

2023 ANNUAL REPORT

OFFICE OF THE MEDICAL EXAMINER



UNIVERSITY OF MICHIGAN
HEALTH-SPARROW
MICHIGAN MEDICINE

Executive Summary

**Clinton County • Eaton County • Ingham County • Ionia County
Isabella County • Livingston County • Shiawassee County**

We are pleased to present our 2023 Annual Report. This report reflects the work of the Office of the Medical Examiner during the 2023 calendar year. Only those deaths that fall within the geographical jurisdiction of the medical examiner, which is based on the county in which death was pronounced, are included.

We pride ourselves on providing outstanding service to the communities we serve. Our commitment to excellence was recognized in 2009, when our office was granted full accreditation by the National Association of Medical Examiners (NAME), and that full accreditation status was renewed by NAME in 2023. We have developed a regional system that delivers standardized death investigations. Thanks to leadership provided by University of Michigan Health-Sparrow Forensic Pathology, there is an expected process which ensures quality, compassionate care when people need it most.

It would not be possible for the Office of the Medical Examiner to operate efficiently without our dedicated staff, including our investigators, who are essential to our success and to whom we are grateful for their service. The investigators are listed by county in the text of this report.

UM Health-Sparrow Forensic Pathology

Office of the Medical Examiner • 2023 Staff

Michael A. Markey, M.D.

*Medical Examiner
& Medical Director*

David S. Moons, M.D.

Deputy Medical Examiner

Christopher A. Hauch, M.D.

Deputy Medical Examiner

Michelle A. Fox, D-ABMDI

*Chief Investigator
& Supervisor*

Debra Parsons

*Team Advisor
& Autopsy Assistant*

Holly Marsh

Administrative Assistant

Krystin Smith

*Autopsy Assistant
& In-House Investigator*

Amanda Wallace, D-ABMDI

*Autopsy Assistant
& In-House Investigator*

Jacob Stair

*Autopsy Assistant
& In-House Investigator*

Amanda Bukovick

Medical Examiner Investigator

Jessica Nicholson

Medical Examiner Investigator

Karen Phelps

Medical Examiner Investigator

Marissa Timko

Medical Examiner Investigator

Shelly Travis

Medical Examiner Investigator

Medical Examiner Services

Investigation of Deaths

As the Office of the Medical Examiner for seven counties in Michigan, we perform autopsies and other postmortem examinations as an important part of the death investigation process. Each county in Michigan has a licensed physician, appointed by the County Commissioners to serve as medical examiner, who is responsible for investigating deaths as defined by the Michigan Compiled Laws.

In general, the deaths investigated by our office include those that are thought to result from injury or poisoning (such as homicide, suicide and accidental deaths), and those deaths that are sudden, unexpected and not readily explainable at the time of death. Because deaths occur around the clock, the Office of the Medical Examiner is staffed 24 hours a day, 365 days a year.

The typical sequence of events that occurs following a death is:

- A death is reported to the on-call Medical Examiner Investigator (MEI).
- The MEI assesses whether we have legal authority and duty to investigate the death.
- The death scene is visited and investigated, if indicated.
- Investigative information is obtained about the decedent's medical and social history, as well as other information surrounding the events that were associated with the death.
- If an examination is indicated, the body is transported to the Forensic Pathology Laboratory at UM Health-Sparrow Lansing in Lansing, MI.
- If the investigator believes the death does not require a postmortem examination, the on-call Medical Examiner or Chief Investigator may be contacted to discuss the case before the body is released to the funeral home.
- An investigative report is written by the MEI.
- When applicable, the decedent's primary care physician is contacted and notified of the death, and medical history is confirmed.
- A death certificate is generated by either the decedent's personal physician, the attending physician in the medical facility or the assigned Medical Examiner or Deputy Medical Examiner.
- If a postmortem examination is performed, following receipt and review of all appropriate test results and records, a postmortem examination report is written.
- Permanent records are maintained for future use, as needed, and distributed to those who have requested a copy of the report and are authorized to receive the report.

Some deaths require additional follow-up investigations, which are conducted by our in-house investigators based at UM Health-Sparrow Lansing. For 2023, these investigations were performed by Michelle Fox, Amanda Bukovick, Jessica Nicholson, Karen Phelps, Krystin Smith, Jacob Stair, Marissa Timko, Shelly Travis and Amanda Wallace.

Death Certification

The primary focus of our investigation is to determine the cause and manner of death and to clarify circumstances surrounding the death. The cause of death is related to the underlying disease or injury that resulted in the individual's death. The manner of death, in the state of Michigan, is limited to these five options: natural, accident, suicide, homicide, or indeterminate. In addition, information gathered during the investigation and/or evidence collected may be critical for future legal proceedings.

Case Management Approach

A board-certified forensic pathologist is assigned to each death and determines the level of medical investigation required. Cases are handled by one of the following approaches:

- **Direct release** – The body is released directly from the scene to the funeral director. The MEI is typically at the scene and views the body. Based upon scene and medical history information, and in consultation with the on-call medical examiner or chief investigator, a decision may be made to release a body directly to the funeral home chosen by the family, without further examination.
- **External examination** – An external examination includes a detailed record of external observations of the body and in many cases laboratory/toxicology testing. A report of the external exam and laboratory findings is written by the responsible pathologist.
- **Autopsy** – An autopsy includes an external examination as described above, as well as an internal examination. This internal examination may be a “limited” or “partial” autopsy, or a “full” or “complete” autopsy. A limited autopsy is an internal examination within a specific anatomic boundary (e.g., head-only examination). Most often, limited autopsies are performed to recover a foreign body, surgical hardware or answer specific questions. A full autopsy includes internal examination of all organs and body cavities. An autopsy usually includes laboratory/toxicology testing and may include histologic examination and additional examination by a subspecialty consultant (e.g., cardiac or neuropathologist). A report of examination and laboratory findings is written by the responsible pathologist.

Decision to Autopsy

The medical examiners and deputy medical examiners use standards established by NAME to determine whether an autopsy is indicated. The standards, most recently revised in October 2022, state:

The forensic pathologist shall perform a forensic autopsy when:

- The death is known or suspected to have been caused by apparent criminal violence.
- The death is unexpected and unexplained in an infant or child.
- The death is associated with police action.
- The death is apparently non-natural and in custody of a local, state or federal institution.
- The death is due to acute workplace injury.*
- The death is caused by apparent electrocution.*
- The death is by apparent intoxication by alcohol, drugs or poison, unless a significant interval has passed and the medical findings and absence of trauma are well documented.
- The death is caused by unwitnessed or suspected drowning.*
- The body is unidentified and the autopsy may aid in identification.
- The body is skeletonized.
- The body is charred.
- The forensic pathologist deems a forensic autopsy is necessary to determine cause or manner of death, document injuries/disease or collect evidence.
- The deceased is involved in a motor vehicle incident, and an autopsy is necessary to document injuries and/or determine the cause of death.

**Unless sufficient antemortem medical evaluation has adequately documented findings and issues of concern that would otherwise have required autopsy performance.*

Accreditation

All of the medical examiner offices operated by UM Health-Sparrow Forensic Pathology are accredited by NAME.

Manner of Death

Guidelines for classifying the manner of death include:

- Natural deaths are due solely or nearly totally to disease and/or the aging process.
- Accident applies when an injury or poisoning (such as a drug overdose) causes death, and there is little or no evidence that the injury or poisoning occurred with intent to harm or cause death. In essence, the fatal outcome was unintentional.
- Suicide results from an injury or poisoning as a result of an intentional self-inflicted act committed to do self-harm or cause the death of one's self.
- Homicide occurs when the death results from a volitional act committed by another person to cause fear, harm or death. Intent to cause death is a common element but is not required for classification as a homicide. It has to be emphasized that the classification of homicide for the purpose of death certification is a “neutral” term and neither indicates nor implies criminal intent, which remains a determination within the province of legal processes.
- Indeterminate is a classification used when the information pointing to one manner of death is no more compelling than one or more other competing manners of death, in thorough consideration of all available information.

In general, when death involves a combination of natural processes and external factors, such as injury or poisoning, preference is given to the non-natural manner of death.

Cremation Permit Authorizations

Michigan law requires funeral directors to obtain a signed cremation permit from the medical examiner. Our office reviews thousands of cremation permit requests each year. We review the death certificates to ensure that deaths that should have been reported to our office were, in fact, reported. Deaths that were not properly reported are investigated before cremation is authorized.

Testimony at Trials

The medical examiner, deputy medical examiners and investigators are often called upon to provide testimony in criminal and civil matters. They meet regularly with members of law enforcement, prosecutors, defense attorneys and civil litigators.

Public Health and Safety Issues

Although the primary purpose of the medical examiner's office is to conduct death investigations, the information obtained from individual death investigations may also be studied collectively to gather data that may inform public health and safety issues. Our office participates with the Michigan Child Death Review process, opiate prevention initiatives and opiate death review teams, providing significant information with the goal of preventing future deaths.

Referrals to Gift of Life

We work closely with Gift of Life, Michigan’s organ and tissue recovery program. Appropriate cases are referred to Gift of Life so that families who wish to consider tissue donation can do so. Recovered bone, skin, corneas and other tissues help improve the lives of seriously injured and sick recipients.

Unclaimed Investigations

When a death occurs, there is not always someone available who is willing and able to claim the decedent and arrange for final disposition with a funeral director. Our team works diligently to find next of kin or someone willing to make final arrangements. When no one can be located, we work with the State of Michigan and area funeral directors to arrange a cremation. Each year our office works with the Diocese of Lansing to have unclaimed remains interred with dignity and respect at St. Joseph Cemetery in Lansing.

Comment on Methods and Terms

This annual report reflects the activities of our medical examiner offices during a given calendar year. With rare exception (e.g., deaths reported to the wrong medical examiner office), the data include a only those cases over which the county’s medical examiner can exercise jurisdiction.

Jurisdiction is determined by where the individual was pronounced dead rather than the county of residence or the county in which the incident leading to death might have occurred. Furthermore, the data reflect the calendar year in which the deaths were reported to the respective medical examiner’s offices, regardless of the year in which the death actually occurred. The category “Total Deaths in the County” is based upon numbers provided by that county clerk’s office. Occasionally, these numbers may change after the time of publication of this report.

For “Accidental Deaths,” the subcategory “Vehicle” consists of deaths that were classified as transportation-related fatalities and include all forms of transport; drivers/operators, passengers and pedestrians; this category does not include types of death that might otherwise fall into a different sub classification, such as vehicle fires and traumatic asphyxia.

Clinton County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

April Archer

Kenneth Barnes

Erica Betts, D.O., MPH

Jeffrey Carrow

Keith Hansen

Zachary Jahnke, CCEMT-P

Lynne Mark, D-ABMDI

Frank Robinson

Jacob Scheib

Stephanie Scheib

Bill Simpson, Sr., D-ABMDI

Krystin Smith

Daniel Sowles, D-ABMDI

Kathleen Thelen

Mitchell Tolan, D-ABMDI

Thomas Wodarek, D-ABMDI

Clinton County

Summary of Cases

On October 1, 2022, Clinton County entered into an agreement with UM Health-Sparrow Forensic Pathology to provide medical examiner services. Due to limited data from prior years, this report only includes data for 2023 which is the first full year we served as the Clinton County Medical Examiner’s Office.

Summary of Cases	2023
TOTAL DEATHS IN THE COUNTY	452
DEATHS REPORTED TO THE ME	125
CASES ACCEPTED FOR INVESTIGATION ¹	121
MEI SCENE INVESTIGATIONS	119
DEATH CERTIFICATES SIGNED BY THE ME	57
BODIES TRANSPORTED TO UM HEALTH-SPARROW	50
COMPLETE AUTOPSY	30
LIMITED AUTOPSY	4
EXTERNAL EXAMINATION	8
STORAGE ONLY	8
UNCLAIMED BODIES	3
REFERRALS TO GIFT OF LIFE	60
TISSUE/CORNEA DONORS	5
CREMATION PERMITS REVIEWED	292

¹ Not every case that is reported to the Medical Examiner’s office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner’s authority (MCL 52.202).

