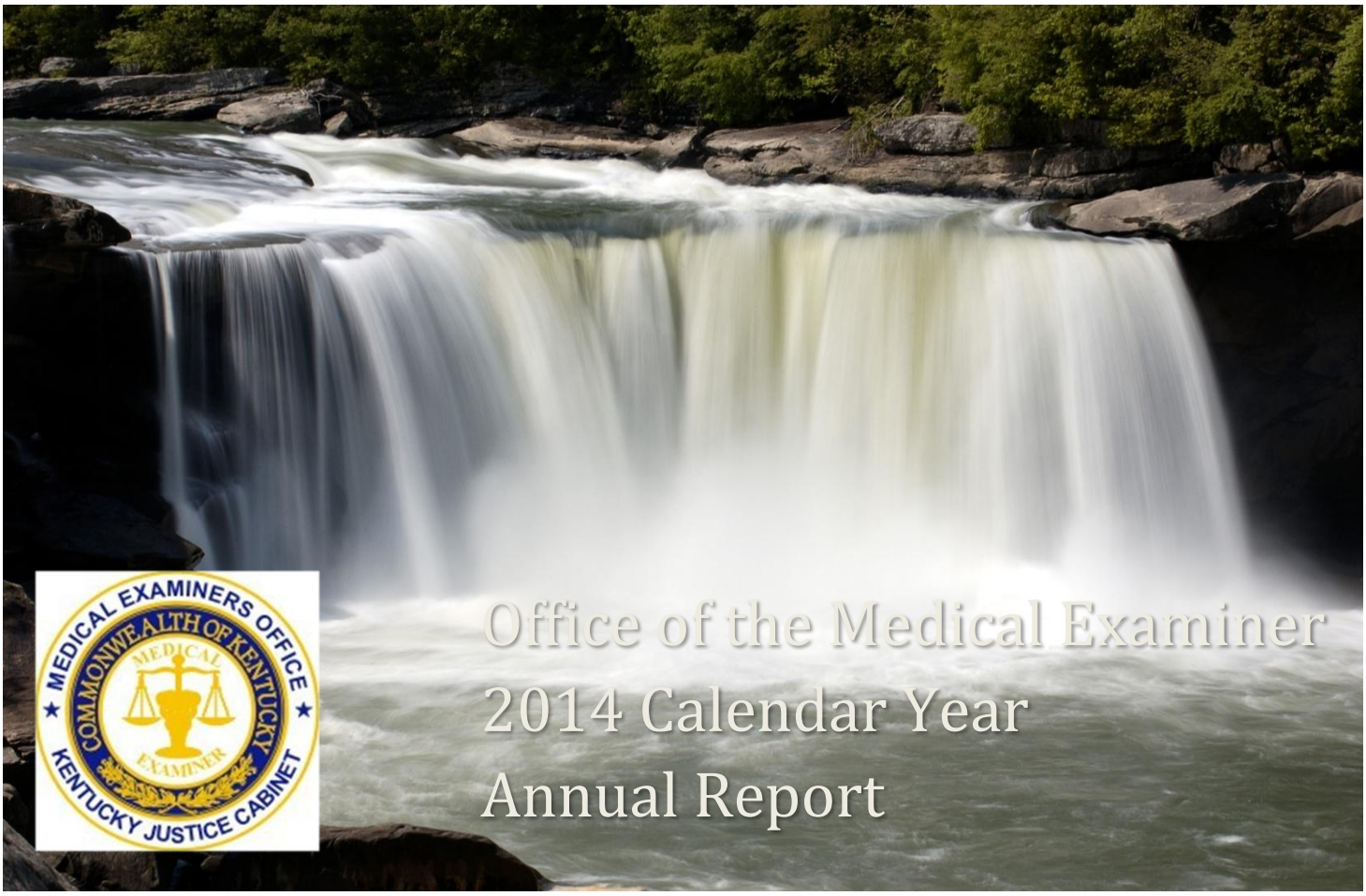

Office of the Medical Examiner
2014 Calendar Year
Annual Report

Image courtesy of www.kentuckytourism.com

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Tracey S. Corey, MD Chief Medical Examiner

Kentucky
UNBRIDLED SPIRIT

Office of the Medical Examiner
State of Kentucky
Physician/Doctorate Staff

Tracey S. Corey, MD
Chief Medical Examiner

John C. Hunsaker III, MD
Associate Chief Medical Examiner

Office of the Chief Medical Examiner Louisville, KY
Tracey S. Corey, MD
Donna Stewart, MD
Amy Burrows-Beckham, MD
Darius Arabadjief, MD
Jeffrey Springer, MD
Victoria Graham, MD

Office of the Associate Medical Examiner Frankfort, KY
John Hunsaker, JD, MD
Cristin Rolf, MD (Through June 30th, 2014)
Meredith Frame, MD
William Ralston, MD (Beginning July 1st, 2014)

Western Kentucky Medical Examiner's Office Madisonville, KY
Gregory Wanger, MD (Through July 31st, 2014)

Northern Kentucky Medical Examiner's Office Ft. Thomas, KY
Charles Stephens, MD (Through March 15th, 2014)
Ashton Ennis, MD
Michael Belenky, MD (Beginning October 16th, 2014)

Table of Contents

Overview 6
Introduction 7
Overview – Office of the Medical Examiner 7
Basic Functions of the Office of the Medical Examiner 7
Reportable Deaths 8
Kentucky's Combined Coroner-Medical Examiner System 9
Statutory Duty 9
Training and Education 10
Forensic Pathologist Fellowship Program 10
Accreditations 10
Figure 1-Organizational Chart: Office of the Medical Examiner 11

Statewide Medical Examiner Data 12
Table 1-Total Cases: ME Cases by Office 13
Figure 2-Statewide Cases Sent for Autopsy by Locality of Death 14
Figure 3-Statewide Cases by Year of Autopsy 15
Figure 4-Statewide Cases by Month of Autopsy 16
Figure 5-Statewide Cases by Age and Gender 17
Figure 6-Statewide Percentages by Age and Gender 18
Table 2-Statewide Cases by Manner of Death 19
Figure 7-Statewide Cases by Manner of Death 20
Figure 8-Statewide Accidents by Cause of Death 21
Figure 9-Statewide Adult Homicides by Cause of Death 22
Figure 10-Statewide Children Homicides by Cause of Death 23
Figure 11-Statewide Suicides by Cause of Death 24
Table 3-Statewide Medical Examiner Totals by Specific Case Type 25
Table 4-Statewide Medical Examiner Drug Related Deaths 26
Table 5-Statewide Medical Examiner Drug Related Deaths Containing Heroin 26
Figure 12-Statewide Drug Related Deaths Sent for Autopsy by Locality of Death 27
Figure 13-Statewide Drug Related Deaths Containing Heroin by Locality of Death 28
Figure 14-Statewide Drugs Most Frequently Detected 29
Table 6-Statewide Top 5 Drugs Most Frequently Detected 29
Figure 15-Statewide Motor Vehicle Collisions by Type 30

Statewide Medical Examiner Data of Children (Birth-17) 31
Figure 16-Statewide Child (<1) Accidents by Cause of Death 32
Figure 17-Statewide Child (1-5) Accidents by Cause of Death 33
Figure 18-Statewide Child (6-12) Accidents by Cause of Death 34
Figure 19-Statewide Child (13-17) Accidents by Cause of Death 35
Figure 20-Statewide Child (<1) Homicides by Cause of Death 36
Figure 21-Statewide Child (1-5) Homicides by Cause of Death 36
Figure 22-Statewide Child (6-12) Homicides by Cause of Death 37
Figure 23-Statewide Child (13-17) Homicides by Cause of Death 37
Figure 24-Statewide Child (13-17) Suicides by Cause of Death 38
Figure 25-Statewide Child (<1) Undetermined by Cause of Death 38

Louisville Medical Examiner Office Data.....39
Figure 26-Louisville Cases by Manner of Death.....40
Figure 27-Louisville Cases by Common Causes of Death.....41
Table 7-Louisville Totals by Common Causes of Death.....42
Figure 28-Louisville Drug Related by Manner of Death.....43
Figure 29-Louisville Most Frequently Detected Drugs.....44
Table 8-Louisville Top 5 Drugs Most Frequently Detected.....44
Table 9-Louisville Additional Drugs Detected in Drug Related Death Victims.....45
Figure 30-Louisville MVC by Manner of Death.....46
Figure 31-Louisville GSW by Manner of Death.....46
Figure 32-Louisville Drowning by Manner of Death.....47
Figure 33-Louisville Fire by Manner of Death.....47

Frankfort Medical Examiner Office Data.....48
Figure 34-Frankfort Cases by Manner of Death.....49
Figure 35-Frankfort Cases by Common Causes of Death.....50
Table 10-Frankfort Totals by Common Causes of Death.....51
Figure 36-Frankfort Drug Related by Manner of Death.....52
Figure 37-Frankfort Most Frequently Detected Drugs.....53
Table 11-Frankfort Top 5 Drugs Most Frequently Detected.....53
Table 12-Frankfort Additional Drugs Detected in Drug Related Death Victims.....54
Figure 38-Frankfort MVC by Manner of Death.....55
Figure 39-Frankfort GSW by Manner of Death.....55
Figure 40-Frankfort Drowning by Manner of Death.....56
Figure 41-Frankfort Fire by Manner of Death.....56

Western Kentucky Medical Examiner Office Data.....57
Figure 42-Western Kentucky Cases by Manner of Death.....58
Figure 43-WKY Cases by Common Causes of Death.....59
Table 13-WKY Totals by Common Causes of Death.....60
Figure 44-WKY Drug Related by Manner of Death.....61
Figure 45-WKY Most Frequently Detected Drugs.....62
Table 14-WKY Top 5 Drugs Most Frequently Detected.....62
Table 15-WKY Additional Drugs Detected in Drug Related Death Victims.....63
Figure 46-WKY MVC by Manner of Death.....64
Figure 47-WKY GSW by Manner of Death.....64
Figure 48-WKY Drowning by Manner of Death.....65
Figure 49-WKY Fire by Manner of Death.....65

Northern Kentucky Medical Examiner Office Data.....66
Figure 50-Northern Kentucky Cases by Manner of Death.....67
Figure 51-NKY Cases by Common Causes of Death.....68
Table 16-NKY Totals by Common Causes of Death.....69
Figure 52-NKY Drug Related by Manner of Death.....70
Figure 53-NKY Most Frequently Detected Drugs.....71
Table 17-NKY Top 5 Drugs Most Frequently Detected.....71
Table 18-NKY Additional Drugs Detected in Drug Related Death Victims.....72
Figure 54-NKY MVC by Manner of Death.....73

Figure 55-NKY GSW by Manner of Death 73
Figure 56-NKY Drowning by Manner of Death 74
Figure 57-NKY Fire by Manner of Death 74

Additional Information 75
Additional Data for 2014 76
Medical Examiner Districts 78
Figure 58- Regional Office Coverage 79
Regional Offices Contact Information 80
Glossary 81

Overview

Introduction

The Office of the Medical Examiner investigates deaths occurring in the state of Kentucky, as authorized by Kentucky's elected coroners. The staff assists Kentucky coroners and law enforcement agencies in all aspects of death investigations by determination of the cause and manner of death, identification of the deceased, and collection and interpretation of trace evidence. The Medical Examiner Division performed services for approximately 2,485 deaths. A detailed summary of the case distribution is delineated in this report. **It should be noted that this annual report does not include all deaths occurring in Kentucky, but rather those cases investigated by the Kentucky Medical Examiner Program.** For total numbers of deaths occurring in the state, please contact:

Office of Vital Statistics
275 E. Main St. 1EA
Frankfort, KY 40621
(502) 564-4212

The following report is presented in two sections. The first section summarizes the activity of the Medical Examiner's Office. The second section presents data routinely collected by the Medical Examiner's Office in regards to medicolegal death investigations performed. The graphs and figures presented are designed to be self-explanatory and provide the reader with a brief understanding of the types of cases completed within this Division.

Overview—Office of the Medical Examiner—2014

The Medical Examiners Office performs death investigations and postmortem examinations at four separate regional offices around the state:

- The Office of the Chief Medical Examiner in Louisville, KY
- The Office of the Associate Chief Medical Examiner in Frankfort, KY
- The Western Kentucky Regional Medical Examiners Office in Madisonville, KY
- The Northern Kentucky Regional Medical Examiners Office in Ft. Thomas, KY

There are six basic functions of the Office of the Medical Examiner:

- determine the cause and manner of death of individual decedents in a timely fashion
- identify the dead with a high degree of certainty and written documentation
- prepare and maintain accurate, thorough and timely reports regarding examinations and opinions
- safeguard and account for evidence and personal property
- maintain confidentiality of case information
- base expert opinions on logical conclusions after considering all historical and physical evidence available, in light of current scientific and medical knowledge

All medical examiner offices in Kentucky are staffed by board certified and/or board eligible forensic pathologists. These forensic pathologists are physicians who have undergone at least five years of postgraduate training to become proficient in the subspecialty of forensic pathology. The forensic pathologists routinely perform postmortem examinations; consult with law enforcement officials and attorneys regarding aspects of investigations including blood spatter analysis, crime scene investigation and toxicology interpretation; meet with decedents' families; and provide expert testimony in courts throughout Kentucky.

OUR MISSION

The mission of the Kentucky Medical Examiners Office is to serve the public by:

- providing accurate, thorough and efficient medical legal investigations of death, thereby,
- insuring justice, and
- providing solace, comfort and protection to the living

Reportable Deaths

KRS 72.025 Circumstances requiring post-mortem examination to be performed by coroner.

Coroners shall require a post-mortem examination to be performed in the following circumstances:
(1) When the death of a human being appears to be caused by homicide or violence;
(2) When the death of a human being appears to be the result of suicide;
(3) When the death of a human being appears to be the result of the presence of drugs or poisons in the body;
(4) When the death of a human being appears to be the result of a motor vehicle accident and the operator of the motor vehicle left the scene of the accident or the body was found in or near a roadway or railroad;
(5) When the death of a human being occurs while the person is in a state mental institution or mental hospital when there is no previous medical history to explain the death, or while the person is in police custody, a jail or penal institution;
(6) When the death of a human being occurs in a motor vehicle accident and when an external examination of the body does not reveal a lethal traumatic injury;
(7) When the death of a human being appears to be the result of a fire or explosion;
(8) When the death of a child appears to indicate child abuse prior to the death;
(9) When the manner of death appears to be other than natural;
(10) When human skeletonized remains are found;
(11) When post-mortem decomposition of a human corpse exists to the extent that external examination of the corpse cannot rule out injury or where the circumstances of death cannot rule out the commission of a crime;
(12) When the death of a human being appears to be the result of drowning;
(13) When the death of an infant appears to be caused by sudden infant death syndrome in that the infant has no previous medical history to explain the death;
(14) When the death of a human being occurs as a result of an accident;
(15) When the death of a human being occurs under the age of forty (40) and there is no past medical history to explain the death;
(16) When the death of a human being occurs at the work site and there is no apparent cause of death such as an injury or when industrial toxics may have contributed to the cause of death;
(17) When the body is to be cremated and there is no past medical history to explain the death;
(18) When the death of a human being is sudden and unexplained; and
(19) When the death of a human being occurs and the decedent is not receiving treatment by a licensed physician and there is no ascertainable medical history to indicate the cause of death.
Effective: July 15, 1998

Kentucky's Combined Coroner-Medical Examiner System

1. The coroner determines whether the case becomes a medical examiner case.
2. "Post-mortem examination" as discussed in KRS 72, is not defined as an autopsy. Not all circumstances defined by KRS 72.025 will be referred to the State Medical Examiners System, rather they will be investigated solely by the Coroner.
3. The medical examiner and the coroner may discuss whether a complete autopsy, a focused examination, or external inspection with toxicology specimen acquisition is warranted on certain cases. The Medical Examiner makes a MEDICAL DECISION regarding the type and amount of examination done to render a medicolegal opinion and thus provide assistance to the coroner. In all cases submitted by a coroner with an authorization, a report including a final opinion is generated.
4. In the rare event that the coroner declines to authorize an examination by the Medical Examiner's office in a case in which law enforcement investigators conclude that ME involvement is crucial, then law enforcement may obtain and authorize an examination by the ME office by procuring a court order through the Commonwealth Attorney's Office.
5. In any case undergoing examination by a Kentucky ME, the ME performing the examination renders an official opinion regarding both cause and manner of death.

Statutory Duty

72.210 Purpose of Division of Kentucky State Medical Examiners Office.

In enacting legislation establishing a Division of Kentucky State Medical Examiners Office for the Commonwealth of Kentucky, it is not the intention of the General Assembly to abolish or interfere with the coroner in his role as a constitutionally elected peace officer. It is the intention of the General Assembly for the office to aid, assist, and complement the coroner in the performance of his duties by providing medical assistance to him in determining causes of death.

Effective: July 15, 1998
History: Amended 1998 Ky. Acts ch. 65, sec. 4, effective July 15, 1998. -- Created 1968 Ky. Acts ch. 114, sec. 1.

Summary Highlights

Kentucky has 4 regional medical examiner offices throughout the Commonwealth:

- The Office of the Chief Medical Examiner in Louisville, KY
- The Office of the Associate Chief Medical Examiner in Frankfort, KY
- The Western Kentucky Regional Medical Examiners Office in Madisonville, KY
- The Northern Kentucky Regional Medical Examiners Office in Ft. Thomas, KY

These four regional medical examiner offices (OCME, OACME, WKME and NKME) together performed 2,485 postmortem examinations in 2014.

The Western Kentucky Regional Medical Examiners Office was fully staffed from January 1st through July 31st, 2014. For the remainder of 2014, the office accepted cases only a few days a month. All other days, cases were sent to the Office of the Chief Medical Examiner in Louisville for examination.

Training and Education

The Medical Examiner's Division provides educational instruction in death investigation to coroners, law enforcement, medical, and social service agencies throughout the state. The Office of the Chief Medical Examiner plays an active role in the University of Louisville Department of Pathology educational programs and activities. Staff pathologists participate in the training of medical students, residents and fellows. Furthermore, the OACME plays an active role in the University of Kentucky, Department of Pathology.

Forensic Pathologist Fellowship Program

The University of Louisville Division of Forensic Pathology Fellowship program is a one-year extensive training program in the subspecialty of forensic pathology. The trainee works with all of the attending physicians, gaining exposure to a wide spectrum of cases with various histories, causes, manners and mechanisms of death. The trainee is always staffed by one of the attending physicians in the autopsy room. The gross findings are discussed during the dissection, dictated at the table, and are signed out at the end of dissection. Case discussions are initiated prior to autopsy, and continued with staff and investigators through the multi-step process to the final report. The trainee is supervised throughout the process of interpretation of radiographs, microscopic slides, and toxicologic analysis. An attending pathologist always co-signs the final autopsy report with the trainee.

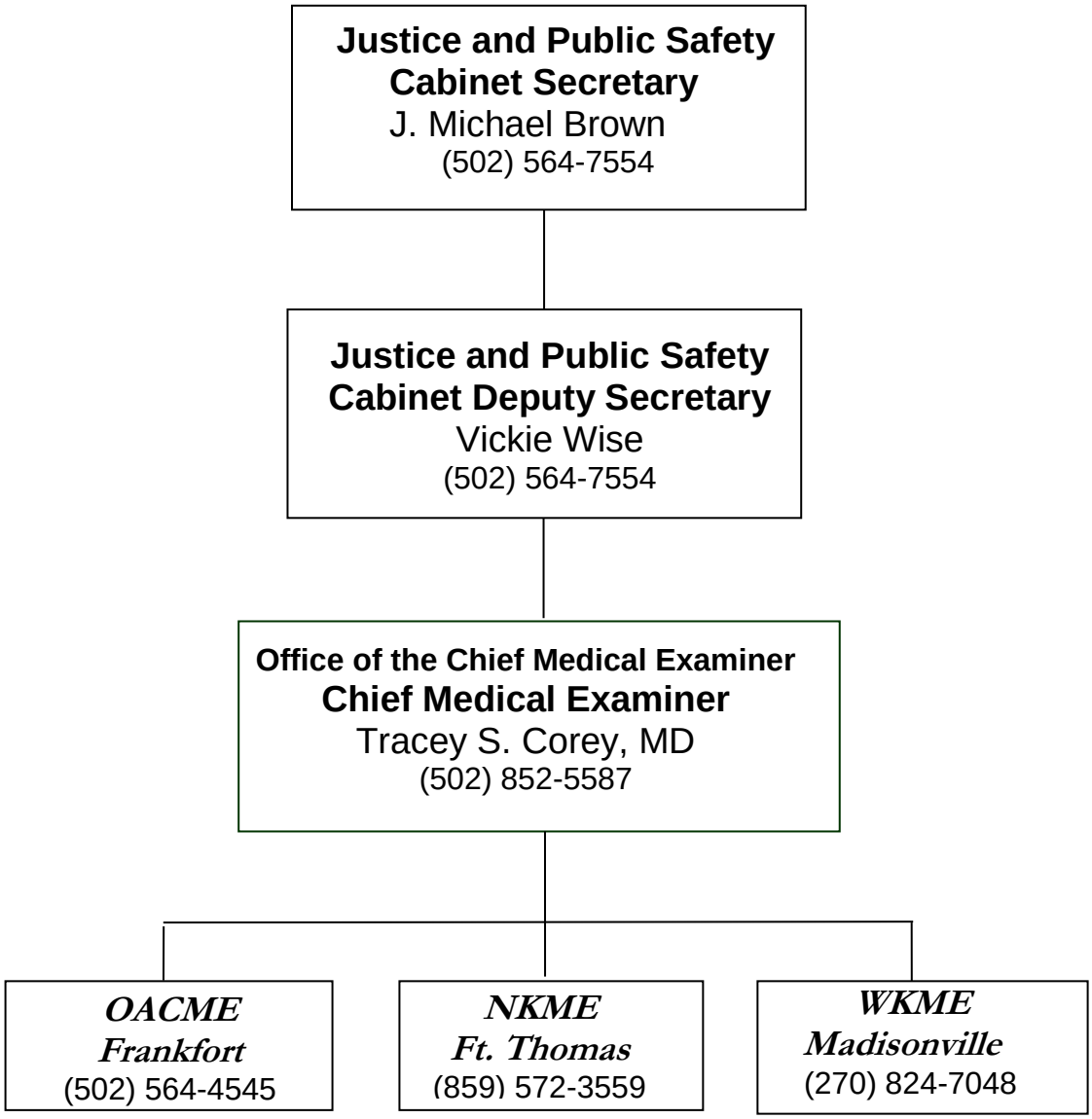
Accreditations

The Kentucky State Office of the Chief Medical Examiner in Louisville, KY is fully accredited by the National Association of Medical Examiners (NAME) through December 2017.

The University of Louisville Division of Forensic Pathology Fellowship Program at the Office of the Chief Medical Examiner in Louisville, KY is fully accredited by The Accreditation Council for Graduate Medical Education (ACGME) through April 2018.

Office of the Medical Examiner Organizational Chart

Figure 1



Statewide
Medical Examiner Data

Total Cases

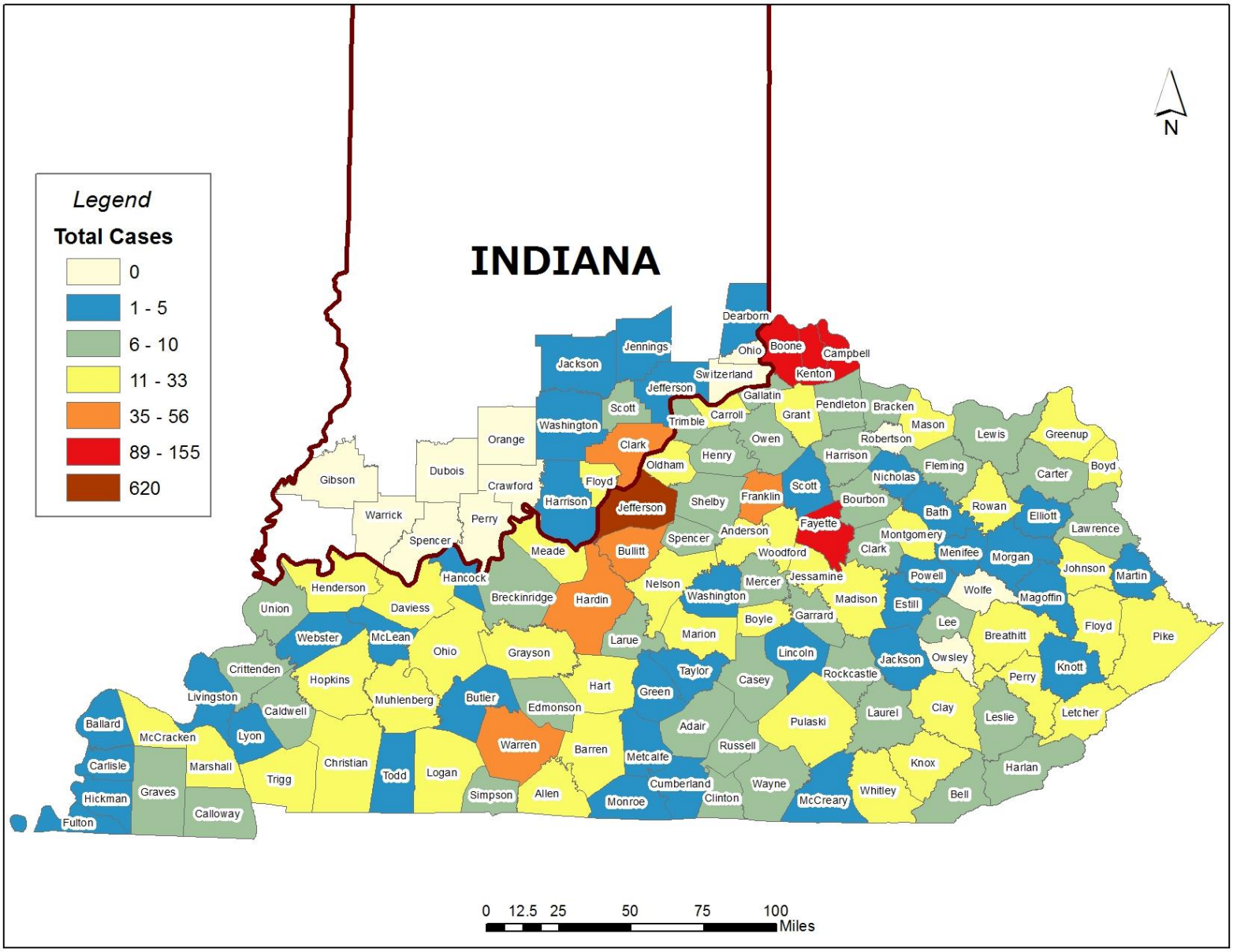
The remainder of this report will present data routinely collected by the Medical Examiner Offices. The graphs summarize data collected on all cases performed throughout the four regional offices.

