



2024 Annual Drug Report

Table of Contents

Dedication.....	2
Methods, Considerations, and Limitations.....	3
2024 Aggregate Data.....	4-8
2023 vs 2024 Drug-Related Deaths.....	9
2024 Drug Related Deaths by Manner.....	10
Demographics.....	11-12
Law Enforcement Interactions.....	13
Substance Use Disorder Diagnoses & Treatment.....	14
Prior Non-Fatal Overdose Incidents.....	14
Naloxone Administration & Distribution.....	15
Health Factors.....	16
Mental Health Factors.....	17
Scene Findings.....	18
Injury & Death Location.....	18
Charleston County Heatmap.....	19
Regional Locations.....	20
Rapid Blood Screening.....	21-22
Toxicology Results	22-24
Charleston County Overdose Fatality Review.....	25
Highlights.....	26

Dedication

This report is dedicated to those who have lost their lives or a loved one to substance use. These losses remind us of the urgent need to raise awareness, challenge the stigma surrounding substance use, and support harm reduction strategies. By doing so, we can honor those we have lost and their families and work together to prevent future tragedies.

Methods, Considerations, and Limitations

This annual report presents the statistics on drug-related deaths in Charleston County for the year 2024. It is important to include the publication year when referencing this data and these reports. The purpose of this report is to provide current statistics to those working to reduce the number of drug-related deaths.

To maintain the integrity of the medicolegal death investigation and show respect for the deceased and their families, all cases presented in this report are organized by their location, as indicated on the accompanying regional map. This report excludes any identifying information about the deceased, including their address, date of birth, social security number, and details regarding next of kin.

Data analyzed in the report is obtained from the Charleston County Coroner's Office case management system, law enforcement (LE) reports, EMS run sheets, death certificates, obituaries, medical records, behavioral health records, toxicology reports, and autopsy reports. The data presented in this report is based on cases of either complete autopsy, toxicology only, or external exams. All manners of fatal drug overdoses (accident, homicide, suicide, and undetermined) are included in this report.

This report compiles data on drugs that cause or contribute to death in drug-related cases. It does not include data on drugs detected that did not contribute to or cause death.

2024 Annual Drug Report

2024 Aggregate Data

Note: B=Black/African American; H=Hispanic; W=White; A=Asian; O=Other; M=Male; F=Female; MOD=Manner of Death; ACC=Accident; SUI=Suicide; HOM=Homicide; and UND=Undetermined.

MOD	Age	Sex	Race	Injury Zip	Death Certificate: Substances Contributing to Death
ACC	44	M	W	29405	Fentanyl, Xylazine
ACC	28	F	W	29407	Fentanyl, Heroin
ACC	35	M	W	29456	Fentanyl, Methamphetamine, Xylazine
ACC	35	M	W	29414	Fentanyl, Ethanol, Methamphetamine
ACC	43	M	W	29405	Fentanyl, Acetyl-Fentanyl, Cocaine
ACC	36	M	W	29414	Ethanol, Cocaine
ACC	50	F	B	29405	Fentanyl, Diphenhydramine
ACC	61	M	B	29405	Fentanyl
ACC	37	M	W	29414	Fentanyl, Xylazine, Alprazolam, Ethanol
ACC	60	M	B	29406	Fentanyl, Cocaine, Diphenhydramine, Ethanol
ACC	53	M	W	29405	Fentanyl, Clonazepam, Ethanol, Amphetamine
ACC	45	M	W	29406	Ethanol, Isopropyl
ACC	47	M	W	29407	Fentanyl, Para-Fluorofentanyl, Xylazine, Methamphetamine
ACC	64	M	W	29429	Fentanyl
ACC	71	M	W	29466	Fentanyl
ACC	35	F	W	29406	N-Dimethylpentylone, Xylazine, Methamphetamine, Fentanyl, Acetyl-Fentanyl
ACC	66	M	W	29412	Fentanyl, Oxycodone, Bupropion, Duloxetine, Mirtazapine
ACC	65	M	W	29412	Oxycodone, Oxymorphone, Pregabalin, Alprazolam
ACC	51	F	B	29407	Fentanyl, Cocaine
ACC	59	F	W	29414	Zolpidem, Ethanol
ACC	32	F	W	29455	Fentanyl, Para-Fluorofentanyl, Xylazine
ACC	39	F	W	29414	Diazepam, Ethanol
ACC	64	M	W	29455	Fentanyl, Para-Fluorofentanyl
ACC	29	M	W	29466	Fentanyl, Xylazine, Mitragynine
ACC	31	M	W	29418	Fentanyl, Bromazepam, Mitragynine, Methamphetamine
ACC	24	M	W	29412	Fentanyl, Bromazepam
ACC	41	F	B	29405	Cocaine
ACC	55	M	W	29418	Fentanyl, Xylazine, Cocaine, Methamphetamine, Buprenorphine, Gabapentin, Trazadone
ACC	45	M	W	29466	Fentanyl
ACC	50	F	W	29414	Methamphetamine
ACC	57	M	W	29487	Fentanyl, Cocaine, Methamphetamine
ACC	60	F	B	29405	Fentanyl, Hydrocodone, Gabapentin
ACC	18	M	W	29412	Fentanyl, Bromazepam, Sertraline, Promethazine
ACC	54	M	W	29412	Fentanyl, Mitragynine, Ethanol
ACC	55	M	W	29406	Fentanyl, Xylazine