Clinton County

Manner of Death

Manner of Death	2023
NATURAL	93
ACCIDENT	20
SUICIDE	10
HOMICIDE	1
INDETERMINATE	1
TOTAL	125



Clinton County

Accidental Deaths

Accidental Deaths	2023
VEHICLE	9
DRUG-RELATED	6
FALL	4
ASPHYXIA	1 ²
OTHER	0
TOTAL	20



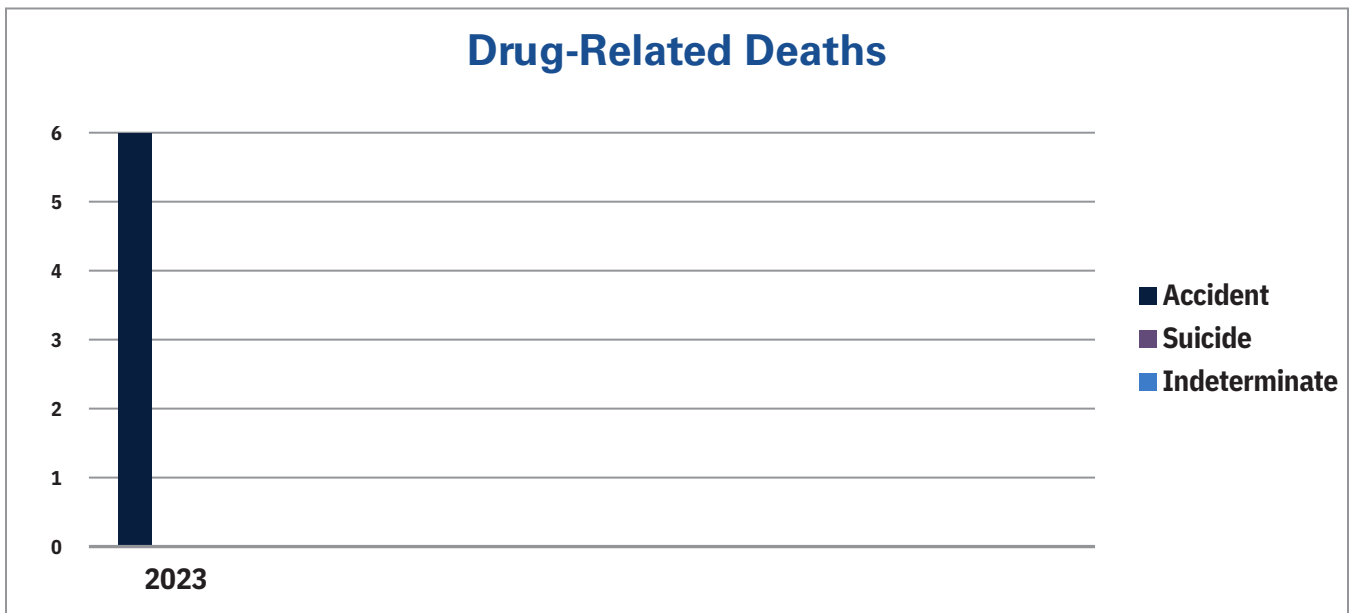
² One drowning (submerged in river)

Clinton County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

Drug-Related Deaths	2023
ACCIDENT	6
SUICIDE	0
INDETERMINATE	0
TOTAL	6



Clinton County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	6 cases
SEX	1 female, 5 male
RACE	5 white, 1 mixed race
AGE RANGE	24-62 years
AVERAGE AGE	45.1 years
MEDIAN AGE	43 years
OPIOID-RELATED	3 cases (50% Drug-Related Deaths)
MANNER OF DEATH	6 accidents

Clinton County

Suicides

Suicide Totals by Year	2023
SUICIDES	10

Suicide Methods	2023
FIREARM	5
HANGING	2
MOTOR VEHICLE	0
SHARP FORCE INJURY	0
POISON (SODIUM NITRITE)	0
OTHER	3 ³

Suicides by Age	2023
0-17	0
18-25	0
26-44	5
45-64	2
65+	3

³ One asphyxia (bag over head/nitrogen gas inhalation); one carbon monoxide (generator exhaust inhalation); one fire/inhalation of products of combustion

Clinton County

Deaths of Children

Deaths of Children by Age	2023
Stillborn	0
<1 year	1
1-5	1
6-10	0
11-17	1
TOTAL	3

Manner of Death	2023
NATURAL	0
ACCIDENT	2
SUICIDE	0
HOMICIDE	0
INDETERMINATE	1

Clinton County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	0			
ACCIDENT	2	2 years	Male	Drowning in river
		14 years	Male	Motor vehicle collision; passenger
HOMICIDE	0			
SUICIDE	0			
INDETERMINATE	1	2 months	Female	SUID; unsafe sleep

Eaton County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Kenneth Barnes

Erica Betts, D.O., MPH

Chad Chambers

Joy Dempsey, D-ABMDI

Mary Kueppers

Lynne Mark, D-ABMDI

Karen Phelps

Brett Ramsden, D-ABMDI

Daniel Sowles, D-ABMDI

Jacob Scheib

Stephanie Scheib

Mary Stevens

Christi Stine

Cody Taboada

Amanda Wallace, D-ABMDI

Thomas Wodarek, D-ABMDI

Gillian Wright

Eaton County

Summary of Cases

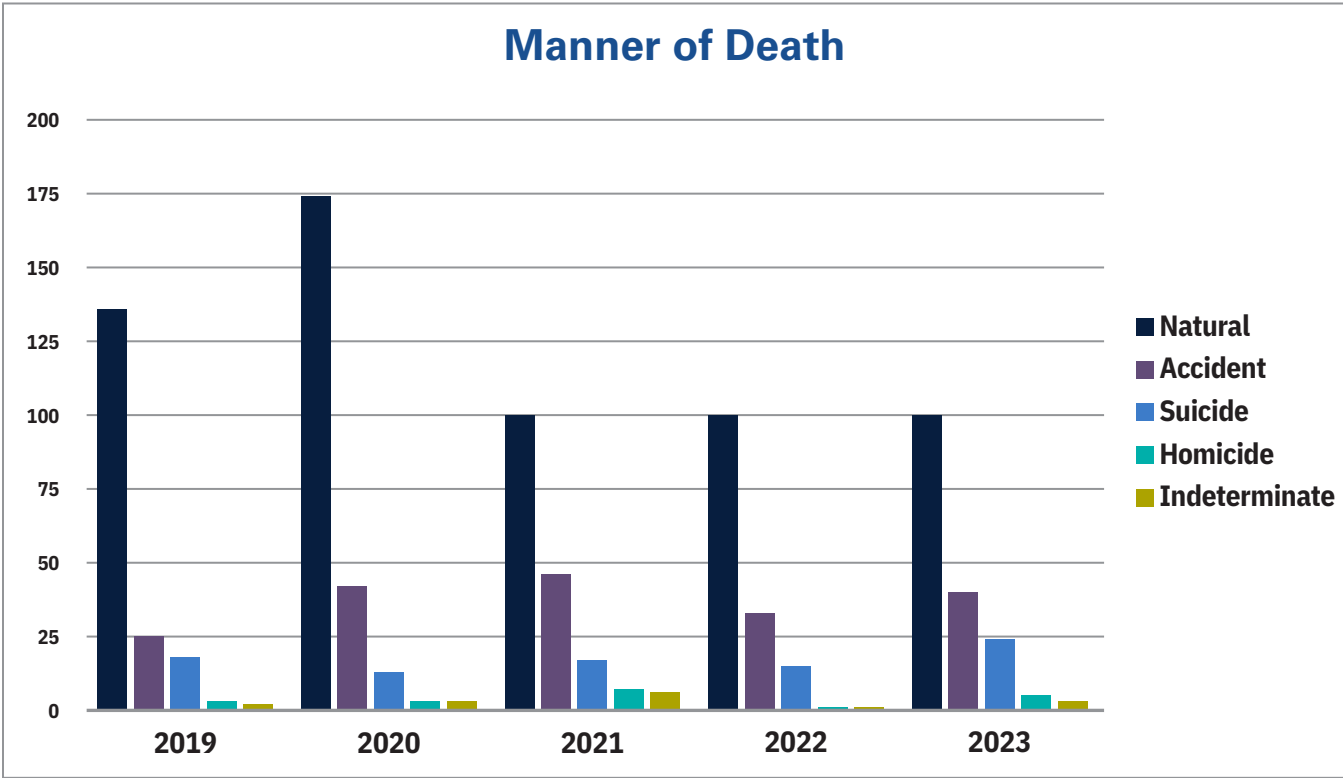
Summary of Cases	2019	2020	2021	2022	2023
TOTAL DEATHS IN THE COUNTY	710	866	844	811	817
DEATHS REPORTED TO THE ME	184	235	262	241	223
CASES ACCEPTED FOR INVESTIGATION ⁴	161	212	230	219	201
MEI SCENE INVESTIGATIONS	170	201	94	197	186
DEATH CERTIFICATES SIGNED BY THE ME	66	102	122	94	102
BODIES TRANSPORTED TO UM HEALTH-SPARROW	58	91	98	72	85
COMPLETE AUTOPSY	39	66	73	52	54
LIMITED AUTOPSY	6	6	9	6	4
EXTERNAL EXAMINATION	7	7	7	5	15
STORAGE ONLY	6	11	9	9	12
UNCLAIMED BODIES	3	4	2	5	3
REFERRALS TO GIFT OF LIFE	75	62	102	104	119
TISSUE/CORNEA DONORS	17	18	21	9	15
CREMATION PERMITS REVIEWED	411	544	538	543	532

⁴ Not every case that is reported to the Medical Examiner's office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner's authority (MCL 52.202).

Eaton County

Manner of Death

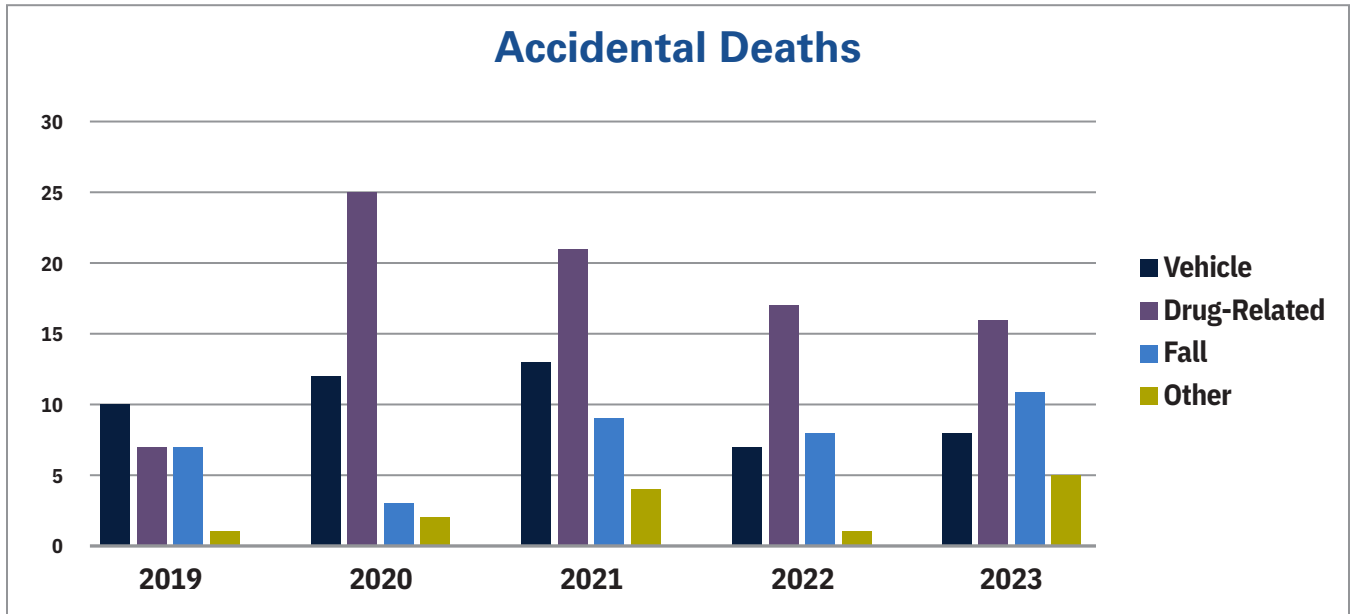
Manner of Death	2019	2020	2021	2022	2023
NATURAL	136	174	186	191	151
ACCIDENT	25	42	46	33	40
SUICIDE	18	13	17	15	24
HOMICIDE	3	3	7	1	5
INDETERMINATE	2	3	6	1	3
TOTAL	184	235	262	241	223



Eaton County

Accidental Deaths

Accidental Deaths	2019	2020	2021	2022	2023
VEHICLE	10	12	13	7	8
DRUG-RELATED	7	25	21	17	16
DROWNING	1	0	3	0	0
FALL	7	3	9	8	11
ASPHYXIA	0	2	1	0	0
OTHER	0	0	0	1 ⁵	5 ⁶
TOTAL	25	42	46 ⁷	33	40



⁵ Injuries from farm equipment

⁶ Two inhalation of products of combustion (carbon monoxide), indoor generator use; one inhalation of smoke/products of combustion (carbon monoxide), house fire; one electrocution (contact with power lines while tree trimming); one blunt force injuries (struck by falling tree)

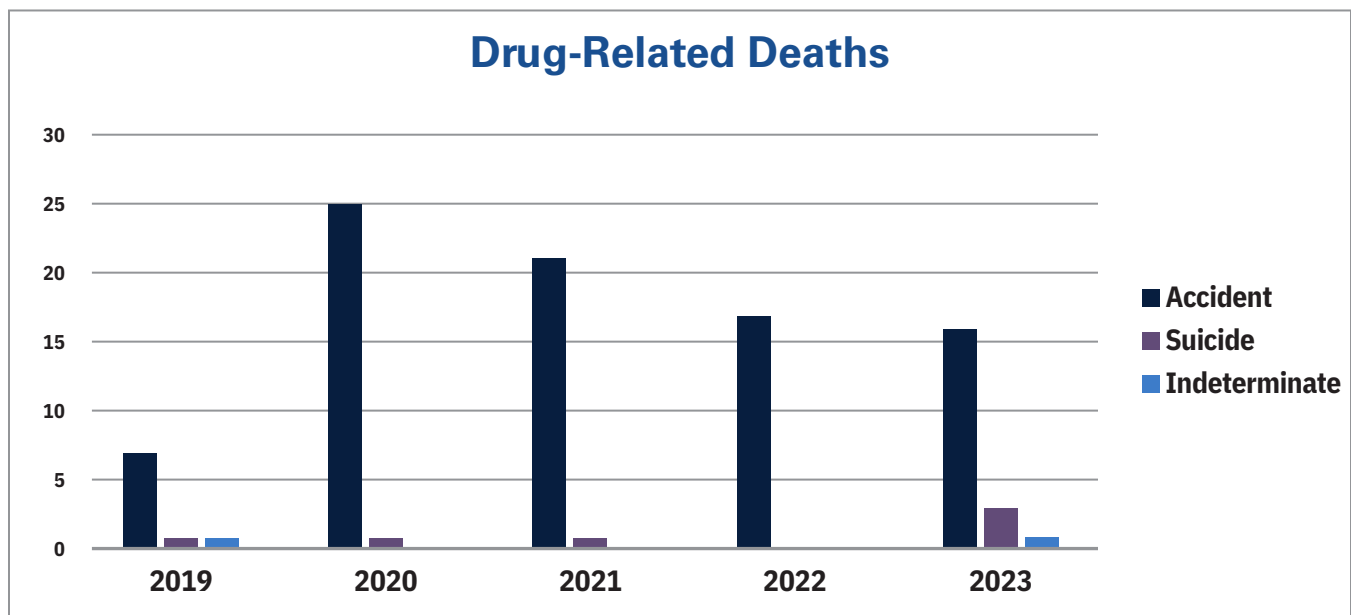
⁷ Drowning associated with drug intoxication included in both categories