The totals listed in this report do not represent all deaths occurring in Kentucky, but rather the total cases undergoing autopsy by the Kentucky Medical Examiner Offices.

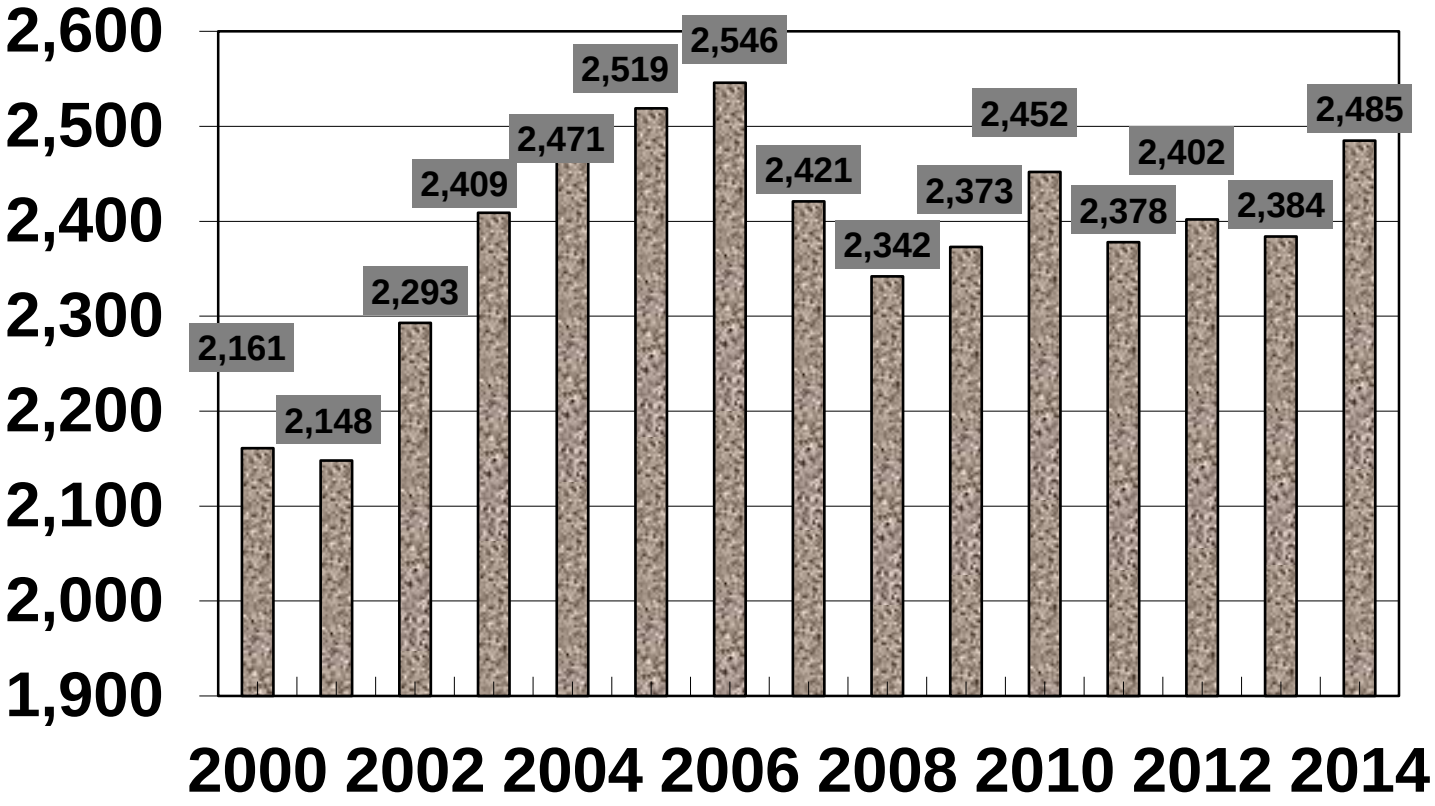
ME CASES 2014 Table 1	
Total	**2,485**
OCME Louisville	**1,199**
OACME Frankfort	**682**
WKME Madisonville	**172**
NKME Ft. Thomas	**432**

Statewide Cases Sent for Autopsy by Locality of Death, 2014

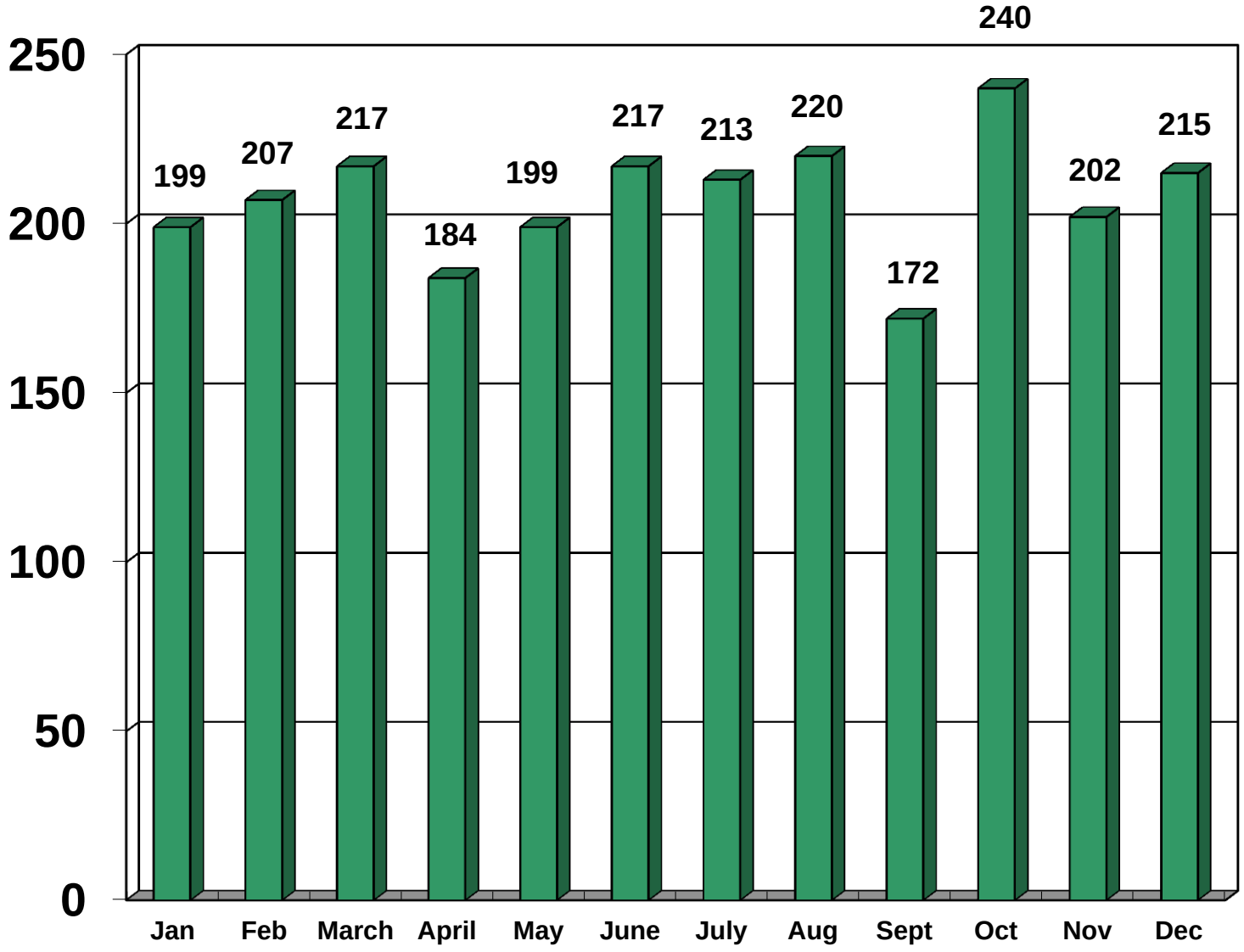
Figure 2



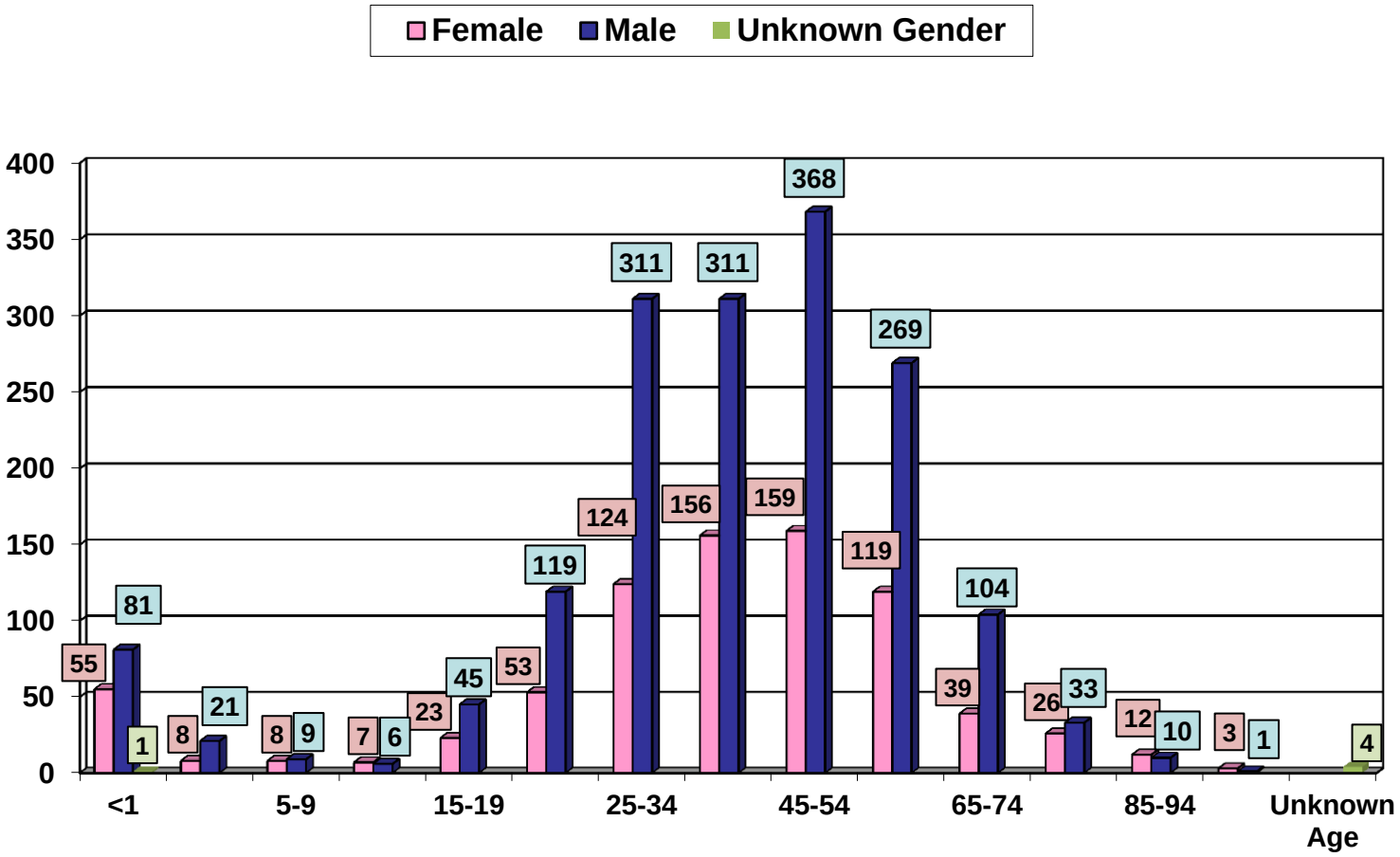
Statewide Cases by Year of Autopsy, 2000-2014
Figure 3



Statewide Cases by Month of Autopsy, 2014
Figure 4

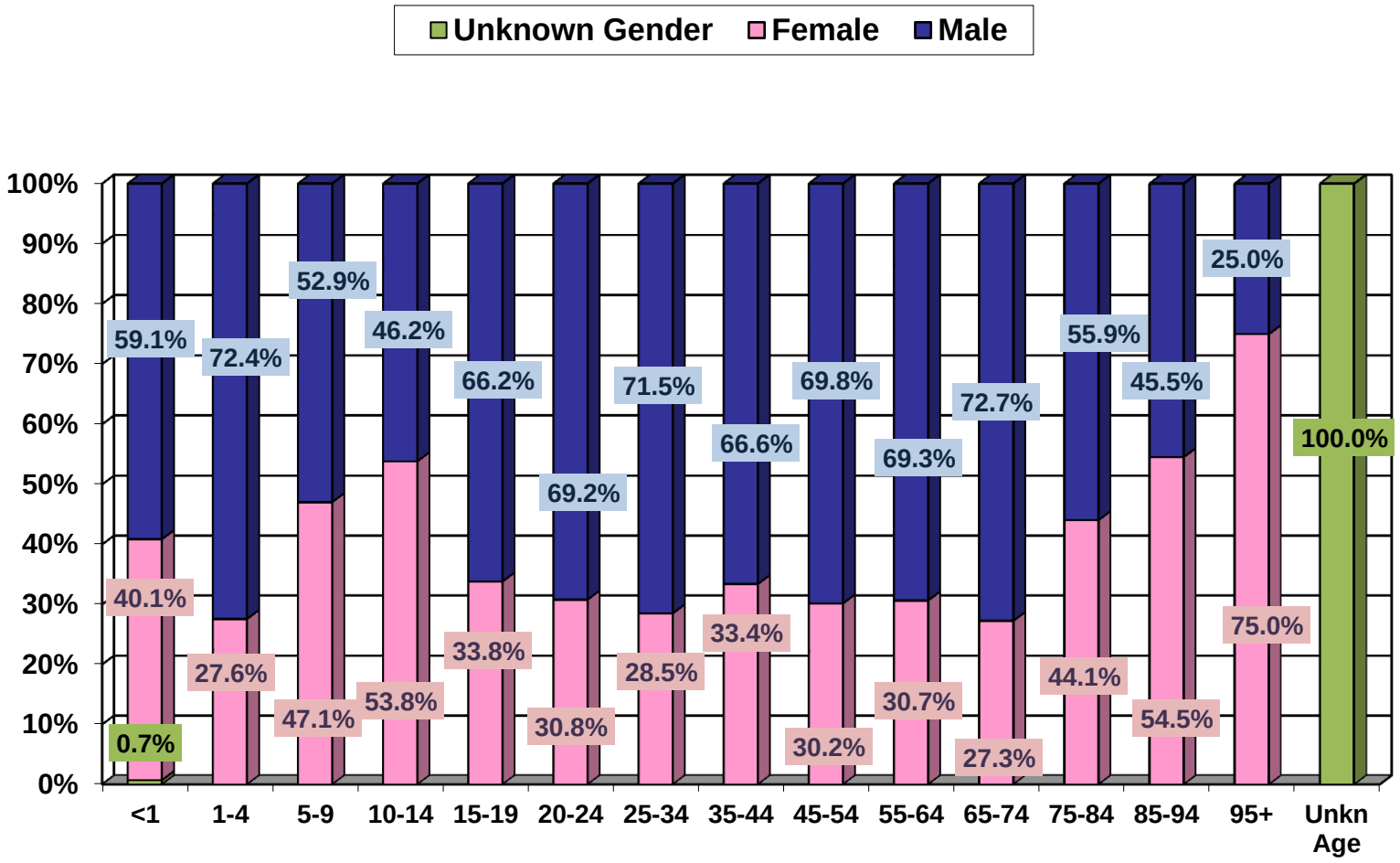


2014 Statewide Cases by Age and Gender
Figure 5



**1 unknown gender/<1 consisted of a skeletonized fetal remains
**4 unknown gender/unknown age consisted of unidentified skeletonized adult remains

2014 Statewide Percentages by Age and Gender
Figure 6

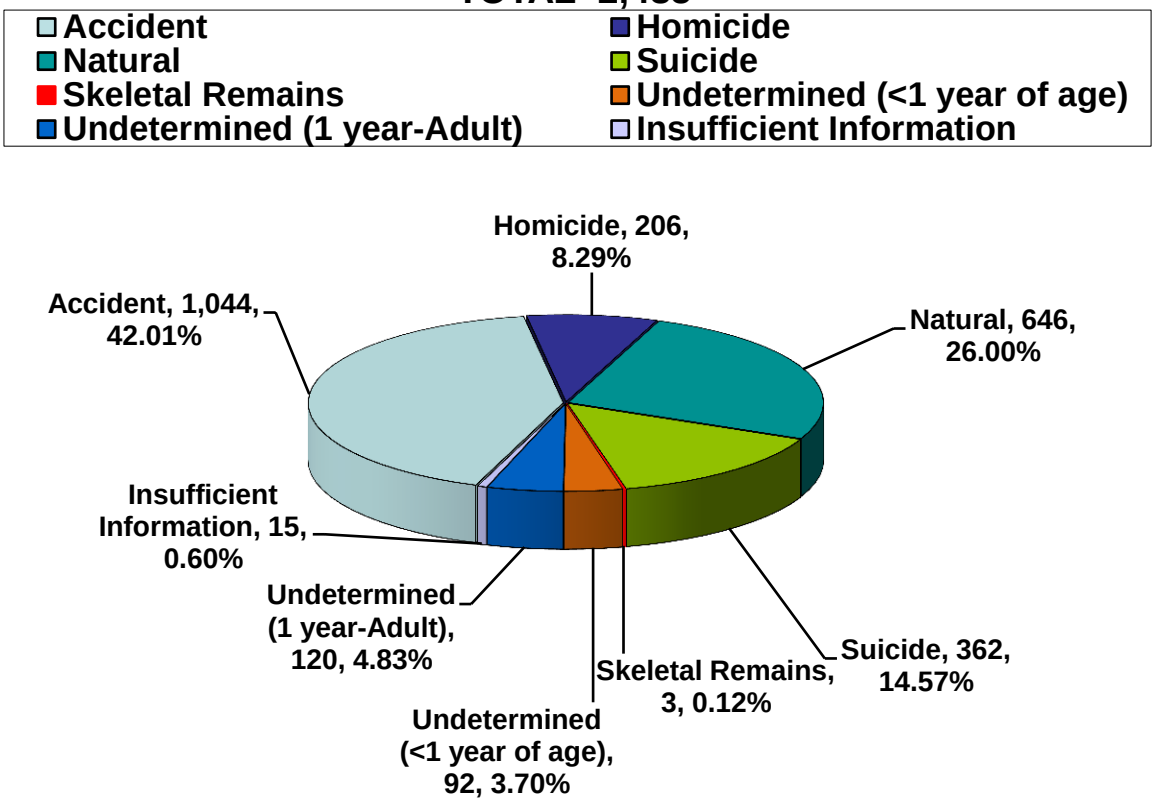


**1 unknown gender/<1 consisted of a skeletonized fetal remains
**4 unknown gender/unknown age consisted of unidentified skeletonized adult remains

STATEWIDE MEDICAL EXAMINER CASES BY MANNER Table 2		
Manner	**Total**	**Percentage**
Accidents	**1,044**	**42.01%**
Homicides	**206**	**8.29%**
Naturals	**646**	**26.00%**
Suicides	**362**	**14.57%**
Undetermined (<1 year of age)	**92**	**3.70%**
Undetermined (1 year – Adult)	**120**	**4.83%**
Insufficient Information Provided	**15**	**0.60%**
Skeletal Remains of No Forensic Significance	**3**	
TOTAL	**2,485**	

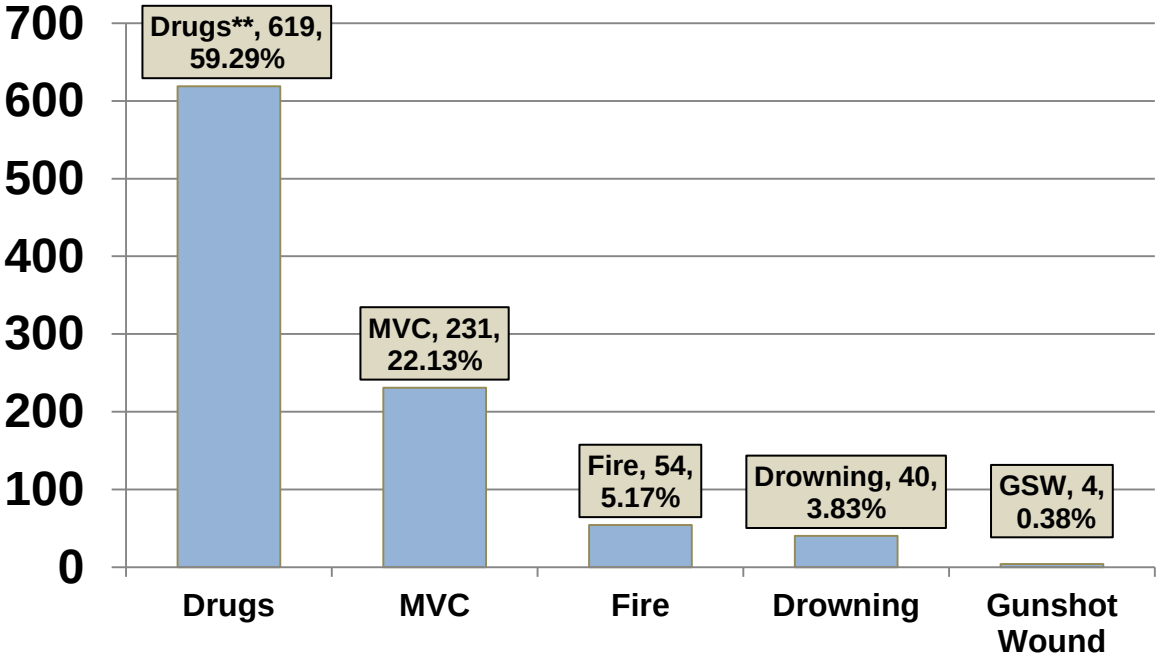
*Skeletal Remains of No Forensic Significance are not included in the total forensic case load

2014 Statewide Cases by Manner of Death
Figure 7
TOTAL=2,485



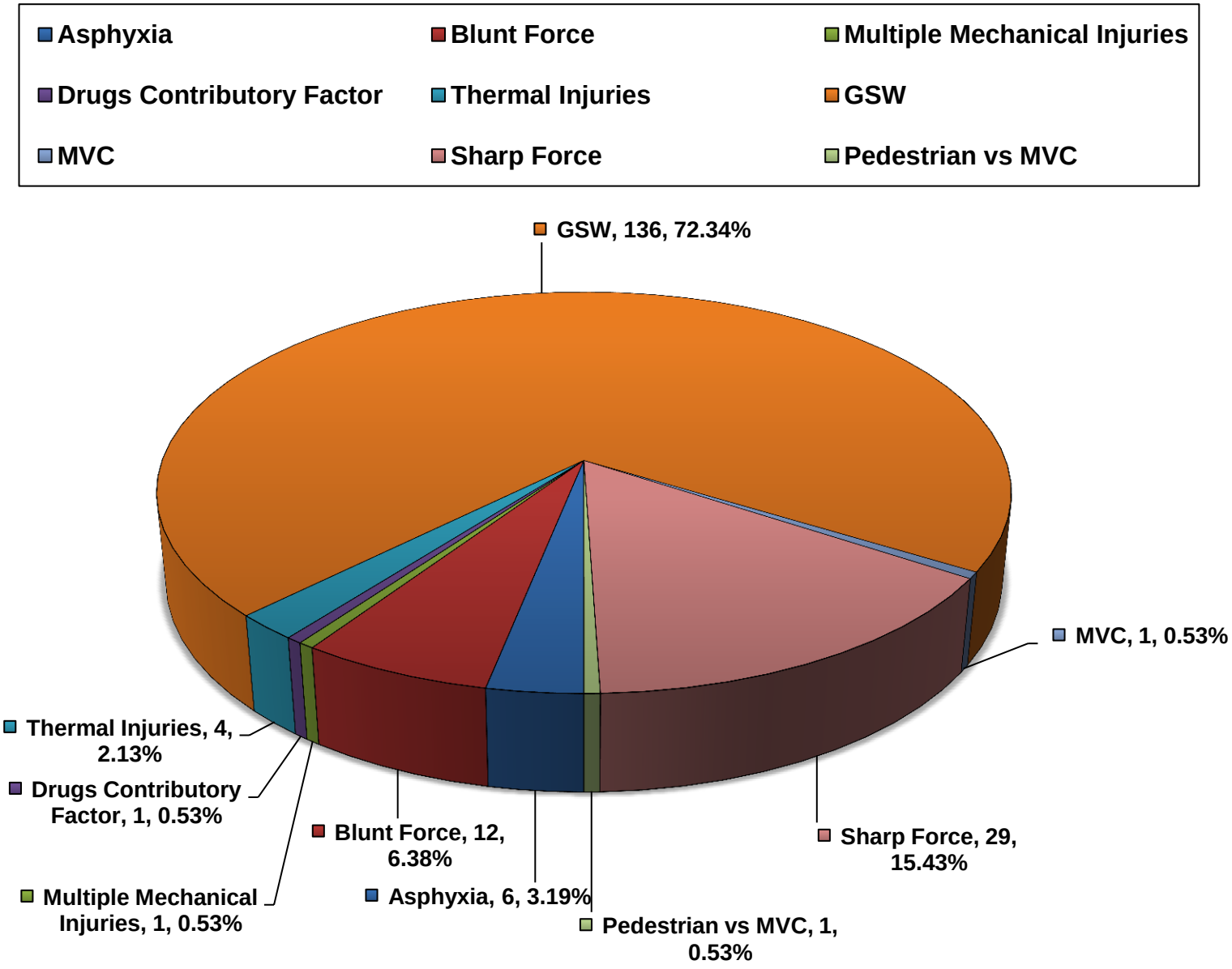
*Skeletal Remains of No Forensic Significance are not included in the total forensic case load

