	0	0	0
Licenses and Permits	276,115	400,000	400,000
Other Revenue	189,044	235,000	235,000
Other Financing	0	0	0
Total Revenues	\$5,841,682	\$6,307,589	\$6,560,259
Personal Services	\$4,684,832	\$ 4,858,810	\$4,907,668
Commodities	91,830	102,500	103,547
Services	1,083,784	1,256,079	1,385,844
Public Aid Assistance	0	0	0
Capital Outlay	0	0	0
Other Charges	26,664	90,200	163,200
Grants	0	0	0
Total Expenditures	\$5,887,109	\$6,307,589	\$6,560,259
Budgeted Positions (Full-time Equivalents)	34.9	37.0	38.0

* Reflects the adjusted property tax requirement budget, not actual property tax collections.

Functions of the Medical Examiner

Receiving death reports

When a reportable death occurs, the Medical Examiner's Office gathers pertinent data, including the person's name, address, age, sex, race, marital status, next of kin, a summary of medical history, physical findings, and name of last attending physician.

Preserving evidence

At the location of the death, the Medical Examiner Investigator takes custody and arranges transport of the body, personal property and associated evidence.

Deciding jurisdiction

The Medical Examiner decides who has jurisdiction to investigate the death, and reserves the right to accept or decline jurisdiction. If the person died from natural causes, and has seen an attending physician within 120 days, the office usually declines jurisdiction. If the office accepts jurisdiction, or if the death is due in part to an injury, the Medical Examiner must sign the death certificate.

Facilitating tissue, eye and organ donation

The Medical Examiner must receive notification and provide authorization before any agency arranges to recover an organ, tissues or eyes.

Performing autopsies

The Medical Examiner determines whether state interest compels an autopsy to answer medical and legal questions in the public interest, to protect public health, or to address a question of law. Families have the right under state law to object to an autopsy under some circumstances.

Determining cause and manner of death

The Medical Examiner assists families, law enforcement agencies, and the legal system by determining a scientifically unbiased and logical cause and manner of death. In many cases, family members benefit from the information derived from a death investigation and autopsy.

Managing public and private information

Basic demographic information and the cause and manner of death are matters of public record under Minnesota law (Minnesota Statute §13.83). The Medical Examiner treats the rest of the information as confidential and gives it the same discretion as a medical record.

In homicide cases, the Medical Examiner provides information and autopsy reports only to the law enforcement agencies investigating the death and to the prosecutor in the county where the homicide occurred.

Types of reportable cases

Deaths that meet certain criteria in Hennepin, Dakota or Scott County must be reported, including all sudden or unexpected deaths and all deaths that may be due entirely, or in part, to any factor other than natural disease. These include:

- 1. Unnatural deaths, including violent deaths arising from homicide, suicide, or accident;
- 2. Deaths due to a fire or associated with burns or chemical, electrical, or radiation injury;
- Unexplained or unexpected perinatal and postpartum maternal deaths;
- Deaths under suspicious, unusual or unexpected circumstances;
- Deaths of people whose bodies are to be cremated or otherwise disposed of in such a manner that the bodies will later be unavailable for examination;
- Deaths of inmates of public institutions and people in custody of law enforcement officers, who have not been hospitalized primarily for organic disease;
- Deaths that occur during, in association with, or as the result of diagnostic, therapeutic, or anesthetic procedures [these include operating room deaths];
- 8. Deaths due to culpable neglect;
- 9. Stillbirths of 20 weeks or longer gestation, not attended by a physician;
- 10. Sudden deaths of people notaffected by recognizable disease;
- 11. Unexpected deaths notwithstanding a history of underlying disease;
- Deaths in which a fracture of a major bone such as a femur, humerus, or tibia has occurred within the past six months;
- Deaths not attended by a physician, occurring outside of a licensed health care facility or licensed residential hospice program;
- 14. Deaths of people not seen by their physician within the past 120 days;

- 15. Deaths occurring in an emergency department;
- 16. Stillbirths or deaths of newborn infants in which there has been maternal use of or exposure to unprescribed controlled substances, including street drugs, or in which there is history or evidence of maternal trauma;
- 17. Unexpected deaths of children;
- 18. Solid organ donors;
- 19. Unidentified bodies;
- 20. Skeletonized remains;
- 21. Deaths occurring within 24 hours of arrival at a health care facility, if death is unexpected;
- 22. Deaths associated with the decedent's employment;
- 23. Deaths of nonregistered hospice patients or patients in unlicensed hospice programs; and
- 24. Deaths attributable to acts of terrorism.