Eaton County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

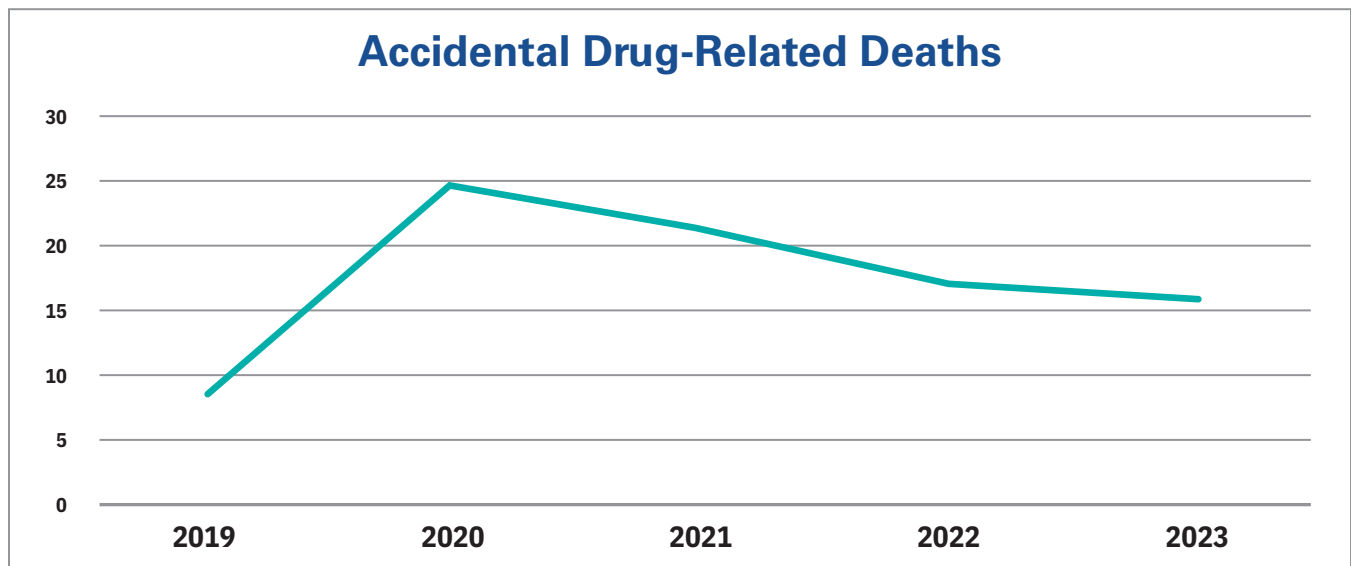
Drug-Related Deaths	2019	2020	2021	2022	2023
ACCIDENT	7	25	21	17	16
SUICIDE	1	1	1	0	3
INDETERMINATE	1	0	0	0	1
TOTAL	9	26	22	17	19



Eaton County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	19 cases
SEX	7 female, 12 male
RACE	17 white, 2 black
AGE RANGE	24-68 years
AVERAGE AGE	45.6 years ⁸
MEDIAN AGE	42 years ⁹
OPIOID-RELATED	13 cases (68% Drug-Related Deaths)
MANNER OF DEATH	16 accidents, 3 suicides



⁸ Does not include age of one unidentified individual at time of report.

⁹ Does not include age of one unidentified individual at time of report.

Eaton County

Suicides

Suicide Totals by Year	2019	2020	2021	2022	2023
SUICIDES	18	13	17	15	24

Suicide Methods	2019	2020	2021	2022	2023
FIREARM	11	7	11	9	16
HANGING	4	4	5	4	4
DRUG INTOXICATION	1	1	1	0	3
SHARP FORCE INJURY	1	0	0	1	0
OTHER	1 ¹⁰	1 ¹¹	0	1 ¹²	1 ¹³

Suicides by Age	2019	2020	2021	2022	2023
0-17	1	0	1	1	1
18-25	3	1	2	1	3
26-44	7	3	7	5	8
45-64	4	7	4	4	6
65+	3	2	3	4	6

¹⁰ Drowning
¹¹ Carbon monoxide inhalation
¹² Blunt force injuries- Struck by train
¹³ Jump from height

Eaton County

Deaths of Children

Deaths of Children by Age	2019	2020	2021	2022	2023
Stillborn	0	0	1	0	0
<1 year	0	0	1	0	2
1-5	1	0	2	2	0
6-10	4	0	0	0	0
11-17	2	3	2	2	1
TOTAL	7	3	6	4	3

Manner of Death	2019	2020	2021	2022	2023
NATURAL	2	0	0	2	0
ACCIDENT	4	3	3	1	0
SUICIDE	1	0	1	1	1
HOMICIDE	0	0	1	0	0
INDETERMINATE	0	0	0	0	2

Eaton County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	0			
ACCIDENT	0			
HOMICIDE	0			
SUICIDE	1	17 years	Male	Gunshot wound
INDETERMINATE	2	4 months	Male	SUID; unsafe sleep
		4 months	Male	SUID; unsafe sleep

Ingham County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Kenneth Barnes

Erica Betts, D.O., MPH

Amanda Buckovick

Aaron Campbell

Chad Chambers

Joy Dempsey, D-ABMDI

Mary Kueppers

Lynne Mark, D-ABMDI

Jessica Nicholson

Karen Phelps

Brett Ramsden, D-ABMDI

Frank Robinson

Jacob Scheib

Stephanie Scheib

Krystin Smith

Daniel Sowles, D-ABMDI

Mary St. John

Jacob Stair

Mary Stevens

Marissa Timko

Shelly Travis

Jamie Updyke

Brett Van Horn

Amanda Wallace, D-ABMDI

Gillian Wright

Ingham County

Summary of Cases

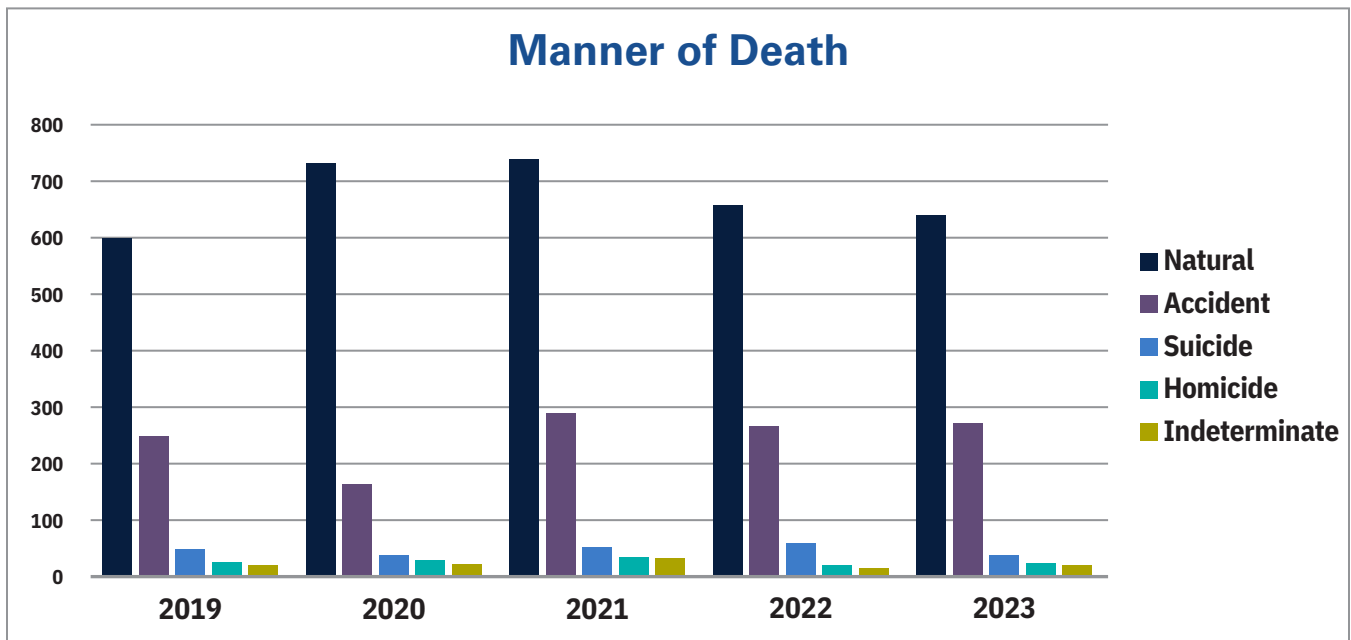
Summary of Cases	2019	2020	2021	2022	2023
TOTAL DEATHS IN THE COUNTY	3,066	3,468	3,754	3,317	3,213
DEATHS REPORTED TO THE ME	936	1,087	1,138	1,035	1,003
CASES ACCEPTED FOR INVESTIGATION ¹⁴	742	840	971	908	890
MEI SCENE INVESTIGATIONS	775	572	775	779	753
DEATH CERTIFICATES SIGNED BY THE ME	477	504	606	531	539
BODIES TRANSPORTED TO UM HEALTH-SPARROW	275	313	334	287	382
COMPLETE AUTOPSY	276	273	310	262	267
LIMITED AUTOPSY	13	24	22	26	17
EXTERNAL EXAMINATION	44	59	66	57	58
STORAGE ONLY	47	53	63	42	40
UNCLAIMED BODIES	13	18	25	26	28
REFERRALS TO GIFT OF LIFE	264	294	375	524	573
TISSUE/CORNEA DONORS	51	54	52	81	77
CREMATION PERMITS REVIEWED	2,154	2,483	2,730	2,631	2,464

¹⁴ Not every case that is reported to the Medical Examiner's office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner's authority (MCL 52.202).

Ingham County

Manner of Death

Manner of Death	2019	2020	2021	2022	2023
NATURAL	598	728	730	666	643
ACCIDENT	251	271	290	276	280
SUICIDE	51	39	56	60	39
HOMICIDE	16	26	31	19	21
INDETERMINATE	18	22	28	13	18
TOTAL	934	1,086	1,135	1,034	1,003 ¹⁵

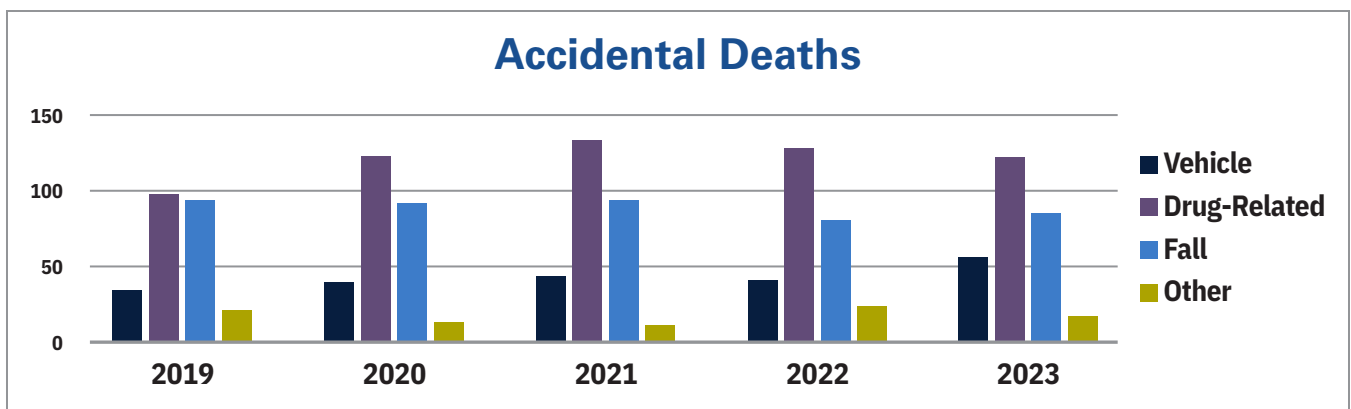


¹⁵ Two stillbirths; no manner of death included

Ingham County

Accidental Deaths

Accidental Deaths	2019	2020	2021	2022	2023
VEHICLE	35	40	46	43	56
DRUG-RELATED	98	124	138	131	122
DROWNING	3	1	6 ¹⁶	7 ¹⁷	2
FALL	95	93	94	77	85
FIRE	5	2	0	2	3
ASPHYXIA	2 ¹⁸	2 ¹⁹	3 ²⁰	0	3 ²¹
CHOKING	6	3	2	8	4
HYPOTHERMIA	0	4	0	2	0
OTHER	7 ²²	2 ²³	3 ²⁴	8 ²⁵	5 ²⁶
TOTAL	251	271	290²⁷	276²⁸	280



16 One associated with drug intoxication (included in both categories)

17 Two associated with drug intoxication (included in both categories)

18 Two infants in unsafe sleep environments

19 Two infants in unsafe sleep environments

20 Two infants in unsafe sleep environment; one child compressed beneath trailer

21 One positional; two traumatic/mechanical due to compression (one beneath vehicle, one beneath debris from tornado)

22 Two injuries from plane crash; one burns from hot coffee; one carbon monoxide; one hypothermia; one bicycle crash; one therapeutic injury

23 One pedestrian struck by train; One injuries from compaction in refuse vehicle

24 One hypothermia; one thermal injury from smoking; one carbon monoxide intoxication associated with drug intoxication (included in both categories)

25 Two carbon monoxide intoxication; two sharp force injuries; two pedestrians struck by trains; two blunt force injuries