2024 Annual Drug Report

ACC	60	F	W	29464	Zolpidem, Ethanol
ACC	42	M	B	29418	Fentanyl, Cocaine, Methadone
ACC	42	M	W	29418	Amphetamine, Methamphetamine
ACC	30	M	W	29406	Cocaine, Opiates
ACC	56	F	A	29406	Methamphetamine
ACC	64	M	B	29412	Cocaine
ACC	58	M	B	29405	Fentanyl, Cocaine, Ethanol
ACC	58	M	W	29406	Fentanyl, Xylazine, Mitragynine, Ethanol
ACC	33	M	A	29407	Fentanyl, Methamphetamine, Xylazine
ACC	63	M	W	29464	Methadone
ACC	50	M	W	29470	Methamphetamine
ACC	47	F	B	29406	Cocaine, Fentanyl
ACC	40	F	W	29405	Fentanyl, Xylazine, Cocaine
ACC	28	M	W	29464	Fentanyl, Cocaine
ACC	34	M	B	29407	Methamphetamine
ACC	59	F	W	29407	Fentanyl, Cocaine, Bromazolam, Xylazine
ACC	67	M	W	29407	Fentanyl, Cocaine, Oxycodone
ACC	58	F	B	29403	Fentanyl
ACC	67	M	B	29403	Fentanyl, Cocaine
ACC	71	M	B	29405	Fentanyl, Cocaine
ACC	40	M	B	29485	Fentanyl
ACC	32	F	W	29470	Methadone
ACC	48	M	W	29414	Fentanyl, Para-Fluorofentanyl, Methadone
ACC	51	M	W	29418	Fentanyl, Methamphetamine, Diphenhydramine
ACC	33	M	B	29418	Fentanyl, Xylazine
ACC	46	F	W	29418	Fentanyl, Heroin, Xylazine, Methamphetamine
ACC	61	M	B	29455	Fentanyl, Cocaine
ACC	36	F	B	29405	Cocaine, Cocaethylene, Fentanyl, Para-Fluorofentanyl, Ethanol
ACC	28	M	W	29406	Ethanol, Cocaine, Cocaethylene, Methamphetamine
ACC	43	F	W	29438	Methamphetamine
ACC	49	M	W	29466	Cocaine
ACC	58	F	W	29420	Fentanyl, Xylazine, Cocaine
ACC	70	M	B	29403	Cocaine
ACC	37	M	W	29406	Fentanyl, Methamphetamine
ACC	46	M	B	29418	Fentanyl, Ethanol
ACC	46	F	W	29406	Fentanyl, Xylazine, Methamphetamine
ACC	70	M	W	29455	Ethanol, Methadone, Alprazolam
ACC	43	M	W	29456	Fentanyl, Xylazine, Methamphetamine
ACC	54	M	W	29449	Cocaine
ACC	38	M	W	29420	Fentanyl, Cocaine
ACC	77	M	B	29414	Cocaine
ACC	37	F	B	29405	Fentanyl, Cocaine, Ethanol

2024 Annual Drug Report

ACC	29	M	H	29406	Fentanyl, Acetyl-Fentanyl, Cocaine
ACC	47	M	W	29464	Ethanol
ACC	54	M	W	29403	Ethanol, Phenobarbital, Bupropion, Buprenorphine, Hydroxyzine, Diazepam
ACC	40	M	W	29406	Methadone, Methamphetamine
ACC	38	F	W	29403	Fentanyl, Xylazine, Oxycodone
ACC	52	M	W	29403	Fentanyl, Cocaine
ACC	32	M	W	29464	Fentanyl, Nitrous Oxide, Bromazolam, Cocaine
ACC	24	M	H	29420	Fentanyl, Cocaine, Ethanol
ACC	36	M	B	29415	Fentanyl, Cocaine, Xylazine, Methamphetamine
ACC	62	M	W	29466	Fentanyl, Xylazine, Methamphetamine
ACC	35	F	B	29403	Fentanyl, Diphenhydramine, Hydromorphone, Promethazine
ACC	74	F	B	29412	Cocaine
ACC	57	M	W	29414	Fentanyl, Methamphetamine, Gabapentin
ACC	33	M	W	29414	Fentanyl
ACC	42	M	W	29429	Fentanyl, Xylazine, Loperamide
ACC	45	M	W	29405	Fentanyl, Morphine, Hydromorphone
ACC	53	M	B	29449	Fentanyl, Cocaine, Ethanol
ACC	48	M	W	29414	Methamphetamine, Ethanol
ACC	28	F	W	29405	Fentanyl, Methamphetamine, Morphine, Norbuprenorphine
ACC	21	M	B	29406	Fentanyl, Methamphetamine, Hydroxyzine
ACC	68	M	B	29405	Cocaine
ACC	42	F	W	29407	Fentanyl, Heroin, Mitragynine
ACC	53	M	W	29414	Bromazolam, Hydrocodone, Hydromorphone, Alprazolam
ACC	58	F	B	29455	Cocaine
ACC	64	M	W	29407	Fentanyl, Oxycodone, Diphenhydramine, Memantine, Alprazolam
ACC	59	F	W	29405	Cocaine, Benzodiazepines
ACC	24	F	W	29464	Fentanyl, Cocaine, Methamphetamine, Bromazolam, Ethanol
ACC	62	M	B	29464	Cocaine
ACC	63	M	B	29407	Fentanyl, Cocaine
ACC	49	M	W	29406	Methamphetamine
ACC	46	M	B	29406	Fentanyl, Methamphetamine
ACC	55	F	W	29405	Fentanyl, Methamphetamine, Xylazine, Cocaine
ACC	36	F	B	29403	Cocaine
ACC	43	M	W	29406	Methamphetamine, Cocaine, Haloperidol, Aripiprazole
ACC	62	M	W	29464	Methamphetamine, Cocaine
ACC	50	F	W	29407	Fentanyl, Alprazolam, Hydroxyzine
ACC	41	F	W	29429	Fentanyl, Amphetamine, Cyclobenzaprine, Alprazolam
ACC	45	M	W	29456	Fentanyl, Xylazine, Methamphetamine
ACC	85	M	W	29414	Cocaine
ACC	64	M	B	29405	Fentanyl, Cocaine, Xylazine, Ethanol
ACC	50	M	W	29407	Fentanyl, Cocaine, Ethanol
ACC	49	F	W	29464	Cocaine