Super Bowl LII at US Bank Stadium in Minneapolis

On February 4, 2018, Minneapolis hosted the Super Bowl at US Bank Stadium. Tens of thousands of fans, media, and celebrities attended the game and all the pre-game festivities.

The Medical Examiner's Office is located directly across from the U.S. Bank Stadium. Luckily, Medical Examiner staff had been preparing for this event for over 16 months so when roads were blocked and pedestrians descended on the streets of Minneapolis, we had moved operations off site.

On January 28, the office moved all its equipment and some staff to Savage, MN. Metro First Call, the office's transport company, allowed the Medical Examiner to conduct autopsies and release remains to funeral homes from this Scott County location. Medical Examiner doctors and technicians performed postmortem exams one at a time, and the leadership team met daily via conference calls.



Other staff were deployed to various areas in the metro in order to keep all operations running smoothly. Staff were in Minneapolis, Bloomington, Apple Valley, and Brooklyn Center. Phones were answered by staff in the various locations, as death investigators continued to respond to scenes in Hennepin, Dakota, and Scott Counties, and Business office staff worked remotely and from their homes.

The Super Bowl presented technical challenges with staff working throughout the metro area and the Medical Examiner facility in downtown Minneapolis. The staff utilized various technologies to support business operations during this event. Technology had to support connectivity, communication, relocation of equipment, software, and systems. This included secure access to Hennepin County networks and phones, web tools for meetings, establishing network connectivity from Metro First Call, and successfully creating workspaces as if staff were at their own desks.

After months of planning, working in alternate locations went smoothly. This event taught staff what to do if there were an unforeseen circumstance such as a mass fatality. After the week was over, staff moved everything back to the downtown Medical Examiner office and continued serving the residents of Hennepin, Dakota, and Scott Counties.

Training Future Physicians

Our mission states that we ... "advance the knowledge of death investigative professionals and partnering agencies through training and education to improve health, safety and quality of life." One strategy we have in place is by training current and future physicians. In 2018 we trained 1 fellow, 4 residents, and 8 students, for a total of 100 weeks of on-site learning.

The Forensic Pathology Fellowship Program provides MD or DO pathologists a one-year structured education in forensic pathology. This includes scene analysis, performance of autopsies, investigation, case conference presentations, courtroom testimony, toxicology, forensic lab subjects, forensic anthropology, and odontology. In addition, the fellow receives weekly lectures board-certified pathologists. by our Their mentorship, instruction, performance evaluation and competency-based assessment prepares the fellow for certification by the American Board of Pathology in Anatomic and Clinical Pathology and the subspecialty of Forensic Pathology. Our office has trained fellows since 1973 and many are now colleagues across the US, Canada, and the Caribbean.



In partnership with the University of Minnesota, the Hennepin County Medical Examiner's Office also trains pathology residents and medical students.

Pathology residents and students rotate through our office on a monthly basis. During the course of the rotation, the residents and students become an integral

part of the death investigation team at the Medical Examiner's Office, participating in all conferences, performing autopsies, attending scene investigations, viewing expert witness testimony, and interpreting postmortem toxicology tests, experiencing first-hand that death investigation is more than "just an autopsy."

Our goal is to provide an experience so these residents and students will continue in their education and do great things for the communities in which they serve and have an understanding of forensic science.

Medical Examiner Facility Plan Moving Forward



The Medical Examiner's Office provides our community essential services during challenging times and needs a facility to support the work well into the future.