26 One remote firearm injury; three animal related (two dog; one bovine); one industrial incident injury

27 Two are in more than one category

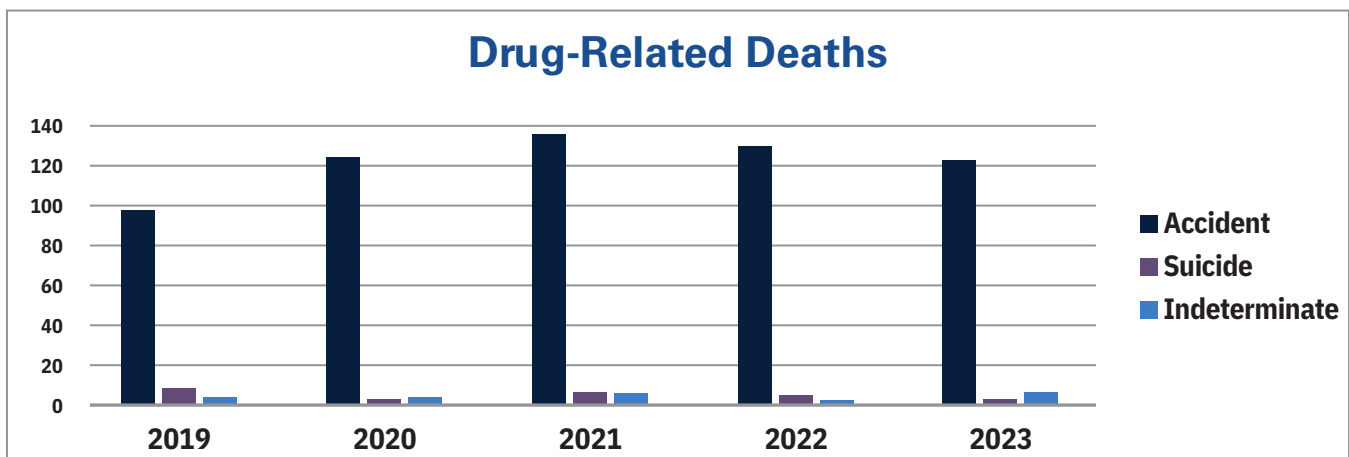
28 Two are in more than one category

Ingham County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

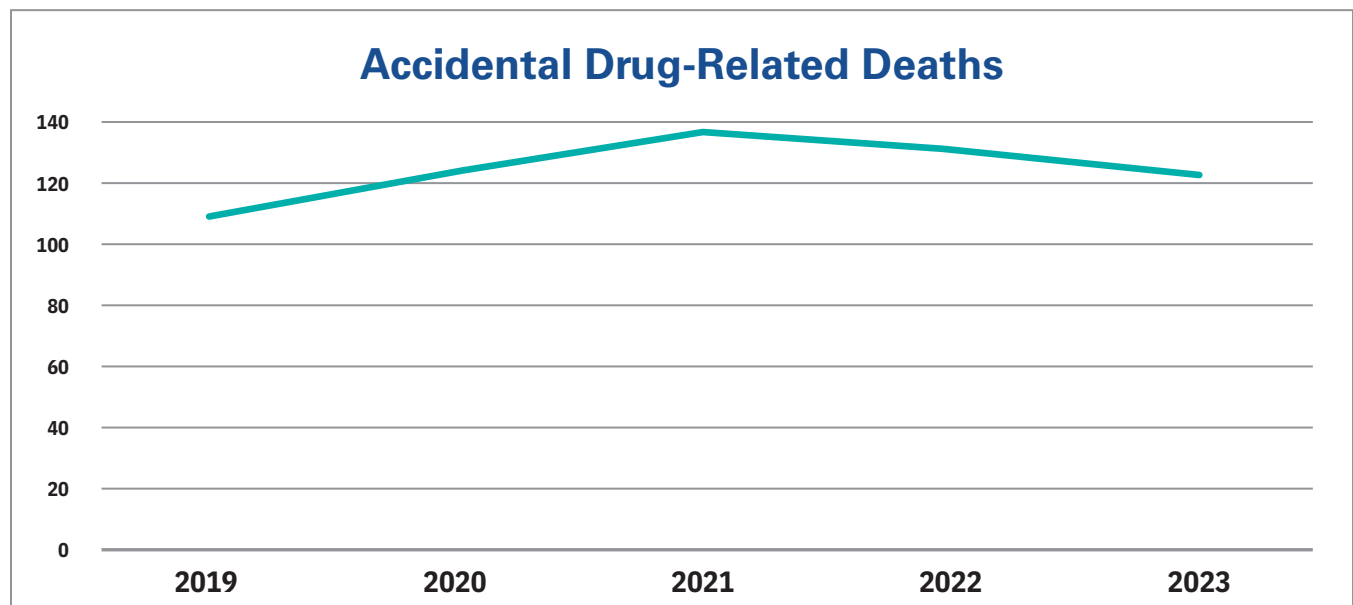
Drug-Related Deaths	2019	2020	2021	2022	2023
ACCIDENT	98	124	138	131	122
SUICIDE	7	3	6	5	3
INDETERMINATE	4	4	7	1	6
TOTAL	109	131	151	137	131



Ingham County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	131 cases
SEX	48 female, 83 male
RACE	88 white, 42 black, 1 other
AGE RANGE	20-78 years
AVERAGE AGE	46.6 years
MEDIAN AGE	46 years
OPIOID-RELATED	106 cases (81% of Drug-Related Deaths)
MANNER OF DEATH	122 accidents, 3 suicides, 6 indeterminate



Ingham County

Suicides

Suicide Totals by Year	2019	2020	2021	2022	2023
SUICIDES	51	39	56	60	39

Suicide Methods	2019	2020	2021	2022	2023
FIREARM	20	21	28	34	24
HANGING	20	13	15	15	5
DRUG INTOXICATION	7	3 ²⁹	6	5	3
SUFFOCATION	0	0	1	1	1
SHARP FORCE INJURY	0	1 ²⁷	1	1	1
JUMP FROM HEIGHT	0	0	1	0	1
MOTOR VEHICLE CRASH	0	0	1	0	0
CARBON MONOXIDE	0	1	1	1	1
STRUCK BY TRAIN	1	1	0	0	1
OTHER	3 ³⁰	0	2 ³¹	3 ³²	2 ³³

Suicides by Age	2019	2020	2021	2022	2023
0-17	2	2	2	3	0
18-25	13	5	7	9	8
26-44	14	13	29	18	16
45-64	18	15	11	16	11
65+	4	4	7	14	4

29 One combined drug intoxication and stab wound- classified in both methods

30 One jump from moving vehicle; one ingestion of household cleaning product; one puncture of dialysis fistula

31 One insecticide poisoning; one neck trauma due to fall associated with suicide attempt via hanging

32 One pedestrian struck by a motor vehicle; one ingestion of sodium nitrate; one ingestion of yew plant components

33 One pedestrian struck by vehicle; one ingestion of sodium nitrite

Ingham County

Deaths of Children

Deaths of Children by Age	2019	2020	2021	2022	2023
Stillborn	2	1	1	1	2
<1 year	13	11	10	5	6
1-5	8	3	2	3	2
6-10	5	2	2	1	1
11-17	7	7	10	6	7
TOTAL	35	24	25	16	18

Manner of Death	2019	2020	2021	2022	2023
NATURAL	8	5	3	5	5
ACCIDENT	12	4	7	2	5
SUICIDE	2	2	2	3	0
HOMICIDE	2	4	7	1	2
INDETERMINATE	9	8	5	4	4

Ingham County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	2	-	Male	Intrauterine Fetal Demise; uncertain cause
		-	Unknown	Intrauterine Fetal Demise; uncertain cause
NATURAL	5	minutes	Male	Complications of prematurity; hydrop fetalis
		2 years	Male	Congenital/Genetic disorder
		2 years	Male	Congenital/Genetic disorder
		7 years	Male	Congenital/Genetic disorder
		13 years	Female	Type I Diabetes Mellitus
ACCIDENT	2	16 years	Female	Motor vehicle crash; passenger ³⁴
		16 years	Female	Motor vehicle crash; passenger ³⁵
		16 years	Female	Motor vehicle crash; passenger
		17 years	Male	House fire
HOMICIDE	1	3 months	Male	Blunt force head injuries
		17 years	Female	Gunshot wound
SUICIDE	0			
INDETERMINATE	4	3 days	Male	Undetermined
		1 month	Female	Undetermined
		3 months	Female	SUID; bed sharing
		8 months	Male	SUID; potential unsafe sleep

³⁴ One of two deaths resulting from a single motor vehicle crash

³⁵ One of two deaths resulting from a single motor vehicle crash

Ionia County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Kenneth Barnes

Erica Betts, D.O., MPH

James Buxton

Jeffrey Carrow

Nigel Heftye

Zachary Jahnke, CCEMT-P

Mary Kueppers

Marvin Raap

Frank Robinson

Jacob Scheib

Stephanie Scheib

Derek Schroeder

Bill Simpson Sr., D-ABMDI

Dan Sowles, D-ABMDI

Jacob Stair

Mitchell Tolan, D-ABMDI

Thomas Wodarek, D-ABMDI

Ionia County

Summary of Cases

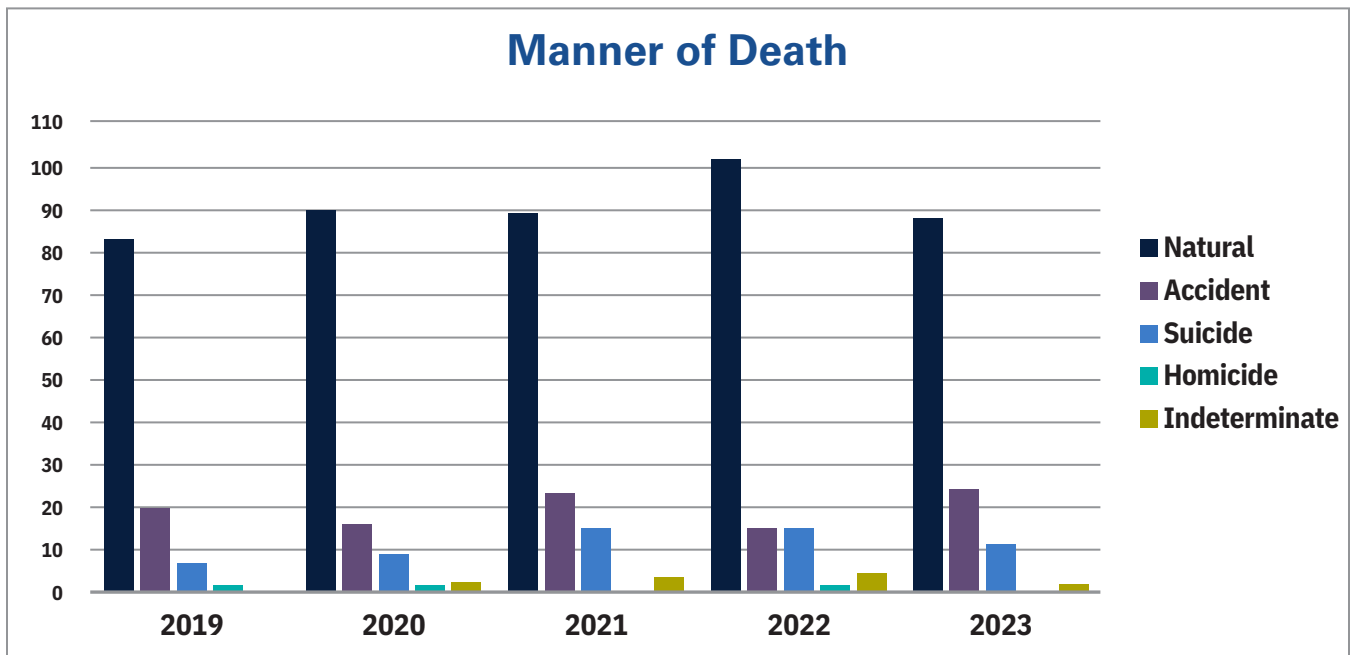
Summary of Cases	2019	2020	2021	2022	2023
TOTAL DEATHS IN THE COUNTY	333	409	398	419	398
DEATHS REPORTED TO THE ME	111	119	130	137	126
CASES ACCEPTED FOR INVESTIGATION ³⁶	107	110	124	122	117
MEI SCENE INVESTIGATIONS	109	107	119	122	108
DEATH CERTIFICATES SIGNED BY THE ME	48	43	67	51	58
BODIES TRANSPORTED TO UM HEALTH-SPARROW	39	34	57	47	43
COMPLETE AUTOPSY	25	21	43	32	28
LIMITED AUTOPSY	6	5	5	9	2
EXTERNAL EXAMINATION	3	5	3	2	7
STORAGE ONLY	5	3	6	4	6
UNCLAIMED BODIES	2	4	1	1	0
REFERRAL TO GIFT OF LIFE	32	38	59	68	71
TISSUE/CORNEA DONORS	12	18	14	13	7
CREMATION PERMITS REVIEWED	212	281	281	305	276

³⁶ Not every case that is reported to the Medical Examiner's office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner's authority (MCL 52.202).

