



2024

**Annual Report
Office of the
Chief Medical Examiner**

State of Maryland

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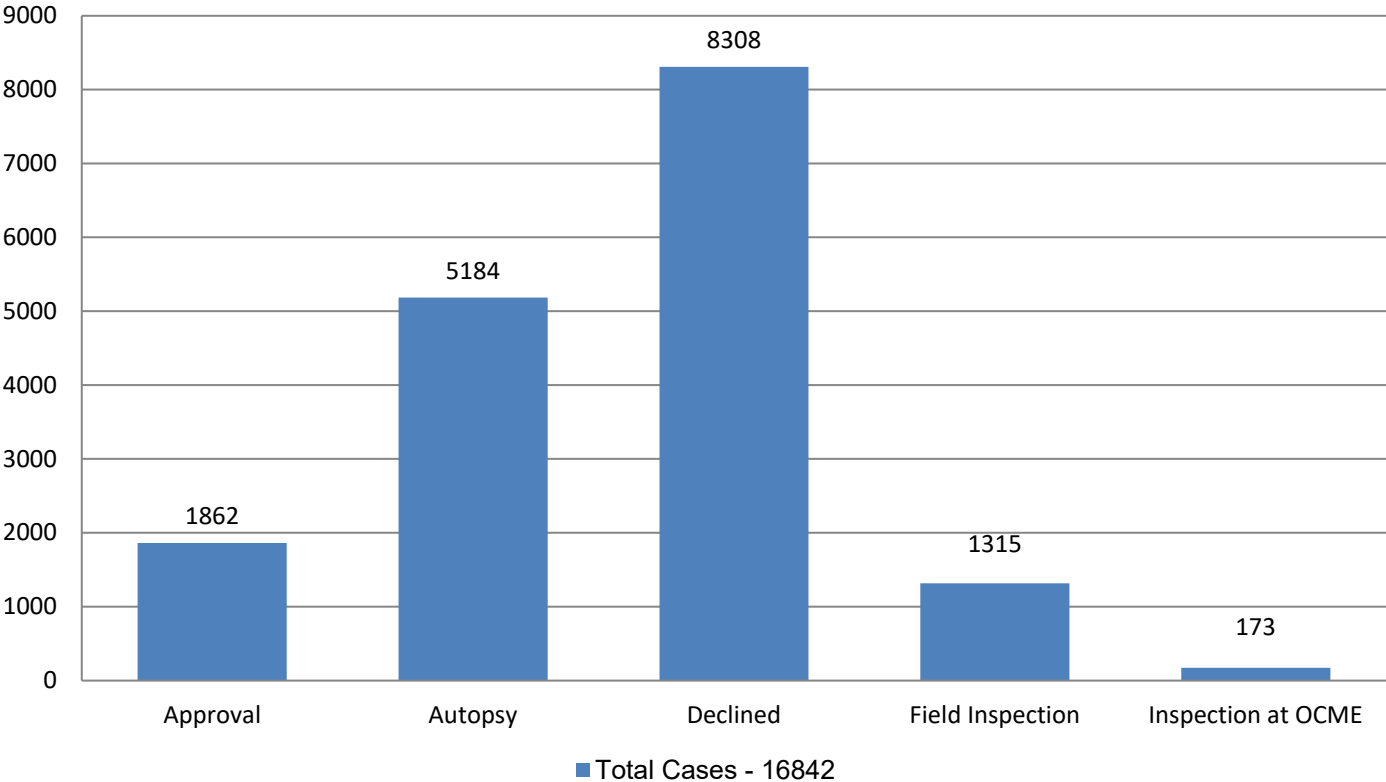
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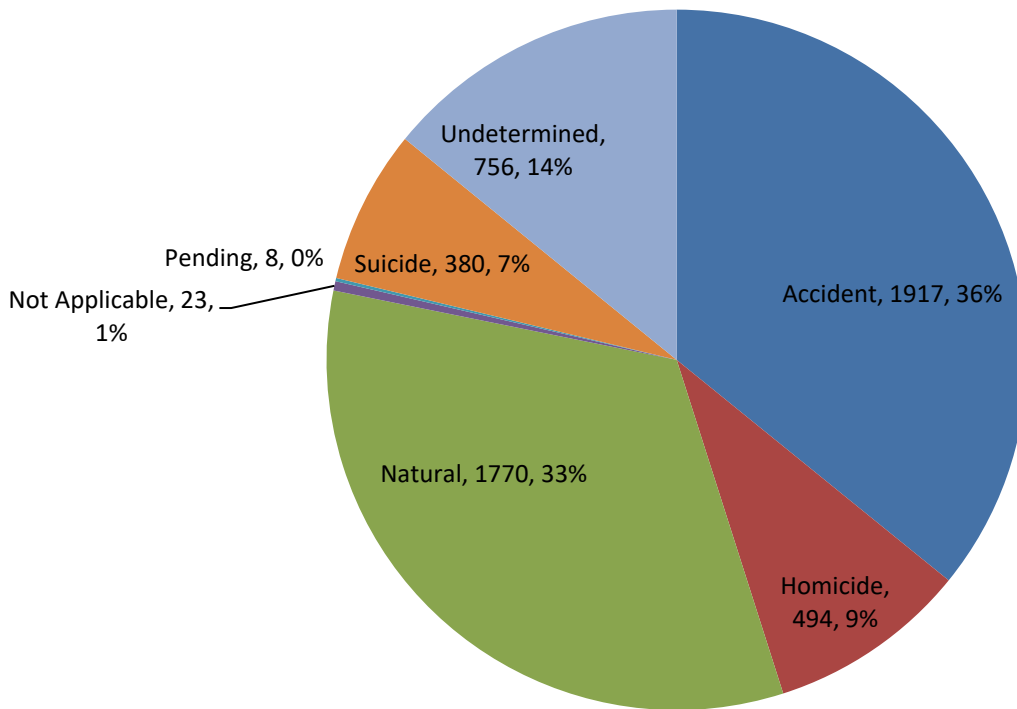
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2024 Cases Reported to OCME - Action Taken



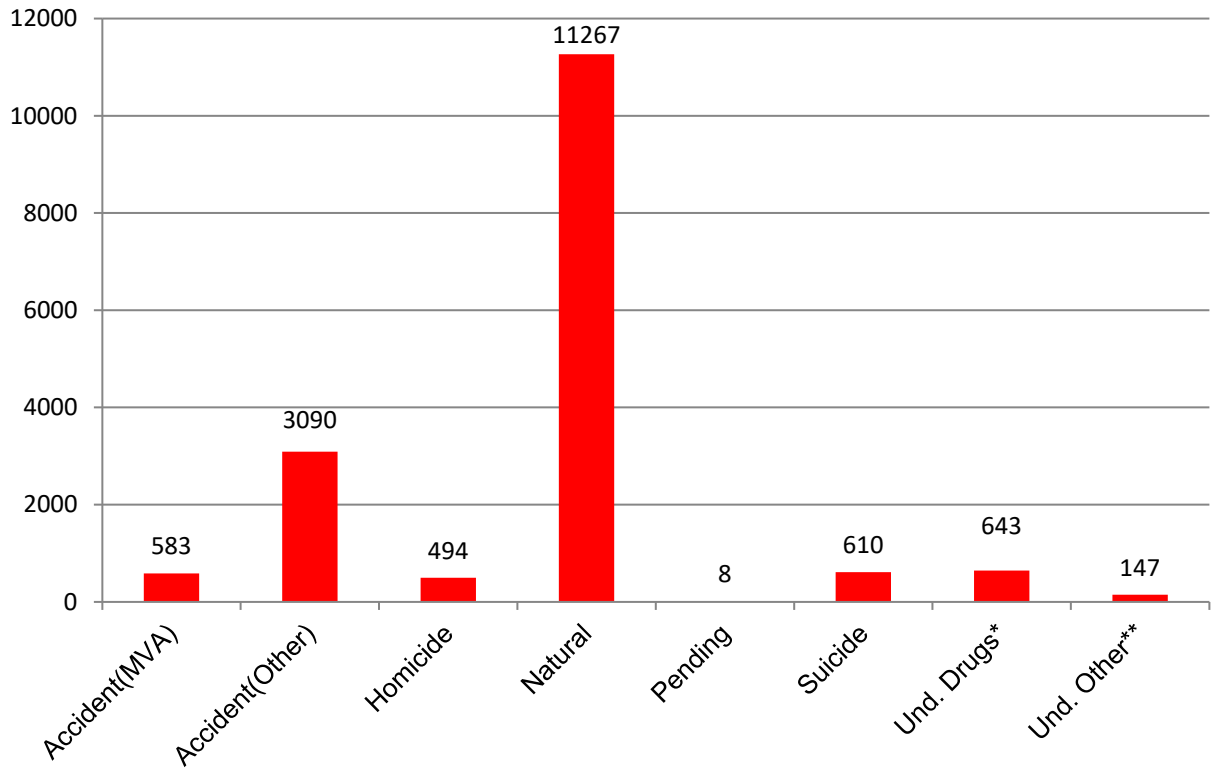
2024 Medical Examiner Cases Autopsied*



Total Cases Autopsied - 5348

*23 cases were classified as "not applicable" (e.g. stillborn & non-human remains).