State Bonding Funds

2018 was a busy year in planning and decision-making for the new facility, with ongoing design sessions, visits and testimony with legislators, and lobbying for State Bonding funds towards the new facility. With ongoing support from our local representatives and the support of Hennepin, Scott, and Dakota County lobbyists, the Medical Examiner Facility was granted \$15.073 million in addition to the \$2.678 million granted in the 2017 legislative session.

Design and Future Planning

Due to delays in the project and escalating expenses, even with the additional funding from the State of Minnesota, the project was required to reduce overall expense by \$5 million before final approval to proceed could be granted. The medical examiner and design team came together and stepped up to the challenge. The team operated under the philosophy that space would only be reduced if the service could be provided at an alternative location, such as through remote work or another appropriate location. Through thoughtful planning and collaborative teamwork, the project expense was reduced from \$57.8 million to \$52.8 million while preserving all core functionality created in the original design.

Examiner Services Medical inform and support law enforcement, the courts, the media, and every facet of public safety and public health. Our new regional medical examiner facility will ensure that world class death investigation services can continue to be provided to all residents that we serve.

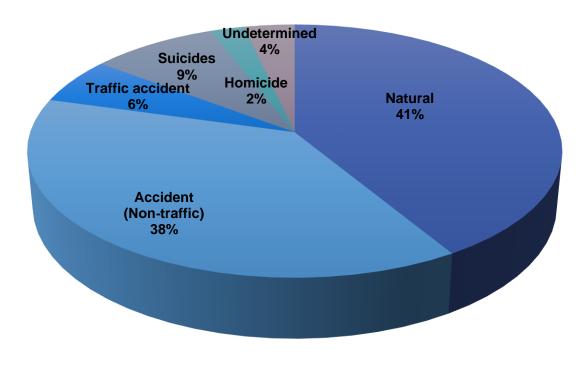
2018 Aggregate Data: Total, Hennepin, Dakota, and Scott Counties:

	Total	Hennepin	Dakota	Scott
Total Cases	7691	5780	1489	381
Jurisdiction Accepted	2215	1769	347	99
Jurisdiction Declined	5435	4011	1142	282
Jurisdiction Accepted	2215	1769	347	99
Naturals	915	708	156	48
Accidents (does not include MVA)	843	687	125	31
Traffic Accidents	131	111	13	7
Suicides	194	143	41	10
Homicides	54	50	2	2
Undetermined	78	70	7	1
Total Medical Examiner Autopsies	1196	917	58	40
HCME Autopsies (not including HCMC Autopsies)	998	764	179	55
Autopsies at Other Institutions (JA cases)	9	8	1	0
Partial Autopsies (not including HCMC Autopsies)	28	23	2	3
Referral Autopsies	40	0	0	0
HCME-HCMC inpatient autopsies	62	62	0	0
HCME-HCMC ER autopsies	67	67	0	0
Total Donations	712	504	164	40
Eyes	504	350	129	23
Tissue/Bone (ME & Hospital referred)	182	128	35	17
Organs	26	26	0	0
Scene Visits	1435	1088	274	73
Cremations Approved	9264	7423	1502	339
Subpoenas Answered	121	111	6	3
Bodies Transported	1971	1619	240	70
Hospice Deaths	4011	2844	946	221

Jurisdiction Accepted Cases by Manner of Death; Hennepin, Dakota, and Scott Counties 2018

	Total	Hennepin	Hennepin % of Total	Dakota	Dakota % of total	Scott	Scott % of total
Jurisdiction accepted	2215	1769	80%	347	16%	99	4%
Natural	915	708	77%	159	17%	48	5%
Accident (Non-traffic)	843	687	81%	125	15%	31	4%
Traffic Accident	131	111	85%	13	10%	7	5%
Suicides	194	143	74%	41	21%	10	5%
Homicides	54	50	93%	2	4%	2	4%
Undetermined	78	70	90%	7	9%	1	1%