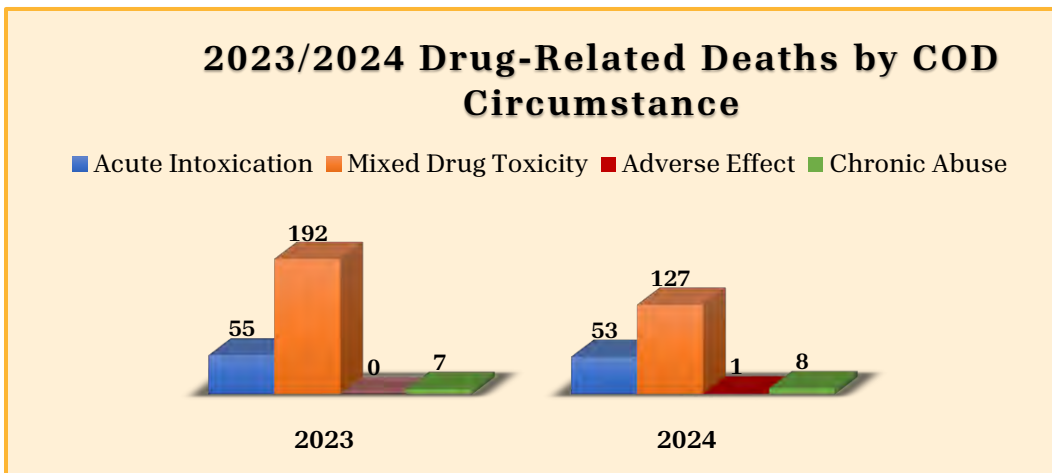
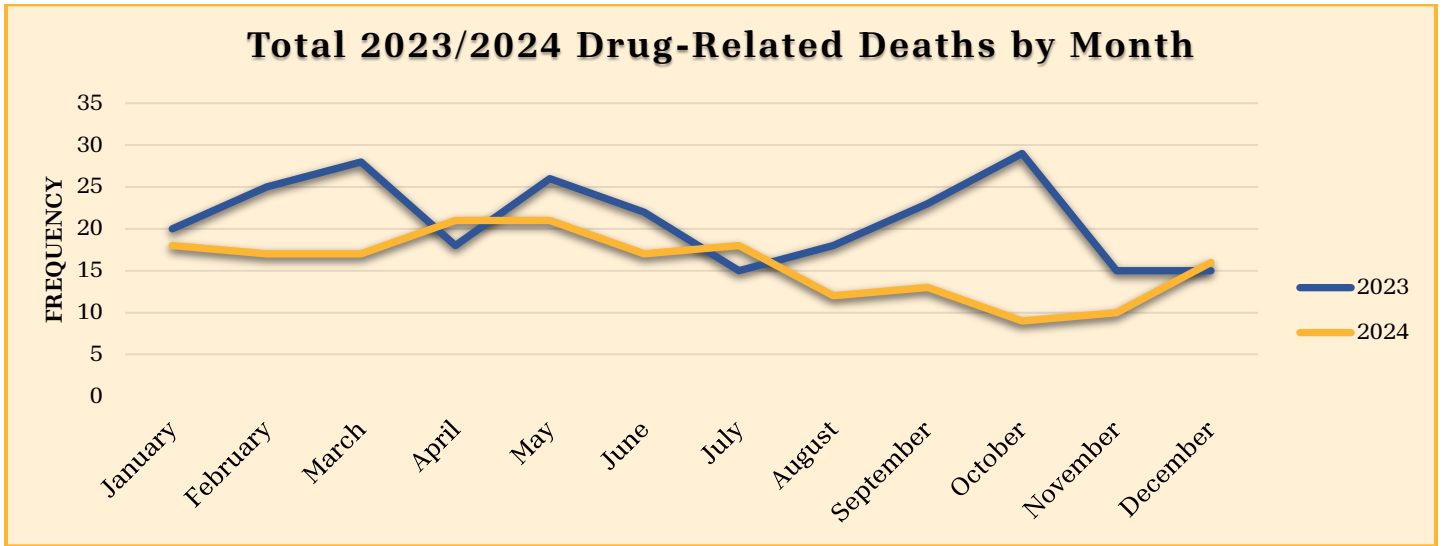
2024 Annual Drug Report

ACC	44	M	W	29414	Fentanyl, Cocaine, Xylazine
ACC	59	M	B	29405	Fentanyl, Cocaine, Xylazine
ACC	65	M	B	29405	Methamphetamine
ACC	51	M	B	29405	Fentanyl, Ethanol
ACC	42	F	W	Unkn	Fentanyl
ACC	73	M	B	29403	Cocaine
ACC	52	M	B	29455	Cyclobenzaprine, Dextro-Levo-Methmorphan, Clonazepam, Acetaminophen
ACC	69	M	B	29403	Fentanyl, Xylazine, Cocaine, Ethanol
ACC	36	M	W	29485	Fentanyl, Xylazine, Methamphetamine
ACC	50	F	B	29407	N-Pyrrolidino Protonitazene, Cocaine, Fentanyl
ACC	59	M	W	29406	Cocaine
ACC	37	M	W	29407	Fentanyl, Xylazine, Ethanol
ACC	56	M	B	29458	Methamphetamine
ACC	48	M	B	29405	Cocaine
ACC	32	M	W	29412	Unknown Substances
ACC	64	M	B	29406	Cocaine, Ethanol
ACC	47	M	W	29407	Fentanyl, Cocaine, Xylazine, Mitragynine
ACC	42	M	B	29405	Fentanyl, Xylazine, Ethanol
ACC	52	F	W	29418	Fentanyl, Xylazine, Methamphetamine
ACC	36	M	W	29414	Fentanyl, Cocaine, Ketamine
ACC	49	M	W	29412	Fentanyl, Cocaine
ACC	37	M	W	29405	Methamphetamine
ACC	56	M	B	29406	Cocaine
ACC	67	M	B	29405	Fentanyl, Xylazine, Cocaine, Ethanol
ACC	35	M	W	29407	Fentanyl, Cocaine
ACC	55	M	B	29412	Fentanyl
ACC	20	M	W	29407	Fentanyl
ACC	51	M	B	29405	Cocaine
ACC	44	M	W	29414	Cocaine
ACC	37	M	W	29412	Fentanyl, Ethanol
ACC	61	M	B	29407	Fentanyl, Xylazine, Heroin, Ethanol
ACC	22	M	W	29405	Fentanyl, Xylazine, Amphetamine
ACC	56	M	B	29466	Fentanyl, Xylazine, Cocaine
ACC	40	M	W	29485	Fentanyl, Methamphetamine
ACC	45	M	B	29466	Cocaine
ACC	60	F	B	29406	Oxycodone, Oxymorphone
ACC	42	M	W	29406	Fentanyl, Bromazolam, Methamphetamine
ACC	73	M	W	29455	Cocaine
ACC	55	M	B	29406	Cocaine
ACC	68	M	B	29412	Cocaine
ACC	51	M	B	29485	Fentanyl, Cocaine, Ethanol
ACC	68	M	B	29414	Fentanyl, Methamphetamine