Ionia County

Manner of Death

Manner of Death	2019	2020	2021	2022	2023
NATURAL	83	90	89	102	88
ACCIDENT	20	16	23	15	24
SUICIDE	7	9	15	15	11
HOMICIDE	1	1	0	1	0
INDETERMINATE	0	2	3	4	2
TOTAL	111	118	130	137	126 ³⁷

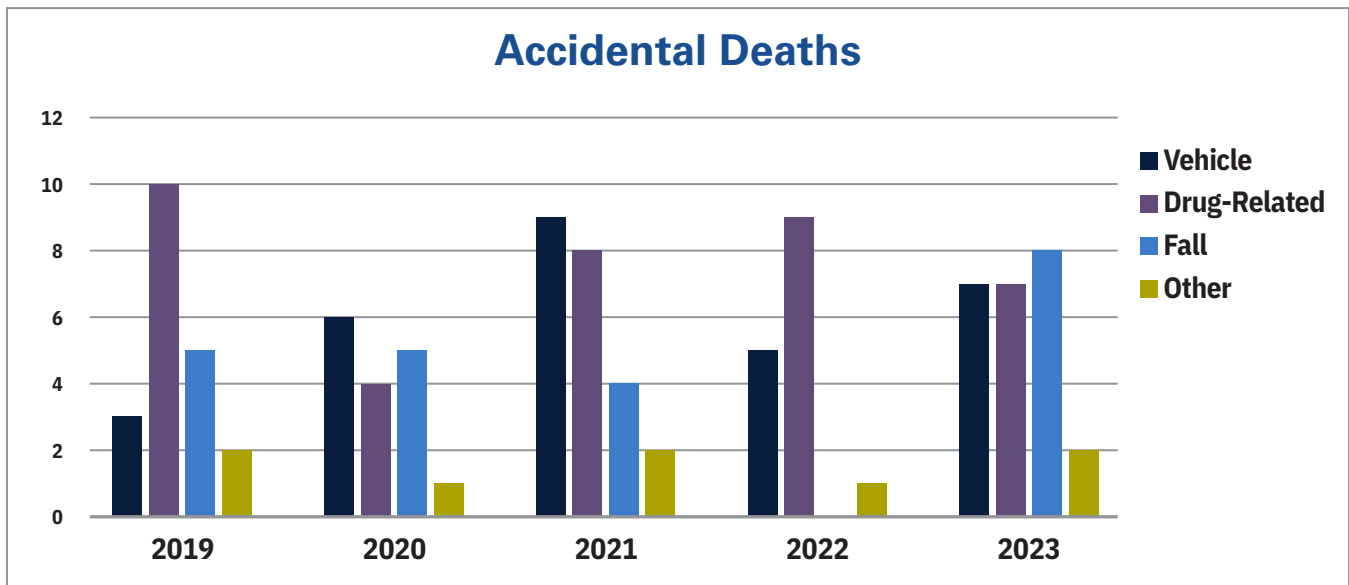


³⁷ One stillbirth with no manner of death

Ionia County

Accidental Deaths

Accidental Deaths	2019	2020	2021	2022	2023
VEHICLE	3	6	9	5	7 ³⁸
DRUG-RELATED	10	4	8	9	7
DROWNING	0	1	0	0	0
FALL	5	5	4	0	8
ASPHYXIA	2 ³⁹	0	0	1 ⁴⁰	2 ⁴¹
OTHER	0	0	2 ⁴²	0	0
TOTAL	20	16	16	15	24



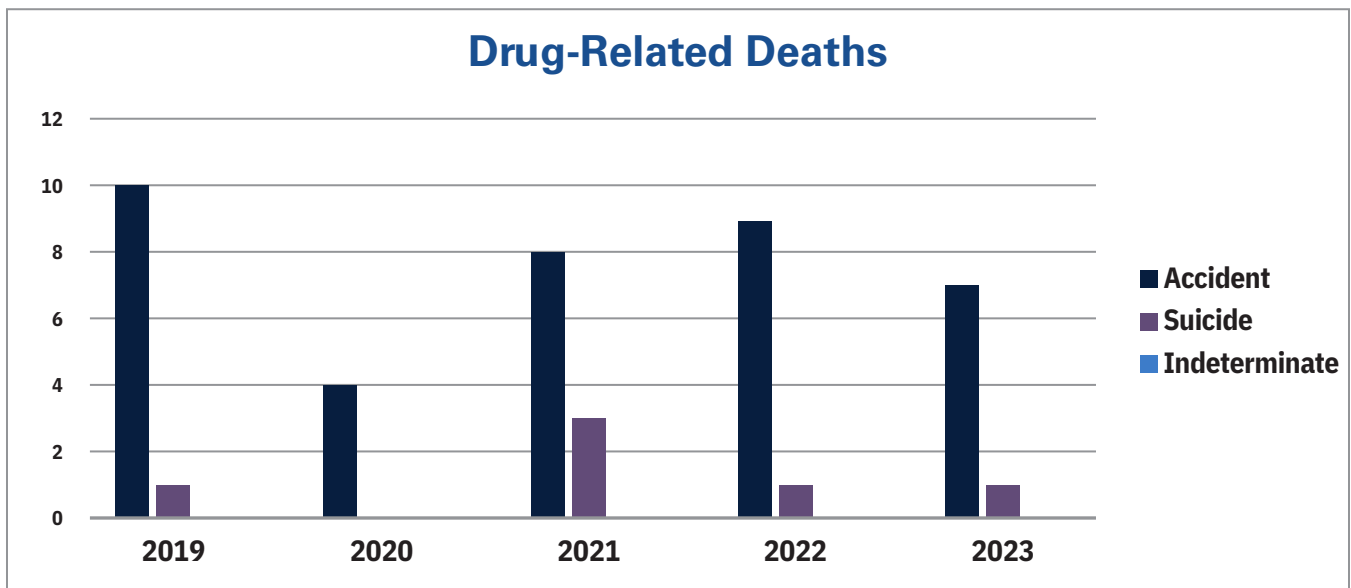
38 Includes one fire/burn death following motor vehicle crash
 39 One carbon monoxide; one mechanical- vehicle fell off jack
 40 Mechanical- lawnmower rollover
 41 Two asphyxia via choking on food
 42 Two injuries from falling trees

Ionia County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

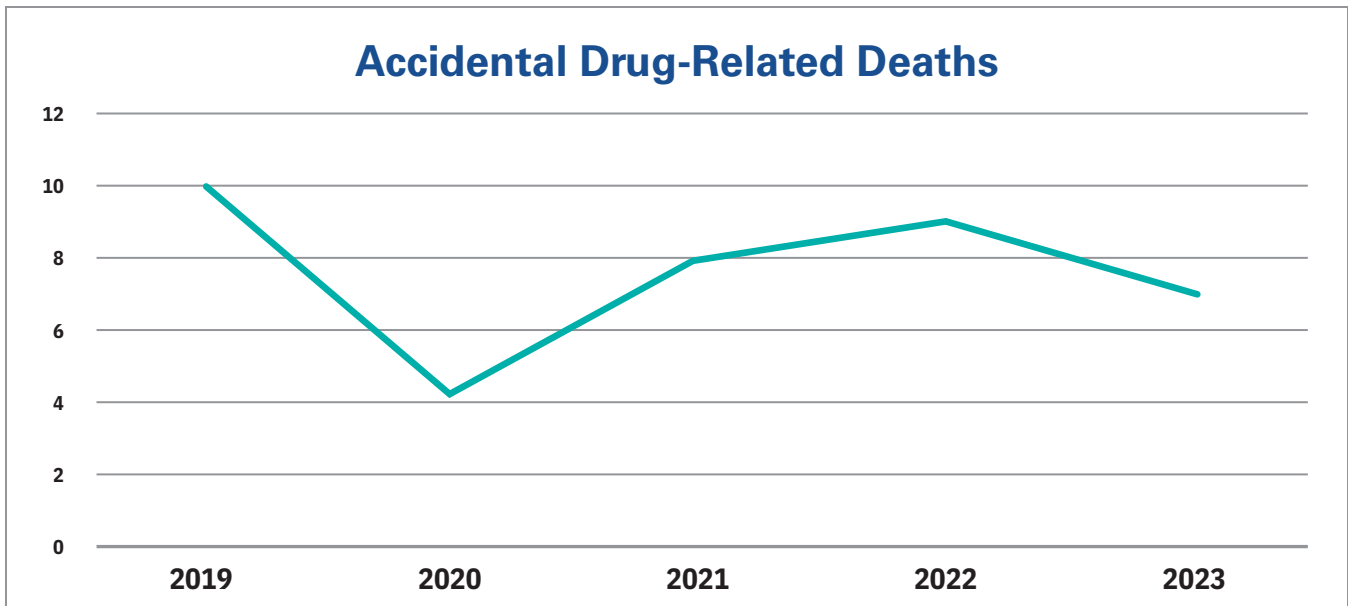
Drug-Related Deaths	2019	2020	2021	2022	2023
ACCIDENT	10	4	8	9	7
SUICIDE	1	0	3	1	1
INDETERMINATE	0	0	0	0	0
TOTAL	11	4	11	10	8



Ionia County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	8 cases
SEX	3 female, 5 male
RACE	8 white
AGE RANGE	21-50 years
AVERAGE AGE	37.1 years
MEDIAN AGE	36.5 years
OPIOID-RELATED	5 cases (62.5% of Drug-Related Deaths)
MANNER OF DEATH	7 accidents, 1 suicide



Ionia County

Suicides

Suicide Totals by Year	2019	2020	2021	2022	2023
SUICIDES	7	9	15	15	11

Suicide Methods	2019	2020	2021	2022	2023
FIREARM	4	5	6	8	3
HANGING	2	4	3	3	5
DRUG INTOXICATION	1	0	3	1	1
CARBON MONOXIDE	0	0	1	0	0
MOTOR VEHICLE	0	0	1	2 ⁴³	1 ⁴⁴
OTHER	0	0	1 ⁴⁵	1 ⁴⁶	1 ⁴⁷

Suicides by Age	2019	2020	2021	2022	2023
0-17	0	0	2	1	0
18-25	2	2	1	4	2
26-44	3	2	5	4	6
45-64	1	4	6	5	3
65+	1	1	1	1	0

43 One motor vehicle crash; one drowning after intentionally driving vehicle into a drainage ditch

44 Pedestrian struck by motor vehicle after walking into traffic

45 Self-inflicted stab wound

46 Poisoning via ingestion of sodium nitrate

47 Self-inflicted sharp force/incised wound of upper extremity

Ionia County

Deaths of Children

Deaths of Children by Age	2019	2020	2021	2022	2023
Stillborn	0	1	0	0	1
<1 year	0	2	1	2	1
1-5	0	1	0	0	0
6-10	0	1	0	0	0
11-17	0	0	2	2	0
TOTAL	0	5	3	4	2

Manner of Death	2019	2020	2021	2022	2023
NATURAL	0	1	0	0	0
ACCIDENT	0	2	0	1	0
SUICIDE	0	0	2	1	0
HOMICIDE	0	0	0	0	0
INDETERMINATE	0	1	1	2	1

Ionia County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	0			
ACCIDENT	0			
HOMICIDE	0			
SUICIDE	0			
INDETERMINATE	1	13 days	Female	SUID; unsafe sleep

Isabella County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Mindy Bailey

Erica Betts, D.O., MPH

Zachary Brown

Kari Duman

Taylor Maylee Hoekwater, D-ABMDI

Meghan Jones

Karen Phelps

Lynette Mongar

Tiffany Pickler

Krystin Smith

Mary St. John

Michelle Thompson

Claire Torgerson

Isabella County

Summary of Cases

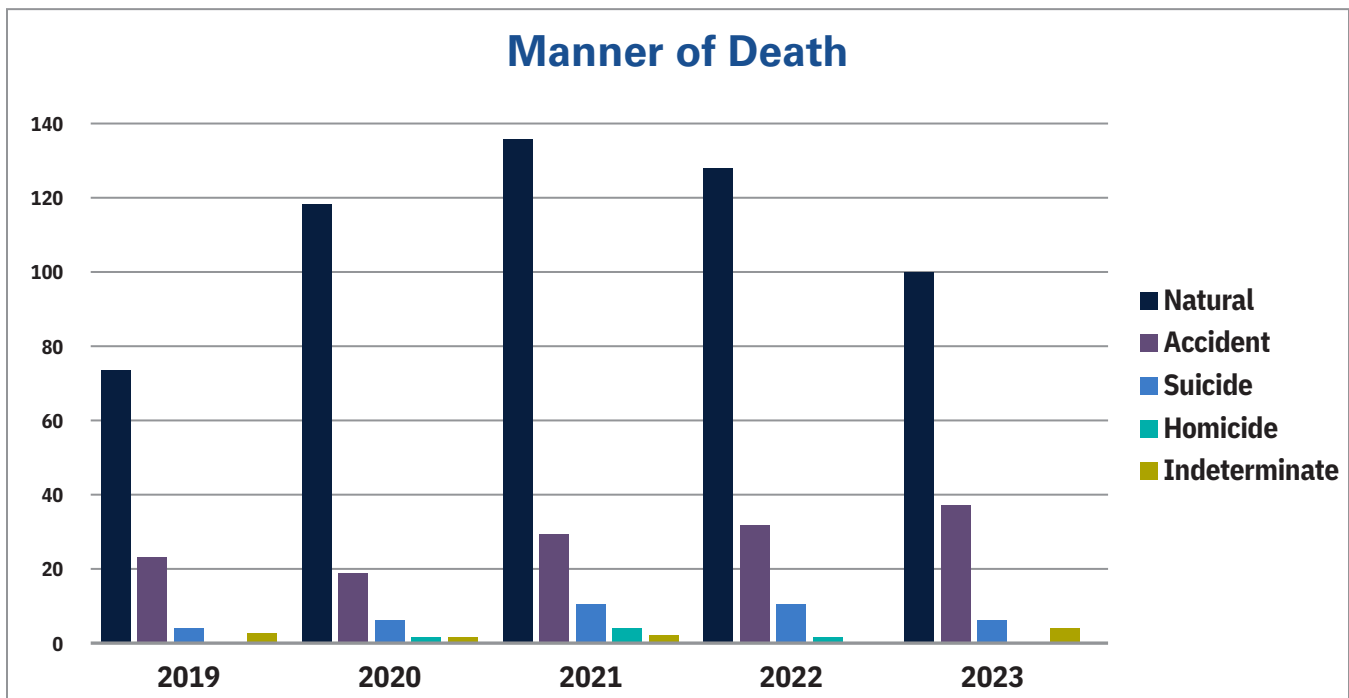
Summary of Cases	2019	2020	2021	2022	2023
TOTAL DEATHS IN THE COUNTY	479	603	624	605	599
DEATHS REPORTED TO THE ME	106	148	183	170	147
CASES ACCEPTED FOR INVESTIGATION ⁴⁸	96	128	150	138	128
MEI SCENE INVESTIGATIONS	92	115	119	124	111
DEATH CERTIFICATES SIGNED BY THE ME	47	50	73	76	76
BODIES TRANSPORTED TO UM HEALTH-SPARROW	39	39	57	52	55
COMPLETE AUTOPSY	33	29	42	41	46
LIMITED AUTOPSY	2	2	6	4	3
EXTERNAL EXAMINATION	3	6	5	4	6
STORAGE ONLY	1	1	4	3	1
UNCLAIMED BODIES	1	1	5	1	2
REFERRALS TO GIFT OF LIFE	28	48	60	66	58
TISSUE/CORNEA DONORS	9	6	7	19	6
CREMATION PERMITS REVIEWED	310	384	409	426	445

⁴⁸ Not every case that is reported to the Medical Examiner's office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner's authority (MCL 52.202).