Case Distribution by Percent of Total

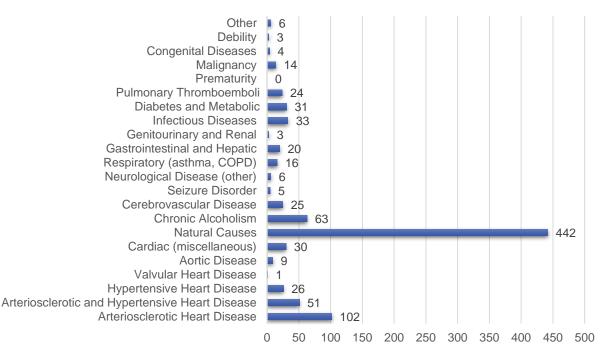


■ Natural ■ Accident (Non-traffic) ■ Traffic Accident ■ Suicides ■ Homicides ■ Undetermined

Natural Deaths Autopsied; Hennepin, Dakota, and Scott Counties 2018

	Exam	(full or pa	rtial)		No Exam		Total (I	Exam + No	Exam)	
	Hennepin	Dakota	Scott	Hennepin	Dakota	Scott	Hennepin	Dakota	Scott	Total
Arteriosclerotic Heart Disease	69	21	6	4	2	0	73	23	6	102
Arteriosclerotic and Hypertensive Heart Disease	32	11	2	6	0	0	38	11	2	51
Hypertensive Heart Disease	23	1	1	1	0	0	24	1	1	26
Valvular Heart Disease	0	0	0	1	0	0	1	0	0	1
Aortic Disease	3	2	1	2	1	0	5	3	1	9
Cardiac (miscellaneous)	18	4	3	4	1	0	22	5	3	30
Natural Causes	65	12	3	276	69	17	341	81	20	442
Chronic Alcoholism	43	8	1	10	1	0	53	9	1	63
Cerebrovascular Disease	16	3	0	5	1	0	21	4	0	25
Seizure Disorder	5	0	0	0	0	0	5	0	0	5
Neurological Disease (other)	0	1	0	3	2	0	3	3	0	6
Respiratory (asthma, COPD)	9	2	1	4	0	0	13	2	1	16
Gastrointestinal and Hepatic	15	2	0	3	0	0	18	2	0	20
Genitourinary and Renal	2	0	0	0	0	1	2	0	1	3
Infectious Diseases	19	4	2	7	1	0	26	5	2	33
Diabetes and Metabolic	18	3	2	8	0	0	26	3	2	31
Pulmonary Thromboemboli	19	4	1	0	0	0	19	4	1	24
Prematurity	0	0	0	0	0	0	0	0	0	0
Malignancy	7	0	3	2	1	1	9	1	4	14
Congenital Diseases	1	0	1	2	0	0	3	0	1	4
Debility	3	0	0	0	0	0	3	0	0	3
Other	2	1	0	2	0	1	4	1	1	6
Total	369	79	27	340	79	20	709	158	47	914

Natural Deaths Autopsy Totals Hennepin, Dakota, and Scott Counties



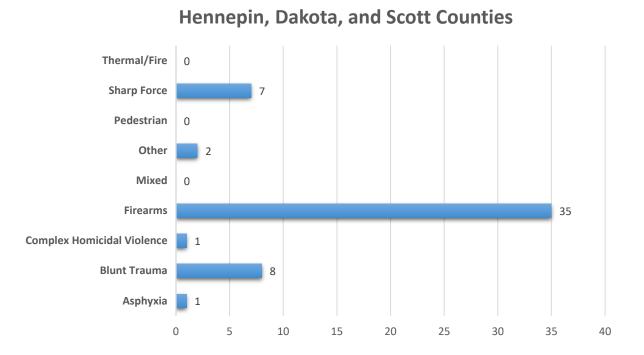
Homicides: Hennepin, Dakota, and Scott Counties 2018

	Hennepin	Dakota	Scott	TOTAL	
Asphyxia	1	0	0	1	
Blunt Trauma	8	0	0	8	
Complex Homicidal Violence	1	0	0	1	
Firearms	33	1	1	35	
Mixed	0	0	0	0	
Other	2	0	0	2	
Pedestrian	0	0	0	0	
Sharp Force	6	0	1	7	
Thermal/Fire	0	0	0	0	
ΤΟΤΛΙ					