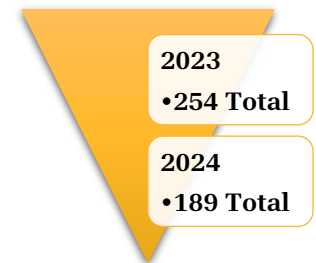
2024 Annual Drug Report

ACC	62	M	W	29414	Amitriptyline, Alprazolam, Ethanol
ACC	30	F	W	29407	N-Pyrrolidino Protonitazene, Mitragynine, Temazepam
ACC	21	M	W	29455	Fentanyl, Heroin
ACC	22	M	W	29406	Fentanyl
ACC	45	M	W	29456	Fentanyl, Xylazine
ACC	35	F	W	29406	Methamphetamine
ACC	35	M	W	29414	Fentanyl
ACC	55	M	W	29464	Cocaine, Ethanol
ACC	76	M	B	29403	Cocaine
ACC	26	F	W	29405	Fentanyl, Xylazine, Methamphetamine
ACC	67	M	B	29403	Cocaine
ACC	48	M	W	29414	Fentanyl, Xylazine
HOM	94	F	W	29420	Morphine, Lorazepam, Haloperidol, Citalopram/Escitalopram
HOM	0	F	B	29456	Fentanyl
SUI	36	F	W	29414	Amitriptyline
SUI	45	F	W	29406	Venlafaxine
SUI	34	M	A	29406	Cocaine, Methamphetamine, Doxepin, Ethanol, Olanzapine, Hydroxyzine, Citalopram/Escitalopram
SUI	43	M	W	29414	Fentanyl, Methamphetamine, Cocaine, Sertraline
SUI	51	F	W	29456	Amitriptyline, Nortriptyline, Zolpidem, Quetiapine, Lorazepam, Dextro-Levo-Methmorphan
SUI	48	F	W	29418	Ethanol, Diphenhydramine
SUI	27	M	W	29414	Rocuronium
SUI	69	F	W	29412	Ethanol, Alprazolam, Citalopram
SUI	55	M	W	29406	Morphine
SUI	51	M	W	29407	Fentanyl, Cocaine, Ethanol, Alprazolam, Diphenhydramine
SUI	83	F	W	29414	Acetaminophen, Hydrocodone, Oxycodone, Trazadone
UND	68	F	W	29405	Oxycodone, Phentermine, Gabapentin, Olanzapine, Duloxetine, Promethazine, Clonazepam
UND	49	F	W	29456	Fluoxetine, Oxycodone, Gabapentin, Clonazepam
UND	63	F	W	29407	Oxycodone, Diphenhydramine, Diazepam

2023 vs 2024 Drug-Related Deaths



Percent Change



13% Decrease from 2023 to 2024

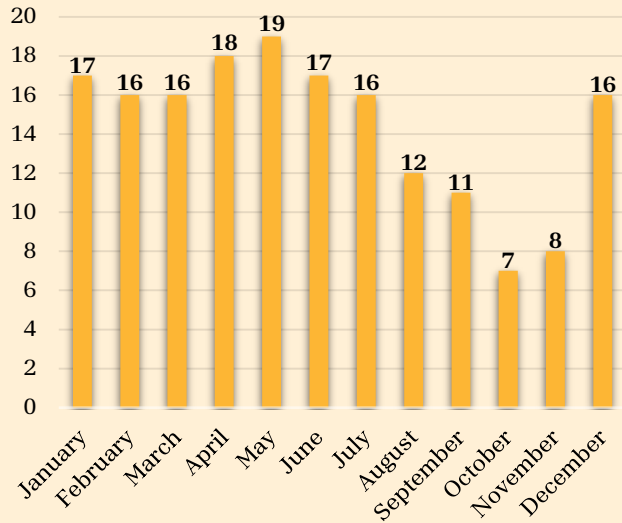
Both graphics include the MODs of Accident, Suicide, Homicide, and Undetermined.

Cause of Death (COD) Circumstance Types Described:

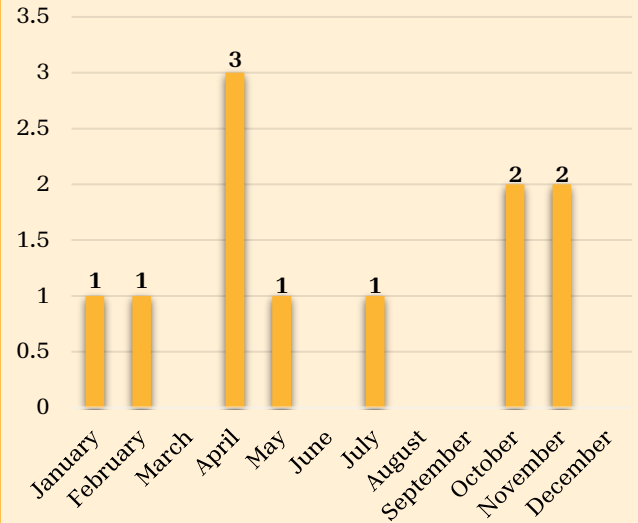
- **Acute Intoxication:** Death resulting from one substance.
- **Mixed Drug Toxicity:** Death resulting from two or more substances.
- **Adverse Effect:** Death resulting from the consumption of medication as prescribed that is followed by adverse drug interactions or an allergic reaction.
- **Chronic Abuse:** Death resulting from pathological stress or disease developed as a result chronic use/abuse of substances.

2024 Drug-Related Deaths by Manner

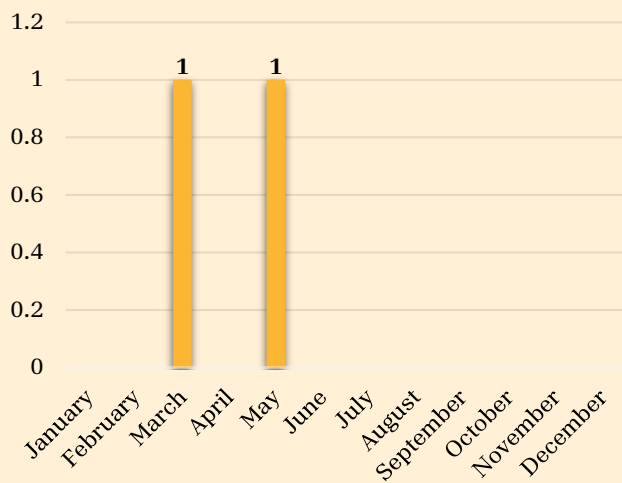
**Drug-Related Deaths
MOD 'Accident' by Month**



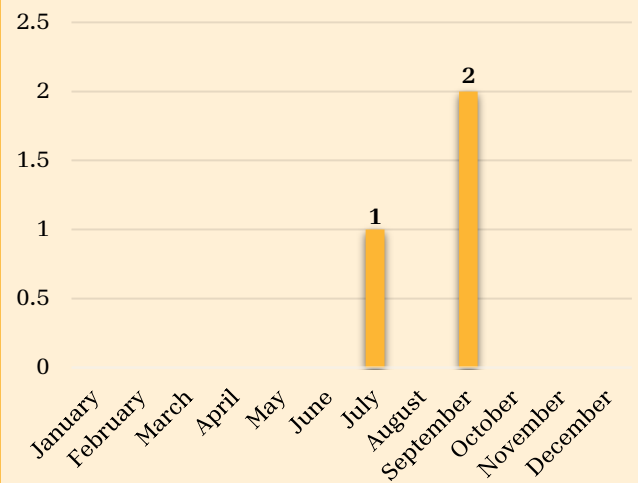
**Drug-Related Deaths
MOD 'Suicide' by Month**