2024 Cases Reported to OCME Manner of Death



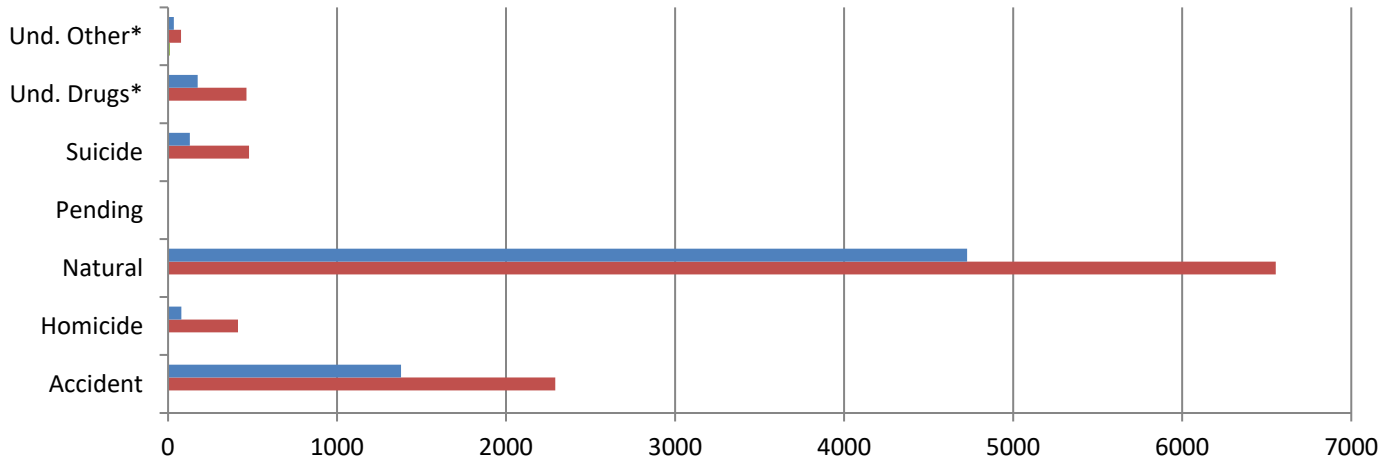
Total Cases – 16842

*Undetermined Manner: Drugs/Narcotics

** Undetermined Manner: Other

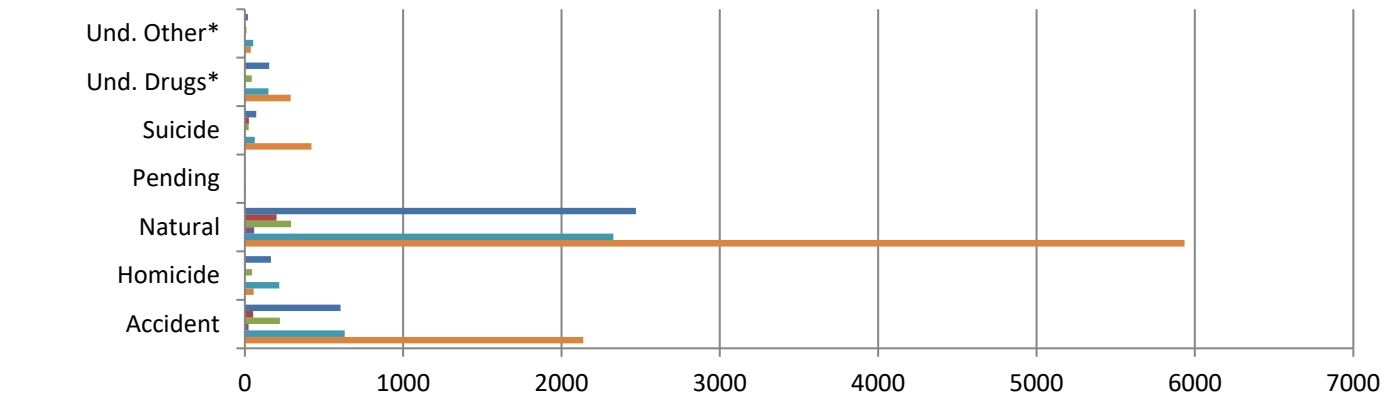
2024 Manner of Death

Classified by Sex



	Accident	Homicide	Natural	Pending	Suicide	Und. Drugs*	Und. Other*
Female	1379	79	4728	1	129	176	35
Male	2291	414	6554	5	479	464	77
Unknown	3	2	4	5	2	3	12

Classified by Race



	Accident	Homicide	Natural	Pending	Suicide	Und. Drugs*	Und. Other*
African American	605	165	2470	2	72	154	20
Asian	53	8	201		26	2	2
Hispanic	222	46	293		25	44	11
Other	24	2	59		3	4	
Unknown	631	218	2328	6	63	149	53
White	2138	56	5935	3	421	290	38

*Undetermined Manner: Drugs/Narcotics

** Undetermined Manner: Other

Manner of Death

Cause of Death	Accident	Homicide	Natural	Not Applicable	Suicide	Undetermined	Pending	Total
Asphyxiation	122	7	1		99	16		245
Airway obstruction/Aspirated stomach content	3		1			1		5
Drowning	86	1			16	13		116
Hanging					56			56
Smoke inhalation	9							9
Strangulation/Asphyxiation	24	6			27	2		59
Chemical/Drug/Alcohol Intoxication/Abuse/Use	980	2	148		55	627		1812
Alcohol abuse/use	20		106		1			127
Alcohol and drug intoxication/use	7		2		2	2		13
Alcohol intoxication/use	18		11			3		32
Carbon monoxide	2				4	5		11
Cocaine and alcohol intoxication/use	5					6		11
Cocaine intoxication/use	76		11		2	36		125
Drug intoxication/abuse/use	45	1	11		28	29		114
Narcotic and alcohol intoxication/use	110				2	67		179
Narcotic intoxication/use	697	1	7		16	479		1200
Circulatory system	34	3	1338			6		1381
Aneurysm			6					6
Cardiac arrhythmia	2	1	64					67
Cardiomyopathy			13					13
Cardiovascular disease	17	1	920			2		940
Cerebrovascular disease	1		46			3		50
Hemorrhage	3		2					5
Other cardiac	6		234			1		241
Pulmonary embolism	5	1	53					59
Congenital / Perinatal			4	7		42		53
Congenital/Perinatal			4	7		1		12
Sudden Unexplained Death in Infancy (SUDI)						41		41
Digestive system disease	3		32					35
Cirrhosis	1		5					6
Gastrointestinal hemorrhage	2		20					22
Other digestive			7					7
Electrocution	3				1			4
Endocrine and metabolic disease	2		64					66
Diabetes	2		57					59
Other Endocrine and metabolic			7					7
Hyperthermia	21							21
Hypothermia	66				1	5		72
Infectious disease			15			1		16
Other infectious disease			10			1		11
COVID-19			5					5
Malignant neoplasms (Cancer)	1		35			1		37
Malignant neoplasms (Cancer)	1		35			1		37
Nervous system disease	1	1	25			4		31
Other CNS			3			2		5
Seizure disorder	1	1	22			2		26

Manner of Death

Cause of Death	Accident	Homicide	Natural	Not Applicable	Suicide	Undetermined	Pending	Total
Other natural cause			43					43
Other non-natural cause	10	6		10	4		8	38
Respiratory system	2		65					67
Asthma			9					9
Chronic obstructive pulmonary disease			7					7
Other respiratory			9					9
Pneumonia			40					40
Anaphylaxis	2							2
Thermal Injuries (Burns)	37	1			1	1		40
Traumatic injury	635	474			219	21		1349
Blunt force	184	23			15	5		227
Fracture	9	1				1		11
Gunshot wound	5	376			151	3		535
Head/Chest injuries	60	3			1	3		67
Multiple injuries	368	21			32	8		429
Other trauma	8	1			1			10
Sharp force/cutting	1	49			19	1		70
Unknown cause						32		32
Non-human remains				6				6
Grand Total	1917	494	1770	23	380	756	8	5348

Manner of Death - 3 Year Comparison

Medical Examiner Cases: Manner of Death, Maryland 2024

Manner of Death	Number	%
Accident	3663	21.7%
Homicide	494	2.9%
Natural	11193	66.5%
Pending	8	0.0%
Suicide	610	3.6%
Undetermined	874	5.2%
Total	16842	100%

Medical Examiner Cases: Manner of Death, Maryland 2023

Manner of Death	Number	%
Accident	3905	23.9%
Homicide	567	3.5%
Natural	10096	61.9%
Suicide	592	3.6%
Undetermined	1150	7.1%
Total	16310	100.0%

Medical Examiner Cases: Manner of Death, Maryland 2022

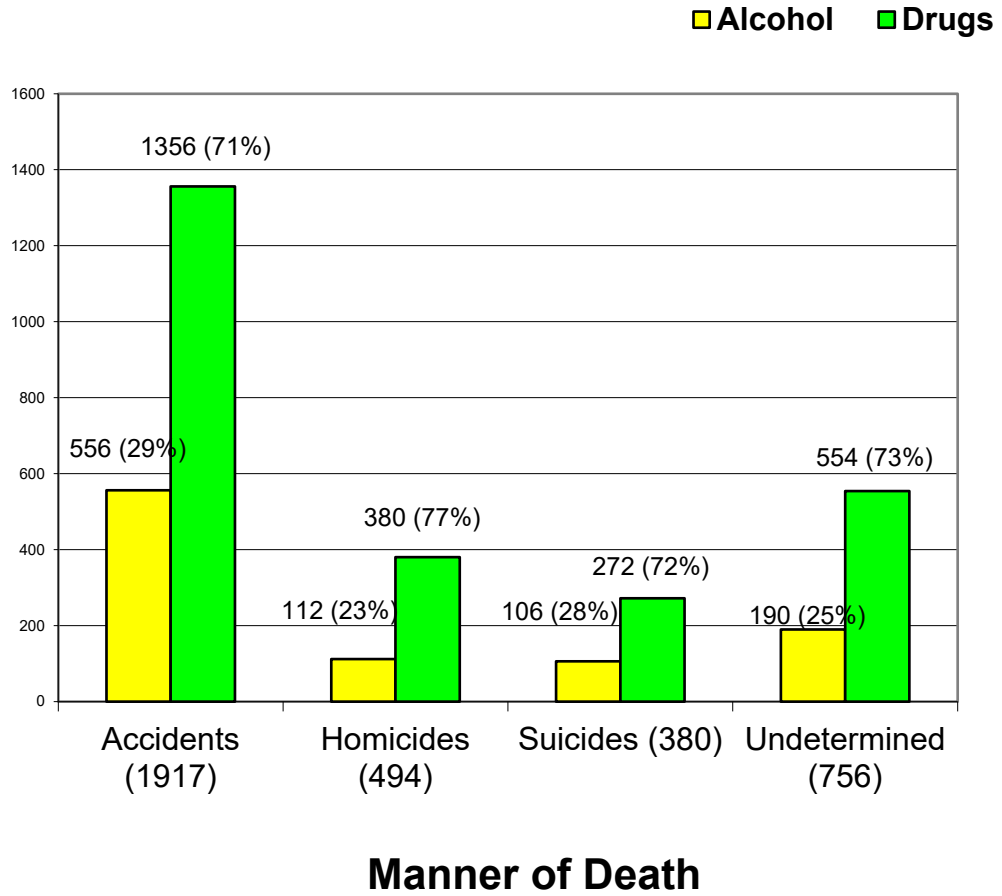
Manner of Death	Number	%
Accident	3484	20.3%
Homicide	620	3.6%
Natural	11074	64.4%
Pending	2	0.0%
Suicide	592	3.4%
Undetermined	1425	8.3%
Total	17197	100.0%