Homicides

TOTAL

54

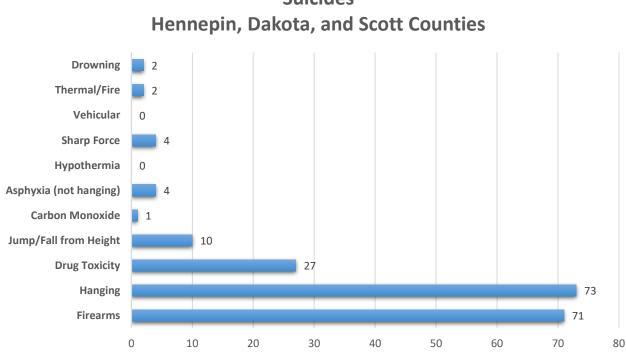


Suicides: Hennepin, Dakota, and Scott Counties 2018

	Hennepin	Dakota	Scott	TOTAL
Firearms	46	21	4	71
Hanging	60	9	4	73
Drug Toxicity	19	7	1	27
Jump/Fall from Height	10	0	0	10
Carbon Monoxide	1	0	0	1
Asphyxia (not hanging)	3	1	0	4
Hypothermia	0	0	0	0
Sharp Force	2	1	1	4
Vehicular	0	0	0	0
Thermal/Fire	1	1	0	2
Drowning	1	1	0	2

TOTAL

194

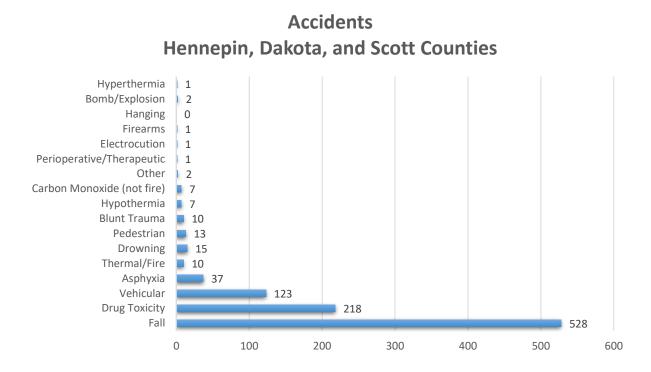


Suicides

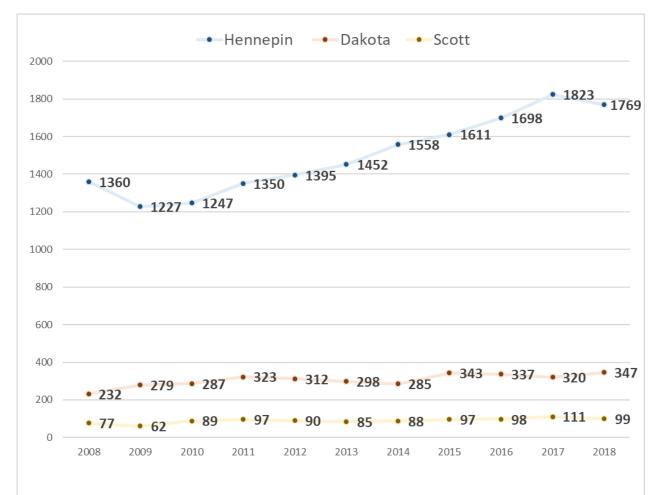
Accidents: Hennepin, Dakota, and Scott Counties 2018

	Hennepin	Dakota	Scott	TOTAL
Fall	425	84	19	528
Drug Toxicity	183	25	10	218
Vehicular	103	13	7	123
Asphyxia	28	7	2	37
Thermal/Fire	9	1	0	10
Drowning	12	3	0	15
Pedestrian	13	0	0	13
Blunt Trauma	8	2	0	10
Hypothermia	7	0	0	7
Carbon Monoxide (not fire)	5	2	0	7
Other	1	1	0	2
Perioperative/Therapeutic	1	0	0	1
Electrocution	1	0	0	1
Firearms	1	0	0	1
Hanging	0	0	0	0
Bomb/Explosion	2	0	0	2
Hyperthermia	1	0	0	1