**Drug-Related Deaths
MOD 'Homicide' by
Month**



**Drug-Related Deaths
MOD 'Undetermined' by
Month**

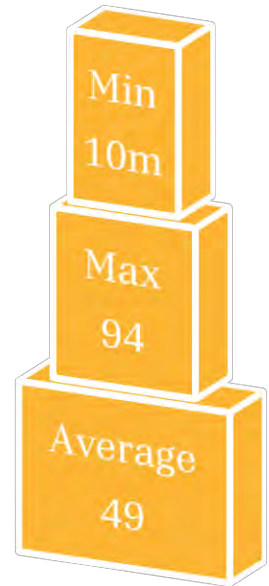
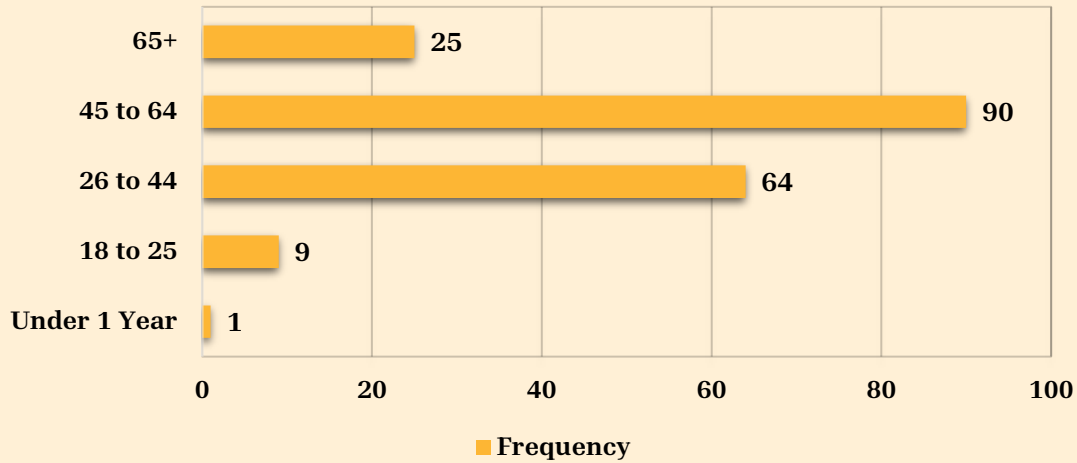


2024 Total Drug-Related Deaths by Manner

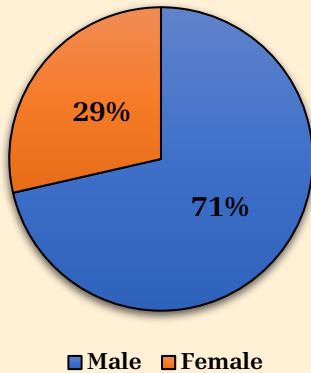
Accident	Suicide	Homicide	Undetermined
173	11	2	3
92%	6%	1%	2%