2024 Manner of Death by County

2024 - Manner	Accident	Homicide	Natural	Suicide	Undetermined	Pending	Total
Allegany	42	5	37	9	17		110
Anne Arundel	141	11	141	46	50		389
Baltimore City	624	233	400	56	318	5	1636
Baltimore County	205	26	188	47	88	2	556
Calvert	26	2	31	9	8		76
Caroline	12		10	3	3		28
Carroll	28	4	29	12	7		80
Cecil	50	6	40	5	21		122
Charles	51	7	37	12	18		125
Dorchester	14	1	14	5	5		39
Frederick	47	6	32	11	13		109
Garrett	8	1	14	5	1		29
Harford	60	8	59	11	14		152
Howard	54	10	77	14	22		177
Kent	2		8	1			11
Montgomery	133	26	213	46	40	1	459
Prince George's	230	124	266	45	81		746
Queen Anne's	13	2	6	6	2		29
Saint Mary's	24	2	21	9	14		70
Somerset	11	2	9	1	6		29
Talbot	14		11	5	1		31
Washington	60	7	59	11	23		160
Wicomico	45	10	44	4	22		125
Worcester	23	1	24	7	5		60
Grand Total	1917	494	1770	380	779	8	5348
2024 - Case Type	Autopsy	OCME Insp.	Total	County	Autopsy	OCME Insp.	Total
Allegany	107	3	110	Washington	156	4	160
Anne Arundel	379	10	389	Wicomico	123	2	125
Baltimore City	1594	42	1636	Worcester	59	1	60
Baltimore County	529	27	556	Grand Total	5176	172	5348
Calvert	72	4	76				
Caroline	25	3	28				
Carroll	77	3	80				
Cecil	118	4	122				
Charles	116	9	125				
Dorchester	37	2	39				
Frederick	106	3	109				
Garrett	25	4	29				
Harford	144	8	152				
Howard	172	5	177				
Kent	11		11				
Montgomery	439	20	459				
Prince George's	733	13	746				
Queen Anne's	29		29				
Saint Mary's	65	5	70				
Somerset	29		29				
Talbot	31		31				

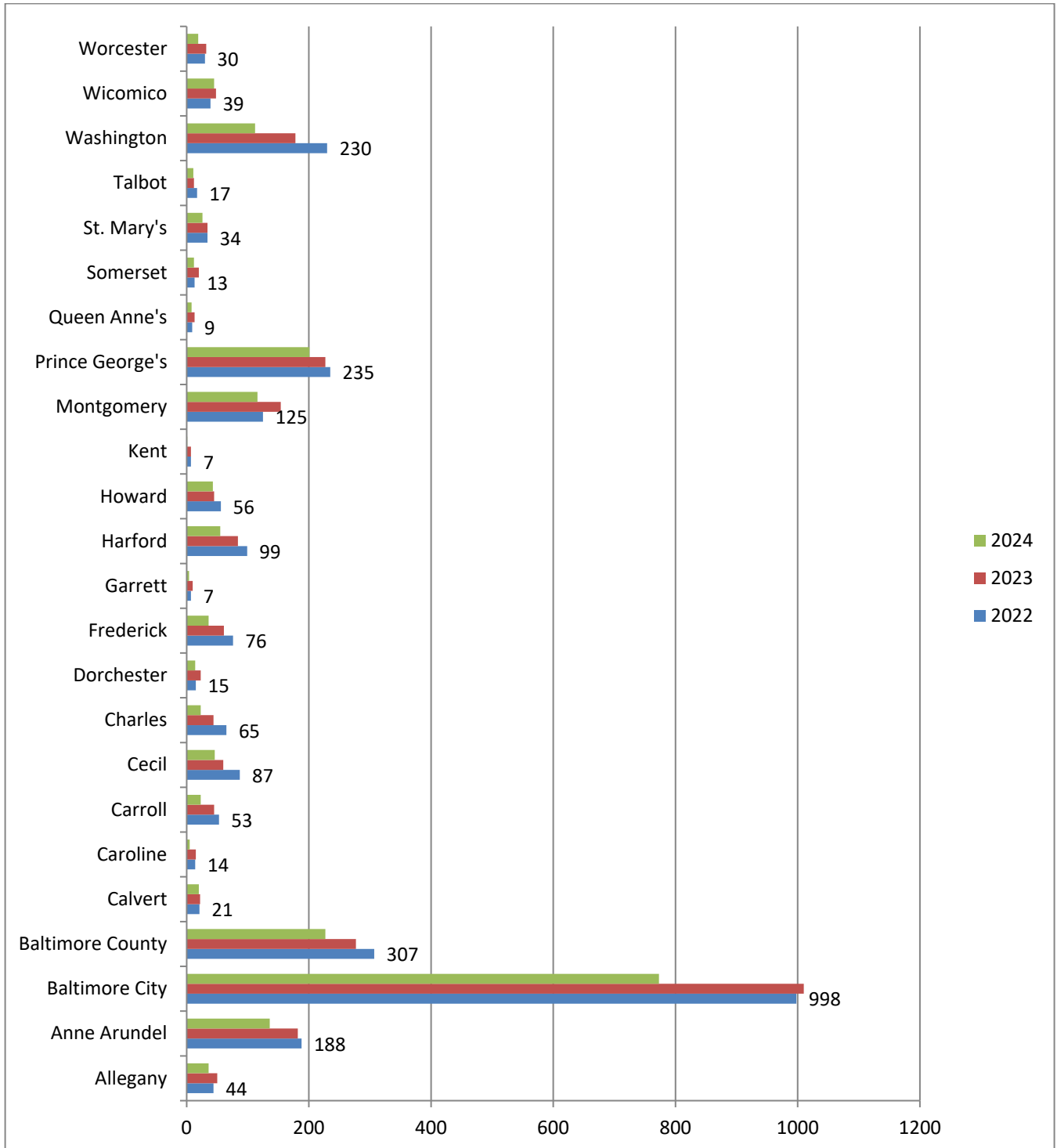
2024 Toxicology Testing

of Cases Positive for Alcohol and/or Drugs (Percentage of the Manner of Death)