2014 Statewide Accidents by Major Causes of Death
Figure 8



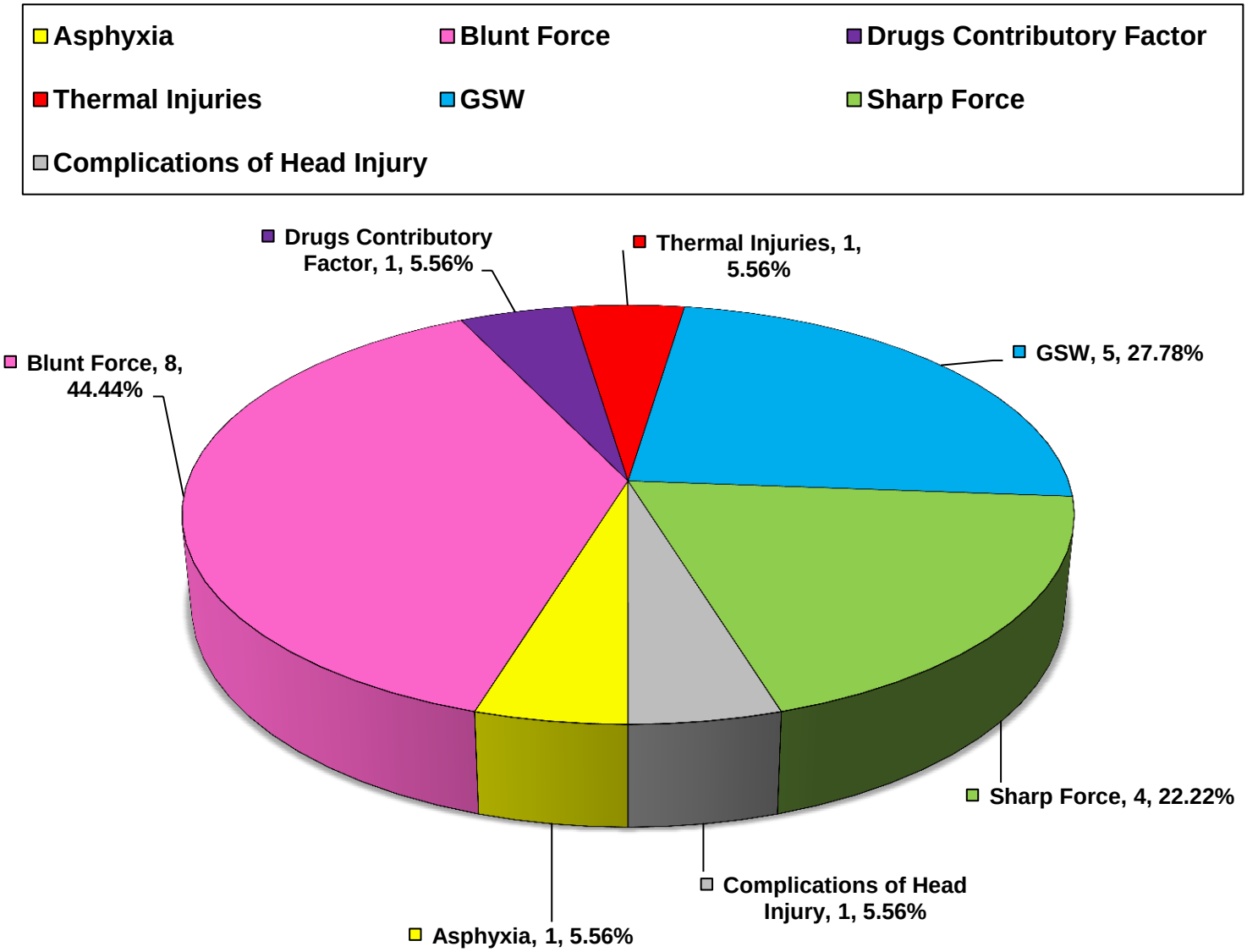
*Only Major Categories of accidents are illustrated
**Drug Related with manner of death other than "accident" are not included in above totals*

2014 Statewide Homicides by Cause of Death, Adults (Age 18+)
Figure 9
Total=188



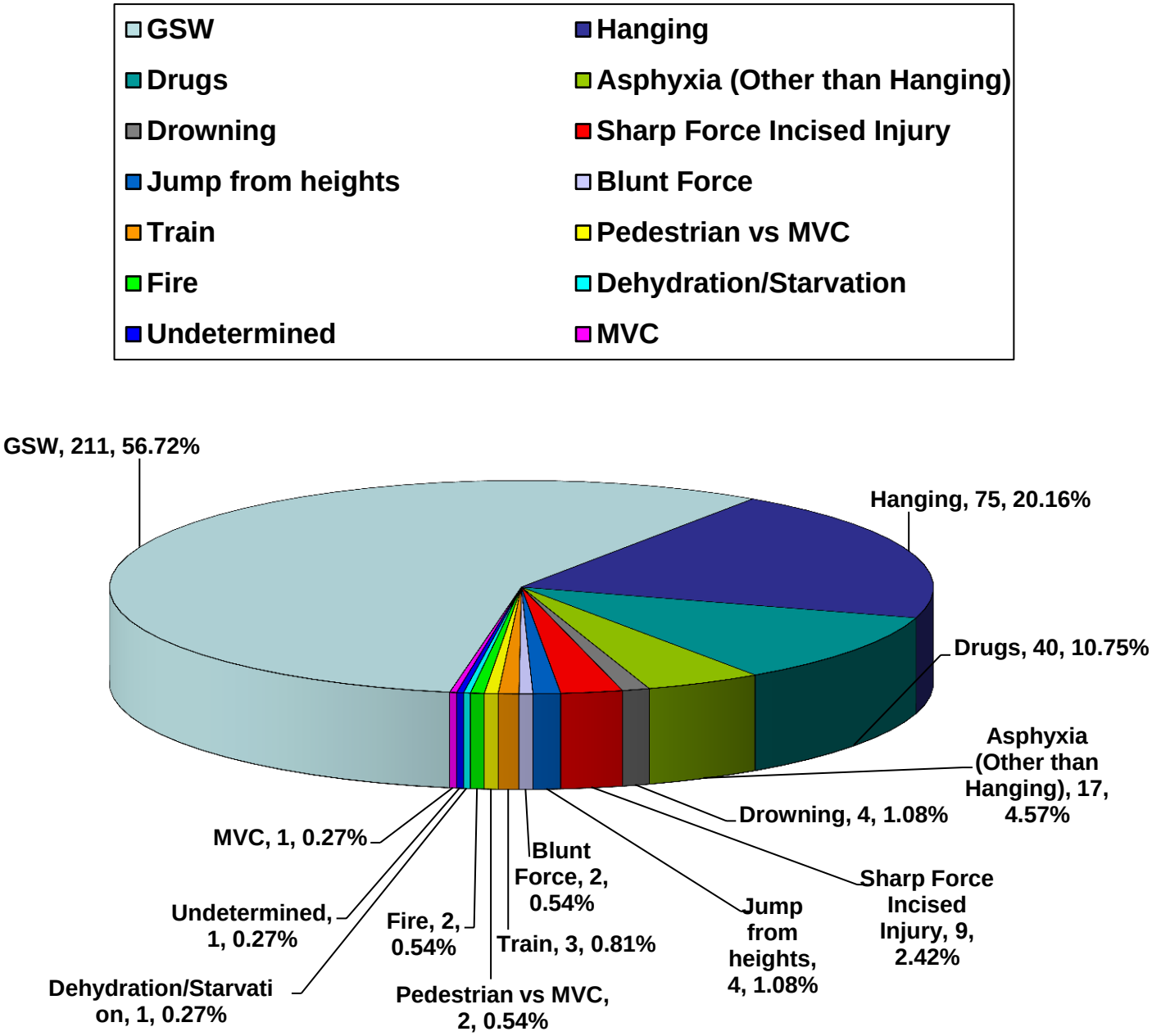
**Percentages may be > than 100%, as some decedents may have more than one (1) type of injury.

2014 Statewide Homicides by Cause of Death, Children (Birth-17)
Figure 10
Total=18



**Percentages may be > than 100%,
as some decedents may have more than one (1)
type of injury.

2014 Statewide Suicides by Cause of Death
Figure 11



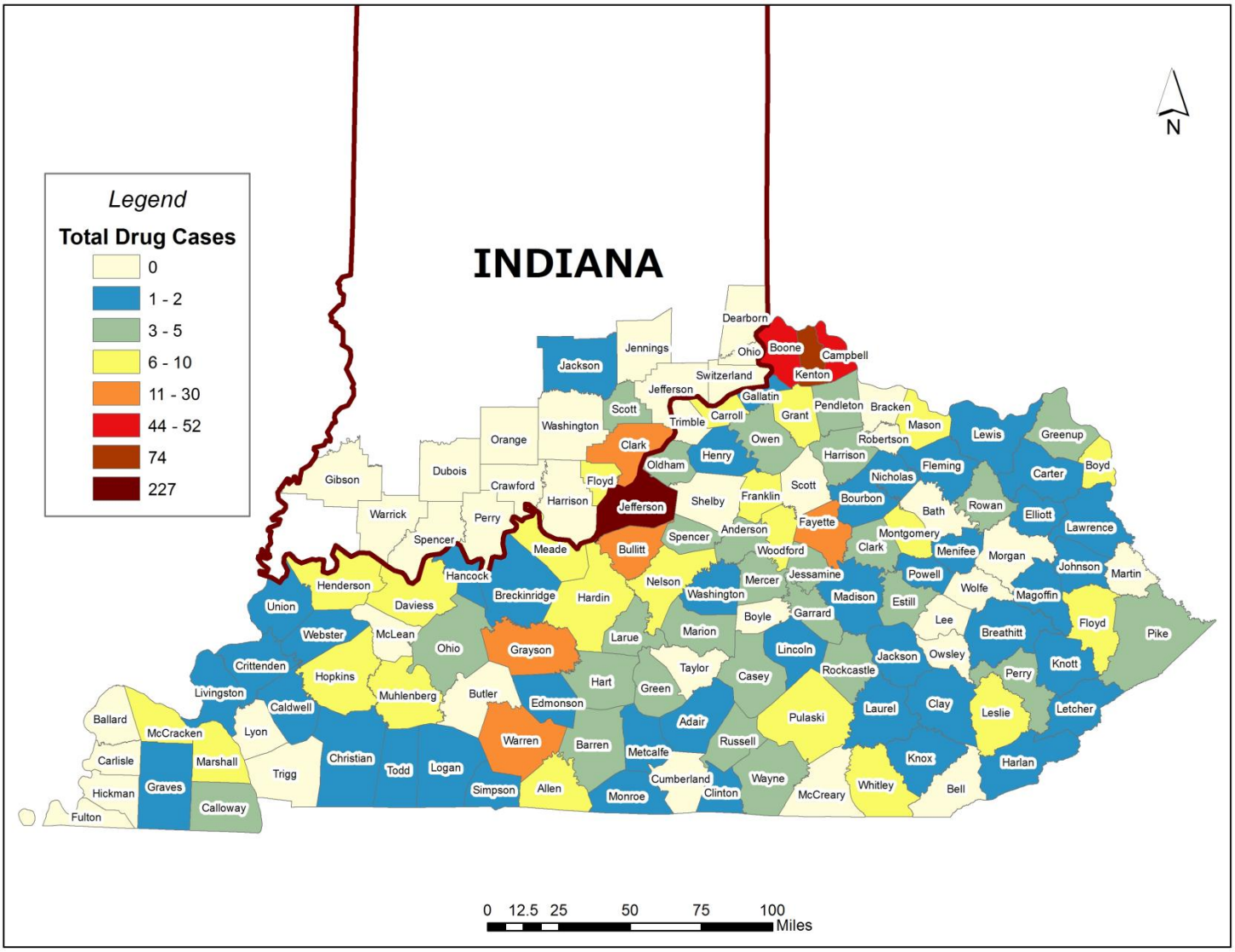
2014 STATEWIDE MEDICAL EXAMINER TOTALS BY SPECIFIC CASE TYPES Table 3		
Type	**Total**	**Percentage of Statewide Total**
Drug Related	**795**	**31.99%**
MVCs	**238**	**9.58%**
GSWs	**363**	**14.61%**
Fire-Related	**67**	**2.70%**
Drowning	**53**	**2.13%**
Infants <1yr ALL Causes	**137**	**5.51%**
SUID	**61**	**2.45%**
Children >1yr ≤ 12yrs, ALL Causes	**49**	**1.97%**

2014 STATEWIDE MEDICAL EXAMINER DRUG RELATED DEATHS Table 4		
Manner	Total	Percentage
Accidents	619	77.86%
Homicides	2	0.25%
Suicides	40	5.03%
Undetermined	41	5.16%
Insufficient Information	6	0.75%
Complications of Chronic Use	87	10.94%
TOTAL	795	100%

2014 STATEWIDE MEDICAL EXAMINER DRUG RELATED DEATHS CONTAINING HEROIN Table 5		
Manner	Total	Percentage
Accidents	219	93.99%
Suicides	4	1.72%
Undetermined	9	3.86%
Insufficient Information	1	0.43%
TOTAL	233	100%

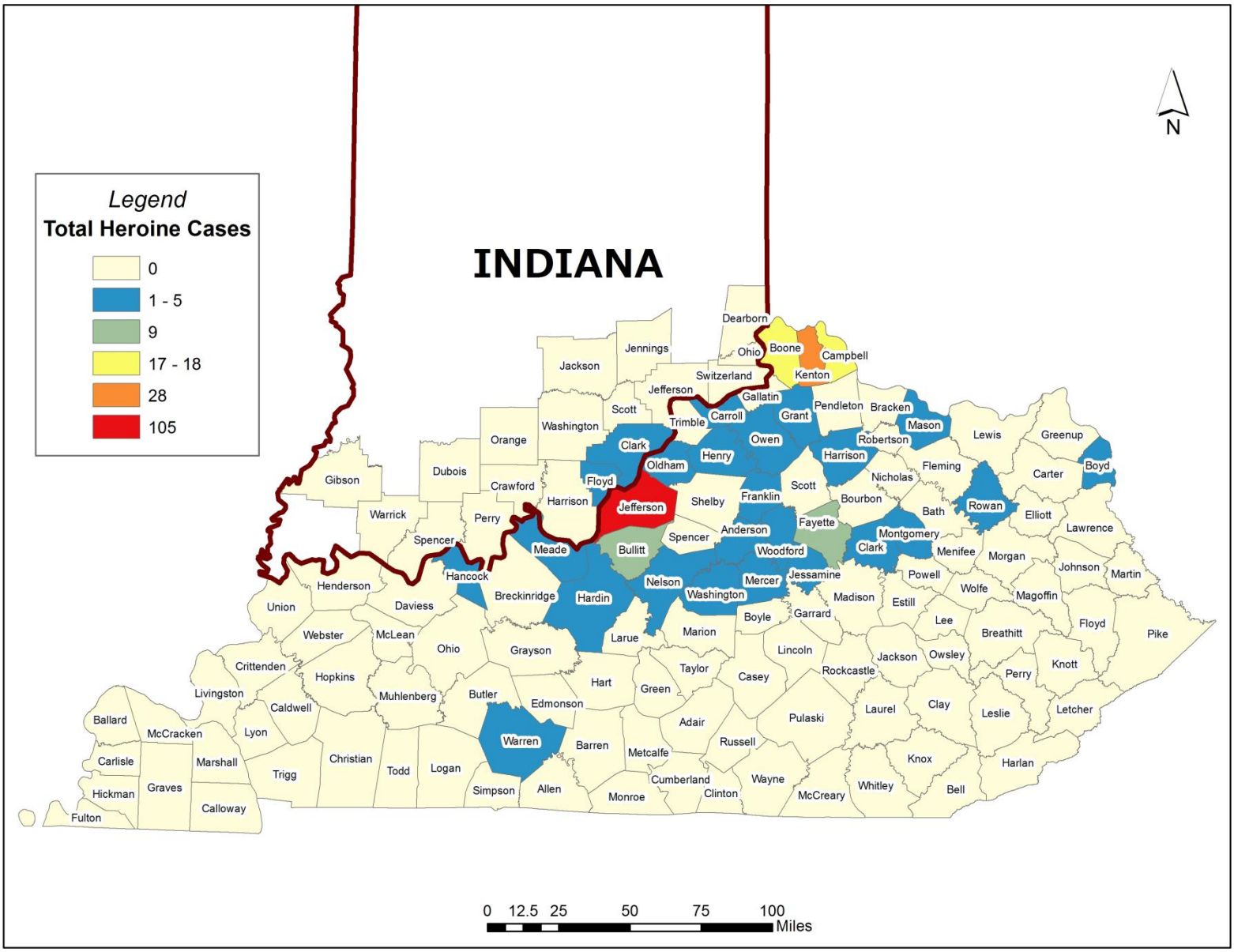
Statewide Drug Related Deaths Sent for Autopsy by Locality of Death, 2014

Figure 12

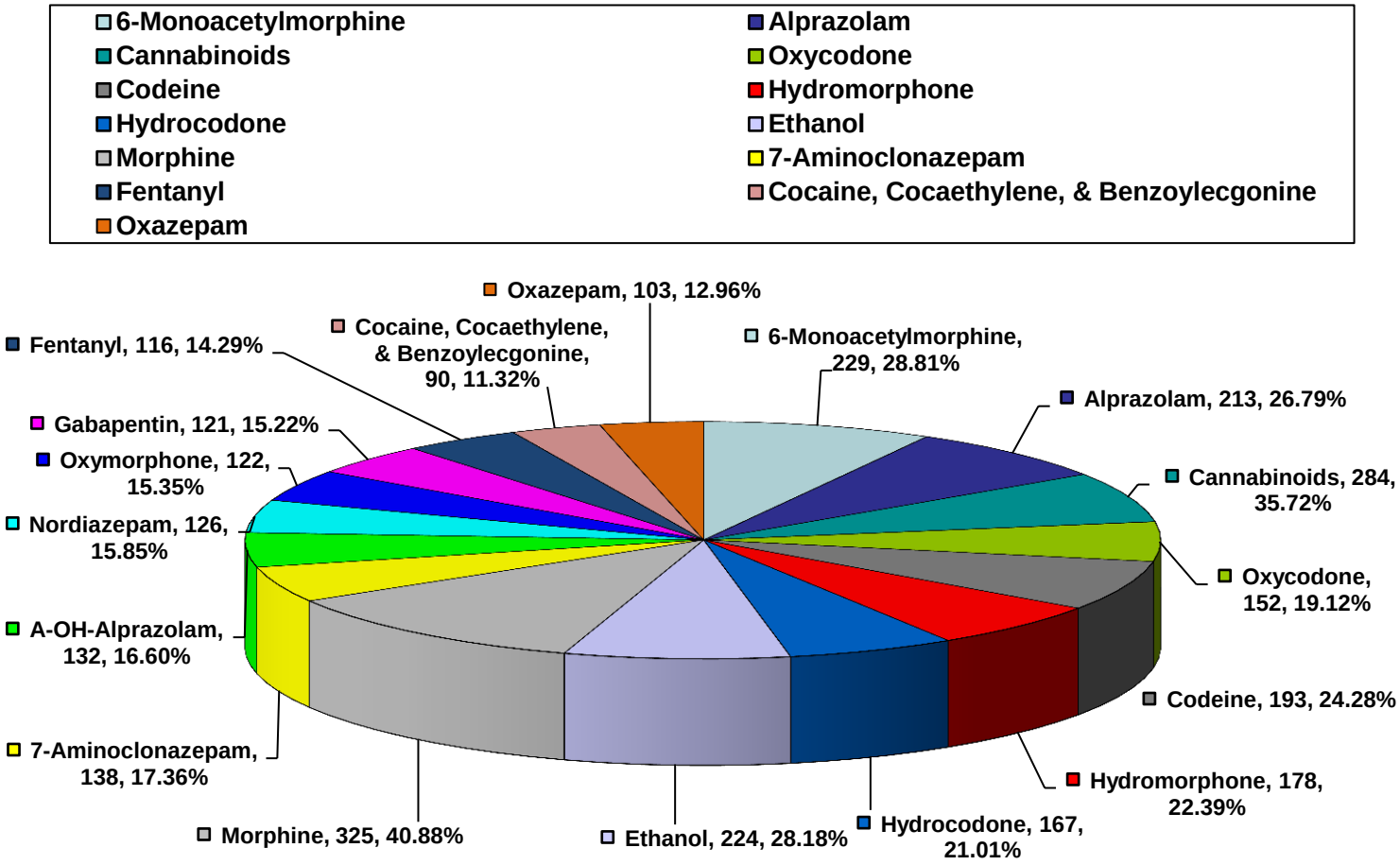


Statewide Drug Related Deaths Containing Heroin Sent for Autopsy by Locality of Death, 2014

Figure 13



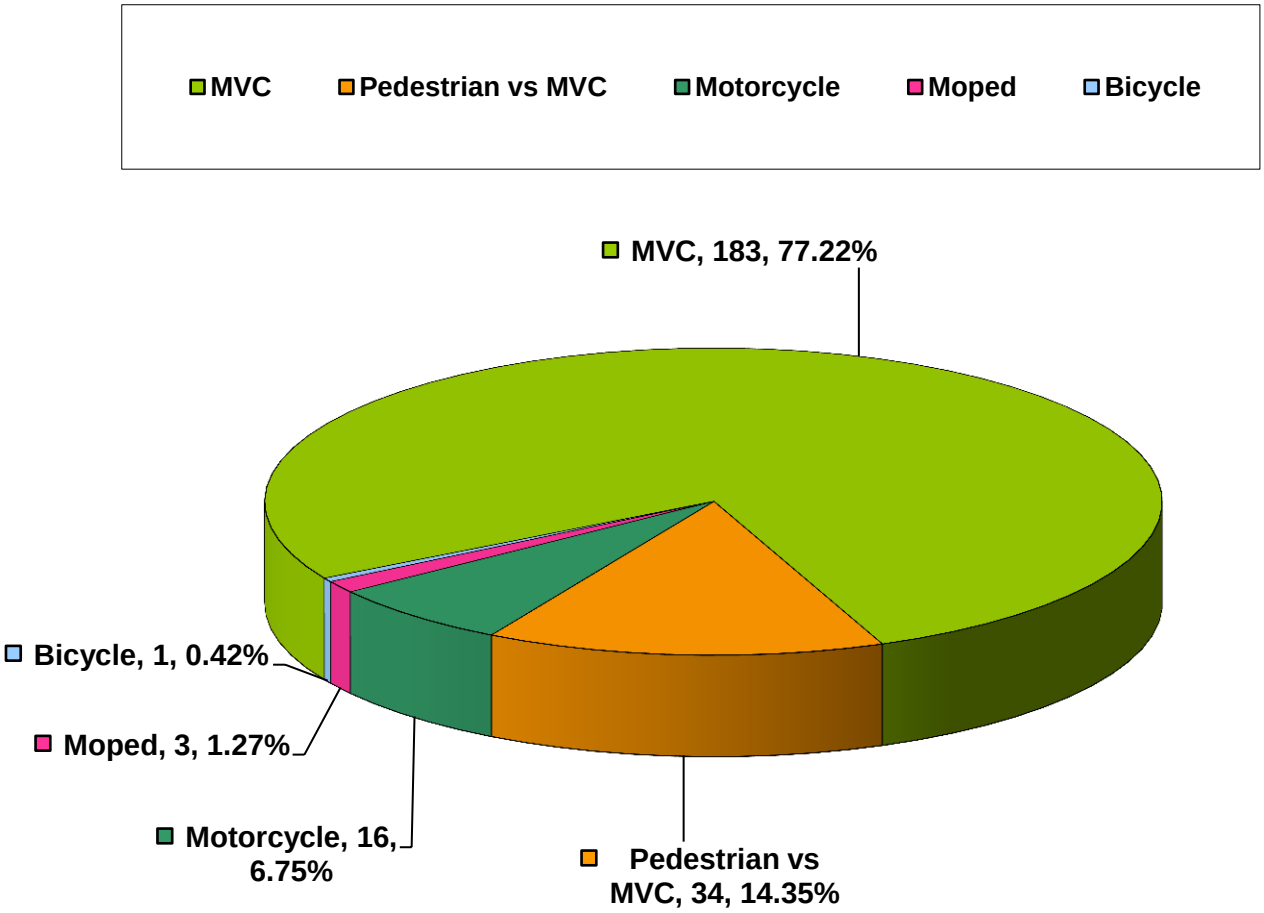
2014 Statewide Most Frequently Detected Drugs in Drug Related Death Victims
Figure 14
Total = 795*
***Includes Indiana**



*Morphine represents true drug and/or metabolite of Heroin: Heroin is known in 233 statewide cases
¤Detected drugs were found in blood, urine, and/or vitreous fluids.
*Total Percentages >100% due to more than 1 drug being present in many decedents
§This figure delineates only drugs occurring ≥100 other than Cocaine, Cocaethylene & Benzoylecgonine.