976

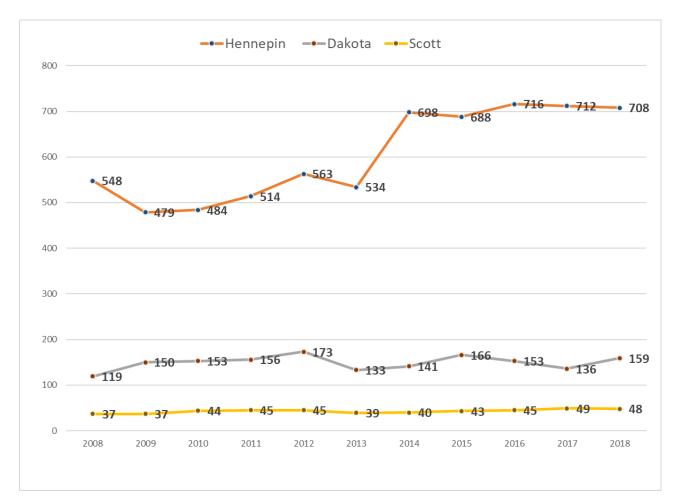


Cases Accepted – Hennepin, Dakota, and Scott Counties 2008-2018



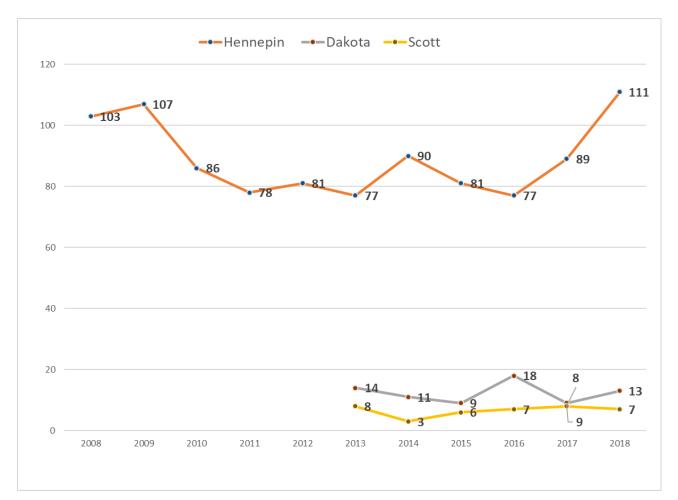
Cases Accepted	Hennepin	Dakota	Scott
2008	1360	232	77
2009	1227	279	62
2010	1247	287	89
2011	1350	323	97
2012	1395	312	90
2013	1452	298	85
2014	1558	285	88
2015	1611	343	97
2016	1698	337	98
2017	1823	320	111
2018	1769	347	99

Natural Deaths– Hennepin, Dakota, and Scott Counties 2008-2018



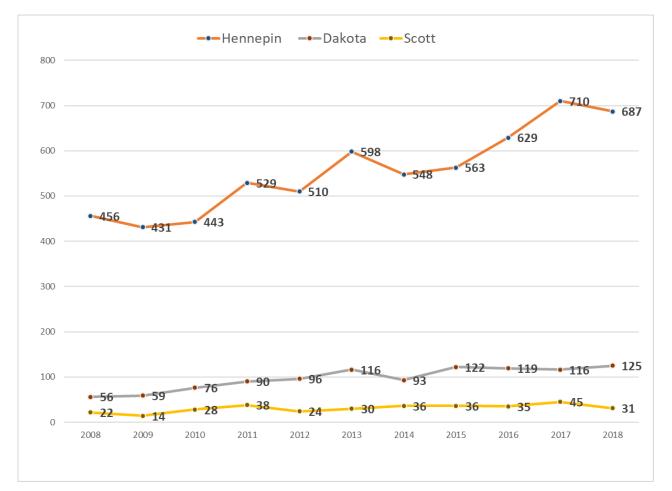
Natural Deaths	Hennepin	Dakota	Scott
2008	548	119	37
2009	479	150	37
2010	484	153	44
2011	514	156	45
2012	563	173	45
2013	534	133	39
2014	698	141	40
2015	688	166	43
2016	716	153	45
2017	712	136	49
2018	708	159	48