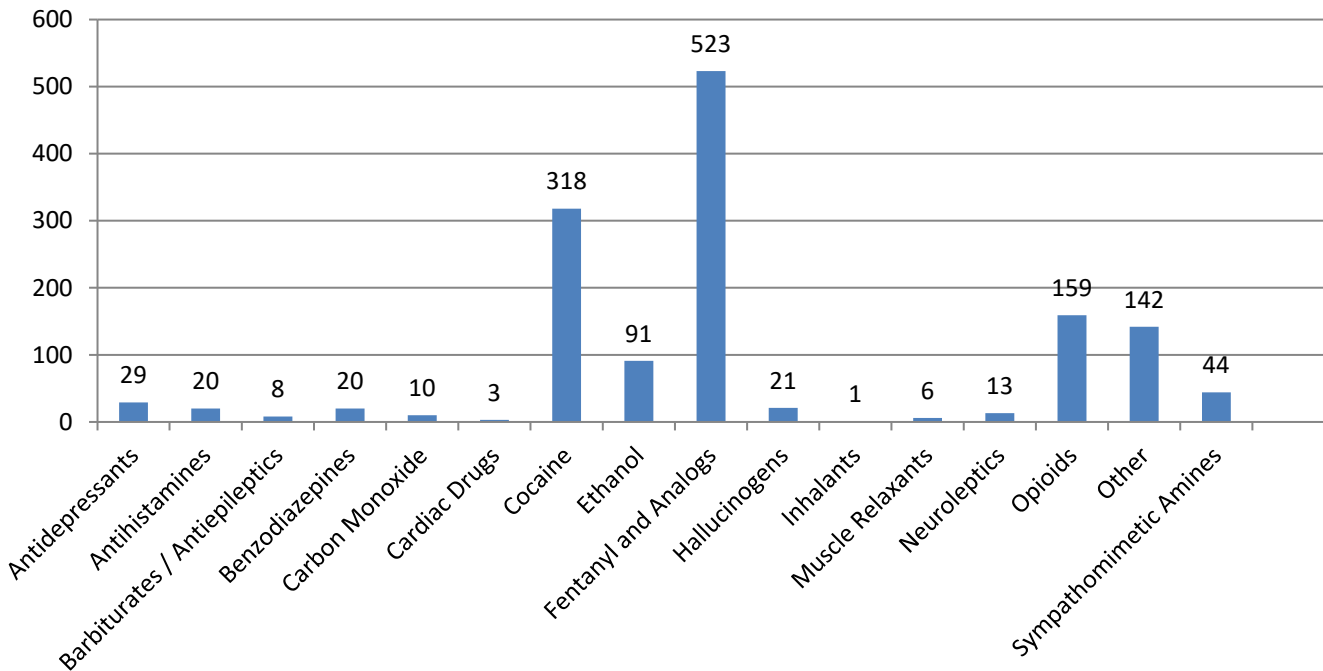


Drug Deaths

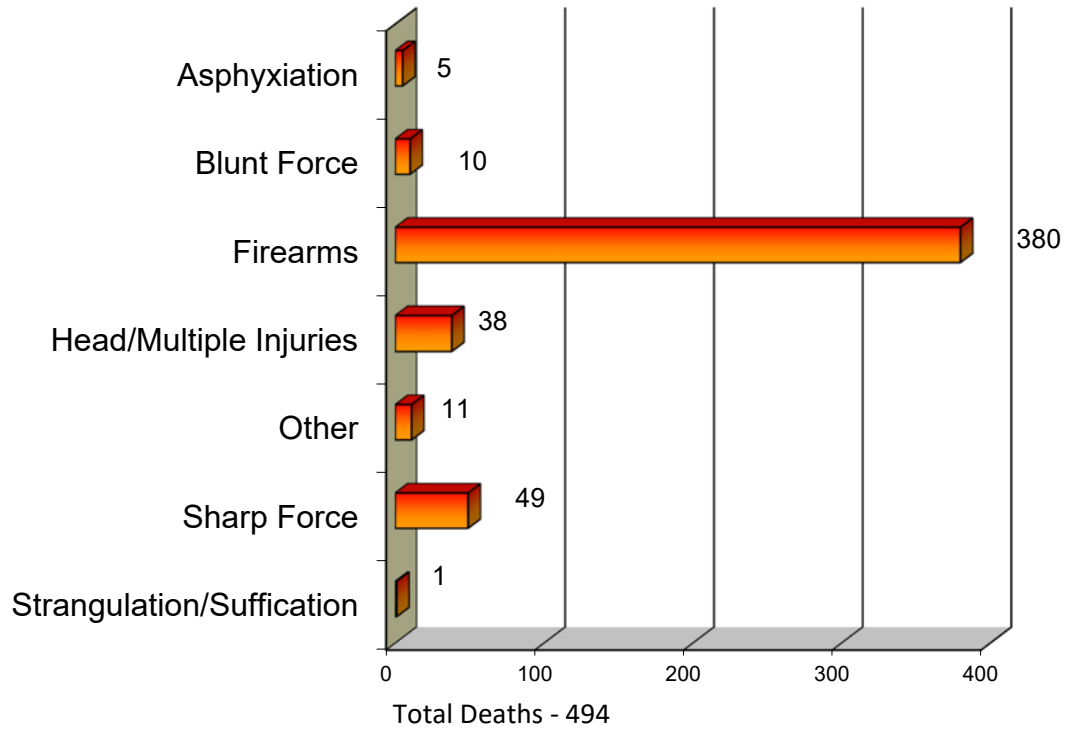
3 Year Comparison by Jurisdiction 2022-2024



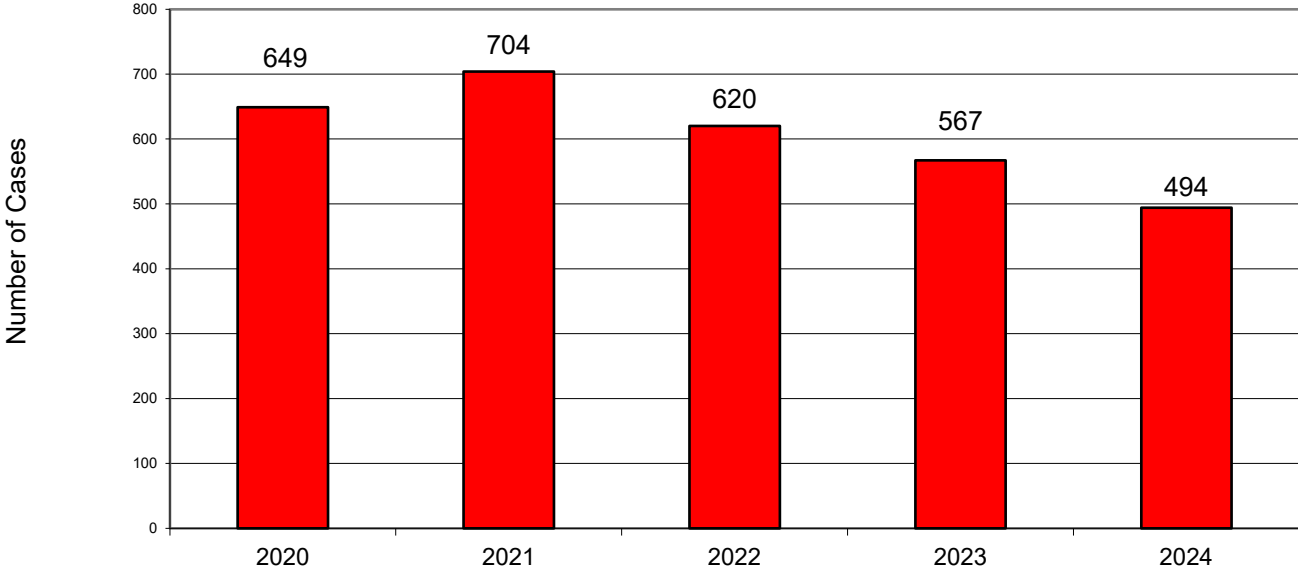
2024 Drug Deaths Undetermined Manner



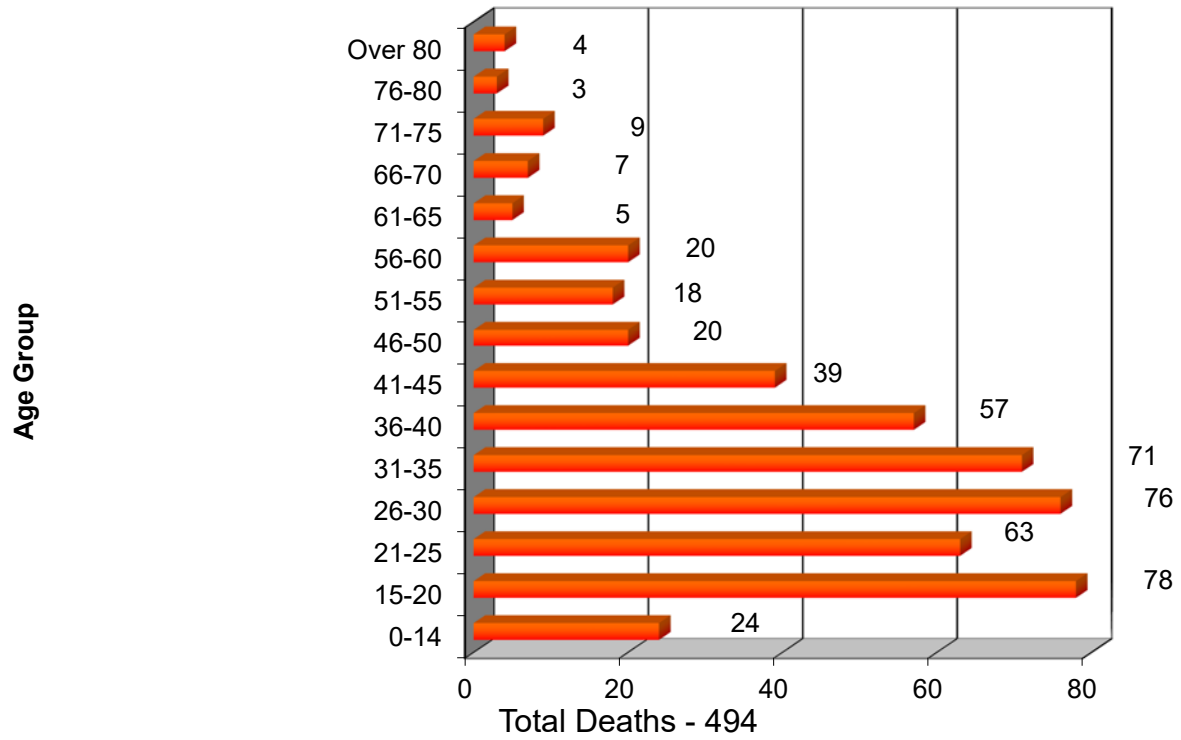
2024 Homicide Deaths Cause of Death



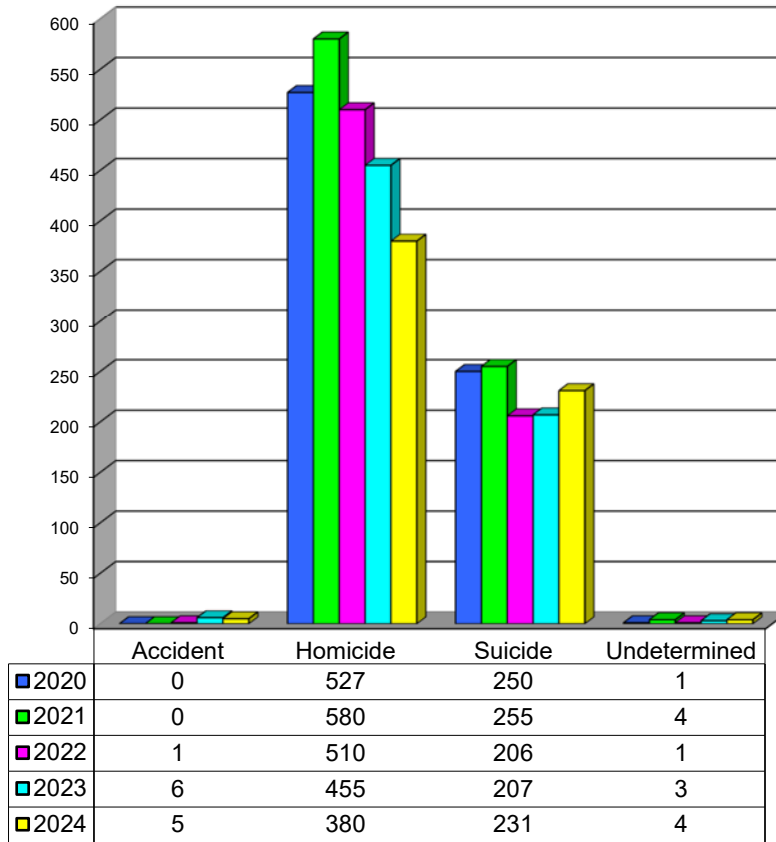
**Homicides
5 Year Comparison
2020 - 2024**