Isabella County

Manner of Death

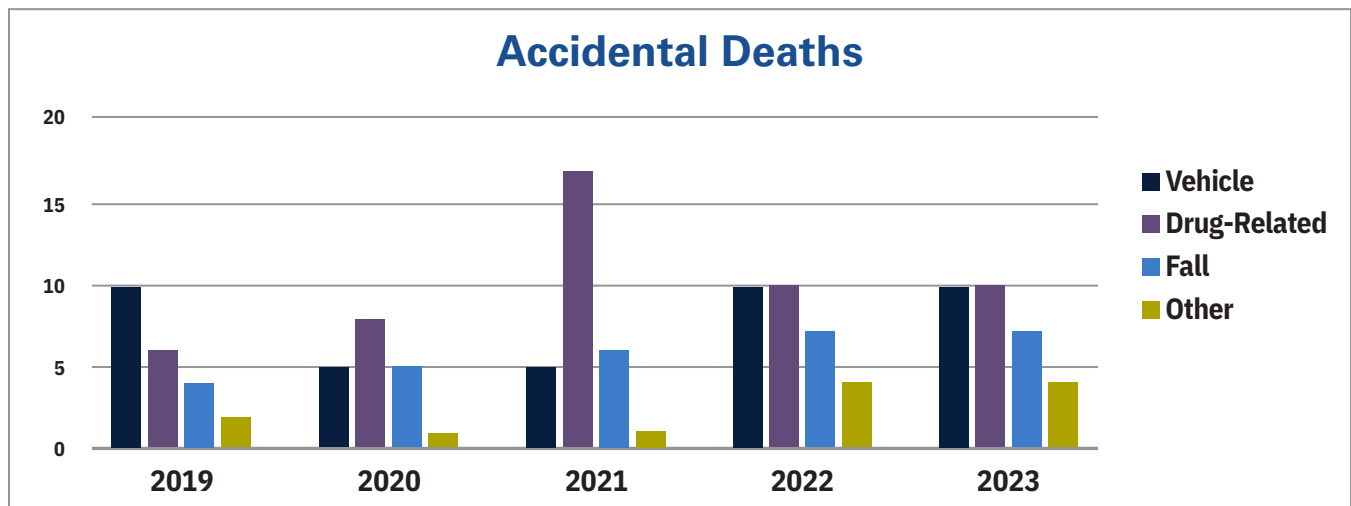
Manner of Death	2019	2020	2021	2022	2023
NATURAL	74	119	137	127	100
ACCIDENT	24	19	29	31	37
SUICIDE	5	6	10	10	6
HOMICIDE	0	2	4	2	0
INDETERMINATE	2	2	2	0	4
TOTAL	105	148	182	170	147



Isabella County

Accidental Deaths

Accidental Deaths	2019	2020	2021	2022	2023
VEHICLE	10	5	5	10	8 ⁴⁹
DRUG-RELATED	6	8	17	10	19
DROWNING	1	0	0	0	1
FALL	4	5	6	7	7
ASPHYXIA	1	1	0	4	2
FIRE	1	0	0	0	1 ⁵⁰
OTHER	1 ⁵¹	0	1 ⁵²	0	0
TOTAL	24	19	29	31	37



⁴⁹ One post motor vehicle crash included in both fire and vehicle categories

⁵⁰ One post motor vehicle crash included in both fire and vehicle categories

⁵¹ One work related tire explosion

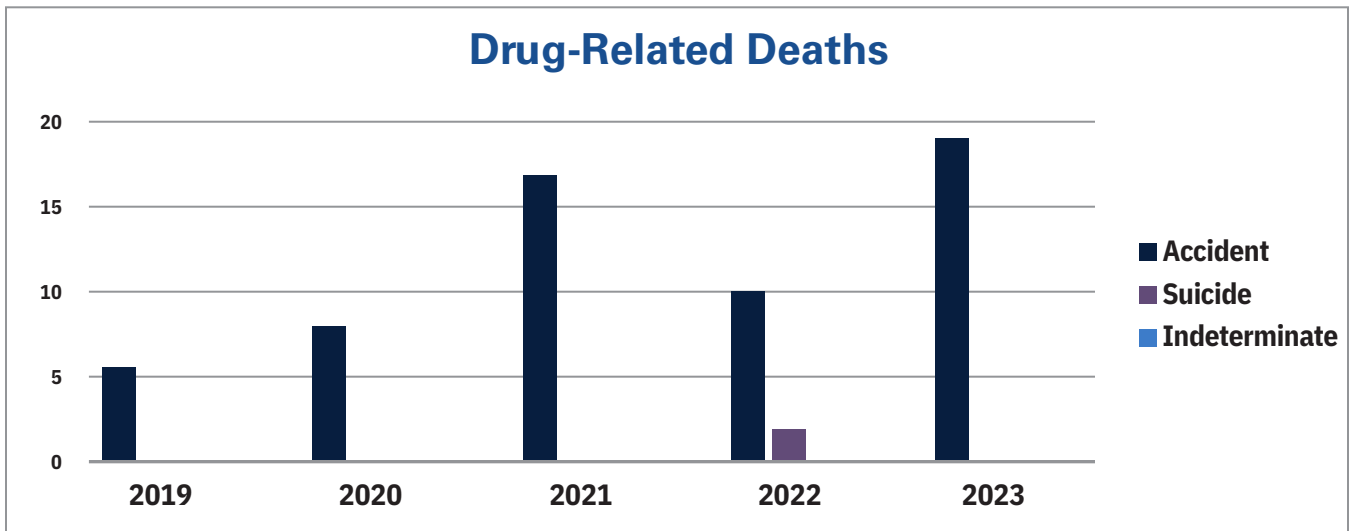
⁵² One industrial injury

Isabella County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

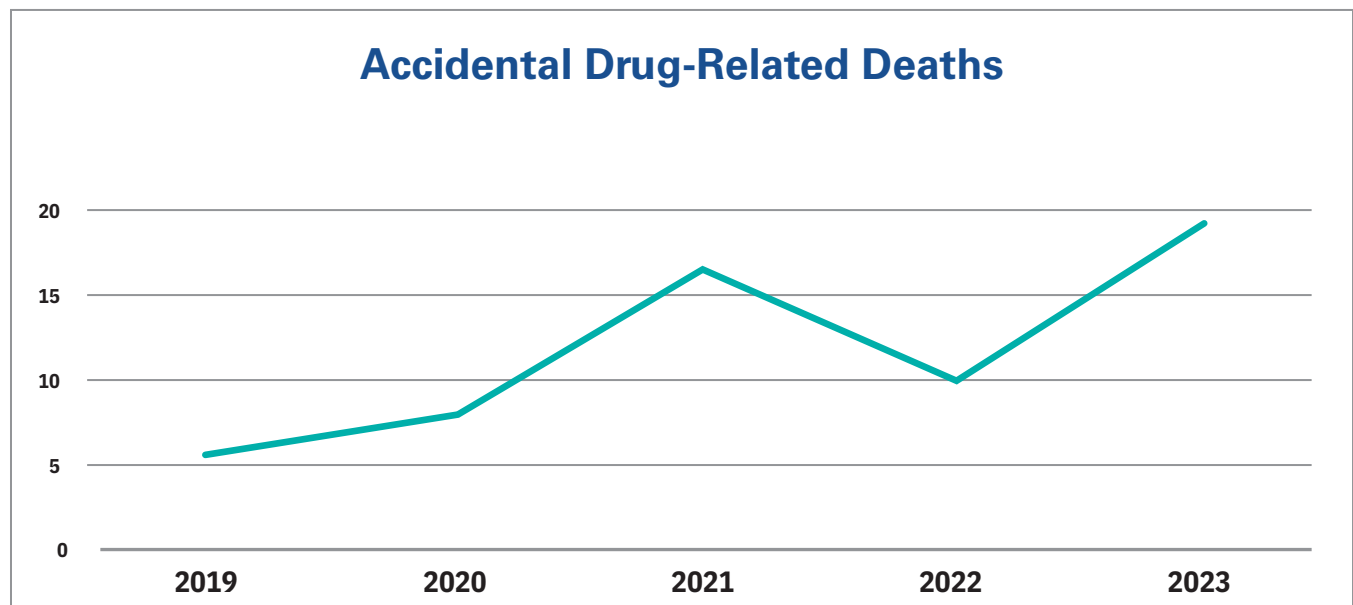
Drug-Related Deaths	2019	2020	2021	2022	2023
ACCIDENT	6	8	17	10	19
SUICIDE	0	0	0	2	0
INDETERMINATE	0	0	0	0	0
TOTAL	6	8	17	12	19



Isabella County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	19 cases
SEX	8 female, 11 male
RACE	11 white, 2 Black, Native American
AGE RANGE	18-68 years
AVERAGE AGE	38.1 years
MEDIAN AGE	33 years
OPIOID-RELATED	15 cases (79% of Drug-Related Deaths)
MANNER OF DEATH	19 accidents



Isabella County

Suicides

Suicide Totals by Year	2019	2020	2021	2022	2023
SUICIDES	5	6	10	10	6

Suicide Methods	2019	2020	2021	2022	2023
FIREARM	4	3	5	5	3
HANGING	1	3	4	2	3
DRUG INTOXICATION	0	0	0	2	0
MOTOR VEHICLE/FIRE	0	0	0	1	0
OTHER	0	0	1 ⁵³	0	0

Suicides by Age	2019	2020	2021	2022	2023
0-17	0	1	0	2	0
18-25	0	1	2	0	0
26-44	1	1	4	2	2
45-64	3	2	1	2	2
65+	1	1	3	4	2

⁵³ Sharp force injury

Isabella County

Deaths of Children

Deaths of Children by Age	2019	2020	2021	2022	2023
Stillborn	0	0	0	0	0
<1 year	1	3	1	1	1
1-5	4	1	1	1	0
6-10	0	0	0	0	0
11-17	0	2	3	3	0
TOTAL	5	6	5	5	1

Manner of Death	2019	2020	2021	2022	2023
NATURAL	0	2	0	0	0
ACCIDENT	4	2	2	2	0
SUICIDE	0	1	0	2	0
HOMICIDE	0	0	2	1	0
INDETERMINATE	1	1	1	0	1

Isabella County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	0			
ACCIDENT	0			
HOMICIDE	0			
SUICIDE	0			
INDETERMINATE	1	1 month, 20 days	Female	

Livingston County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Jonathan Black, D-ABMDI

Samantha Lee

Richard Cruz, D-ABMDI

Edwin Moore, D-ABMDI

Tim Davids

Troy Murrish, D-ABMDI

Scott Demoff

David Taylor

Diana French, D-ABMDI

Krystin Smith

Emily Gehringer

Mary Stevens

John Kelley

Amanda Wallace, D-ABMDI

Eric LaPres, D-ABMDI

Livingston County

Summary of Cases

On Sept. 20, 2022, Livingston County entered into an agreement with UM Health-Sparrow Forensic Pathology to provide medical examiner services. Due to limited data from prior years, this report only includes data for 2023 which is the first full year we served as the Livingston County Medical Examiner’s Office.