Demographics

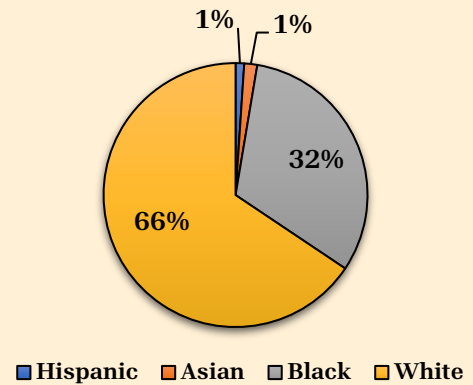
Age Groups



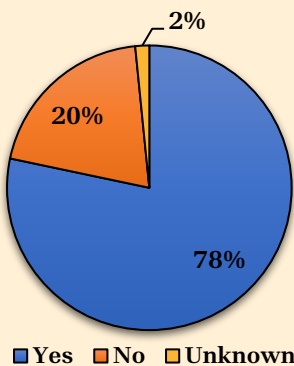
Sex



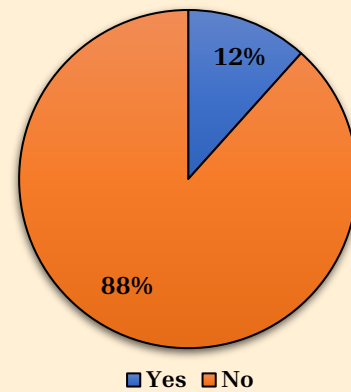
Race



Charleston County Residency Status

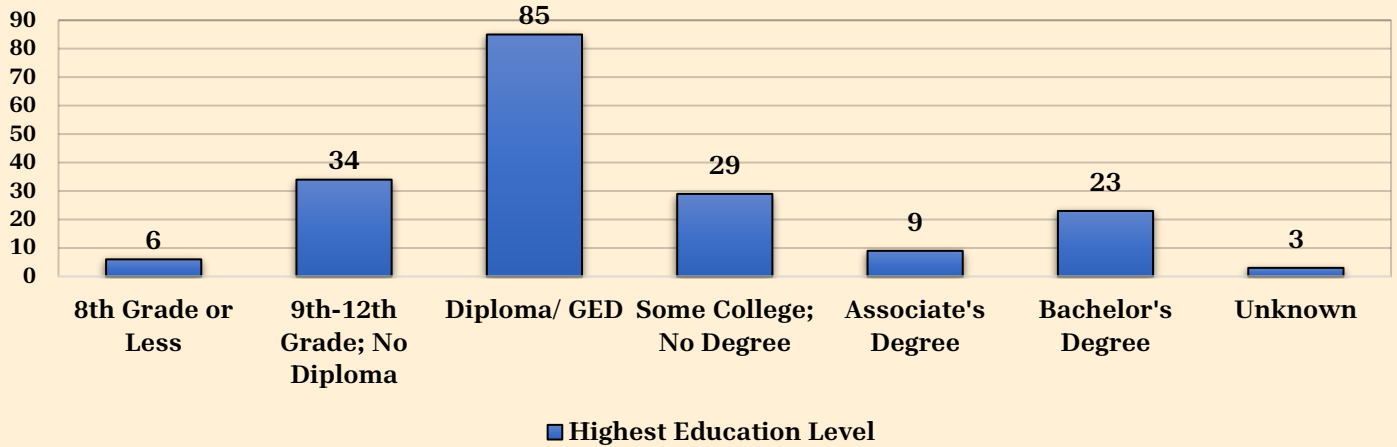


Unsheltered Status

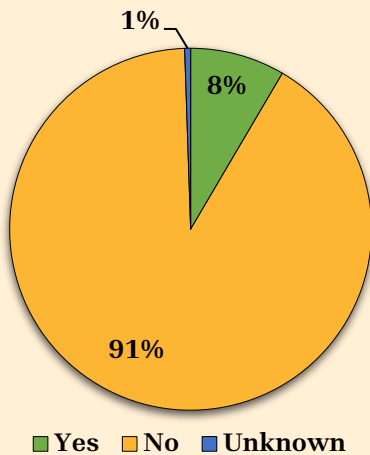


2024 Annual Drug Report

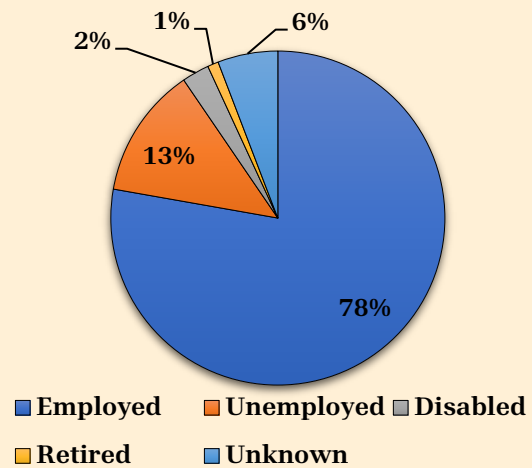
Highest Education Level



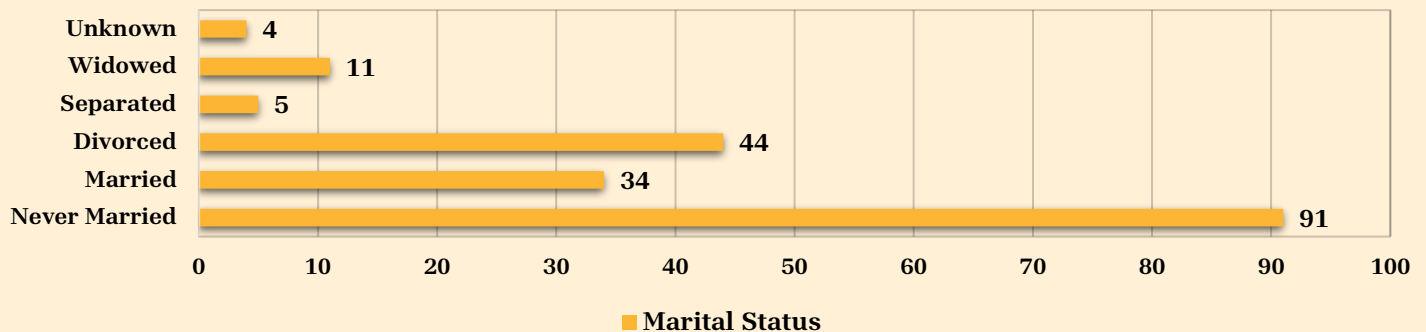
Veteran Status



Employment Status



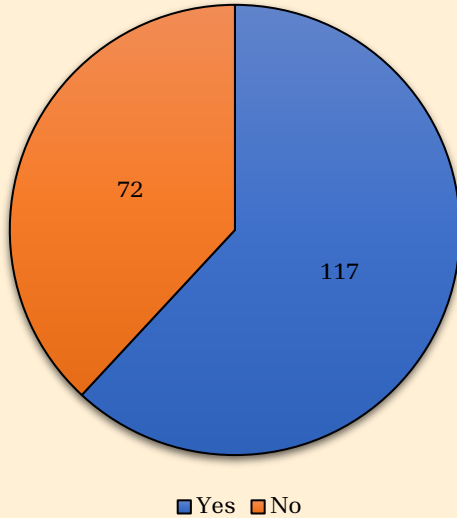
Marital Status



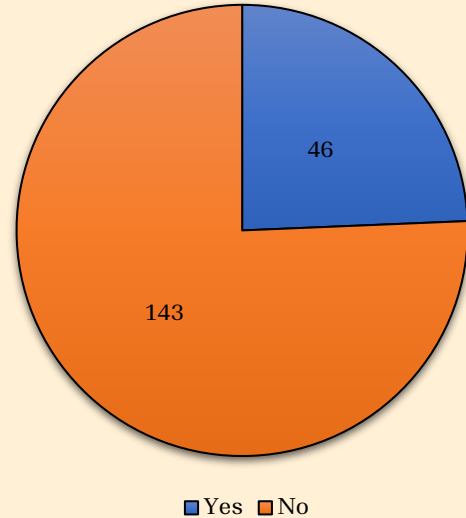
Data Notes: All data in the '2024 Drug-Related Deaths Demographics' section of this report was obtained from items 1-23c and 51-55 on the Death Certificate, which is completed by the Funeral Director.

Law Enforcement Interactions

Prior LE Interactions



30+ Days Incarcerated



Total Drug-Related Deaths with Recent Release from Incarceration

18

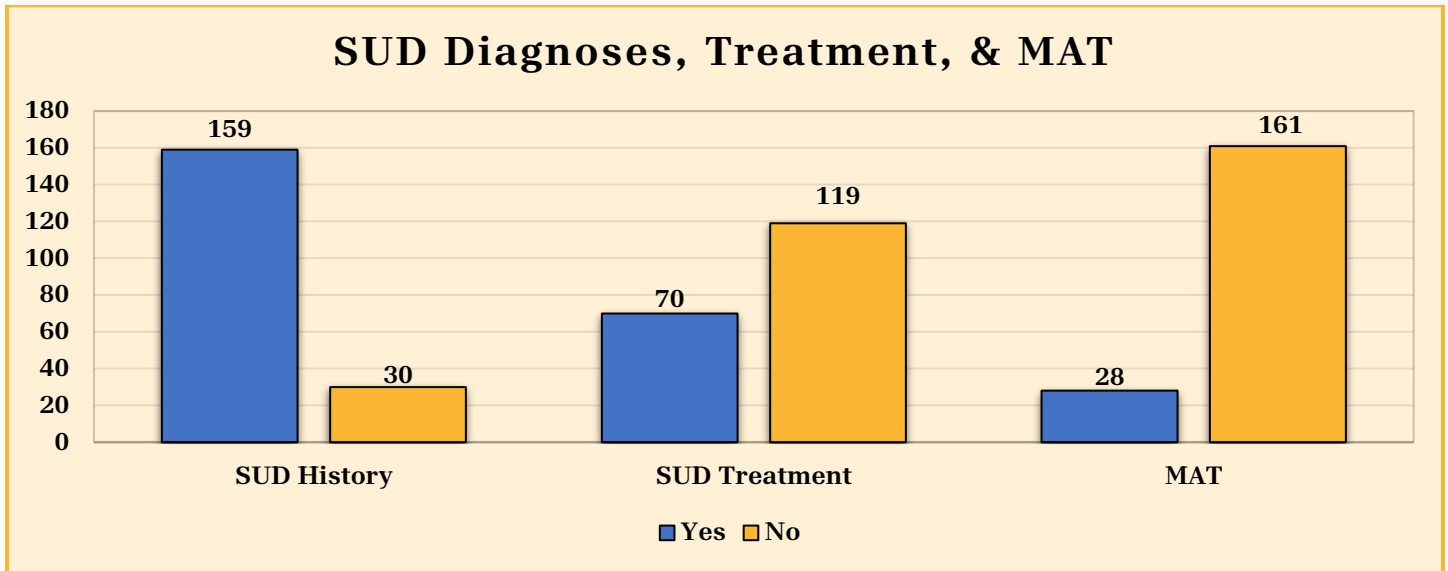
Average time Between Release and DOD

45 Days
(1 Month & 17 Days)

Data Notes- Law Enforcement Interactions

- Prior Law Enforcement (LE) interactions= Documented arrests regardless of charges.
- 30+ Days Incarcerated= 30 or more consecutive days spent incarcerated after being booked into a jail/ detention center.