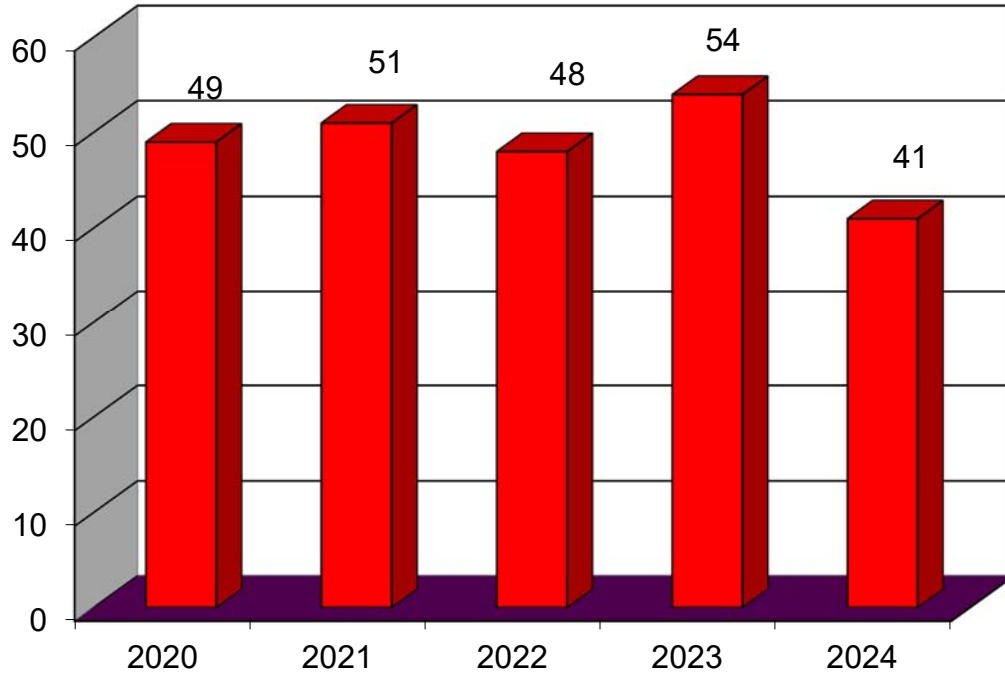
2024 Homicide Deaths by Age



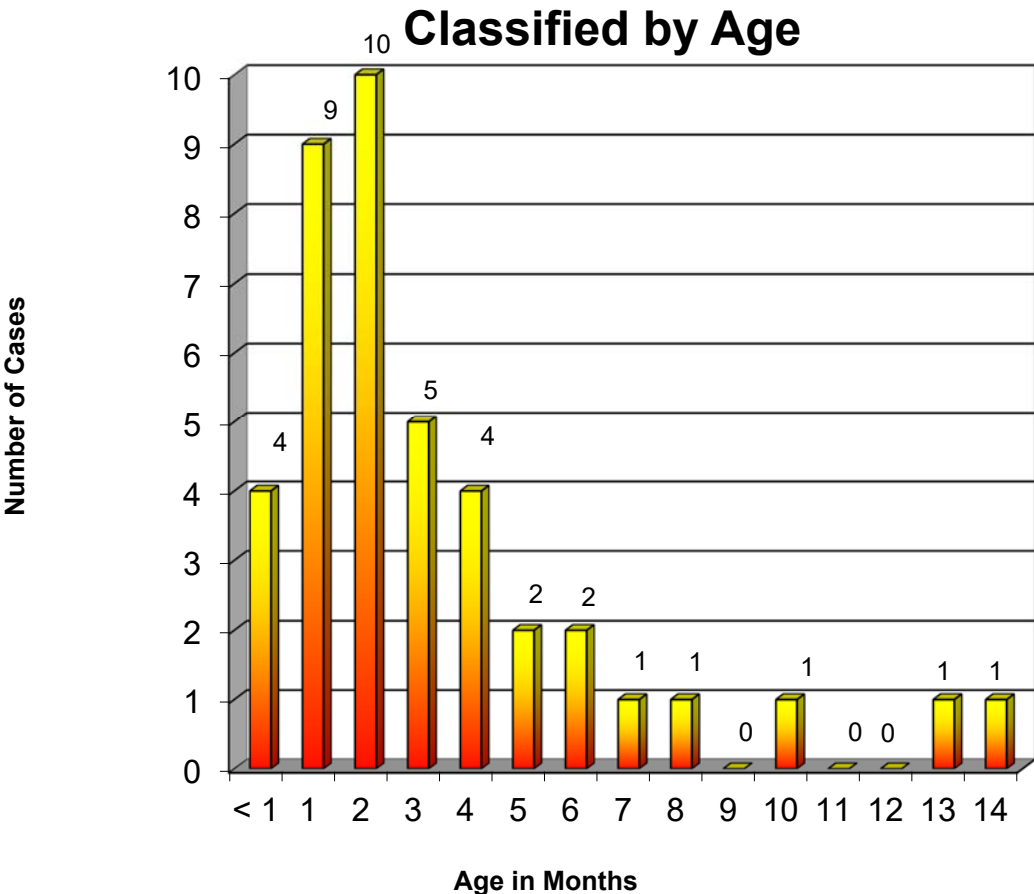
Firearm Deaths 2020 - 2024



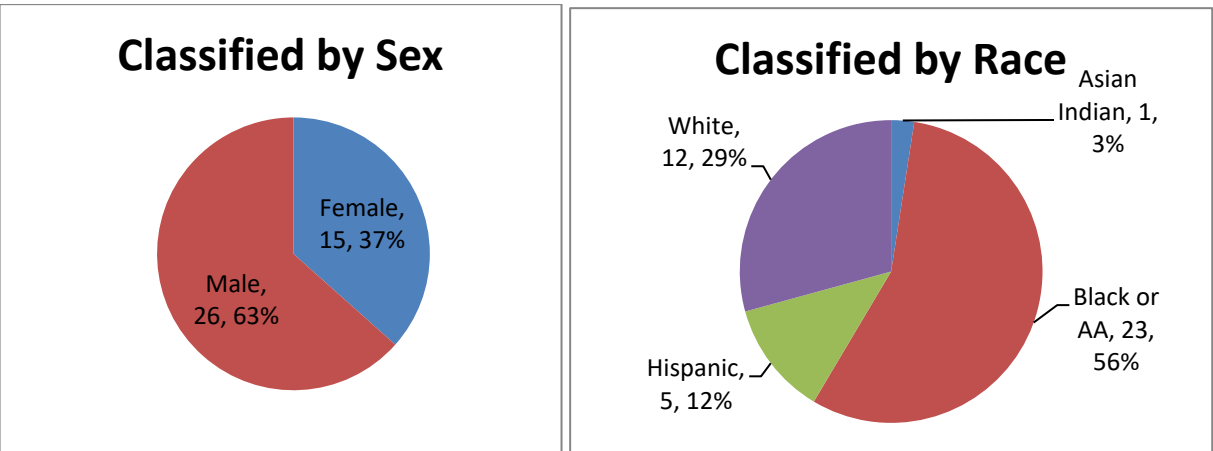
SUDI Deaths 2020 - 2024 Comparison



Sudden Unexplained Death in Infancy – 2024



*These charts are based on SUDI in COD, some ages greater than 12 months due to premature birth.



Total of 41 Deaths

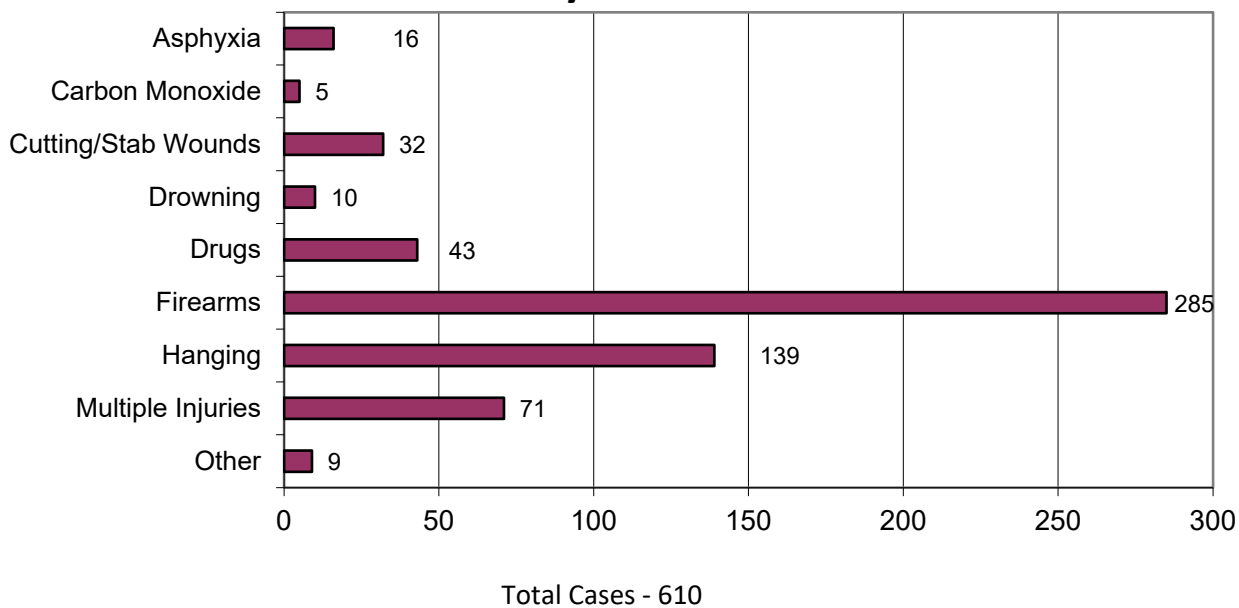
Infant Deaths (age live birth to one year)*