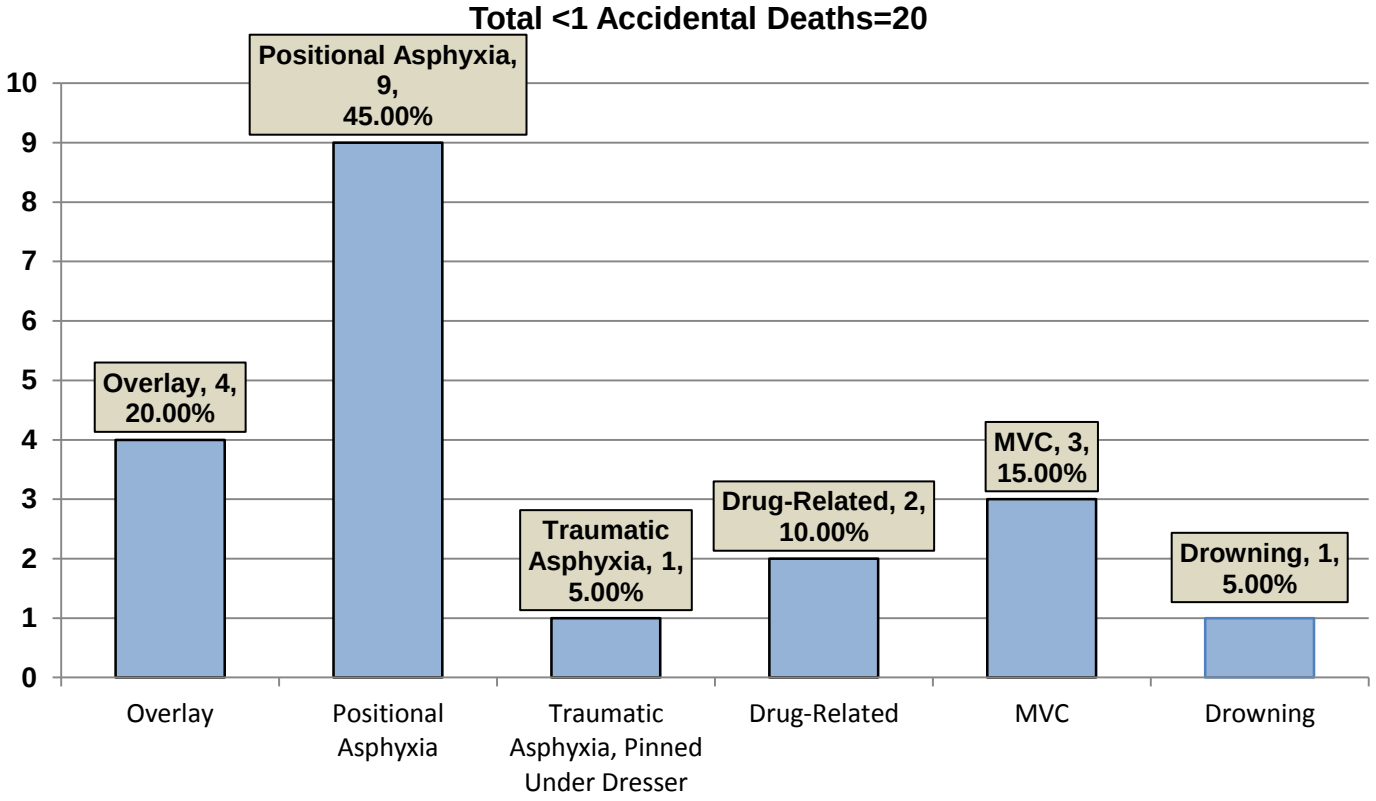
2014 STATEWIDE MEDICAL EXAMINER TOP 5 DRUGS IN DRUG RELATED DEATHS Table 6		
Drug	Total	Percentage
Morphine	325	40.88%
Cannabinoids	284	35.72%
6-Monoacetylmorphine	229	28.81%
Ethanol	224	28.18%
Alprazolam	213	26.79%

2014 Motor Vehicle Collisions by Type
Figure 15

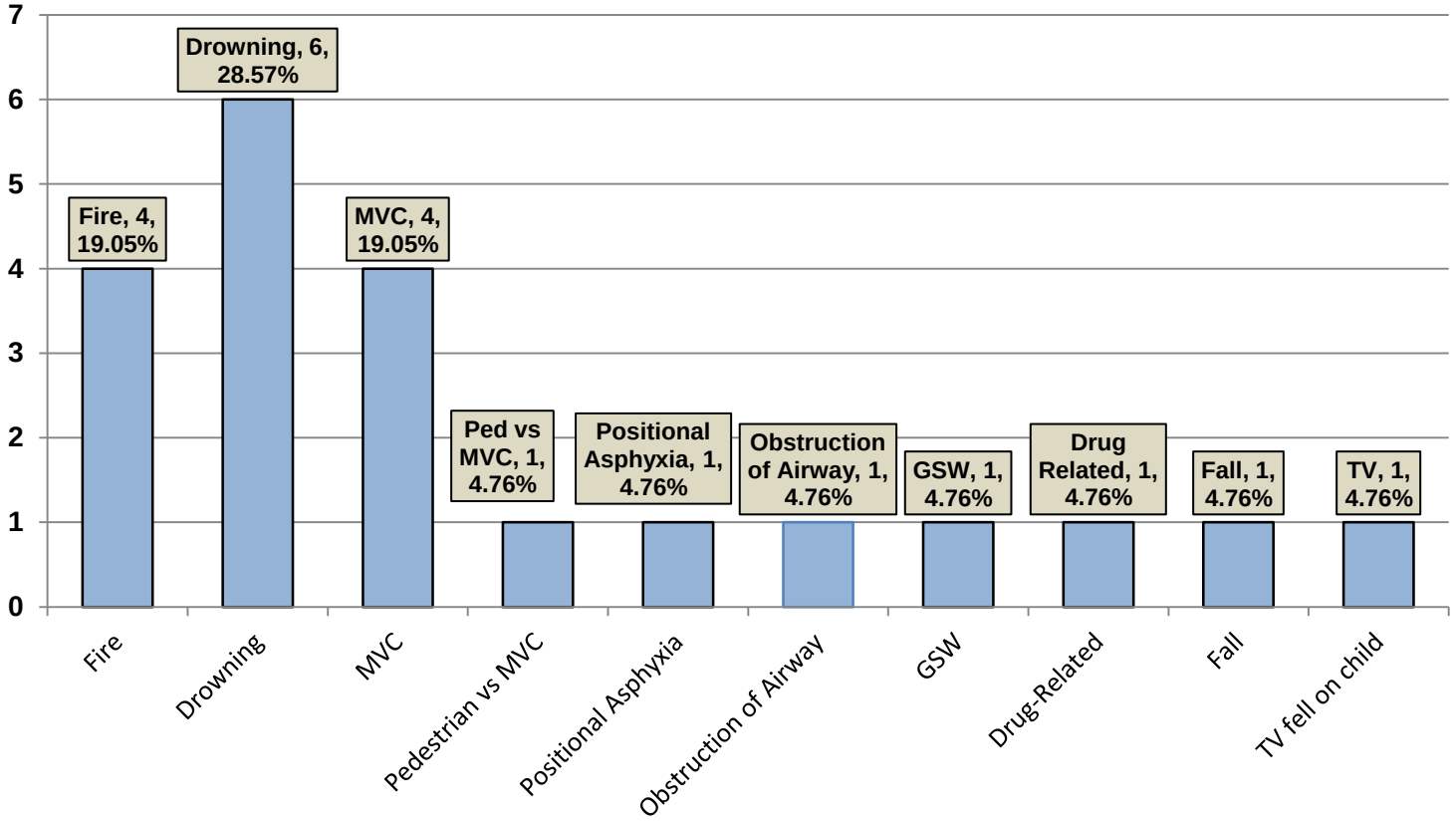


Statewide Medical Examiner Data of Children (Birth-17)

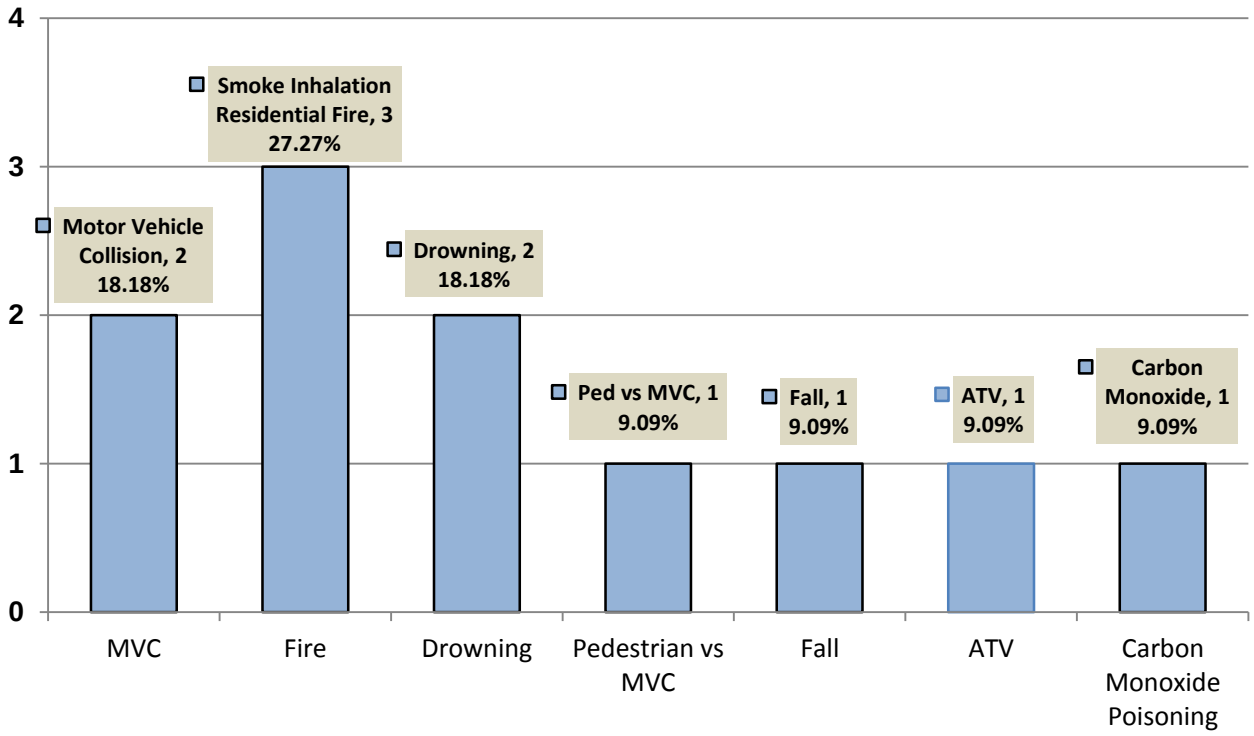
2014 Statewide Child (<1) Accidents by Cause of Death
Figure 16



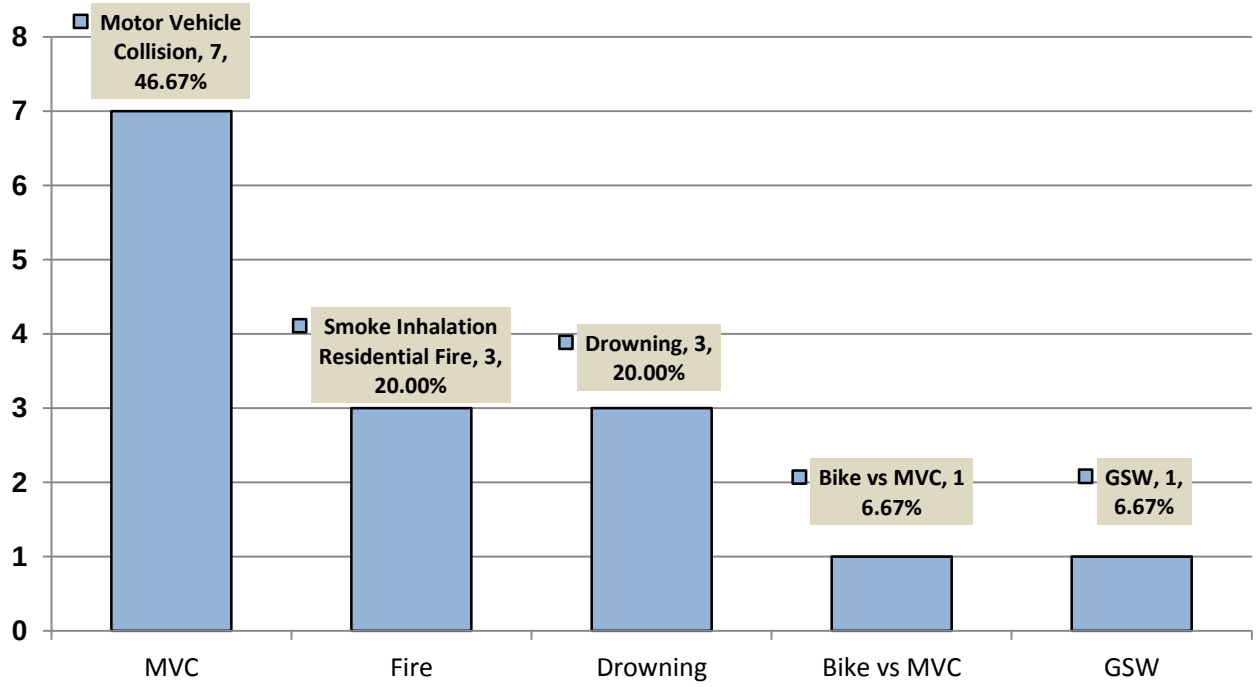
2014 Statewide Child (1-5) Accidents by Cause of Death
Figure 17
Total 1-5 Accidental Deaths=21



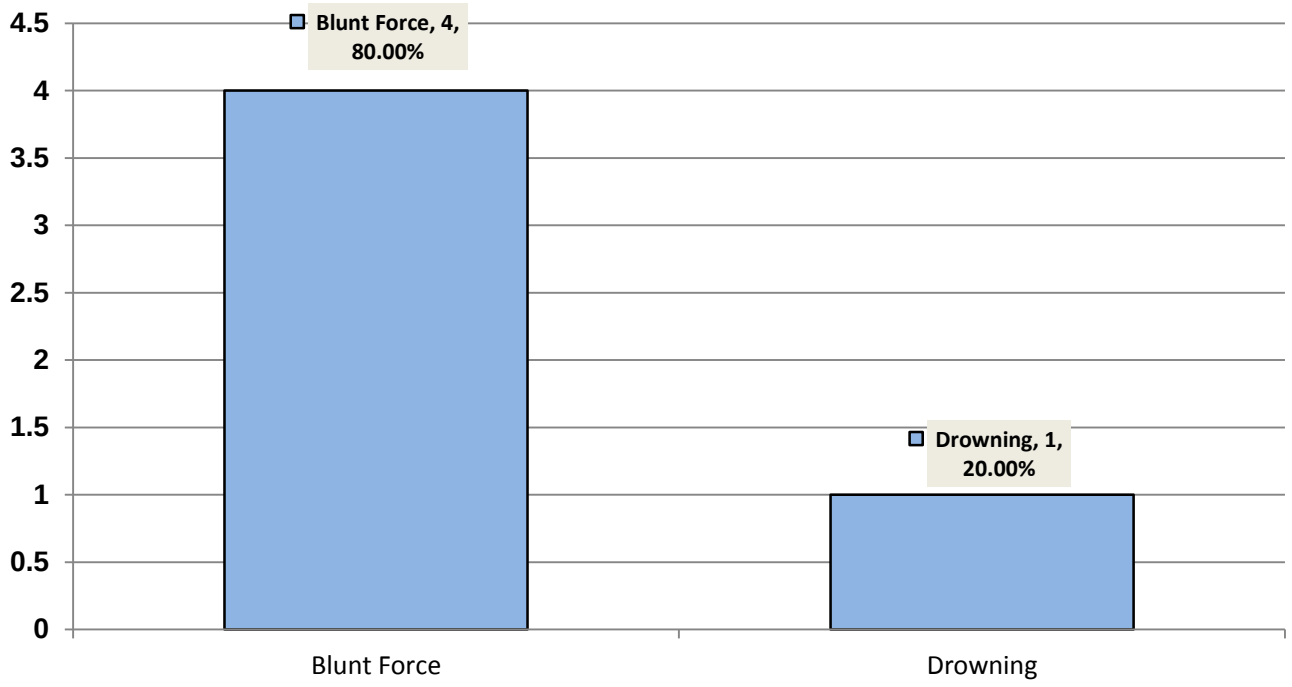
2014 Statewide Child (6-12) Accidents by Cause of Death
Figure 18
Total 6-12 Accidental Deaths=11



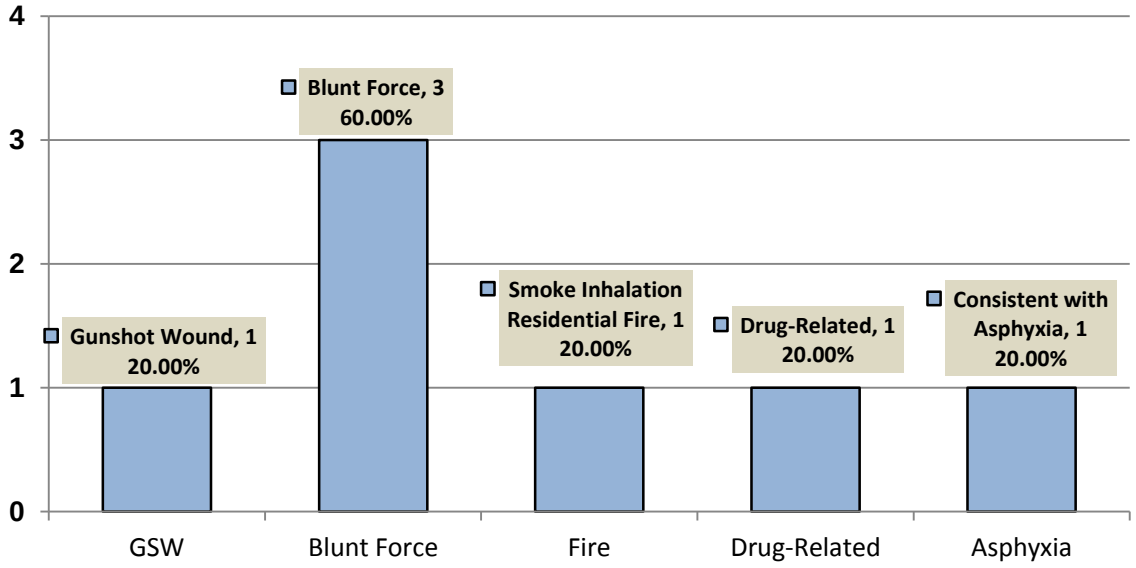
2014 Statewide Child (13-17) Accidents by Cause of Death
Figure 19
Total 13-17 Accidental Deaths=15