Summary of Cases	2023
TOTAL DEATHS IN THE COUNTY	1340
DEATHS REPORTED TO THE ME	357
CASES ACCEPTED - INVESTIGATION ⁵⁴	320
MEI SCENE INVESTIGATIONS	313
DEATH CERTIFICATES SIGNED BY THE ME	126
BODIES TRANSPORTED TO UM HEALTH-SPARROW	88
COMPLETE AUTOPSY	66
LIMITED AUTOPSY	10
EXTERNAL EXAMINATION	12
STORAGE ONLY	16 ⁵⁵
UNCLAIMED BODIES	0
REFERRALS TO GIFT OF LIFE	183
TISSUE/CORNEA DONORS	17
CREMATION PERMITS REVIEWED	963

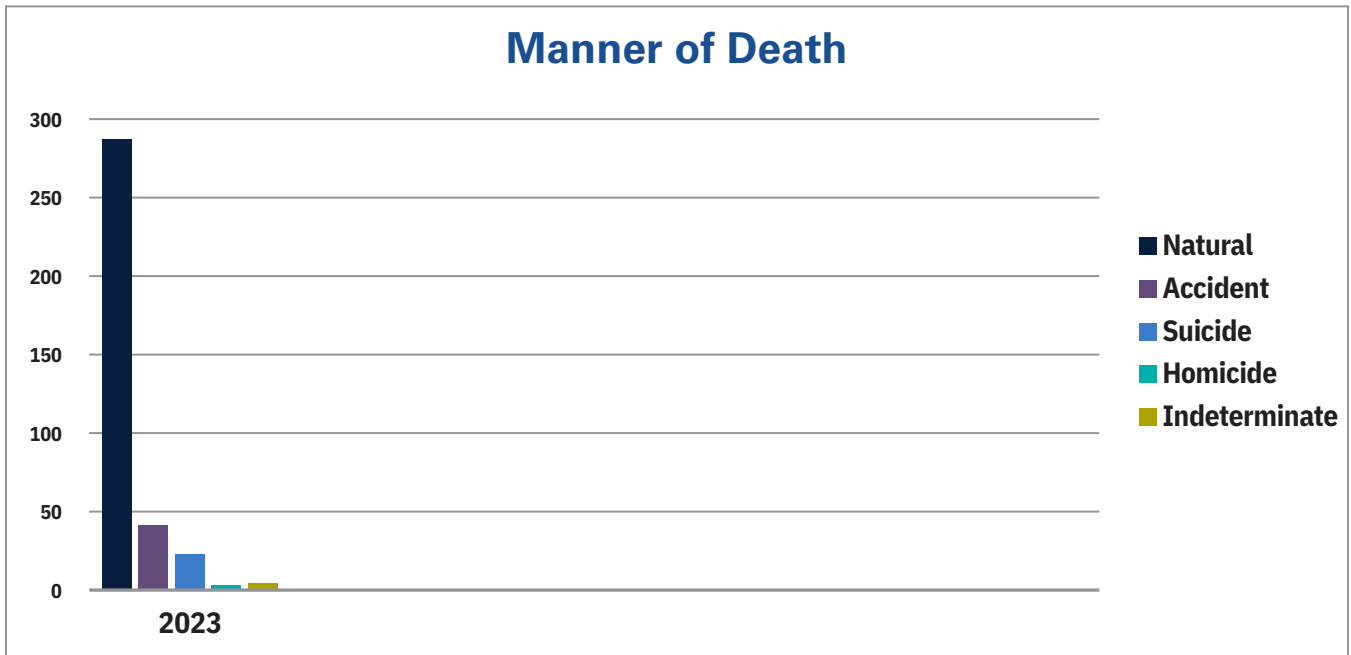
⁵⁴ Not every case that is reported to the Medical Examiner’s office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner’s authority (MCL 52.202).

⁵⁵ 12 sent to UM Health-Sparrow Lansing morgue, three sent to Genoa EMS, one Sent to Trinity Health

Livingston County

Manner of Death

Manner of Death	2023
NATURAL	287
ACCIDENT	41
SUICIDE	23
HOMICIDE	2
INDETERMINATE	3
TOTAL	356 ⁵⁶



⁵⁶ One non-human remains (bone)

Livingston County

Accidental Deaths

Accidental Deaths	2023
VEHICLE	10
DRUG-RELATED	12
DROWNING	4
FALL	9
FIRE	1
ASPHYXIA	2 ⁵⁷
HYPOTHERMIA	0
OTHER	3 ⁵⁸
TOTAL	41



⁵⁷ One infant (unsafe sleep); one adult (positional asphyxia)

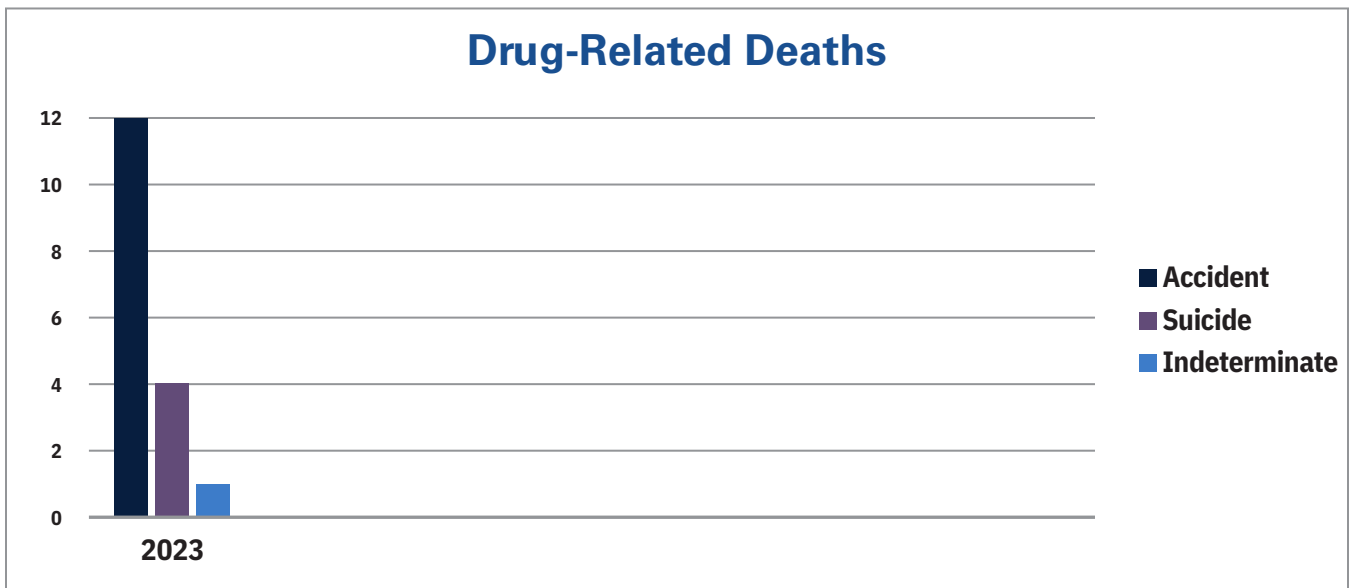
⁵⁸ One electrocution; one inhalation of products of combustion (carbon monoxide); one dog mauling

Livingston County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

Drug-Related Deaths	2023
ACCIDENT	12
SUICIDE	4
INDETERMINATE	1
TOTAL	17



Livingston County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	17 cases
SEX	6 female, 11 male
RACE	17 white
AGE RANGE	33-75 years
AVERAGE AGE	46.8 years
MEDIAN AGE	47 years
OPIOD-RELATED	10 cases (59% of Drug-Related Deaths)
MANNER OF DEATH	12 accidents, 4 suicides, 1 indeterminate

Livingston County

Suicides

Suicide Totals by Year	2023
SUICIDES	23

Suicide Methods	2023
FIREARM	13
HANGING	3
DRUG INTOXICATION	4
CARBON MONOXIDE	1
OTHER	2 ⁵⁹

Suicides by Age	2023
0-17	1
18-25	1
26-44	9
45-64	9
65+	3

⁵⁹ One sharp force injury; one jump from height

Livingston County

Deaths of Children

Deaths of Children by Age	2023
Stillborn	0
<1 year	2
1-5	0
6-10	1
11-17	2
TOTAL	5

Manner of Death	2023
NATURAL	1
ACCIDENT	2
SUICIDE	1
HOMICIDE	0
INDETERMINATE	1

Livingston County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	1	7 years	Male	Pneumonia; Trisomy 21 (Down’s Syndrome)
ACCIDENT	2	2 months	Female	Asphyxia associated with unsafe sleep
		16 years	Female	Drowning in hot tub
HOMICIDE	0			
SUICIDE	1	17 years	Male	Gunshot wound
INDETERMINATE	1	2 weeks	Female	SUID; unsafe sleep

Shiawassee County

Medical Examiner

Michael A. Markey, M.D.

Deputy Medical Examiners

Christopher A. Hauch, M.D.

David S. Moons, M.D.

Chief Investigator

Michelle A. Fox, D-ABMDI

Medical Examiner Investigators

Mark Pendergraff

April Archer

Erica Betts, D.O., MPH

Laura Bohms

Lynn Carpenter

Jeffrey Carrow

Chad Chambers

Keith Hansen

Lisa Higbee

Alanna Pendergraff

Nicole Perdue

Jesse Radzynski

Frank Robinson

Jacob Scheib

Stephanie Schieb

Jacob Stair

Kayla Stammersky

Christi Stine

Kathy Thelen

Amanda Wallace, D-ABMDI

Shiawassee County

Summary of Cases

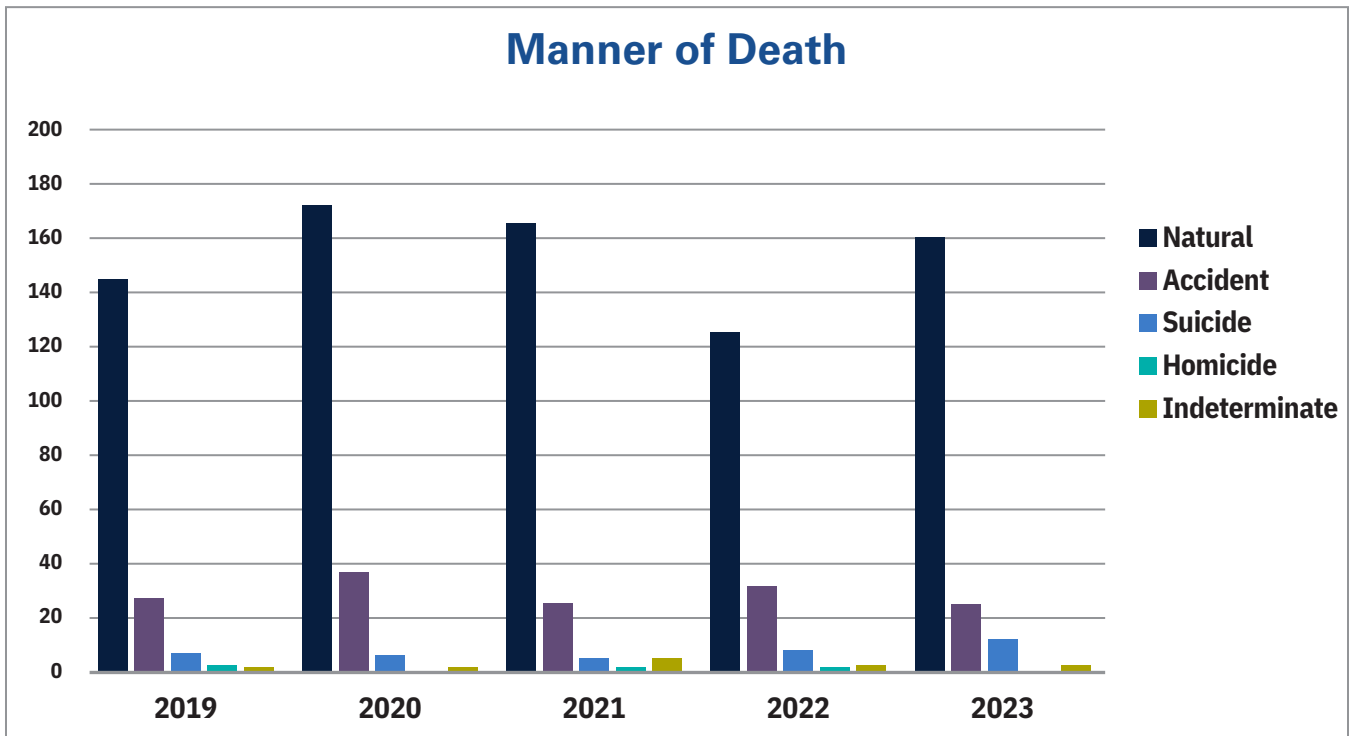
Summary of Cases	2019	2020	2021	2022	2023
TOTAL DEATHS IN THE COUNTY	708	730	804	836	783
DEATHS REPORTED TO THE ME	185	219	200	220	199
CASES ACCEPTED - INVESTIGATION ⁶⁰	162	182	162	191	178
MEI SCENE INVESTIGATIONS	160	152	143	162	156
DEATH CERTIFICATES SIGNED BY THE ME	69	75	72	81	78
BODIES TRANSPORTED TO UM HEALTH-SPARROW	52	52	41	51	46
COMPLETE AUTOPSY	41	43	31	40	26
LIMITED AUTOPSY	6	4	3	5	5
EXTERNAL EXAMINATION	0	3	3	3	9
STORAGE ONLY	1	1	2	1	6
UNCLAIMED BODIES	5	2	2	2	0
REFERRALS TO GIFT OF LIFE	41	24	28	81	84
TISSUE/CORNEA DONORS	11	4	2	11	18
CREMATION PERMITS REVIEWED	439	466	538	543	565

⁶⁰ Not every case that is reported to the Medical Examiner's office falls within our jurisdiction. We accept cases for investigation based on the circumstances surrounding the death and the law that governs the Medical Examiner's authority (MCL 52.202).