Manner of Death

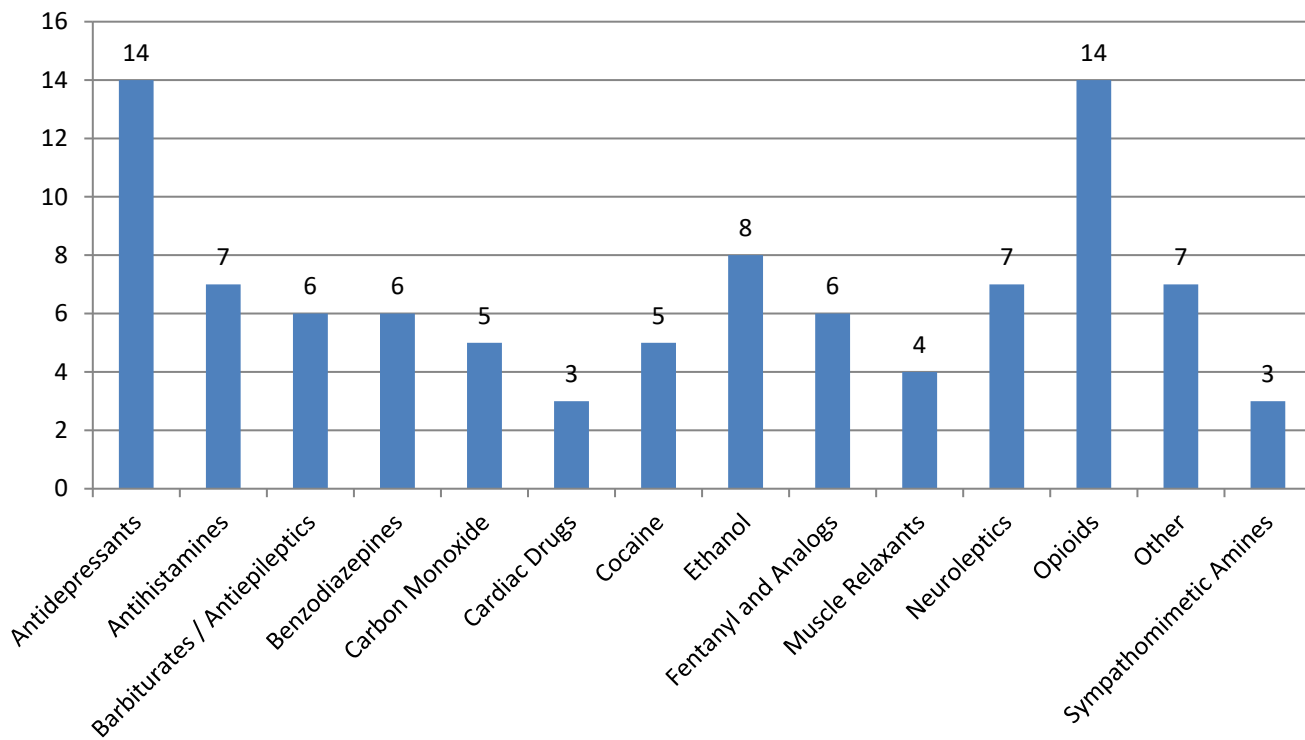
Cause of Death	Accident	Homicide	Natural	Pending	Undeter- mined	Total
Asphyxiation	8	1				9
Drowning		1				1
Strangulation/Asphyxiation	8					8
Chemical/Drug/Alcohol Intoxication/Abuse/Use	1	1				2
Drug intoxication/abuse/use	1	1				2
Circulatory system			4		1	5
Cardiomyopathy			1			1
Cerebrovascular disease					1	1
Other cardiac			3			3
Congenital / Perinatal			1		41	42
Congenital/Perinatal			1			1
Sudden Unexplained Death in Infancy (SUDI)					41	41
Hypothermia	1					1
Hypothermia	1					1
Other natural cause			1			1
Other non-natural cause				1		1
Respiratory system			2			2
Other respiratory			1			1
Pneumonia			1			1
Traumatic injury		4				4
Blunt force		3				3
Head/Chest injuries		1				1
Grand Total	10	6	8	1	42	67

*Some ages are greater than 12 months due to premature birth.

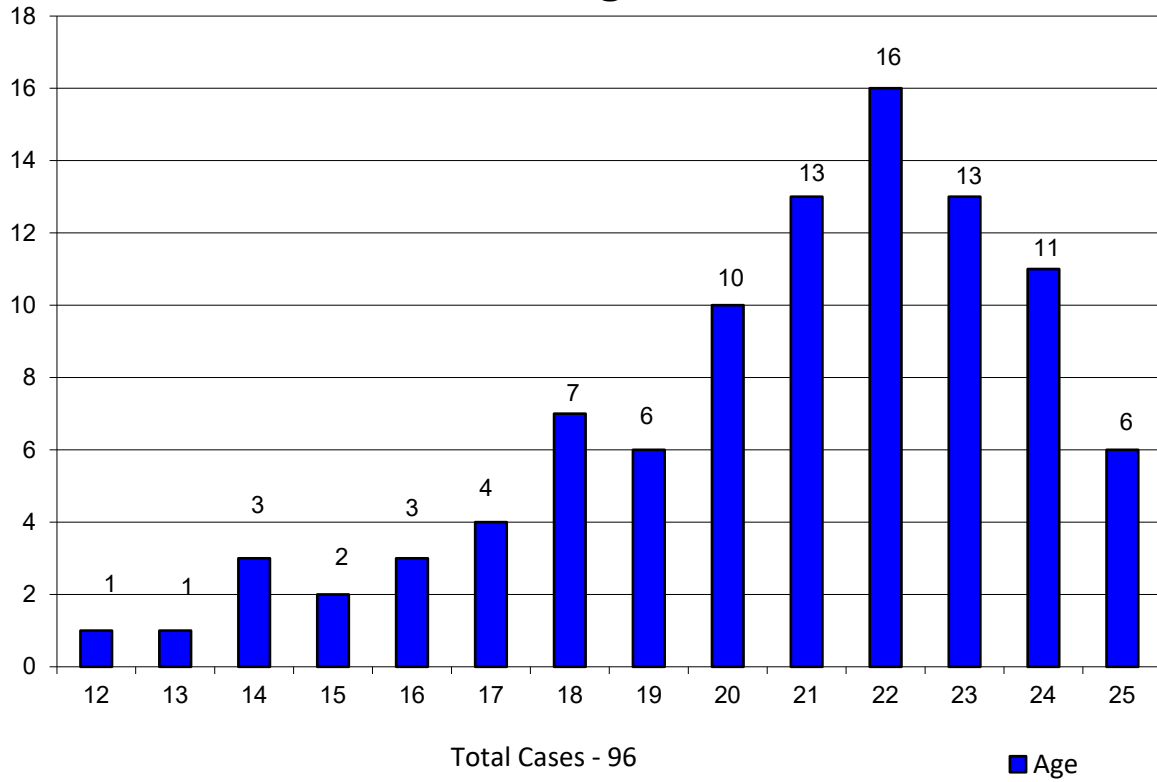
2024 Suicide Deaths Classified by Cause of Death