2014 Statewide Child (<1) Homicides by Cause of Death
Figure 20
Total <1 Homicide Deaths=5

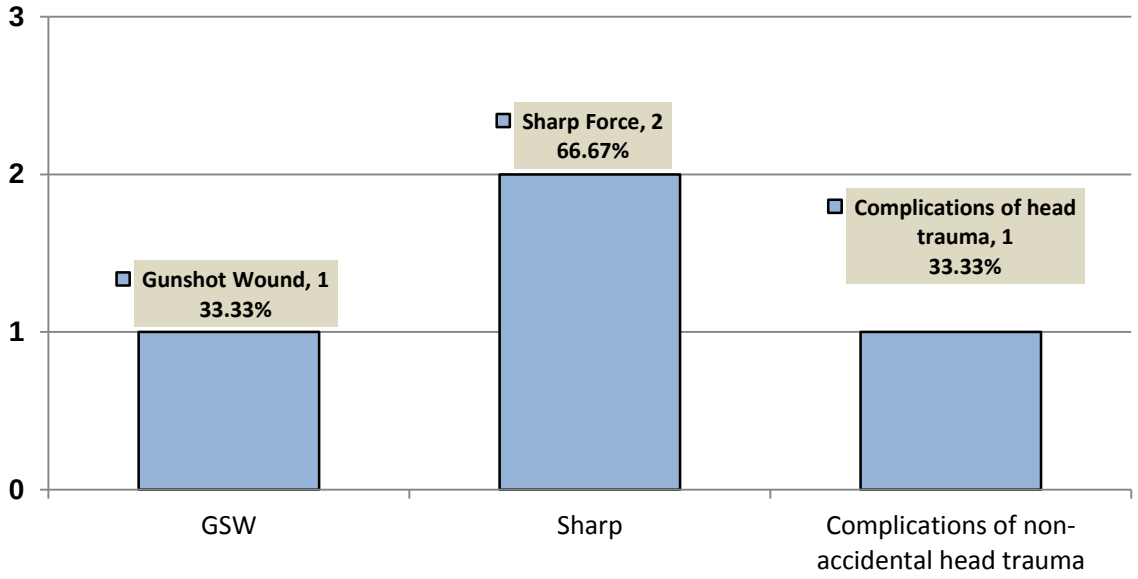


2014 Statewide Child (1-5) Homicides by Cause of Death
Figure 21
Total 1-5 Homicide Deaths=5

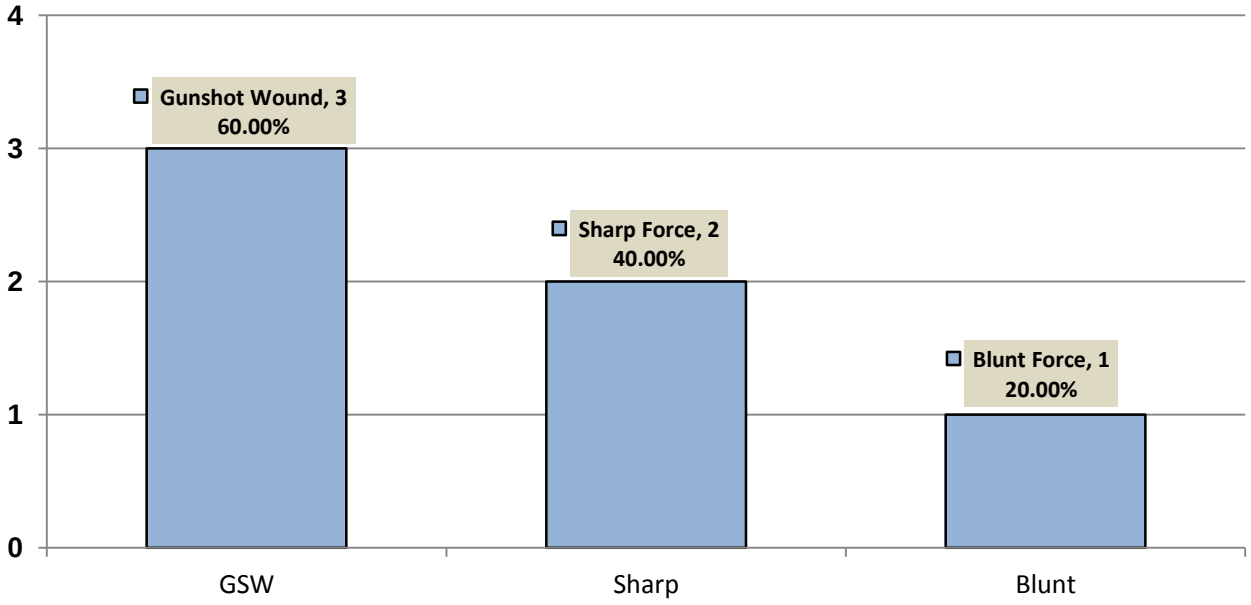


**Percentages may be > than 100%, as some decedents may have more than one (1) type of injury.

2014 Statewide Child (6-12) Homicides by Cause of Death
Figure 22
Total 6-12 Homicide Deaths=3

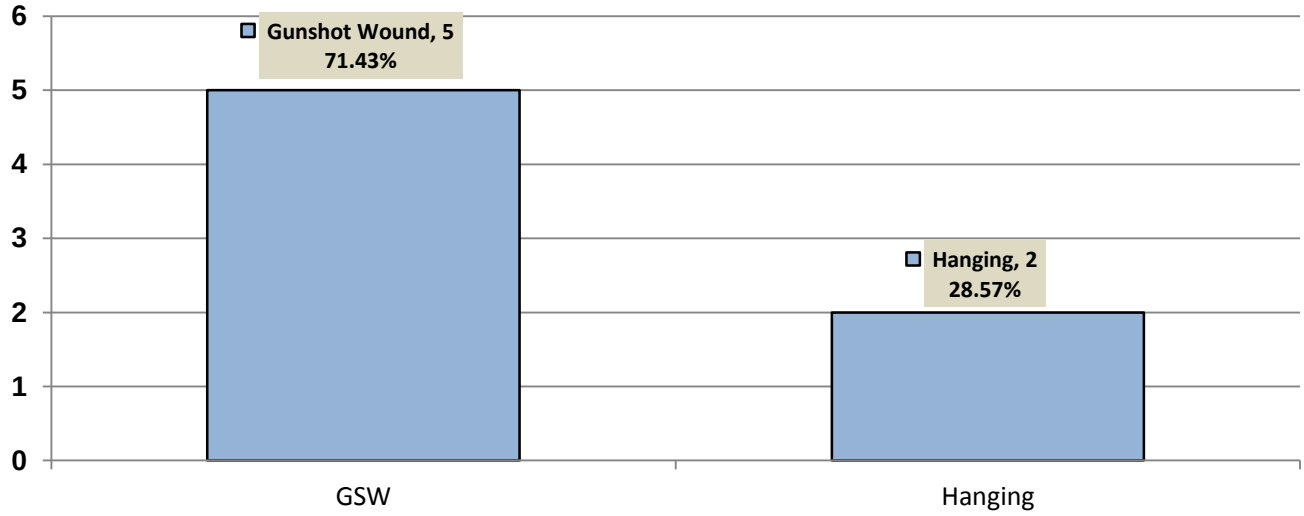


2014 Statewide Child (13-17) Homicides by Cause of Death
Figure 23
Total 13-17 Homicide Deaths=5

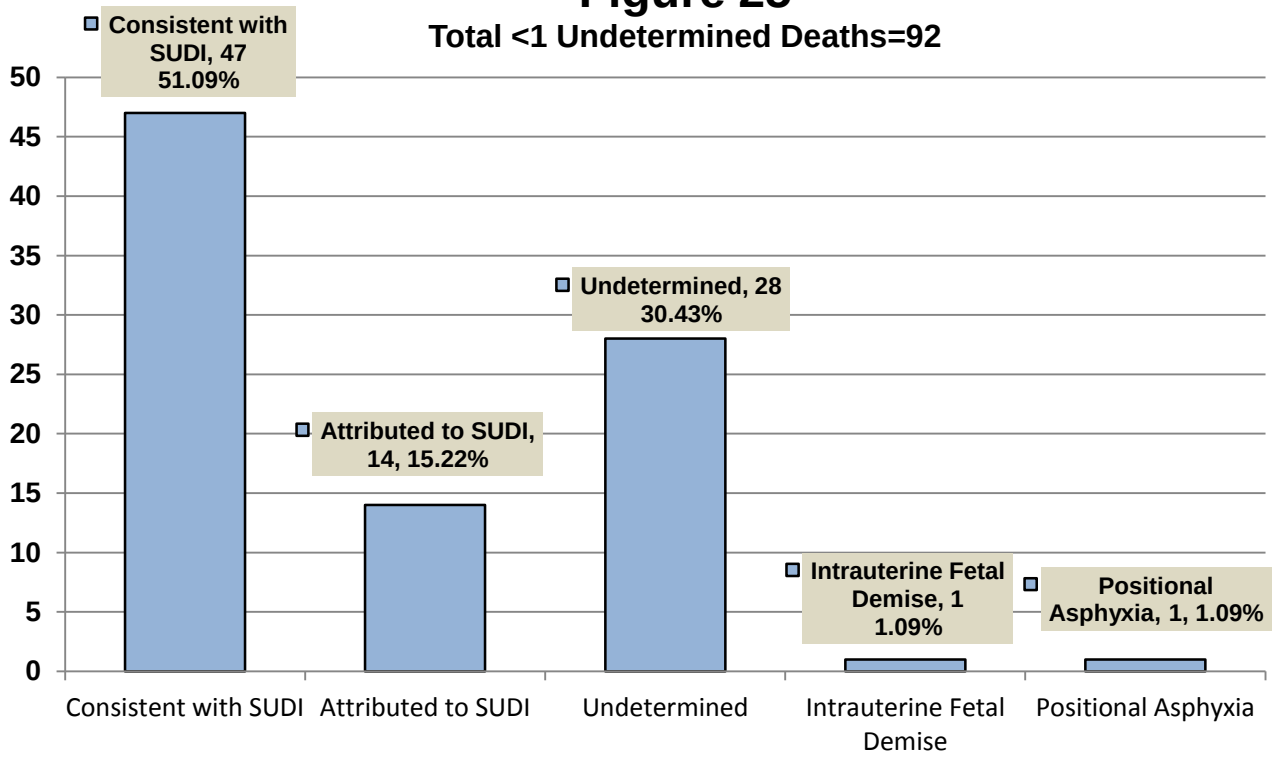


**Percentages may be > than 100%, as some decedents may have more than one (1) type of injury

2014 Statewide Child (13-17) Suicides by Cause of Death
Figure 24
Total 13-17 Suicide Deaths=7

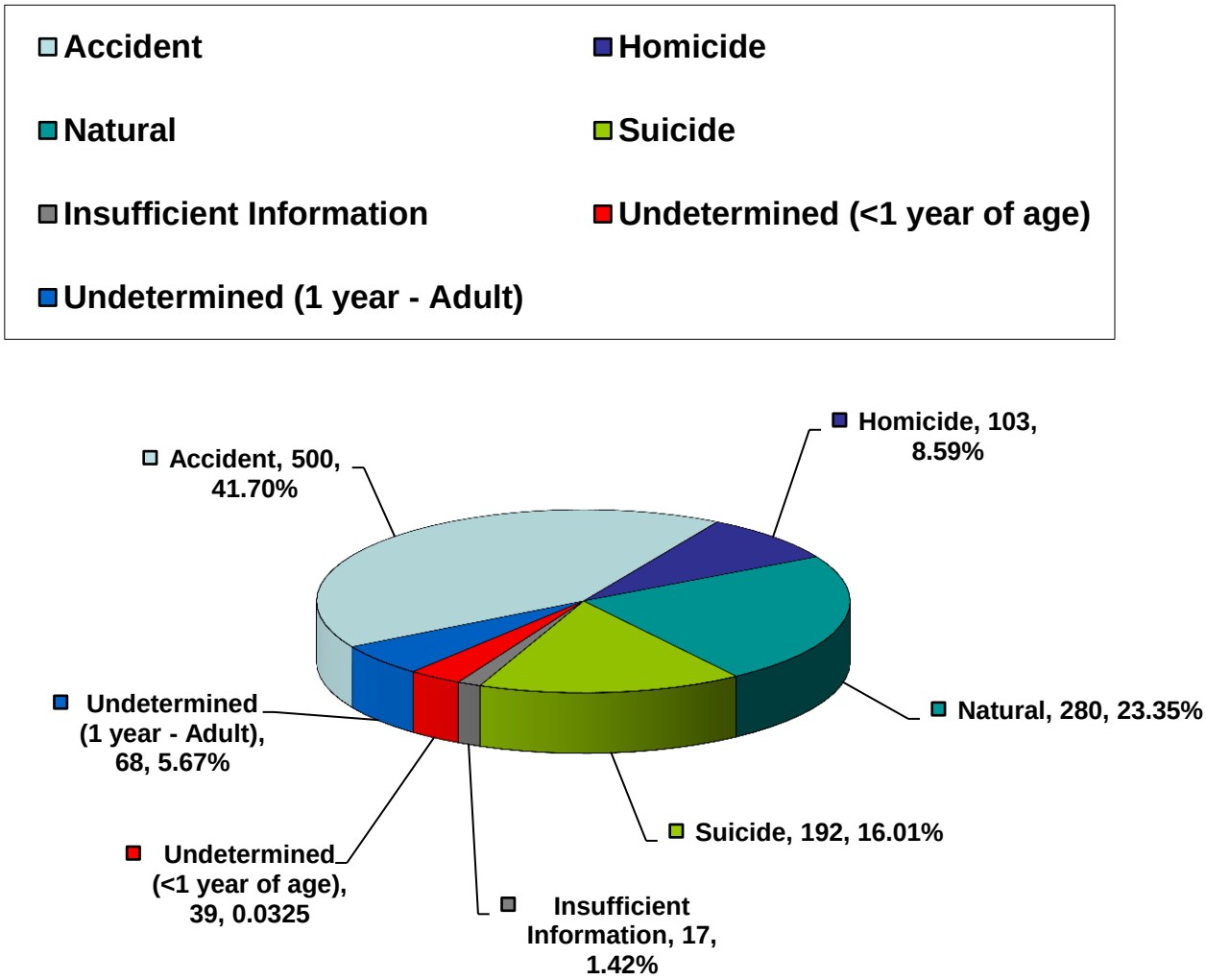


2014 Statewide Child (<1) Undetermined Manners by Cause of Death
Figure 25
Total <1 Undetermined Deaths=92

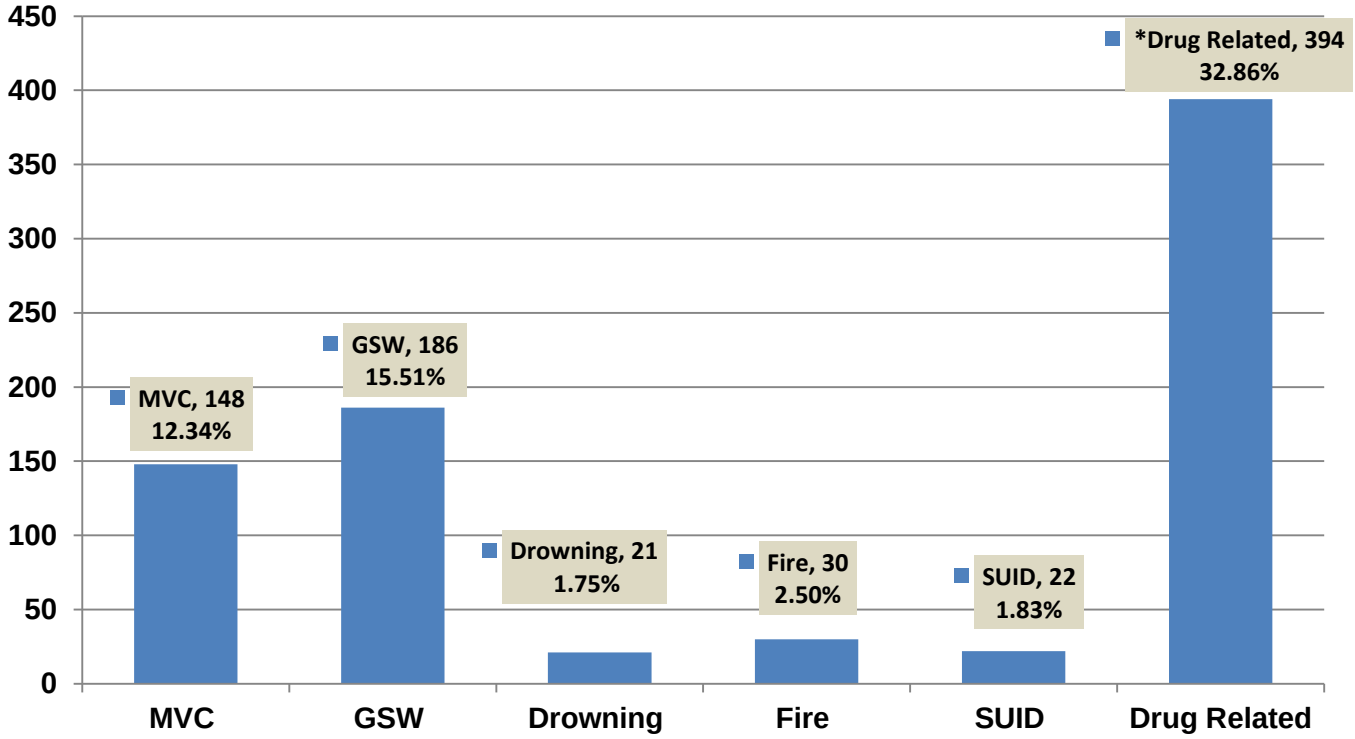


Louisville Medical Examiner Office Data

2014 Louisville Cases by Manner of Death
Figure 26



2014 Louisville Cases by Common Causes of Death
Figure 27



*Drug Related total includes Indiana

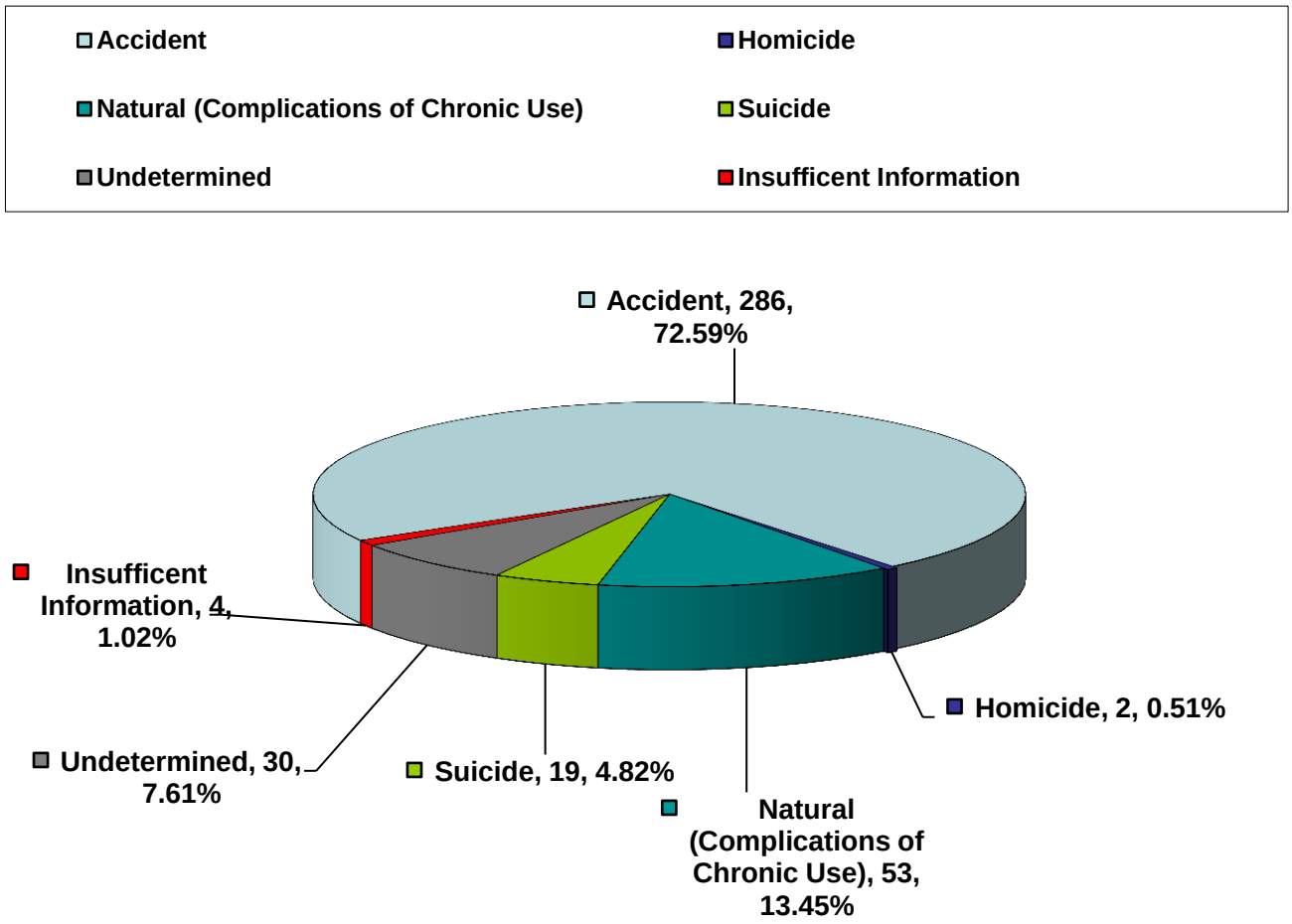
Louisville Totals by Common Causes And Subsequent Manners of Death

Table 7

Fatal Event	Total Cases	Percentage
Drug Related - Kentucky	**373**	**33.10%**
Accident	274	73.46%
Homicide§	2	0.54%
Suicide	17	4.56%
Natural (Complications of Chronic Use)	49	13.14%
Undetermined/Insufficient	31	8.31%
Heroin Present	129	34.58%
Drug Related - Indiana	**21**	**29.17%**
Accident	**12**	57.14%
Natural (Complications of Chronic Use)	4	19.05%
Suicide	2	9.52%
Undetermined/Insufficient	3	14.29%
Heroin Present	3	14.29%
Motor Vehicle Accident	**148**	**12.34%**
Accident	142	95.95%
Homicide	1	0.68%
Suicide	3	2.03%
Undetermined/Insufficient	2	1.35%
Gunshot Wound	**186**	**15.51%**
Accident	3	1.61%
Homicide	72	38.71%
Suicide	108	58.06%
Undetermined/Insufficient	3	1.61%
Drowning	**21**	**1.75%**
Accident	14	66.67%
Homicide	3	14.29%
Undetermined/Insufficient	4	19.05%
Fire Related	**30**	**2.50%**
Accident	21	70.00%
Homicide	2	6.67%
Undetermined/Insufficient	7	23.33%
SUID	**22**	**1.83%**
Undetermined	22	100%
All other Louisville Accidents	**44**	**3.67%**

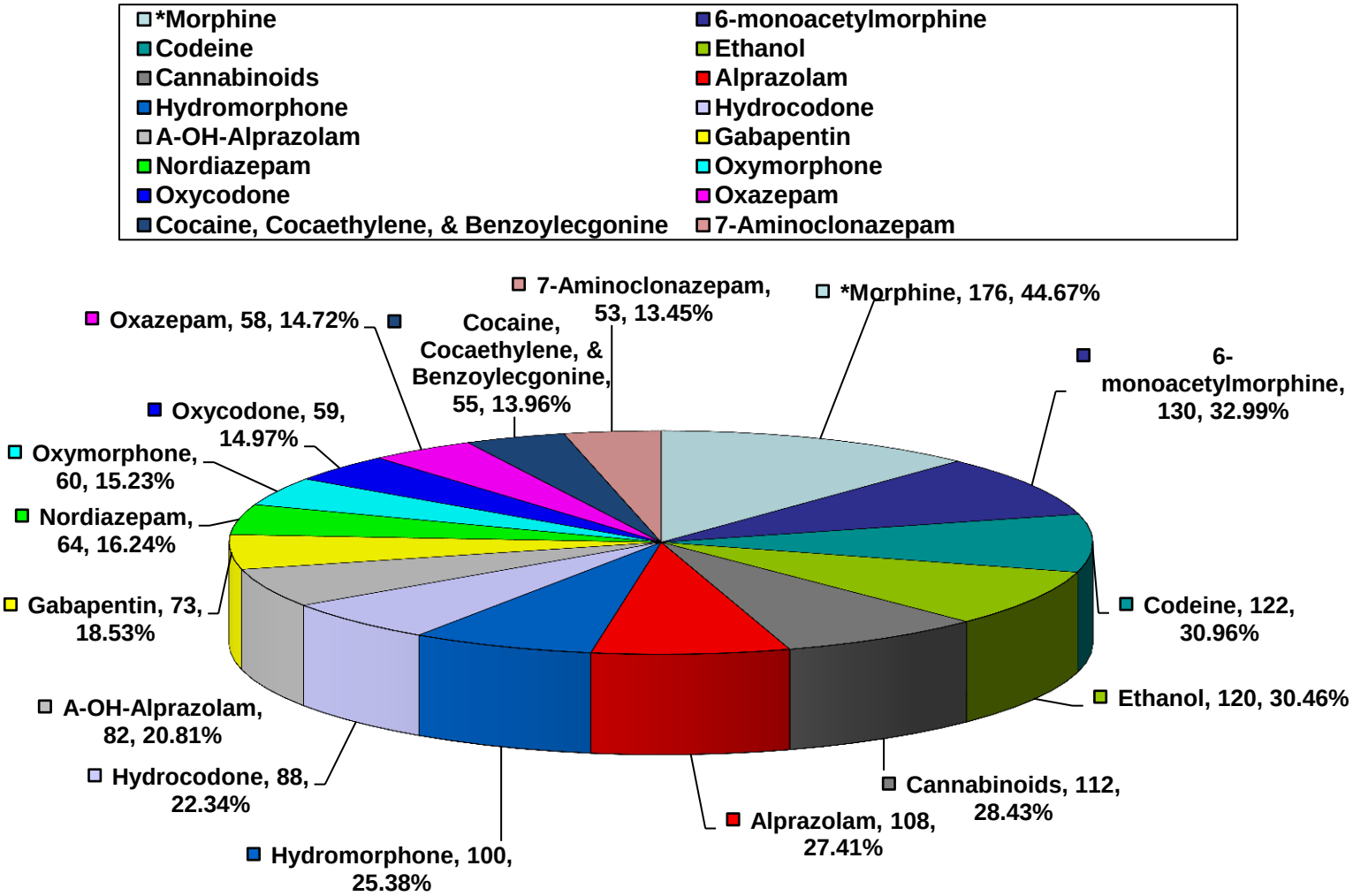
The above does not represent the total number of Louisville cases
¤Other than Drug Related Deaths, Indiana cases are included in totals¤
§Homicide: Multiple Substance Intoxication was cause in 1; contributory cause in 1

2014 Louisville Drug Related by Manner of Death
Figure 28
Total = 394
Includes Indiana Cases



*Homicide: Multiple Substance Intoxication was a contributing factor

2014 Louisville Most Frequently Detected Drugs in Drug Related Death Victims
Figure 29
Total = 394*
*Includes Indiana Cases



*Morphine represents true drug and/or metabolite of Heroin
^Total Percentages >100% due to more than 1 drug being present in many decedents
¤Detected drugs were found in blood, urine, and/or vitreous fluids.
§This figure delineates only drugs occurring ≥50

2014 TOP 5 DRUGS IN LOUISVILLE DRUG RELATED DEATHS Table 8		
Drug	Total	Percentage
Morphine	176	44.67%
6-Monoacetylmorphine	130	32.99%
Codeine	122	30.96%
Ethanol	120	30.46%
Cannabinoids	112	28.43%

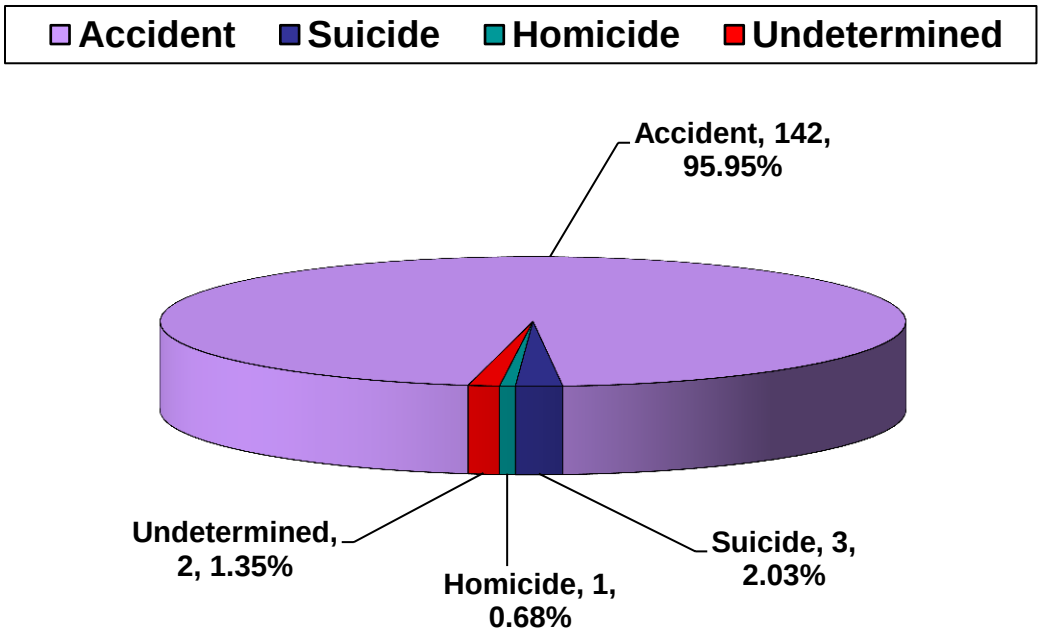
2014 Louisville Additional Drugs Detected in Drug Related Death Victims

Table 9

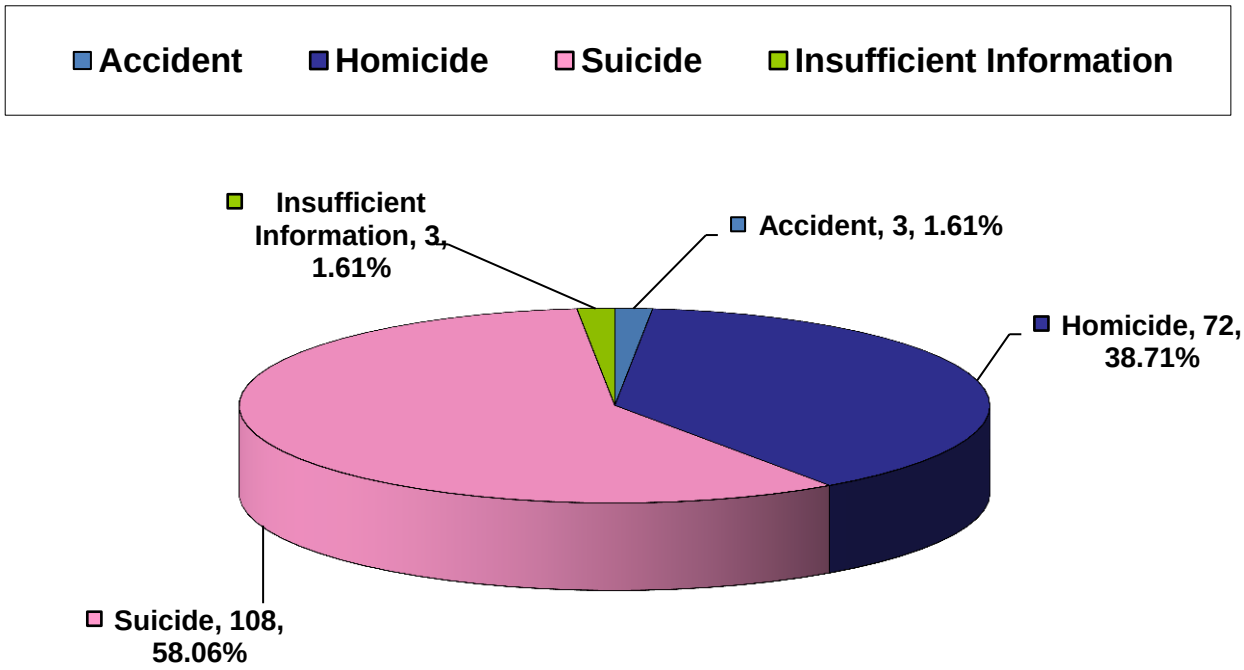
*Includes Indiana Cases

10-oh-carbazepine	1	EDDP	15	nortriptyline	6
acetaminophen	5	estazolam	1	norvenlafaxine	3
acetone	5	eszopiclone	1	olanzapine	2
amitriptyline	6	ethylene glycol	1	paroxetine	3
amlodipine	1	fentanyl	33	phenobarbital	1
amphetamine	33	fluoxetine	9	phenytoin	1
aripiprazole	1	hydrochlorothiazide	2	piroxicam	1
betamethasone	1	hydroxychloroquine	1	pregabalin	1
bisoprolol	1	hydroxyzine	3	promethazine	8
buprenorphine	12	isopropanol	1	propofol	1
bupropion	1	lamotrigine	3	propranolol	1
butalbital	5	levetiracetam	1	propxyphene	1
caffeine	32	lorazepam	12	pseudoephedrine	3
carisoprodol	5	meprobamate	12	quetiapine	4
chlordiazepoxide	4	methadone	35	salicylates	1
chlorophenylpiperazine	3	methamphetamine	35	sertaline	5
chlorpheniramine	1	methanol	1	sumatriptan	1
ciproflaxacin	2	metoprolol	2	temazepam	48
citalopram	12	mirtazapine	4	topiramate	4
clonazepam	16	naloxene	5	tramadol	9
clozapine	1	nicotine	1	trazodone	3
cyclobenzaprine	5	norbuprenorphine	15	triamterene	1
dextromethorphan	5	norclozapine	1	trihexyphenidyl	1
diazepam	42	nordoxepin	3	valproic acid	3
dihydrocodeine	2	norfentanyl	21	venlafaxine	2
diphenhydramine	12	norfluoxetine	9	verapamil	1
doxepin	3	norpropoxyphene	1	ziprasidone	1
doxylamine	1	norsertraline	4	zolpidem	3
duloxetine	2	nortramadol	9		

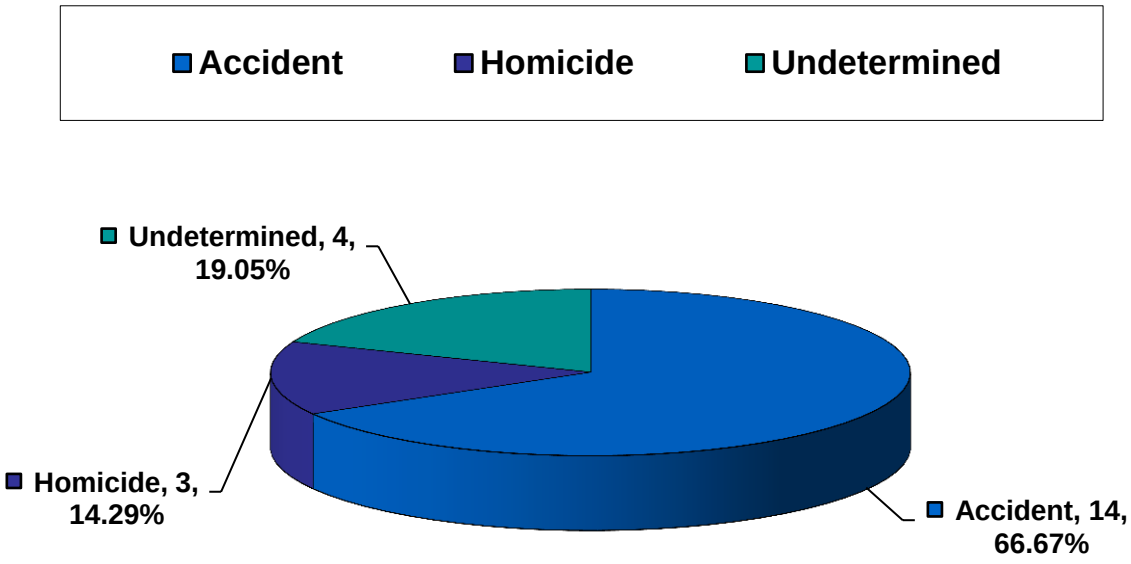
2014 Louisville MVC by Manner of Death
Figure 30