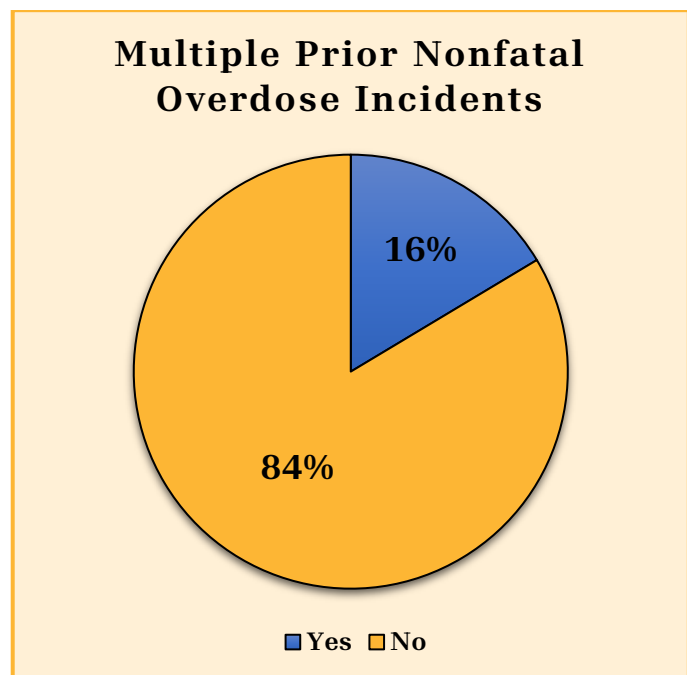
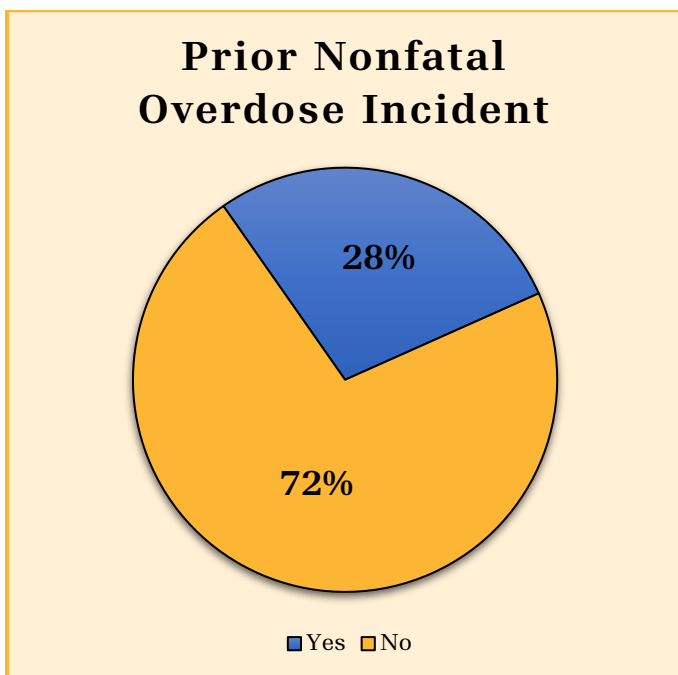
Substance Use Disorder Diagnoses & Treatment



Data Note: SUD Diagnoses, Treatment, & MAT

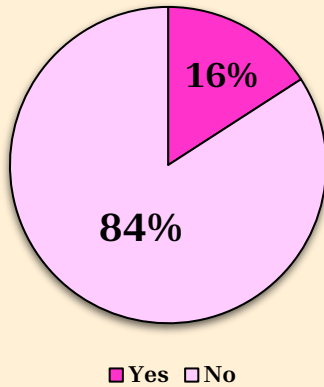
- SUD=Substance Use Disorder; MAT=Medication Assisted Treatment.
- SUD Treatment= The deceased individual attended rehab, inpatient or outpatient services from a SUD treatment provider, or was attending counseling for their substance use.
- All data included was confirmed via family reports, medical records, and PDMP records.