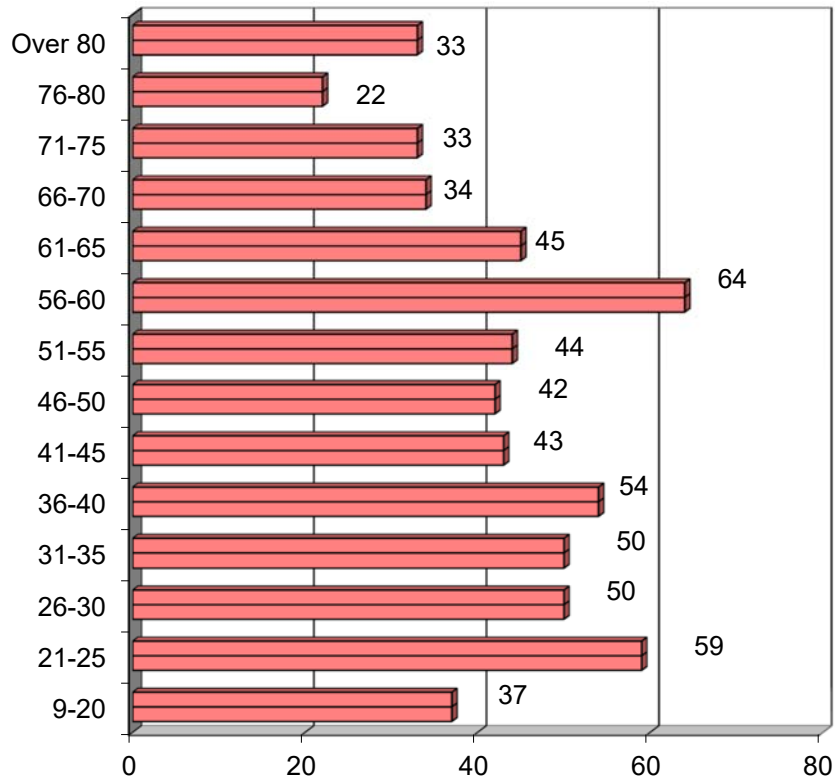
By Drug Classification



2024 Youth Suicides 25 Years of Age and Under

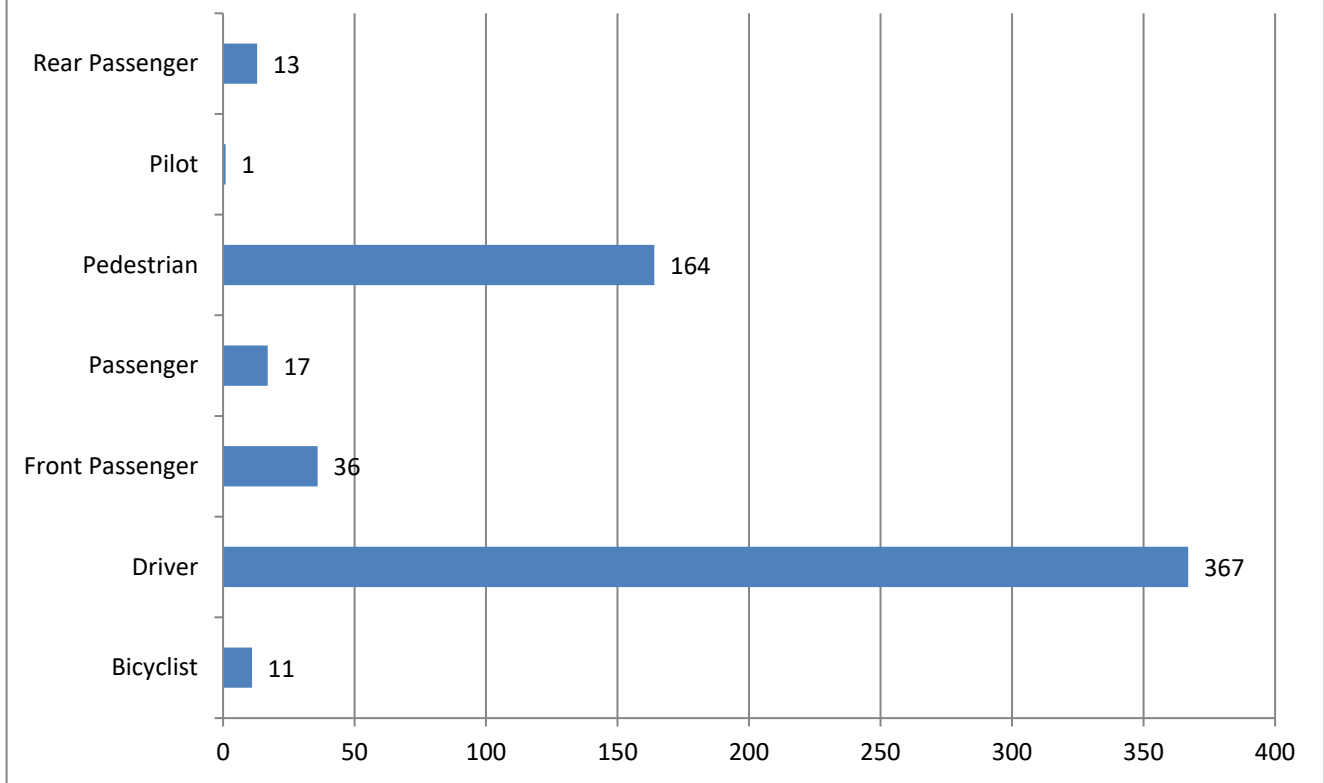


2024 Suicide Deaths by Age



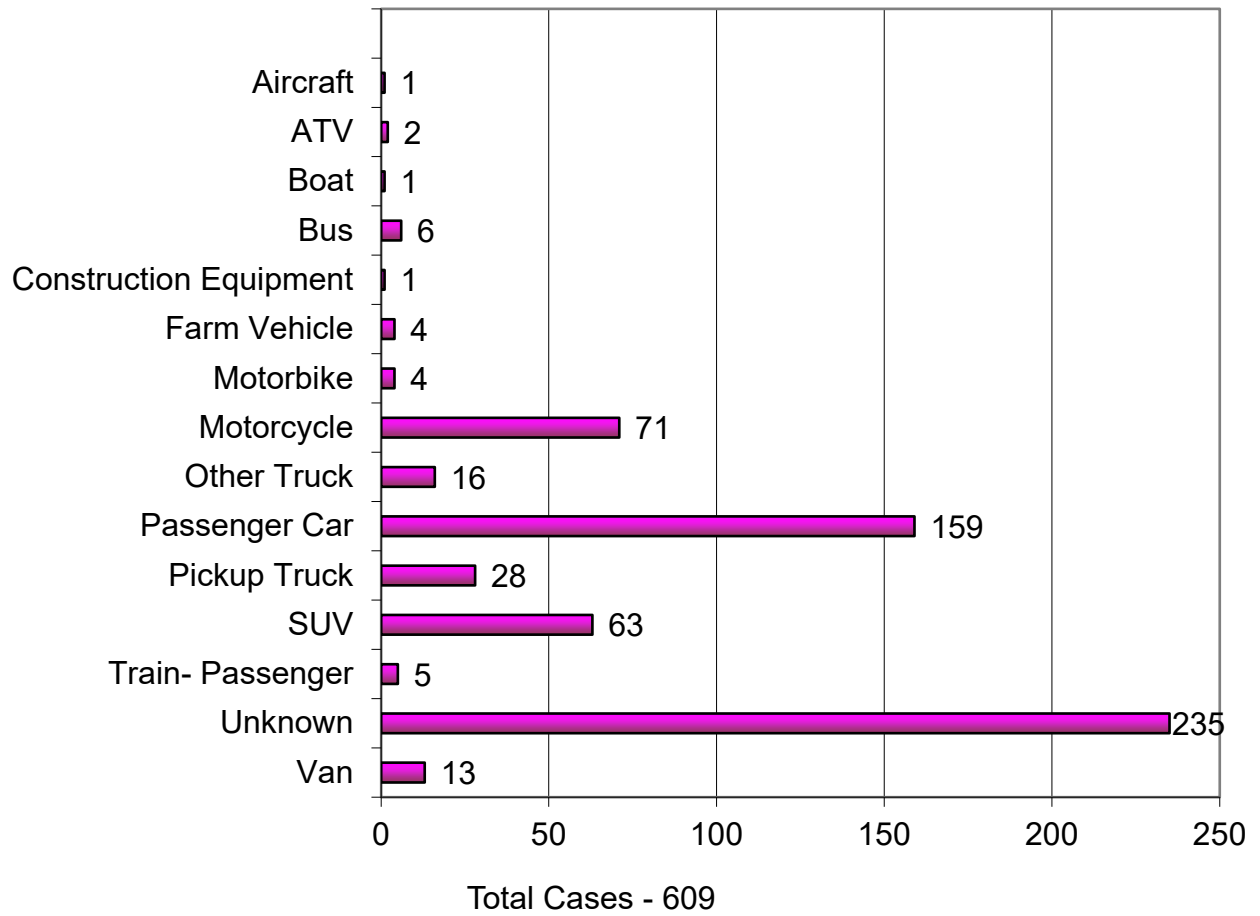
Total Deaths - 610

2024 Transportation Accidents Classified by Activity

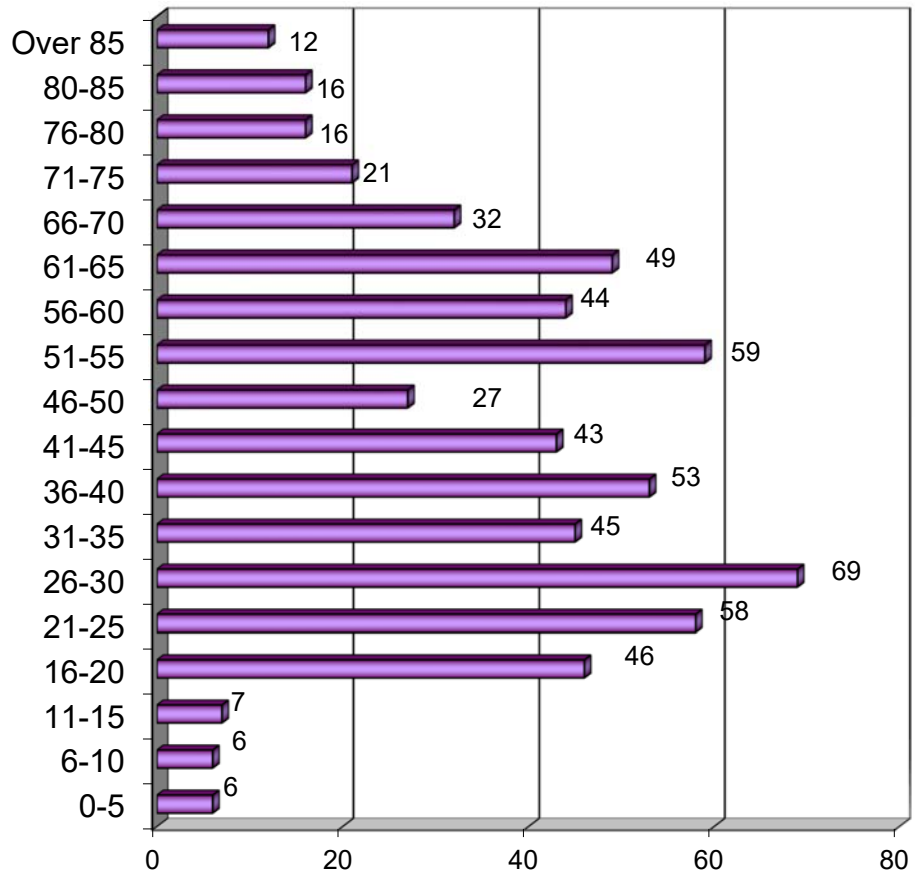


Total Cases – 609

2024 Transportation Deaths Type of Vehicle

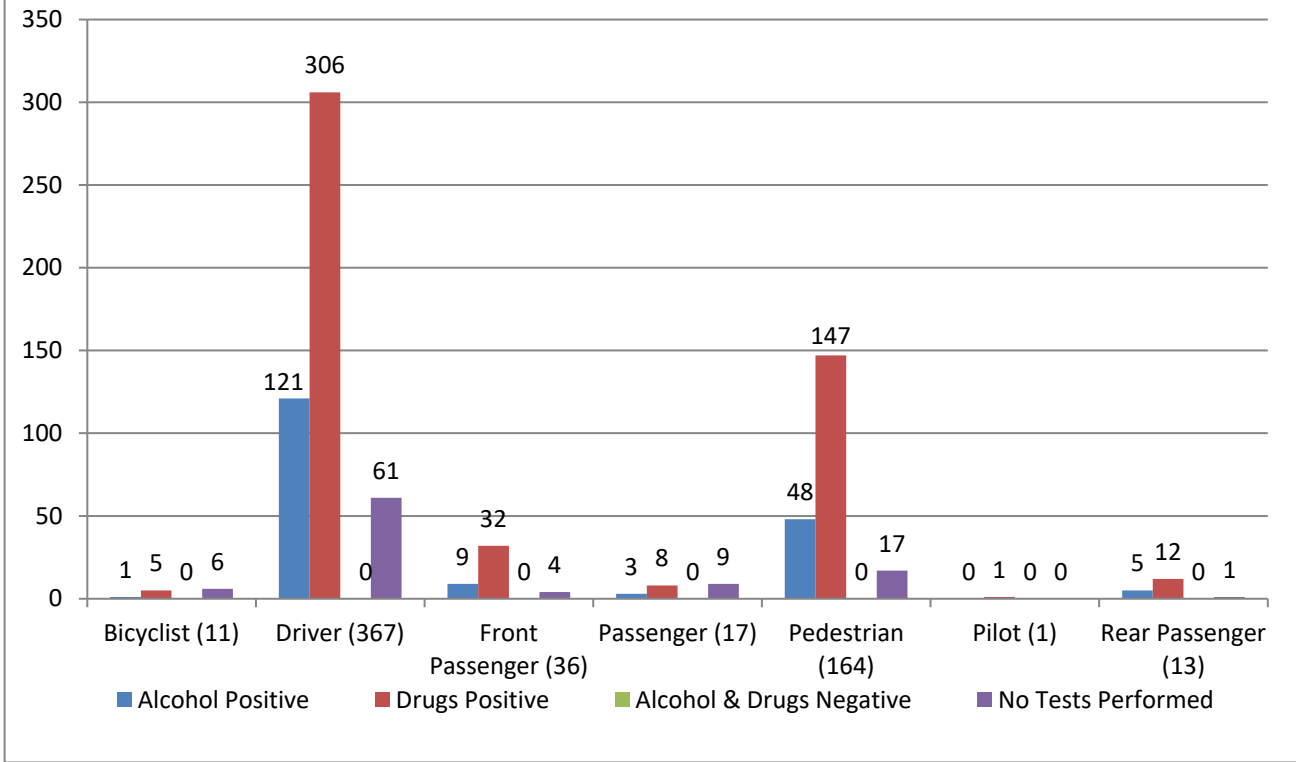


2024 Transportation Deaths by Age



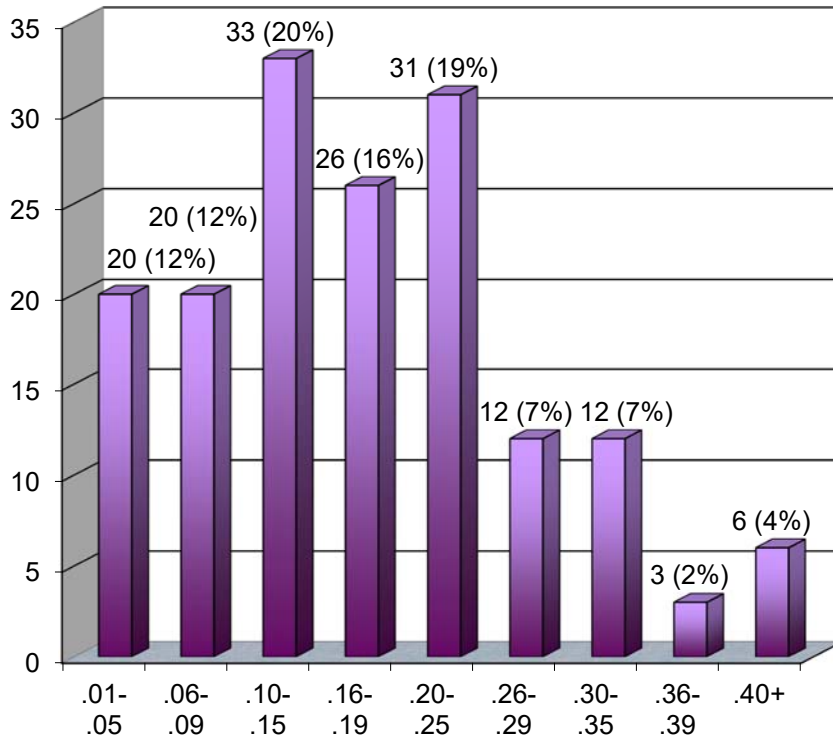
Total Cases - 609

2024 Transportation Accidents Alcohol/Drug Results



The alcohol and drug tests are not mutually exclusive, so the numbers in parentheses may not add up to the numbers on the bar graphs. For example, a bicyclist may be positive for both alcohol and drugs.

**2024 Transportation Deaths
Blood Alcohol Concentration in 163 Cases
32%* Tested Positive**



609 Transportation Deaths
348 Negative for Alcohol
98 No Testing Performed

*Percent based on total cases tested for alcohol

ADDENDUM

Miscellaneous Data

1. Number of Autopsies	4311
Number of Partial Autopsies	820
Number of CT Autopsies	45
2. Organ donations	98
3. Unclaimed bodies released to State Anatomy Board	396
4. Exhumations	0
5. Bodies transported to the OCME	5366
6. Infant deaths certified (age live born to 1 year)	75
7. Infants autopsied	65
8. Drug-related accidental deaths certified	1217
9. Drug-related accidental deaths autopsied	1057
10. Non-MVA, non-drug related accidents certified	1887
11. Non-MVA, non-drug related accidents autopsied	383

2024 Drug Classifications

Antidepressants

Amitriptyline
Bupropion
Citalopram
Clomipramine
Desipramine
Desmethylvenlafaxine
Doxepin
Fluoxetine
Fluvoxamine
Imipramine
Mirtazapine
Nardoxepin
Nortriptyline
Nortriptyline
Paroxetine
Sertraline
Trazodone
Venlafaxine

Antihistamines

Brompheniramine
Chlorpheniramine
Cyproheptadine
Diphenhydramine
Doxylamine