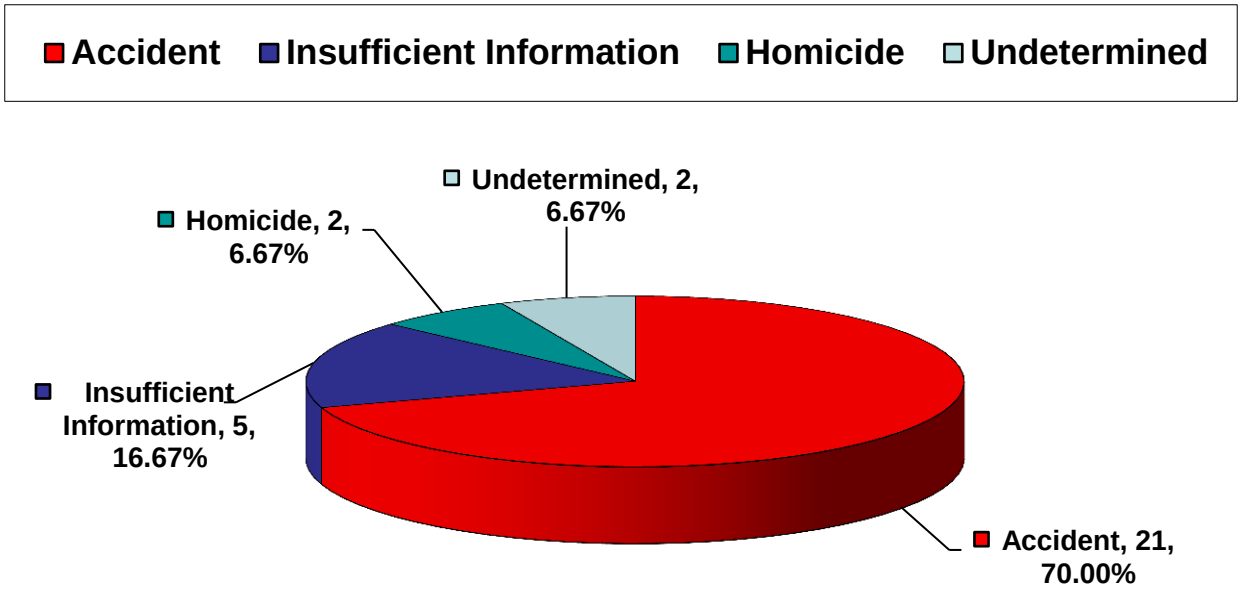
2014 Louisville GSW by Manner of Death
Figure 31



2014 Louisville Drowning by Manner of Death
Figure 32

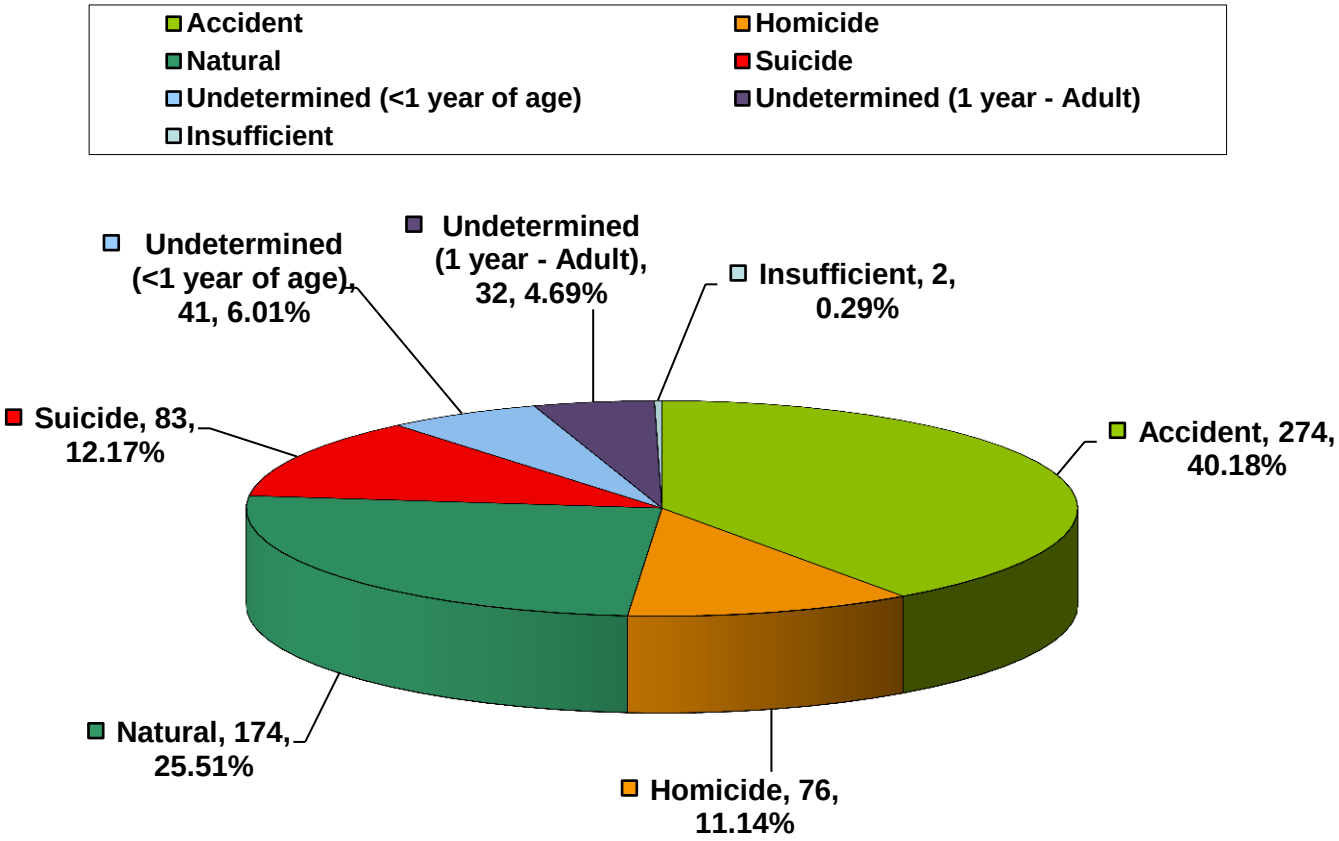


2014 Louisville Fire by Manner of Death
Figure 33



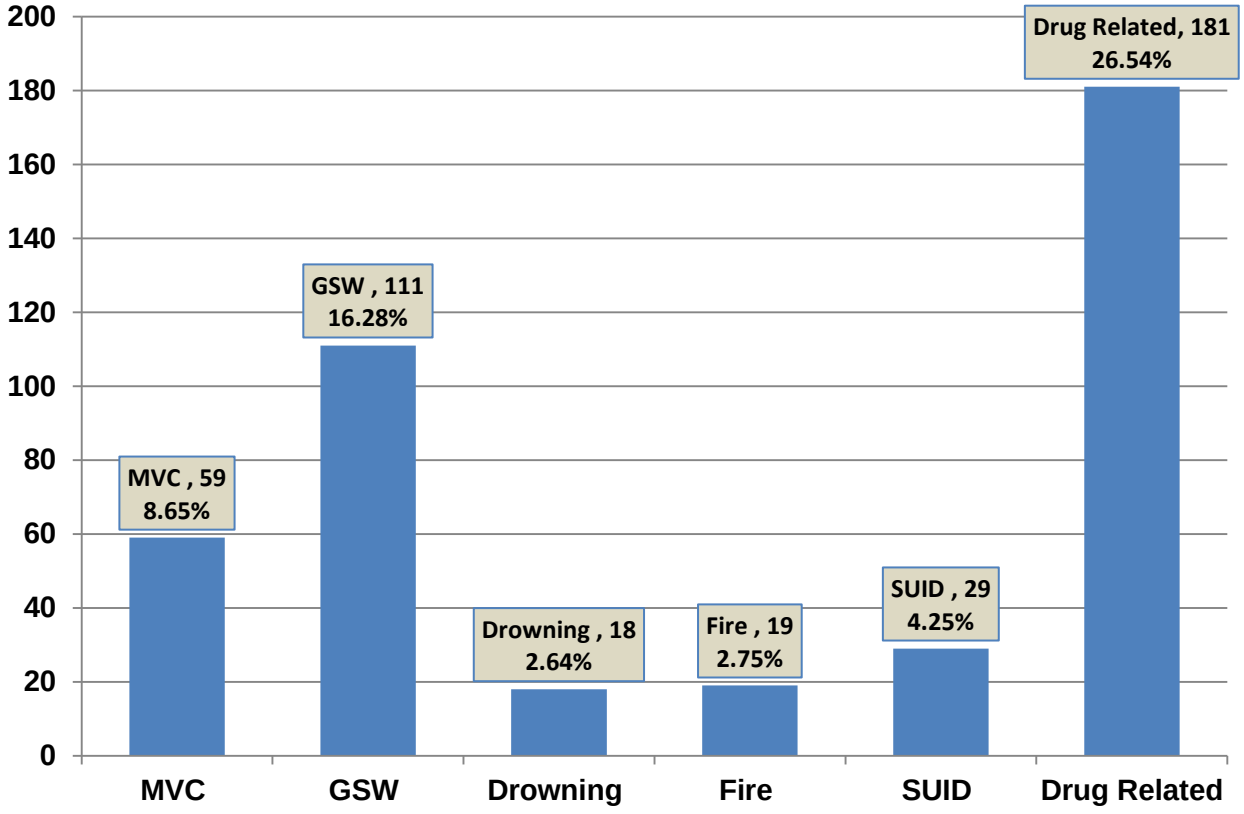
Frankfort Medical Examiner Office Data

2014 Frankfort Cases by Manner of Death
Figure 34



2014 Frankfort Cases by Common Causes of Death

Figure 35



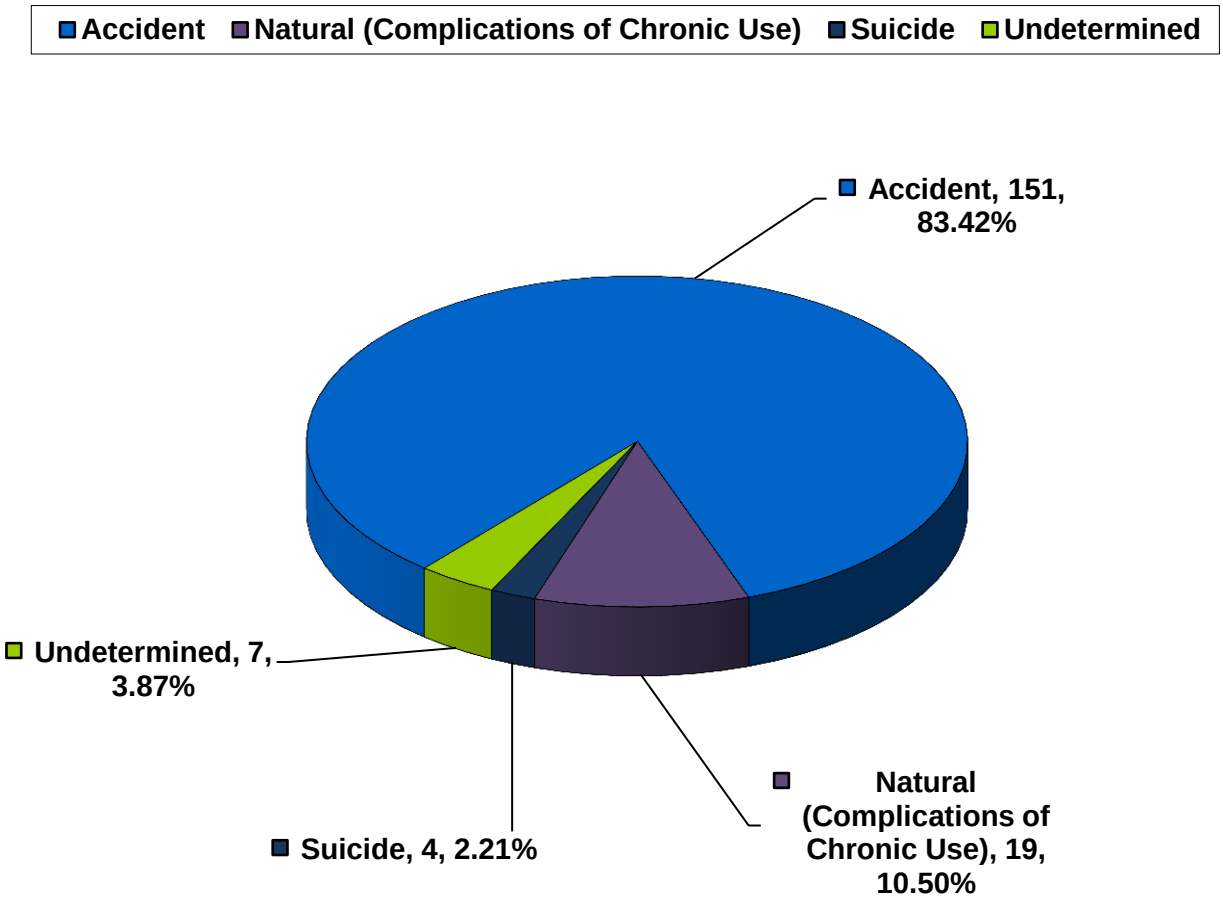
Frankfort Totals by Common Causes And Subsequent Manners of Death

Table 10

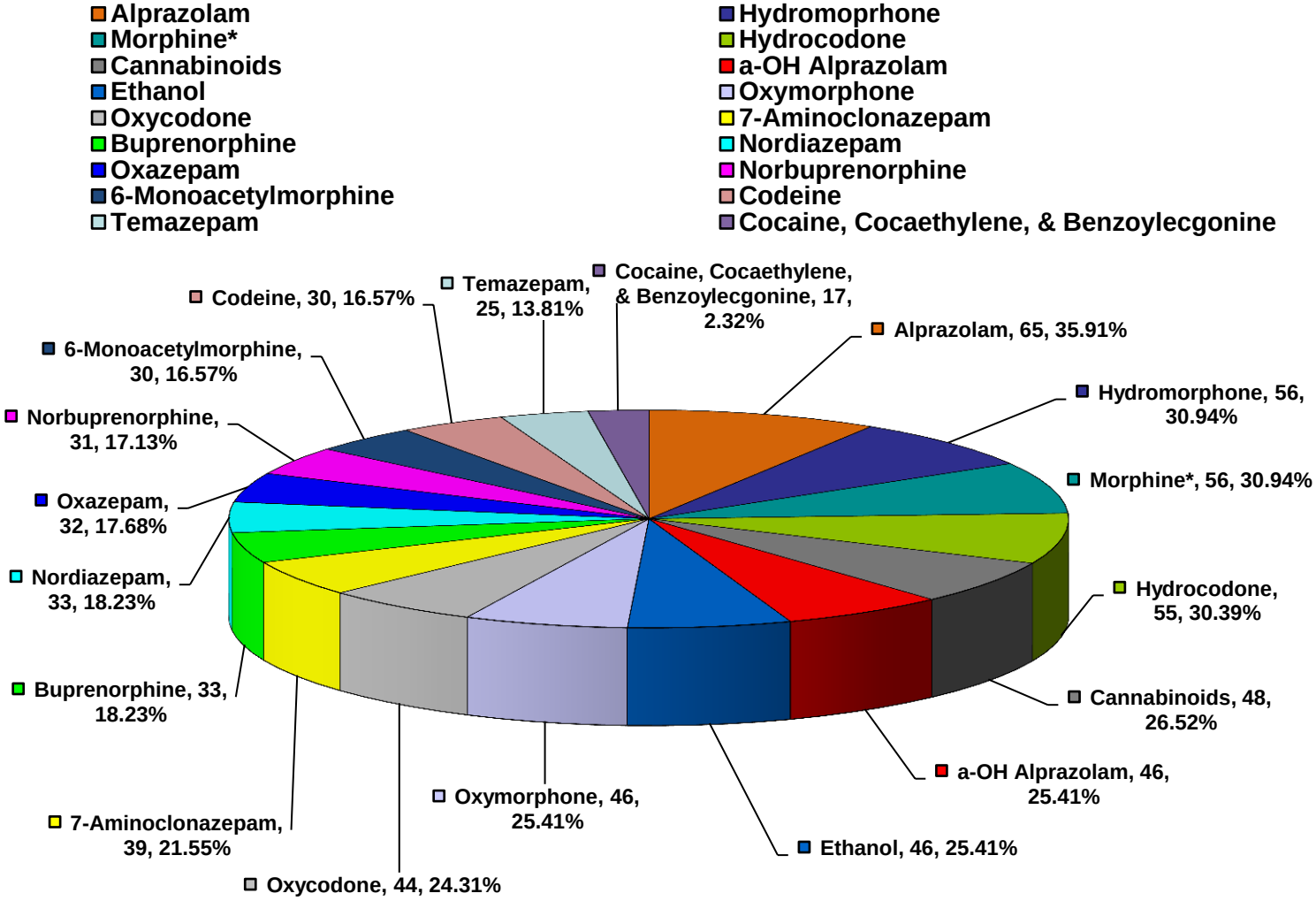
Fatal Event	Total	Percentage
Drug Related	**181**	**26.54%**
Accident	151	83.42%
Natural (Complications of Chronic Use)	19	10.50%
Suicide	4	2.21%
Undetermined	7	3.87%
Heroin Present	31	17.13%
Motor Vehicle Accident	**59**	**8.65%**
Accident	58	98.31%
Undetermined	1	1.69%
Gunshot Wound	**111**	**16.28%**
Accident	1	0.90%
Homicide	49	44.15%
Suicide	58	52.25%
Undetermined	3	2.70%
Drowning	**18**	**2.64%**
Accident	15	83.32%
Homicide	1	5.56%
Insufficient Information	1	5.56%
Undetermined	1	5.56%
Fire Related	**19**	**2.75%**
Accident	15	78.94%
Homicide	2	10.525%
Suicide	2	10.525%
SUID	**29**	**4.25%**
Undetermined	29	100%
All other FFT Accidents	**43**	**6.30%**

The above does not represent the total number of Frankfort cases

2014 Frankfort Drug Related by Manner of Death Figure 36



2014 Frankfort Most Frequently Detected Drugs in Drug Related Death Victims
Figure 37
Total = 181



*Morphine represents true drug and/or metabolite of Heroin
^Total Percentages >100% due to more than 1 drug being present in many decedents
¤Detected drugs were found in blood, urine, and/or vitreous fluids.
§This figure delineates only drugs occurring ≥25 other than Cocaine, Cocaethylene & Benzoylecgonine.

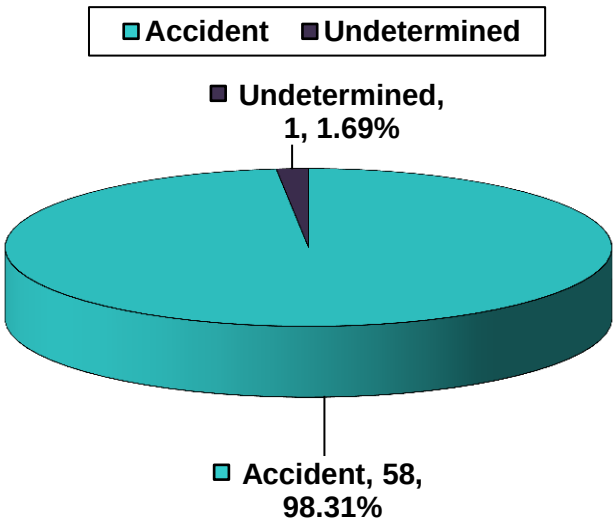
2014 TOP 5 DRUGS IN FRANKFORT DRUG RELATED DEATHS
Table 11

Drug	Total	Percentage
Alprazolam	65	35.91%
Hydromorphone	56	30.94%
Morphine*	56	30.94%
Hydrocodone	55	30.39%
Cannabinoids	48	26.52%

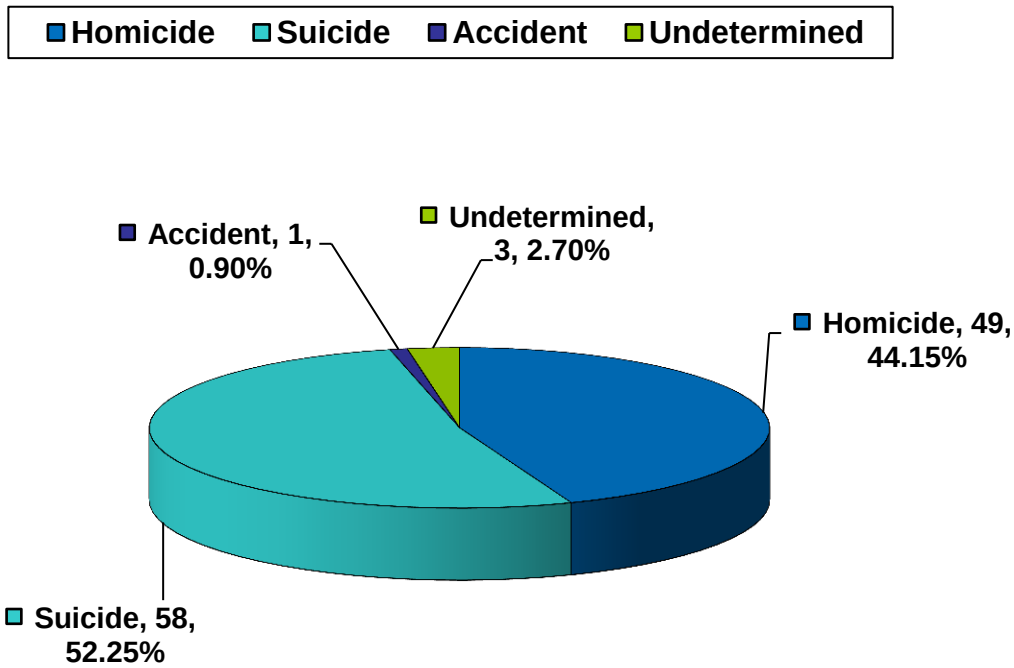
2014 Frankfort Additional Drugs Detected in Drug Related Death Victims Table 12

Acetaminophen	1	MDMA	1
Acetone	2	Meprobamate	2
Alpha-PVP	3	Methadone	21
Amphetamine	9	Methamphetamine	13
Atenolol	1	Methocarbamol	1
Butalbital	4	Naloxone	1
Caffeine	6	Naproxen	1
Carisoprodol	1	Norfentanyl	16
Chlordiazaproxide	2	Norfluoxetine	1
Citalopram	2	Nortramadol	11
Clonazapam	8	Oxcarbezipine	1
Diazepam	17	Oxymetazoline	1
Dextromethorphan	1	Paroxetine	2
Diphenhydramine	1	Promethazine	1
EDDP	10	Propranolol	1
Fentanyl	24	Pseudoephedrine	2
Fluoxetine	1	Quetiapine	2
Gabapentin	22	Tramadol	10
Hydroxyzine	1	Valproic Acid	1
Lomotrigine	1	Zolpidem	1
Lorazepam	4		

2014 Frankfort MVC by Manner of Death
Figure 38

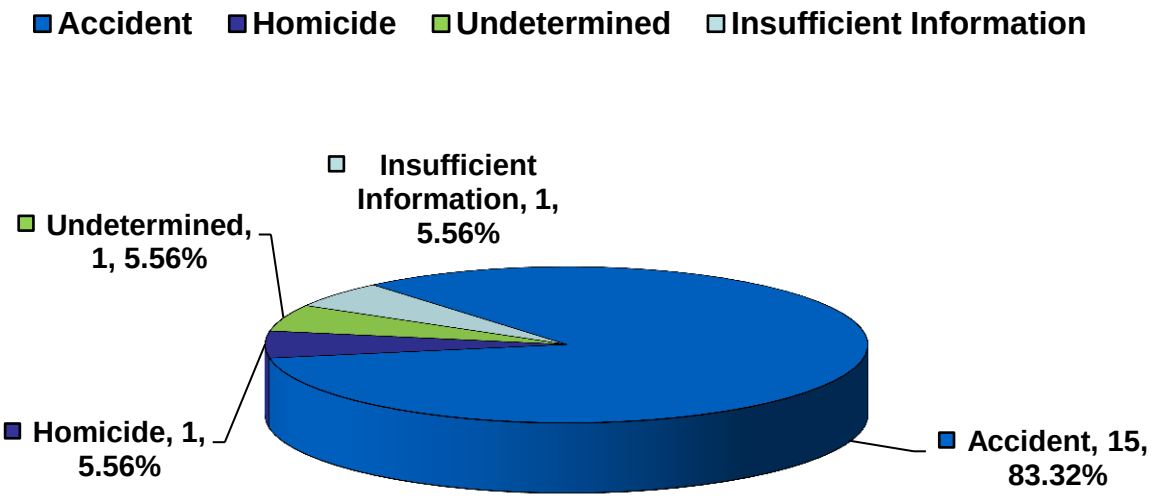


2014 Frankfort GSW by Manner of Death
Figure 39



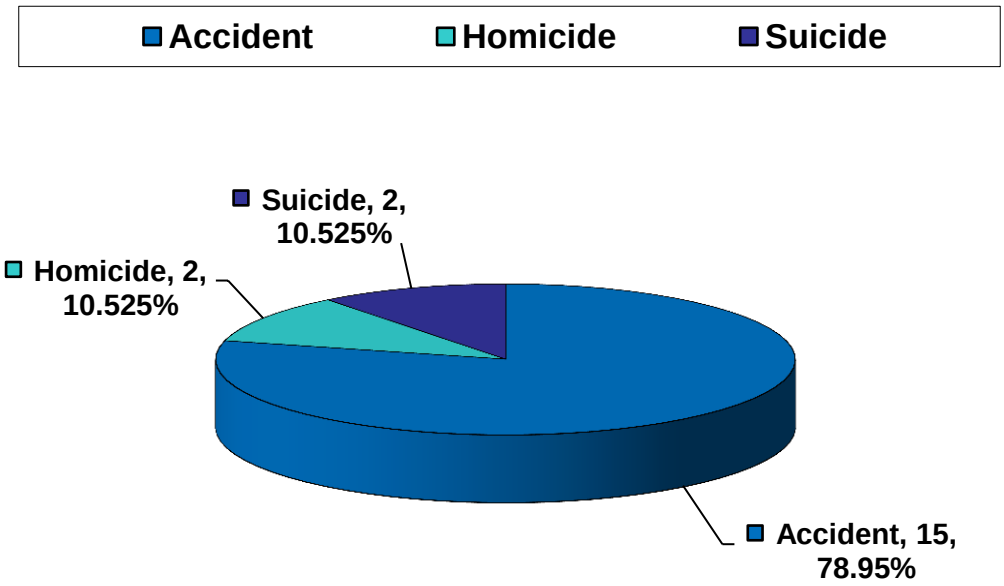
2014 Frankfort Drowning by Manner of Death