Traffic Accident Deaths– Hennepin, Dakota, and Scott Counties 2008-2018



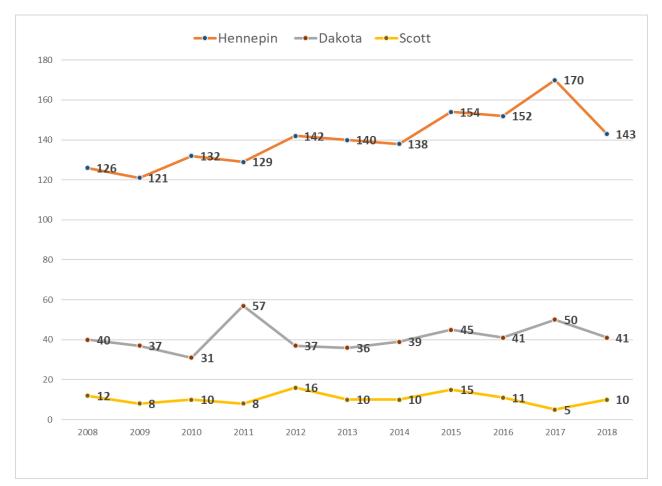
Traffic Accident Deaths	Hennepin	Dakota	Scott
2008	103		
2009	107		
2010	86		
2011	78		
2012	81		
2013	77	14	8
2014	90	11	3
2015	81	9	6
2016	77	18	7
2017	89	8	9
2018	111	13	7

Accident (Non-Traffic) Deaths– Hennepin, Dakota, and Scott Counties 2008-2018



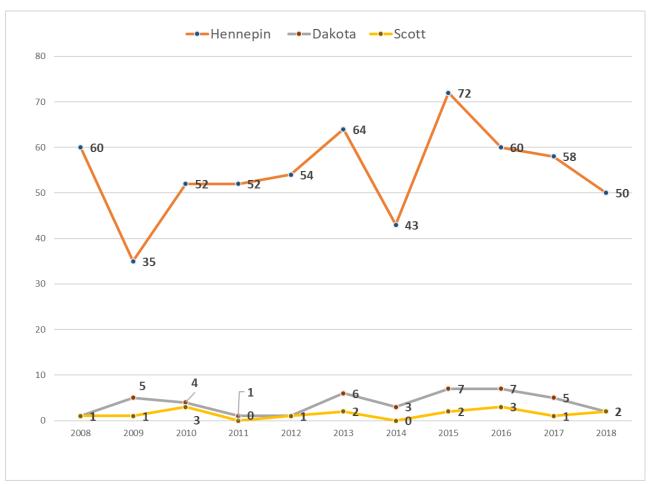
Accident (Non-Traffic) Deaths	Hennepin	Dakota	Scott
2008	456	56	22
2009	431	59	14
2010	443	76	28
2011	529	90	38
2012	510	96	24
2013	598	116	30
2014	548	93	36
2015	563	122	36
2016	629	119	35
2017	710	116	45
2018	687	125	31

Suicide Deaths– Hennepin, Dakota, and Scott Counties 2008-2018



Suicide Deaths	Hennepin	Dakota	Scott
2008	126	40	12
2009	121	37	8
2010	132	31	10
2011	129	57	8
2012	142	37	16
2013	140	36	10
2014	138	39	10
2015	154	45	15
2016	152	41	11
2017	170	50	5
2018	143	41	10

Homicide Deaths– Hennepin, Dakota, and Scott Counties 2008-2018



Homicide Deaths	Hennepin	Dakota	Scott
2008	60	1	1
2009	35	5	1
2010	52	4	3
2011	52	1	0
2012	54	1	1
2013	64	6	2
2014	43	3	0
2015	72	7	2
2016	60	7	3
2017	58	5	1
2018	50	2	2



Hennepin County Medical Examiner

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Andrew M. Baker, M.D., Chief Medical Examiner of Hennepin, Dakota and Scott counties.