Hydroxyzine
Meclizine
Pheniramine

Barbiturates / Antiepileptics

Butalbital
Carbamazepine
Gabapentin
Hydroxycarbazepine
Lamotrigine
Levetiracetam
Pentobarbital
Phenobarbital
Phenytoin
Primidone
Topiramate

Benzodiazepines

7-Aminoclonazepam
Alprazolam

Benzodiazepines (continued)

Chlordiazepoxide
Clonazepam
Diazepam
Etizolam
Flubromazepam
Flurazepam
Lorazepam
Midazolam
Nordiazepam
Oxazepam
Temazepam
Triazolam

Carbon Monoxide

Cardiac Drugs

Amlodipine
Diltiazem
Flecainide
Metoprolol
Procainamide
Propranolol
Verapamil

Cocaine and Metabolites

Benzoyllecgonine
Cocaethylene

Fentanyl and Analogs

4-Fluoroisobutyryl fentanyl
Acetyl Fentanyl
Acrylfentanyl
Butyryl Fentanyl
Carfentanil
Despropionyl fentanyl
Fentanyl
Furanyl fentanyl
Methoxyacetyl fentanyl
para-Fluorofentanyl
Tetrahydrofuran fentanyl

Hallucinogens

Phencyclidine
Tenocyclidine

Inhalants

1,1-Difluoroethane
Halogenated Hydrocarbons
Nitrous Oxide

Muscle Relaxants

Carisoprodol
Cyclobenzaprine
Metaxalone
Tizanidine

Neuroleptics

Amoxapine
Aripiprazole
Buspirone
Chlorpromazine
Clozapine
Haloperidol
Loxapine
Olanzapine
Prochlorperazine
Promethazine
Quetiapine
Thioridazine

Opioids

6-Monoacetylmorphine
Buprenorphine
Codeine
Free Morphine
Hydrocodone
Hydromorphone
Meperidine
Methadone
Mitragnine
Morphine
Normeperidine
Oxycodone
Oxymorphone
Tapentadol
Tramadol
U-47700

Other

Acetaminophen
Amantadine
Atomoxetine
Atropine
Benzoyllecgonine
Benzotropine
Bupivacaine
Caffeine
Carisoprodol
Dextromethorphan
Ethylene Glycol
GHB
Isopropanol
Ketamine
Meprobamate
Propane
Propofol
Quinine
Synthetic Cannabinoids
Vecuronium
Xylazine
Zolpidem

Sympathomimetic Amines

Amphetamine
Ephedrine
MDMA
Methamphetamine
Methylenedioxyamphetamine
Methylenedioxymethamphetamine
Phentermine
Phenylpropanolamine
Pseudoephedrine

Synthetic Cathinones

4-Chloroethcathinone
alpha-Pyrrolidinovalerophenone
Butylone
Dibutylone
Ethylone
Eutylone
MDPV
N-Ethylpentylone
Pentylone