Figure 40



2014 Frankfort Fire by Manner of Death

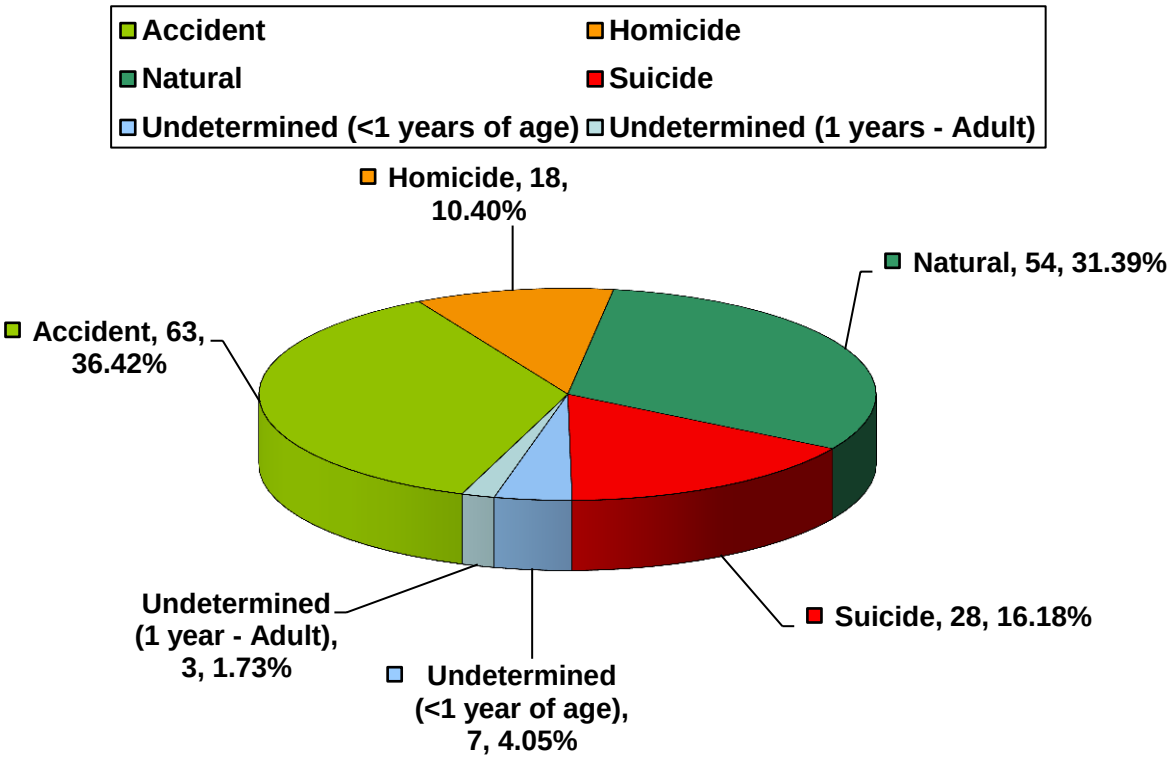
Figure 41



Western Kentucky Medical Examiner Office Data

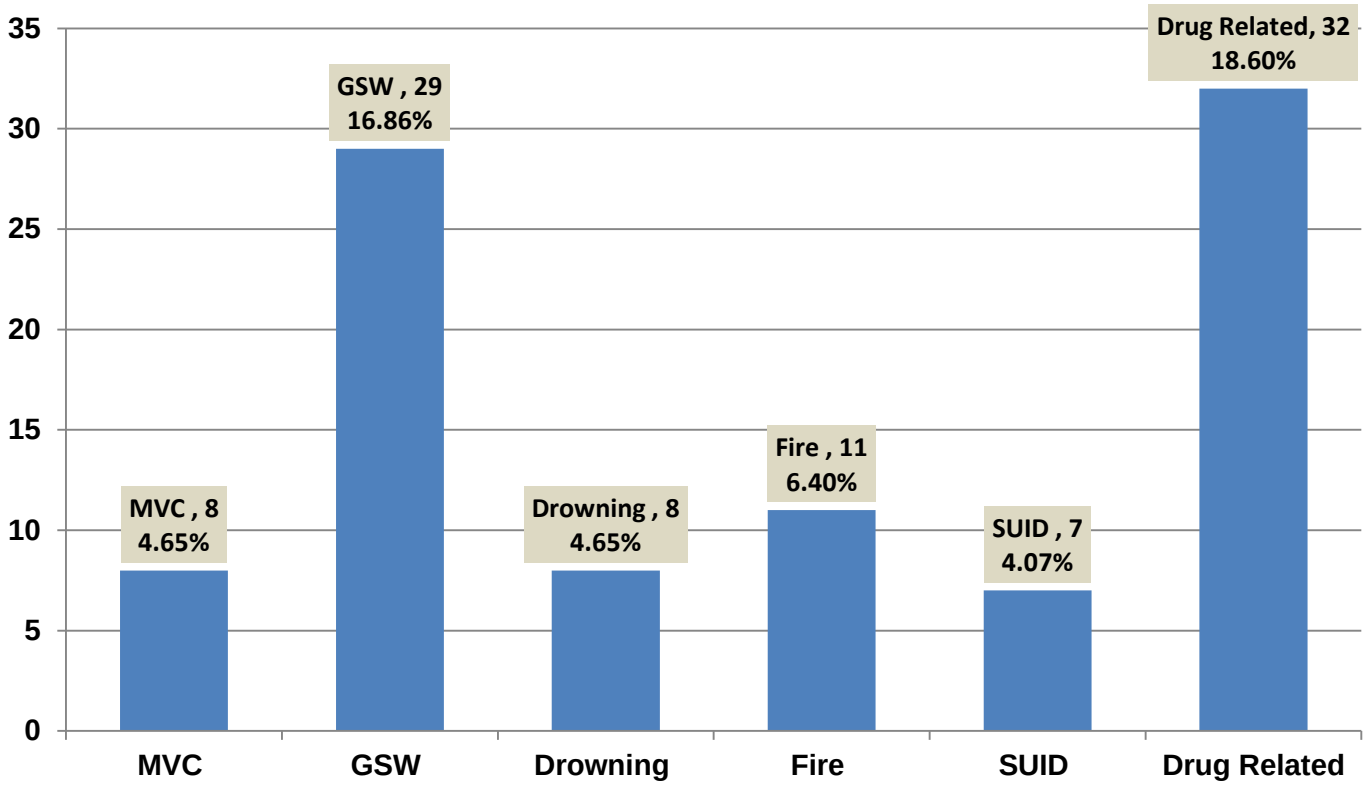
2014 Western Kentucky Cases by Manner of Death

Figure 42



2014 Western Kentucky Cases by Common Cause of Death

Figure 43



Western Kentucky Totals by Common Causes And Subsequent Manners of Death

Table 13

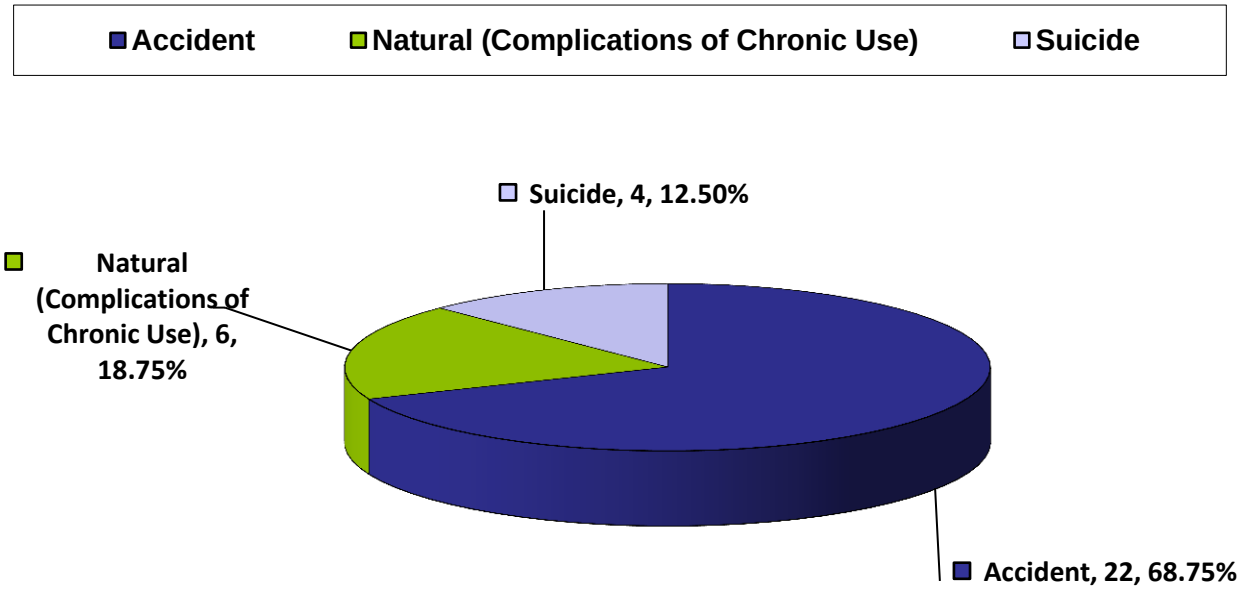
Fatal Event	Total	Percentage
Drug Related	**32**	**18.60%**
Accident	22	68.75%
Natural (Complications of Chronic Use)	6	18.75%
Suicide	4	12.50%
Heroin Present	0	0%
MVC	**8**	**4.65%**
Accident	8	100%
GSW	**29**	**16.86%**
Homicide	13	44.83%
Suicide	16	55.17%
Drowning	**8**	**4.65%**
Accident	8	100%
Fire	**11**	**6.40%**
Accident	11	100%
SUID	**7**	**4.07%**
Undetermined	7	100%
All other WKY Accidents	**16**	**9.30%**

The above does not represent the total number of Western Kentucky cases

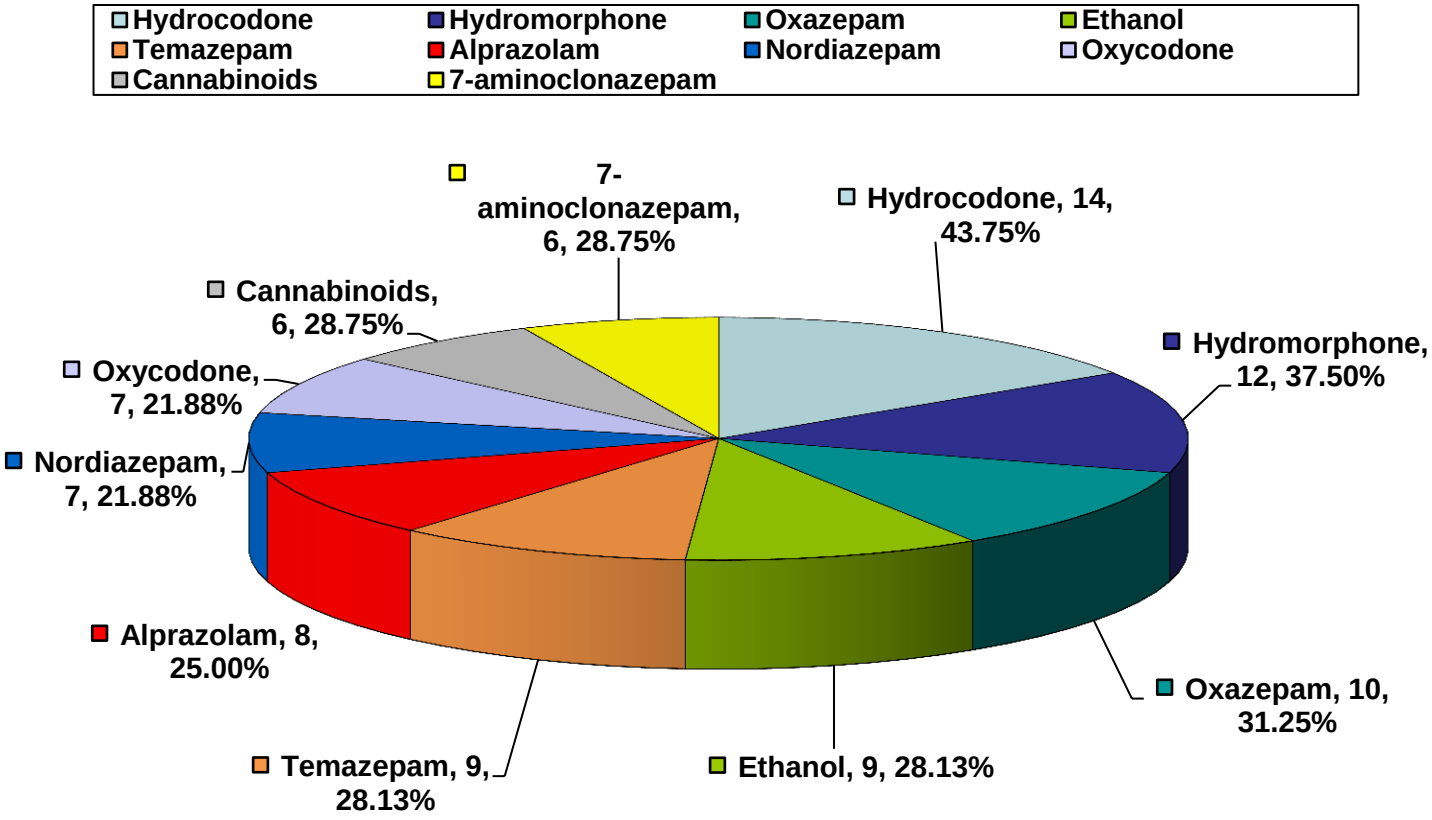
2014 Western Kentucky Drug Related by Manner of Death

Figure 44

Total = 32



2014 Western Kentucky Most Frequently Detected Drugs in Drug Related Death Victims
Figure 45
Total = 32



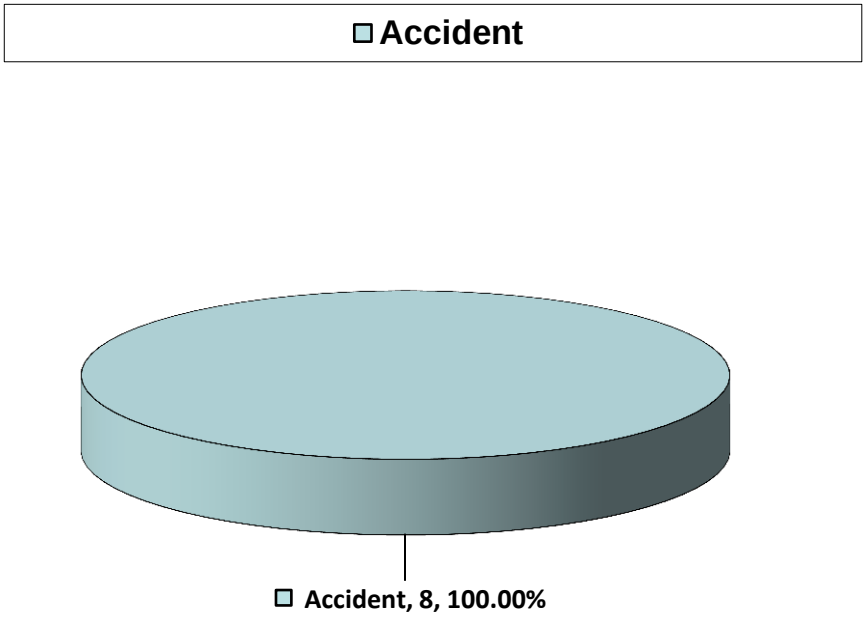
^Total Percentages >100% due to more than 1 drug being present in many decedents
¤Detected drugs were found in blood, urine, and/or vitreous fluids.
§This figure delineates only drugs occurring ≥6.

2014 TOP 5 DRUGS IN WESTERN KY DRUG RELATED DEATHS Table 14		
Drug	Total	Percentage
Hydrocodone	14	43.75%
Hydromorphone	12	37.50%
Oxazepam	10	31.25%
Ethanol	9	28.13%
Temazepam	9	28.13%

2014 Western Kentucky Additional Drugs Detected in Drug Related Death Victims Table 15			
amitriptyline	2	meprobamate	1
amphetamine	2	methamphetamine	6
a-oh-alprazolam	4	morphine*	3
benzoylecgonine	2	norbuprenorphine	3
buprenorphine	3	norfentanyl	3
caffeine	1	nortramadol	2
carisoprodol	1	nortriptyline	2
chlordiazepoxide	1	norvenlafaxine	1
clonazepam	4	oxymorphone	6
diazepam	4	propranolol	1
fentanyl	4	pseudoephedrine	1
gabapentin	1	tramadol	3
lorazepam	1	zolpidem	1

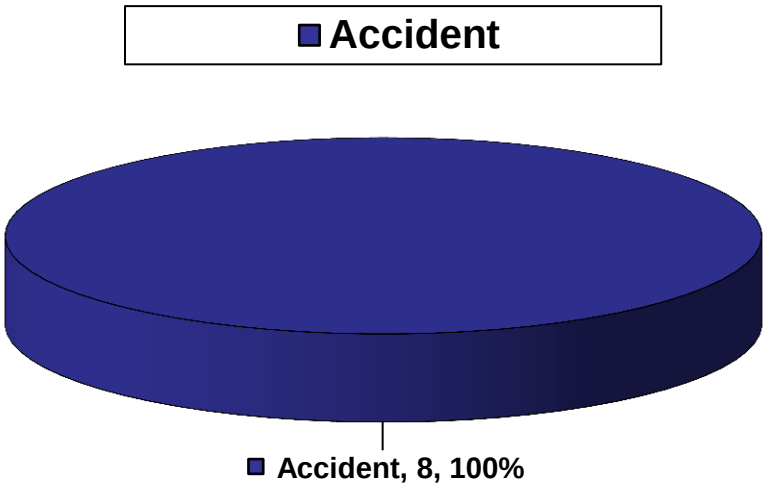
*Morphine represents true drug and/or metabolite of Heroin

2014 Western Kentucky MVC by Manner of Death
Figure 46

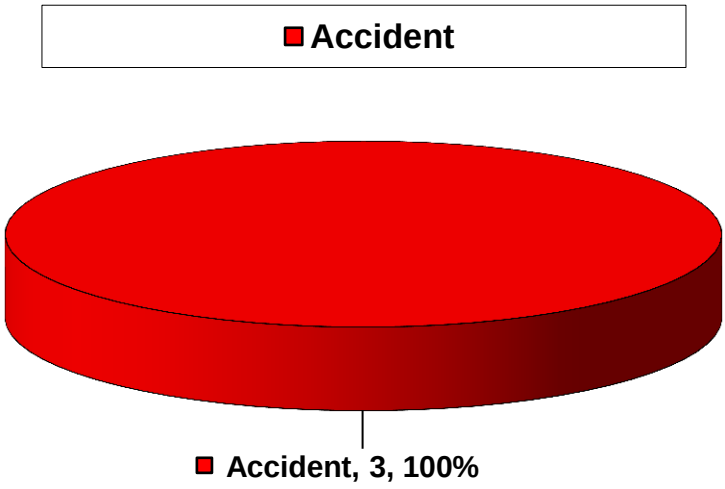


2014 Western Kentucky GSW by Manner of Death
Figure 47

2014 Western Kentucky Drowning by Manner of Death
Figure 48

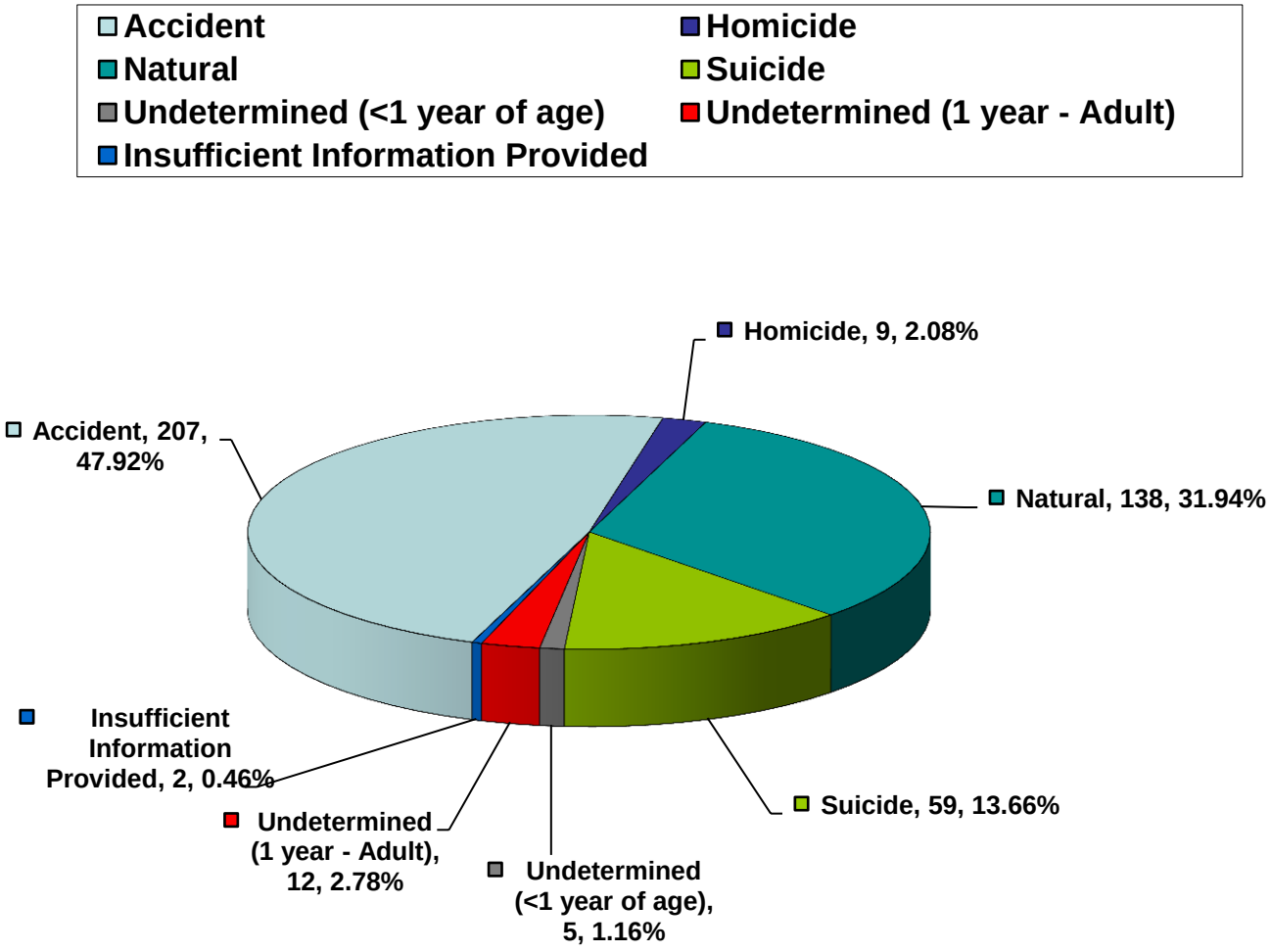


2014 Western Kentucky Fire by Manner of Death
Figure 49

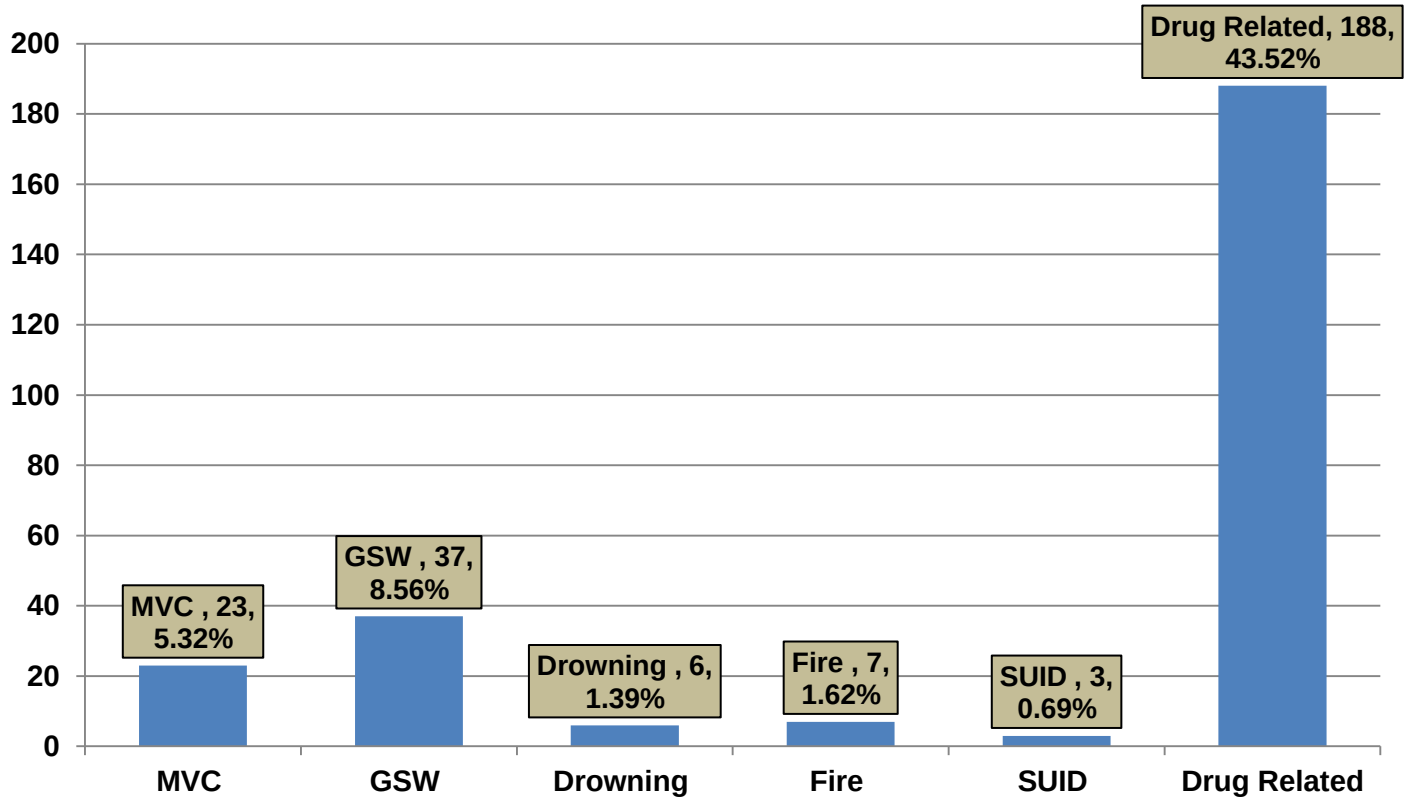


Northern Kentucky Medical Examiner Office Data

2014 Northern Kentucky Cases by Manner of Death
Figure 50



2014 Northern Kentucky Cases by Common Causes
Figure 51



NKY Totals by Common Causes And Subsequent Manners of Death

Table 16

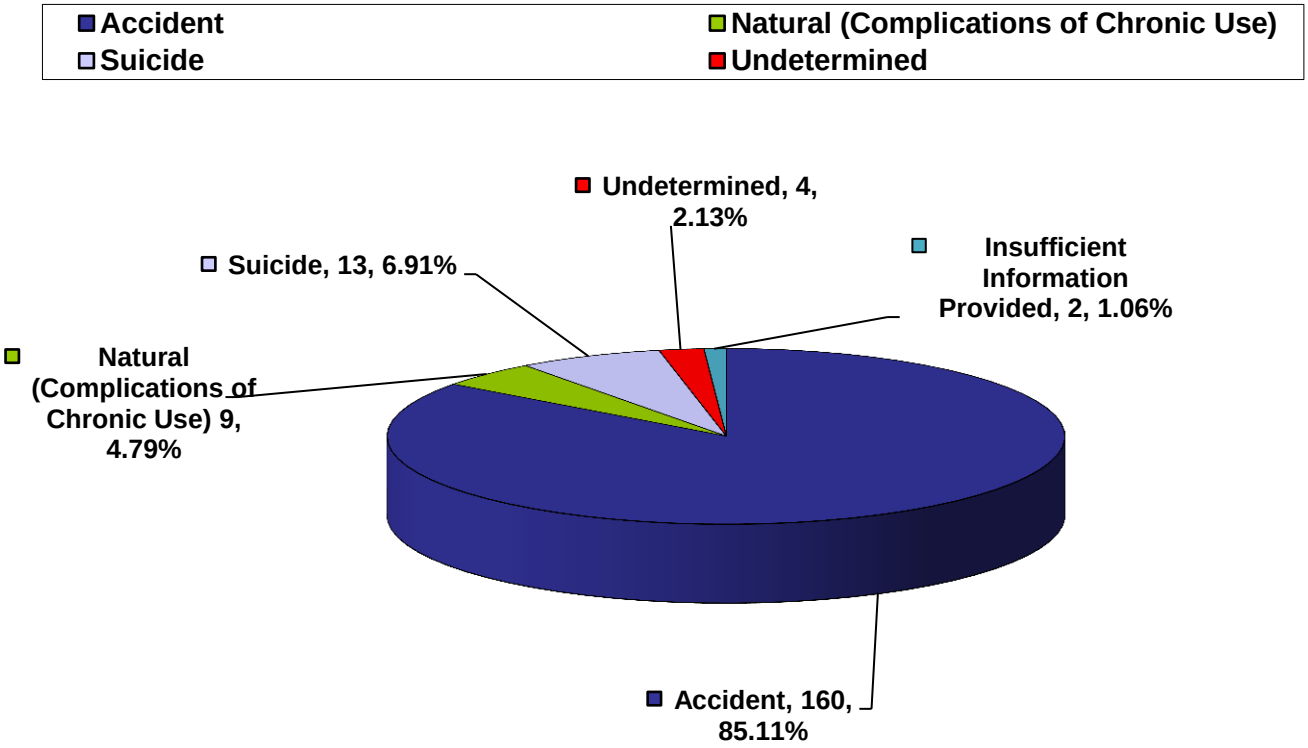
Fatal Event	Total	Percentage
Drug Related	**188**	43.52%
Accident	160	85.11%
Natural (Complications of Chronic Use)	9	4.79%
Suicide	13	6.91%
Undetermined/Insufficient Information	6	3.19%
Heroin Present	70	37.23%
MVC	**23**	5.32%
Accident	23	100.00%
GSW	**37**	8.56%
Homicide	7	18.92%
Suicide	28	75.68%
Undetermined	2	5.41%
Drowning	**6**	1.39%
Accident	3	50.00%
Suicide	1	16.67%
Undetermined	2	33.33%
Fire	**7**	1.62%
Accident	**7**	100.00%
SUID	**3**	0.69%
Undetermined	3	100%
All other NKY Accidents	**17**	**3.94%**