Shiawassee County

Manner of Death

Manner of Death	2019	2020	2021	2022	2023
NATURAL	145	172	166	175	160
ACCIDENT	28	38	24	32	25
SUICIDE	8	7	4	8	12
HOMICIDE	2	0	1	1	0
INDETERMINATE	1	1	5	2	2
TOTAL	184	218	200	220 ⁶¹	199

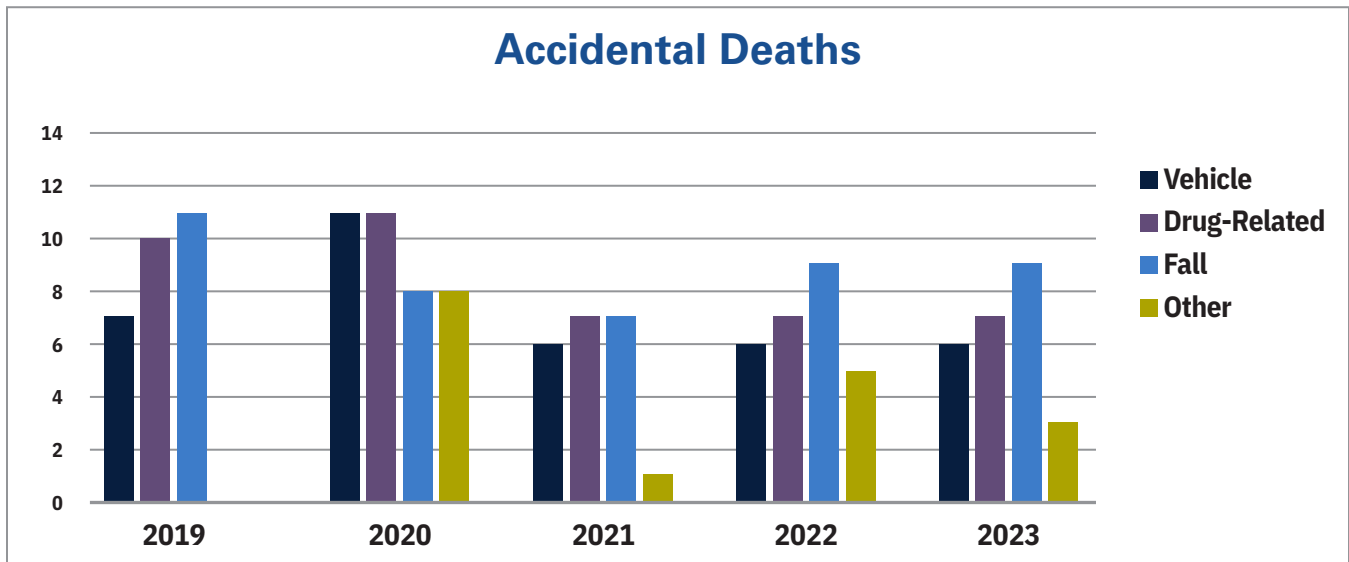


⁶¹ Two stillbirth cases with no manner of death

Shiawassee County

Accidental Deaths

Accidental Deaths	2019	2020	2021	2022	2023
VEHICLE	7	11	6	8	6 ⁶²
DRUG-RELATED	10	11	7	12	7
DROWNING	0	3	1	0	0
FALL	11	8	7	7	9
FIRE	0	1	0	0	0
ASPHYXIA	0	2	0	2	3 ⁶³
HYPOTHERMIA	0	2	0	1	0
OTHER	0	0	3	2 ⁶⁴	0
TOTAL	28	38	24	32	25



62 Does not include one traumatic asphyxia case due to person being run over by own vehicle

63 One motor vehicle traumatic asphyxia case; two choking on food

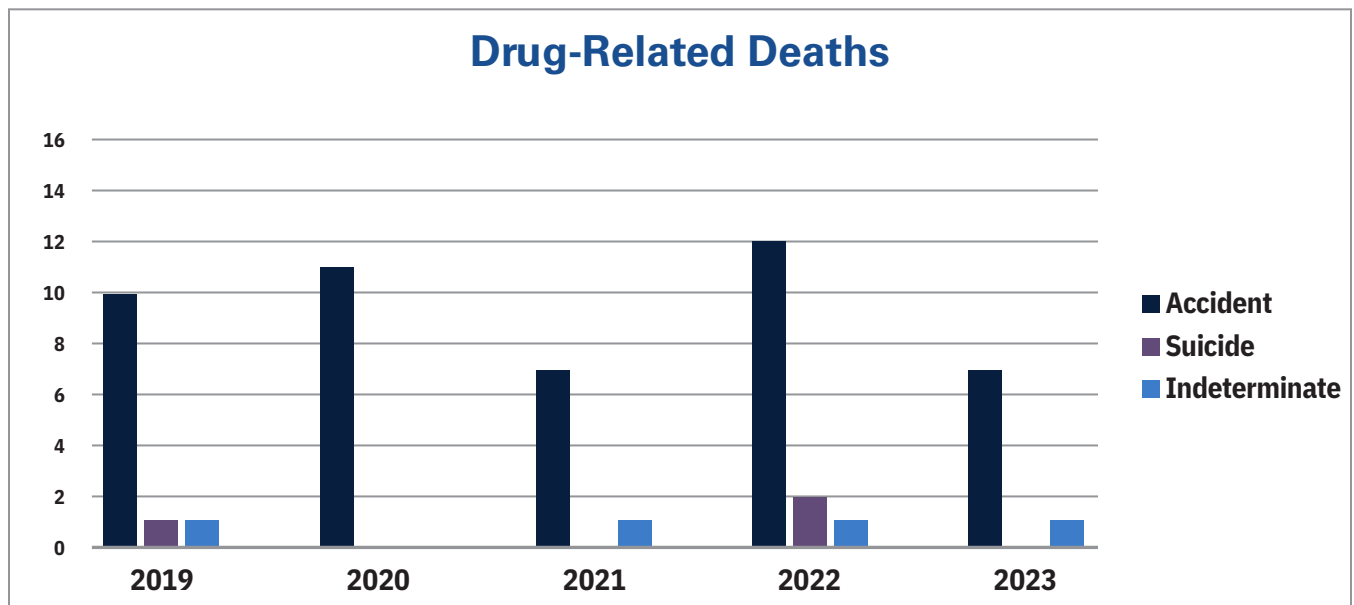
64 One remote diving injury; one remote snowmobile crash

Shiawassee County

Drug-Related Deaths

For purposes of this report, drug-related fatalities are deaths in which an overdose of a combination of drugs or a single drug caused or contributed to the death. These deaths do not include situations in which intoxication might have been a factor in an incident leading to death, such as motor vehicle crashes, falls, choking while eating or environmental exposures.

Drug-Related Deaths	2019	2020	2021	2022	2023
ACCIDENT	10	11	7	12	7
SUICIDE	1	0	0	2	0
INDETERMINATE	1	0	1	1 ⁶⁵	1
TOTAL	12	11	8	15	8

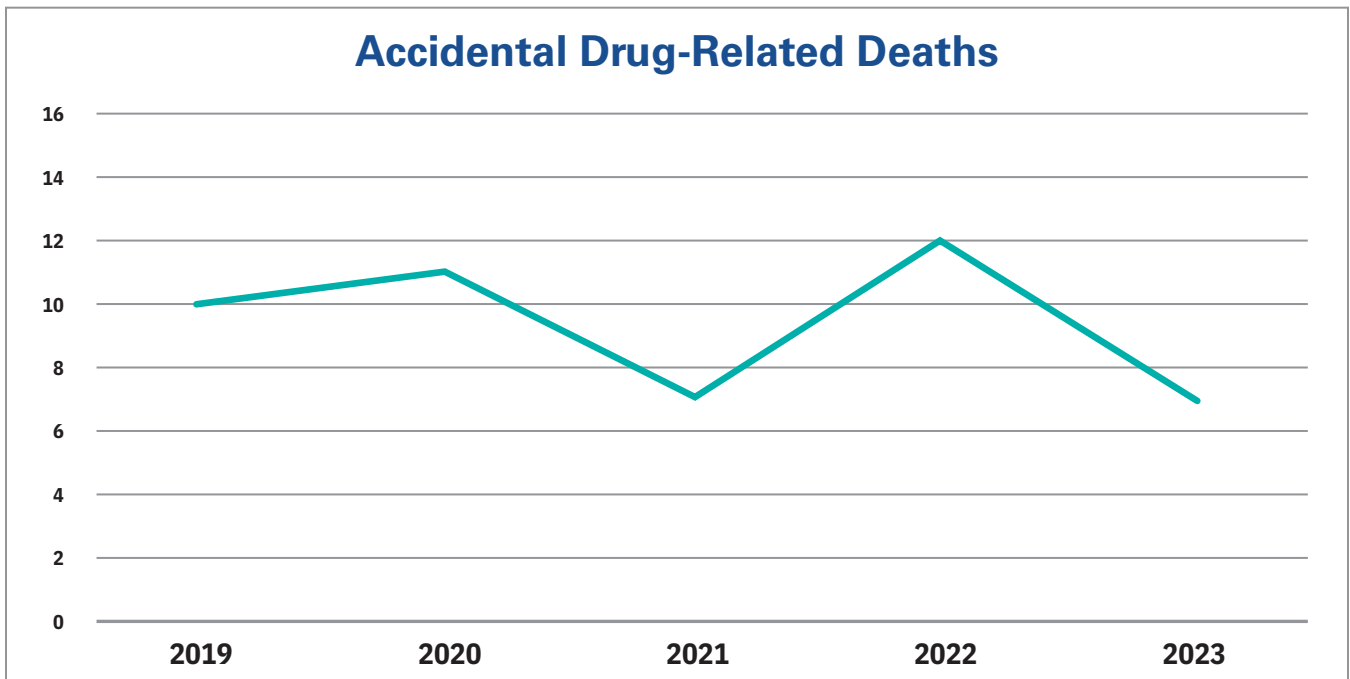


⁶⁵ One-year-old ingested fentanyl

Shiawassee County

Drug-Related Deaths

2023 Drug-Related Deaths Summary	
TOTAL	8 cases
SEX	3 female, 5 male
RACE	8 white
AGE RANGE	37-75 years
AVERAGE AGE	50.3 years
MEDIAN AGE	49.5 years
OPIOID-RELATED	4 cases (50% of Drug-Related Deaths)
MANNER OF DEATH	7 accidents, 1 indeterminate



Shiawassee County

Suicides

Suicide Totals by Year	2019	2020	2021	2022	2023
SUICIDES	8	7	4	8	12

Suicide Methods	2019	2020	2021	2022	2023
FIREARM	6	4	3	6	7
HANGING	0	3	1	0	4
DRUG INTOXICATION	1	0	0	2	0
CARBON MONOXIDE	1	0	0	0	0
OTHER	0	0	0	0	1 ⁶⁶

Suicides by Age	2019	2020	2021	2022	2023
0-17	0	0	0	0	0
18-25	0	2	1	0	2
26-44	6	2	0	4	3
45-64	1	3	1	3	4
65+	1	0	2	1	3

⁶⁶ Asphyxia (bag placed over head with helium inhalation)

Shiawassee County

Deaths of Children

Deaths of Children by Age	2019	2020	2021	2022	2023
Stillborn	1	1	2	2	0
<1 year	0	0	2	3	0
1-5	0	0	1	1	0
6-10	0	0	0	0	0
11-17	1	0	0	0	1
TOTAL	2	1	5	6	1

Manner of Death	2019	2020	2021	2022	2023
NATURAL	0	0	0	2	0
ACCIDENT	1	0	1	0	1
SUICIDE	0	0	0	0	0
HOMICIDE	0	0	0	0	0
INDETERMINATE	0	0	2	2	0

Shiawassee County

Deaths of Children

2023 Deaths of Children Summary				
<i>Manner</i>	<i>Number of Deaths</i>	<i>Age</i>	<i>Sex</i>	<i>Cause of Death</i>
STILLBORN	0			
NATURAL	0			
ACCIDENT	1	13 Years	Male	Motor vehicle crash (passenger)
HOMICIDE	0			
SUICIDE	0			
INDETERMINATE	0			

Comparisons Across Counties

<i>2023 Comparisons Across Counties</i>	<i>Clinton</i>	<i>Eaton</i>	<i>Ingham</i>	<i>Ionia</i>	<i>Isabella</i>	<i>Livingston</i>	<i>Shiawassee</i>
POPULATION ⁶⁷	79,748	108,992	284,108	66,809	64,447	196,161	68,022
TOTAL DEATHS	452	817	3,213	398	599	1,340	783
DEATHS REPORTED TO THE ME (% OF TOTAL DEATHS)	125 (28%)	223 (27%)	1,003 (31.2%)	126 (31.7%)	147 (24.5%)	357 (26.6%)	199 (25.4%)
CASES ACCEPTED FOR INVESTIGATION	121	201	890	117	128	320	178
MEI SCENE INVESTIGATION	119	186	753	108	111	313	156
DEATH CERTIFICATES SIGNED BY THE ME	57	102	539	58	76	126	78
TOTAL EXAMS (% OF CASES ACCEPTED)	42 (34.7%)	73 (36.3%)	342 (38%)	37 (31.6%)	55 (43%)	88 (27.5%)	40 (22.5%)
NATURAL DEATHS (% OF DEATHS REPORTED)	93 (74%)	151 (68%)	643 (64.1%)	88 (69.8%)	100 (68%)	287 (80.4%)	160 (80%)
ACCIDENTAL DEATHS (% OF DEATHS REPORTED)	20 (16%)	40 (17.9%)	280 (27.9%)	24 (19%)	37 (25.1%)	41 (11.5%)	25 (13%)
SUICIDE DEATHS (% OF DEATHS REPORTED)	10 (8%)	24 (10.8%)	39 (3.9%)	11 (8.7%)	6 (4.1%)	23 (6.4%)	12 (6%)
HOMICIDE DEATHS (% OF DEATHS REPORTED)	1 (0.8%)	5 (2.2%)	21 (2.1%)	0 (0%)	0 (0%)	2 (0.6%)	0 (0%)
INDETERMINATE DEATHS (% OF DEATHS REPORTED)	1 (0.8%)	3 (1.3%)	18 (1.8%)	2 (1.6%)	4 (2.7%)	3 (0.8%)	2 (1%)
DRUG-RELATED DEATHS (% OF DEATHS REPORTED)	6 (4.8%)	19 (8.5%)	131 (13.1%)	8 (6.3%)	19 (12.9%)	17 (4.8%)	8 (4%)
REFERRALS TO GIFT OF LIFE	60	119	573	71	58	183	84
TISSUE/CORNEA DONORS	5	15	77	7	6	17	18
UNCLAIMED BODIES	3	3	28	0	2	0	2

⁶⁷ (2022) Data taken from senate.michigan.gov/sfa/economics/michiganpopulationbycounty.pdf



**UNIVERSITY OF MICHIGAN
HEALTH-SPARROW**
MICHIGAN MEDICINE

UofMHealthSparrow.org