The above does not represent the total number of Northern Kentucky cases

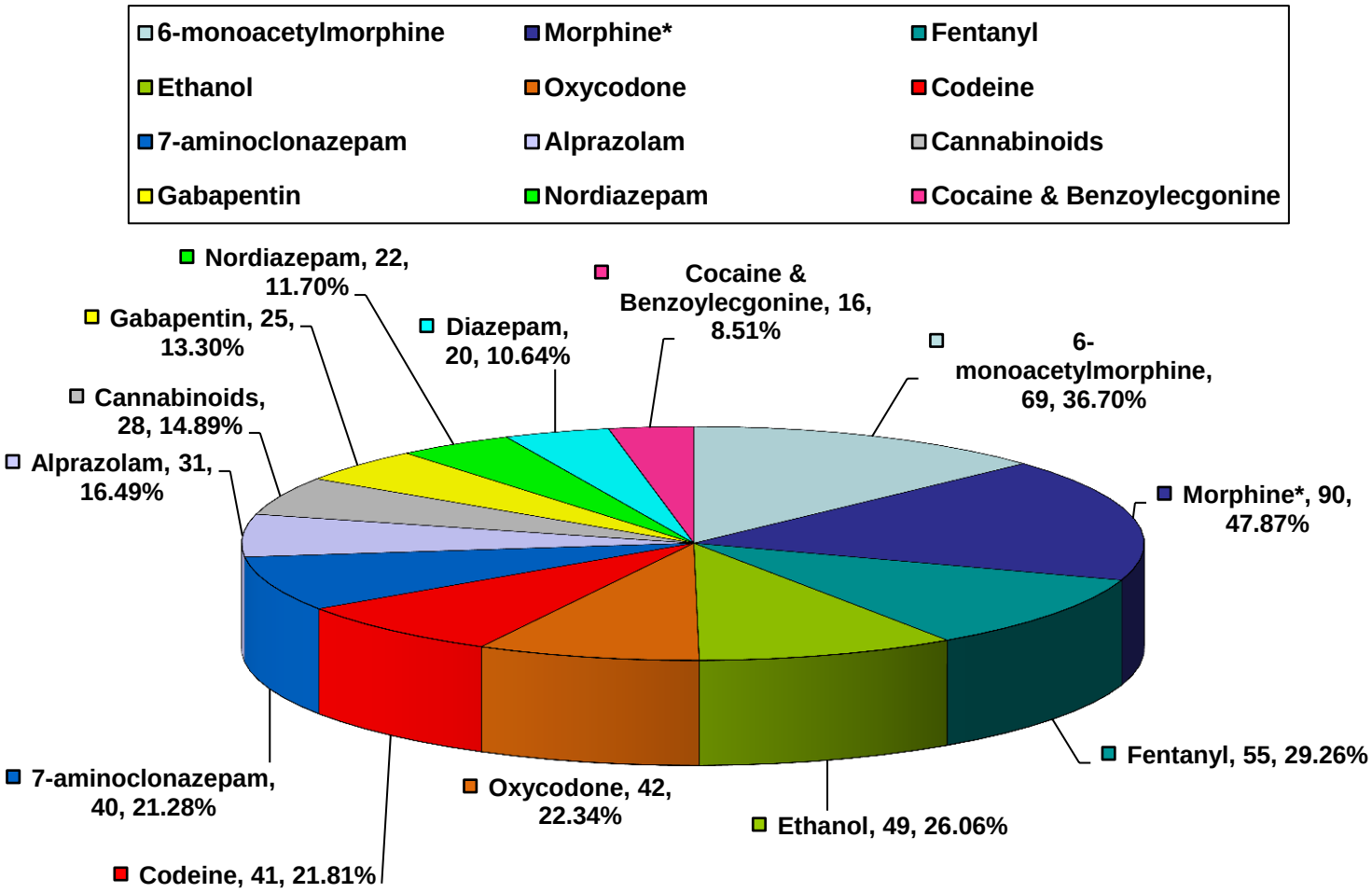
2014 Northern Kentucky Drug Related by Manner of Death

Figure 52

Total = 188



2014 Northern Kentucky Most Frequently Detected Drugs in Drug Related Death Victims
Figure 53
Total = 188



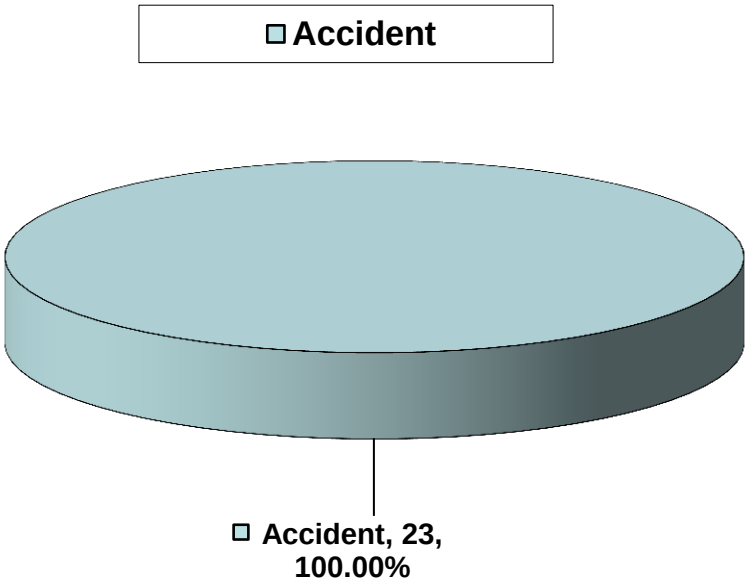
*Morphine represents true drug and/or metabolite of Heroin
^Total Percentages >100% due to more than 1 drug being present in many decedents
¤Detected drugs were found in blood, urine, and/or vitreous fluids.
§This figure delineates only drugs occurring ≥20 other than Cocaine & Benzoylecgonine.

2014 TOP 5 DRUGS IN NORTHERN KY DRUG RELATED DEATHS Table 17		
Drug	Total	Percentage
Morphine*	90	47.87%
6-Monoacetylmorphine	69	36.70%
Fentanyl	55	29.26%
Ethanol	49	26.06%
Oxycodone	42	22.34%

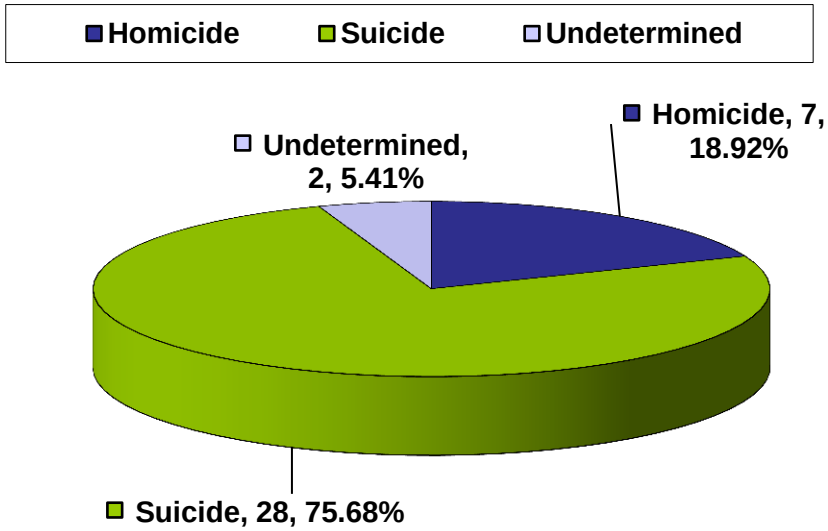
2014 Northern Kentucky Additional Drugs Detected in Drug Related Death Victims Table 18

ACETAMINOPHEN	4	IBUPROFEN	2
ACETONE	2	ISOPROPANOL	1
AMIODARONE	1	LAMOTRIGINE	1
AMITRIPTYLINE	3	LORAZEPAM	4
AMLODIPINE	1	MEPROBAMATE	1
AMPHETAMINE	4	METHADONE	11
ATENOLOL	1	METHAMPHETAMINE	5
BUPRENORPHINE	5	METHOCARBAMOL	1
BUPROPION	1	NICOTINE	1
BUTALBITAL	1	NORBUPRENORPHINE	4
CAFFEINE	16	NORFENTANYL	5
CARISOPRODOL	1	NORFLUOXETINE	1
CHLORDIAZEPOXIDE	2	NORSERTRALINE	1
CHLOROPHENYLPIPERAZINE	1	NORTRAMADOL	2
CHLORPHENIRAMINE	1	NORTRIPTYLINE	3
CITALOPRAM	4	OXAZEPAM	3
CLONAZEPAM	12	OXYMORPHONE	10
DEMOXEPAM	2	PAROXETINE	1
DEXTROMETHORPHAN	3	PROMETHAZINE	3
DIPHENHYDRAMINE	5	PSEUDOEPHEDRINE	1
DOXYLAMINE	1	QUETIAPINE	3
EDDP	3	ROPINIROLE	1
FLUOXETINE	1	SALICYLATES	1
FLUVOXAMINE	1	SERTRALINE	1
FUROSEMIDE	1	TEMAZEPAM	5
GUAIFENESIN	1	TOPIRAMATE	2
HYDROCODONE	10	TRAMADOL	2
HYDROMORPHONE	10	TRAZODONE	1
HYDROXYZINE	1	WARFARIN	1
		ZOLPIDEM	1

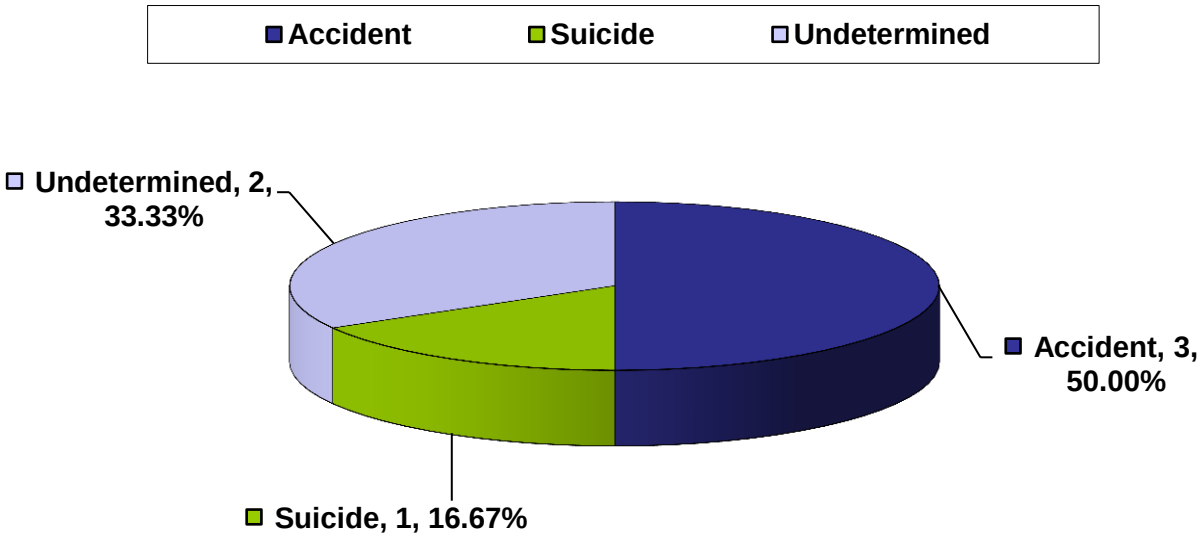
2014 Northern Kentucky MVC by Manner of Death
Figure 54



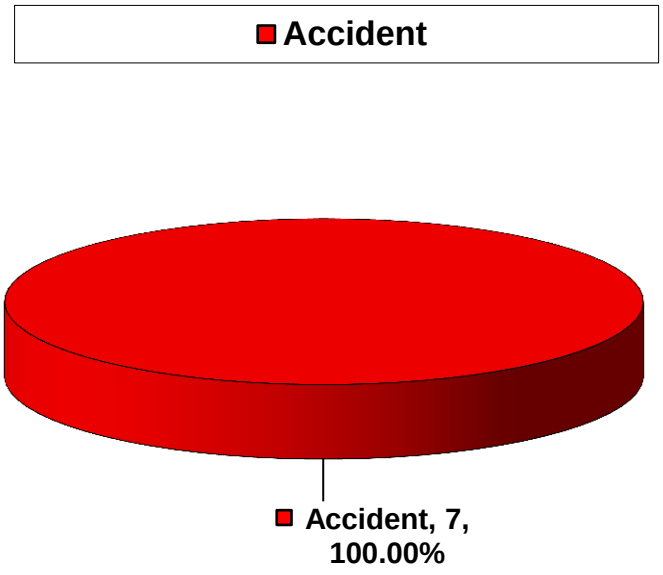
2014 Northern Kentucky GSW by Manner of Death
Figure 55



2014 Northern Kentucky Drowning by Manner of Death
Figure 56



2014 Northern Kentucky Fire by Manner of Death
Figure 57



Additional Information

Additional Data for 2014

Scene Visits at the request of local law enforcement and/or county coroner:
Note: In Kentucky, the scene investigations are conducted by the County Coroners and their deputies who are trained by DOCJT.

The OCME attended four (4) scenes.
The Frankfort Office attended one (1) scene.
The Western Kentucky attended zero (0) scenes.
The Northern Kentucky Office attended zero (0) scenes.

Bodies Transported: Due to the combined Coroner/Medical Examiner system, no regional Medical Examiner Office transports bodies or arranges/orders the transport of bodies. This duty falls under the purview of the county coroner in which the death occurred. Therefore, zero (0) bodies were transported by any regional office.

Hospital Autopsies: Due to the combined Coroner/Medical Examiner system, the Regional Medical Examiner's Offices do not have jurisdiction over hospital deaths and autopsies. There were zero (0) hospital autopsies retained under ME jurisdiction.

Organ and Tissue Donation: KODA had 103 system wide Organ Donors and 307 Tissue Donors in 2014.
Of the 1,199 cases undergoing postmortem examinations by the OCME, 7 were organ, 32 were tissue donations, and 3 were both organ and tissue donations.

Of the 682 cases undergoing postmortem examinations by the Frankfort Office, 7 were organ, 11 were tissue donations, and 2 were both organ and tissue donations.

Of the 172 cases undergoing postmortem examinations by the Western Kentucky Office, 0 were organ, 3 were tissue donation, and 0 were both organ and tissue donations.

Of the 432 cases undergoing postmortem examinations by the Northern Kentucky Office, 0 were organ and tissue donations as KODA does not perform any recoveries at the Northern Kentucky Facility.

Unclaimed Bodies: Due to the combined Coroner/Medical Examiner system, the Regional Medical Examiner's Offices do not have responsibility over unclaimed bodies. This is the duty of the county coroner in which the death occurred. Therefore, there were zero (0) unclaimed bodies in 2014.

Exhumations:

The OCME had zero (0) postmortem examination from an exhumation in 2014.
The Frankfort Office had zero (0) postmortem examination from an exhumation in 2014.
The Western Kentucky Office had zero (0) postmortem examinations from an exhumation in 2014.
The Northern Kentucky Office had zero (0) postmortem examinations from an exhumation in 2014.

Complete Autopsies

The OCME performed 1014 complete autopsies in 2014.
The Frankfort Office performed 546 complete autopsies in 2014.
The Western Kentucky Office performed 158 complete autopsies in 2014.
The Northern Kentucky Office performed 334 complete autopsies in 2014.

Focused Examinations

The OCME performed 108 focused examinations in 2014.
The Frankfort Office performed 97 focused examinations in 2014.
The Western Kentucky Office performed 14 focused examinations in 2014.
The Northern Kentucky Office performed 9 focused examinations in 2014.

External Autopsies

The OCME performed 75 external examinations in 2014. In addition, 2 were examinations of skeletal remains.
The Frankfort Office performed 34 external examinations in 2014. In addition, 5 were examinations of skeletal remains.
The Western Kentucky Office performed 1 external examination in 2014.
The Northern Kentucky Office performed 89 external examinations in 2014.

MEDICAL EXAMINER DISTRICTS

The **Office of the Chief Medical Examiner** in Louisville covers the following **CENTRAL** *counties* in Kentucky and Southern IN:

Adair, Allen, Barren, Breckinridge, Bullitt, Butler, Carroll, Casey, Clinton, Cumberland, Edmonson, Grayson, Green, Hancock, Hardin, Hart, Henry, Jefferson, Larue, Marion, Meade, Metcalfe, Monroe, Nelson, Oldham, Russell, Shelby, Simpson, Spencer, Taylor, Trimble, and Warren.
Southern Indiana counties: Clark, Crawford, Dearborn, Dubois, Floyd, Harrison, Jackson, Jefferson, Ohio, Orange, Perry, Scott, Spencer, Switzerland, Warrick, and Washington.

*Additionally, the OCME provided weekend, holiday, and vacation coverage for the **Western** counties delineated below from Jan 1st-July 31st. From Aug 1st-Dec 31st, the OCME provided full-time coverage for the Western Kentucky counties.

The **WKME in Madisonville** office covers the following **WESTERN** *counties*:

Ballard, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Fulton, Graves, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Muhlenberg, Ohio, Todd, Trigg, Union, and Webster.

The **OACME in Frankfort** office covers the following **EASTERN** *counties*:

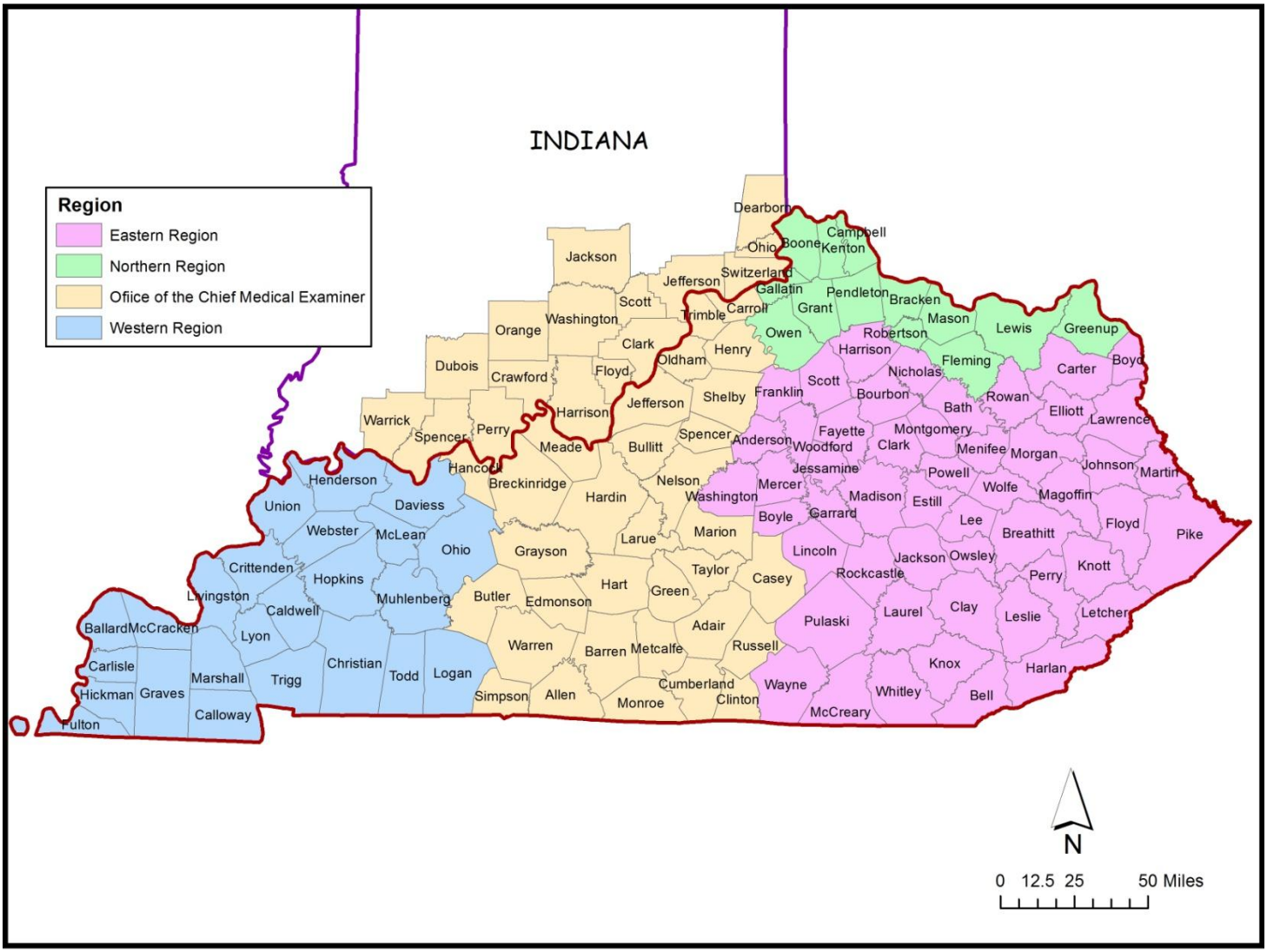
Anderson, Bath, Bell, Bourbon, Boyle, Boyd, Breathitt, Carter, Clark, Clay, Elliott, Estill, Fayette, Floyd, Franklin, Garrard, Harlan, Harrison, Jackson, Jessamine, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lincoln, Madison, Magoffin, Martin, McCreary, Menifee, Mercer, Montgomery, Morgan, Nicholas, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Scott, Washington, Wayne, Whitley, Wolf, and Woodford.

The **NKME in Ft. Thomas** office covers the following **NORTHERN** *counties:*

Boone, Bracken, Campbell, Fleming, Gallatin, Grant, Greenup, Kenton, Lewis, Mason, Owen, Pendleton, and Robertson.

Regional Office Coverage

Figure 58



Office of the Chief Medical Examiner (OCME)

810 Barret Avenue
Louisville, KY 40204
Tel: (502)852-5587
Fax: (502)852-1767

Office of the Associate Chief Medical Examiner (OACME)

Central Laboratory Facility
100 Sower Blvd, STE 202
Frankfort, KY 40601
Tel: (502)564-4545
Fax: (502)564-1699

Northern Kentucky Regional Medical Examiner's Office (NKME)

85 North Grand Avenue
Ft. Thomas, KY 41075
Tel: (859)572-3559
Fax: (859)572-3558

Western Kentucky Regional Medical Examiner's Office (WKME)

25 Brown Badgett Loop
Madisonville, KY 42464
Tel: (270) 824-7048
Fax: (270) 824-7092

Glossary

Accident – The *manner of death* used when, in other than *natural deaths*, there is no evidence of intent. The death occurs as a result of an unforeseen event.

Autopsy – A detailed postmortem external and internal examination of a body to determine cause of death.

Homicide – The *manner of death* in which death results from the intentional harm of one person by another. The medical examiner does not determine whether or not a criminal act has occurred.

Manner of Death – The general category of the condition, circumstances or event, which causes the death. The categories are *natural, accident, homicide, suicide and undetermined.*

Natural – The *manner of death* used when solely a disease causes death. If death is hastened by an injury, the *manner of death* is not considered natural.

Office of the Medical Examiner - the Office of the Medical Examiner investigates deaths occurring in the state of Kentucky, as authorized by Kentucky's elected coroners. The staff assists Kentucky coroners and law enforcement agencies in all aspects of death investigations by determining the cause and manner of death, identification of the deceased, and collection and interpretation of trace evidence.

Suicide – The *manner of death* in which death results from intentional act by one's self.

Unclassified – Are cases in which Medical Examiner involvement was for purposes other than for determining the *cause and manner* of death—e.g. tissue where no products of conception were identified; exhumation for DNA sampling only.

Undetermined – The *manner of death* for deaths in which there is no clear determination of one manner over another.

Insufficient Information Provided – An opinion regarding the manner of death could not be determined due to insufficient information provided to the prosecting Medical Examiner.