Prior Nonfatal Overdose Incidents

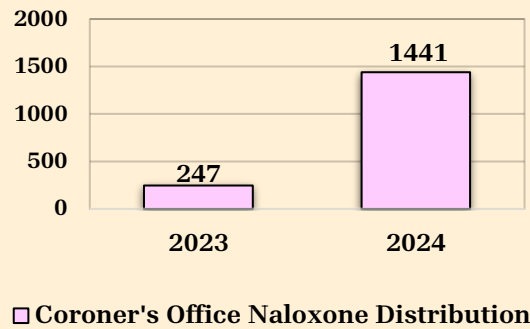


Naloxone Administration & Distribution

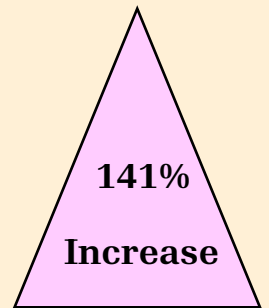
Naloxone Administration



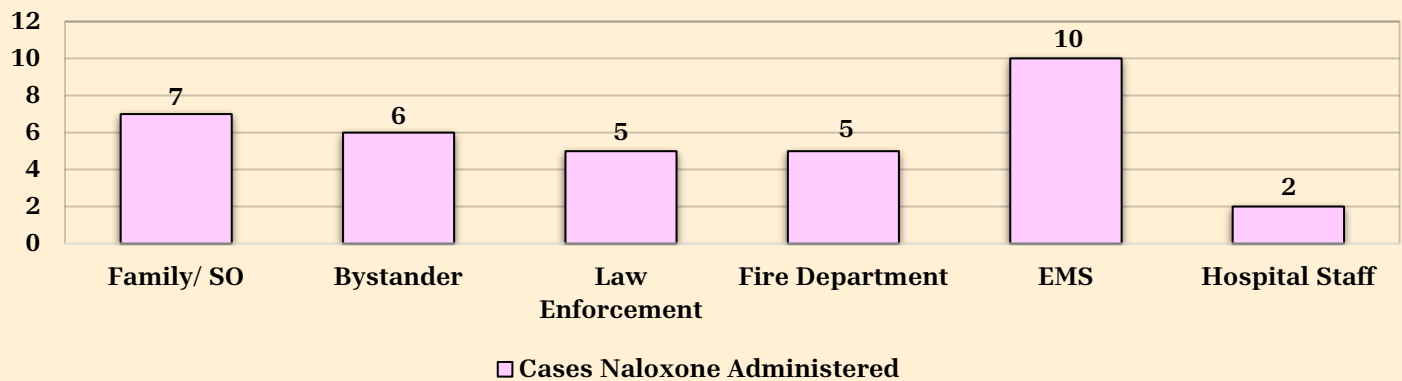
Coroner's Office Naloxone Distribution



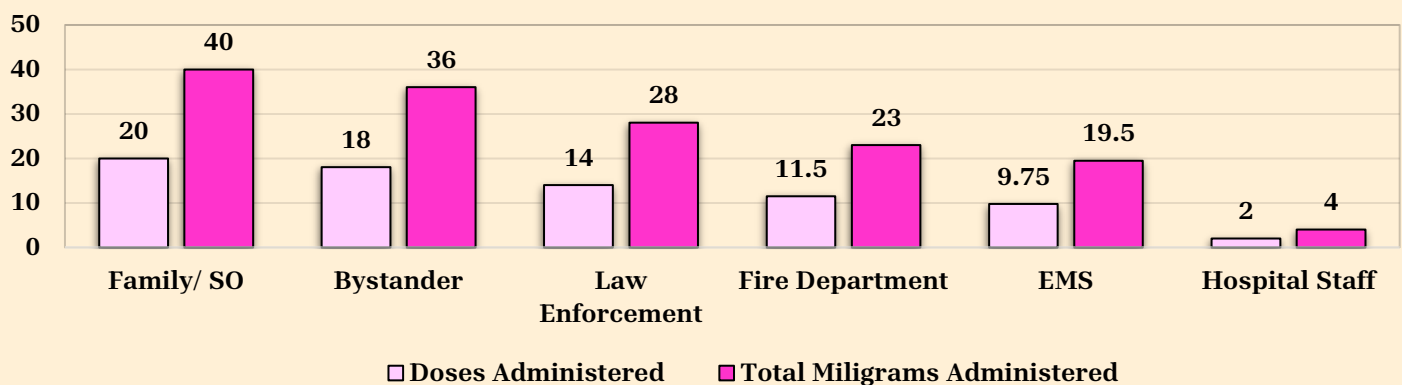
Percent Difference Between 2023 & 2024



Naloxone Administration by Provider



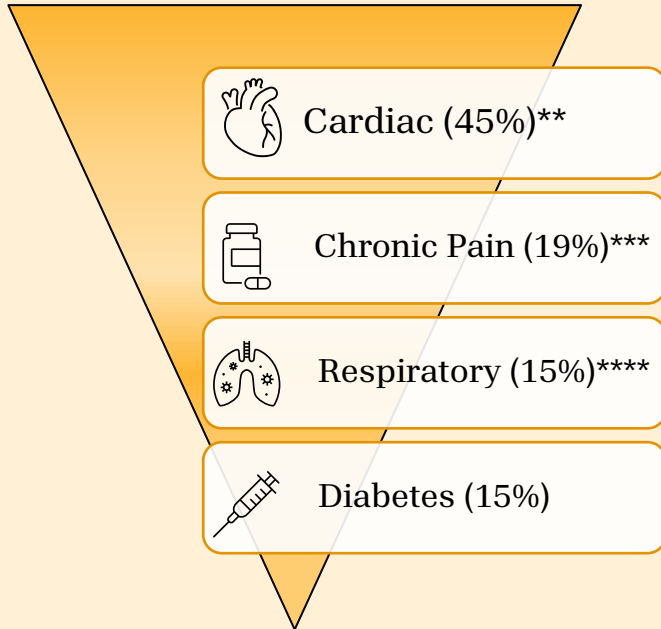
Naloxone Administration by Provider



Data Note: Standard dose of Naloxone is 2mg

Health Factors

Most Common Ailments



*Decedents may be represented in more than one category, only confirmed medical diagnoses are included.

**Cardiac includes CHF, CAD, endocarditis, atherosclerosis, HTN, cardiomegaly, MI, and atrial fibrillation.

***Pain Includes migraine, arthritis, chronic knee, back or shoulder pain, neuropathy, SCD, and general chronic pain,

****Respiratory Includes asthma, COPD, chronic sinusitis, RSV, and pneumonia.

CHF=Congestive heart failure; CAD=coronary artery disease; HTN=Hypertension; MI=Myocardial infarction; SCD=Sickle cell disease; COPD= Chronic obstructive pulmonary disease; RSV=Respiratory syncytial virus.

8 decedents
were Hepatitis
C Positive

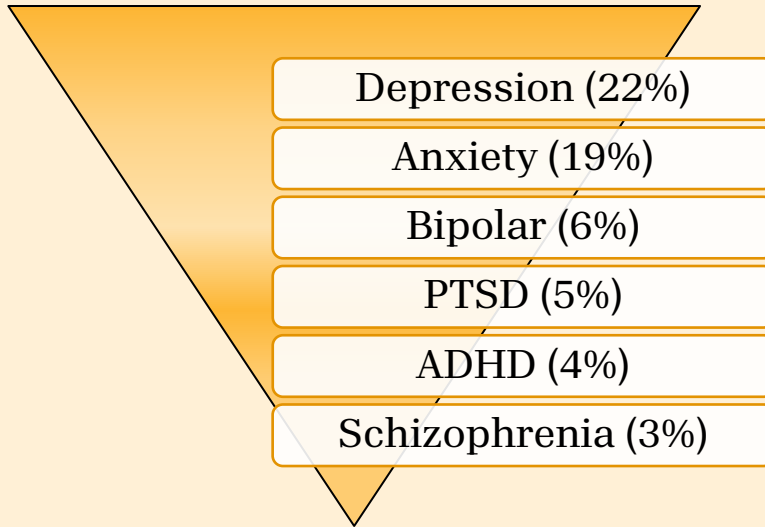
2 decedents
were HIV
positive

9 decedents
had a history
of Strokes

6 decedents
had Cancer
diagnoses

Mental Health Factors

Most Common Mental Illnesses



*Decedents may be represented in more than one category, only confirmed medical diagnoses are included.

**PTSD=Post traumatic stress disorder; ADHD=Attention deficit/hyperactivity disorder.

Percentage of Decedents

...with a diagnosed mental illness

36%

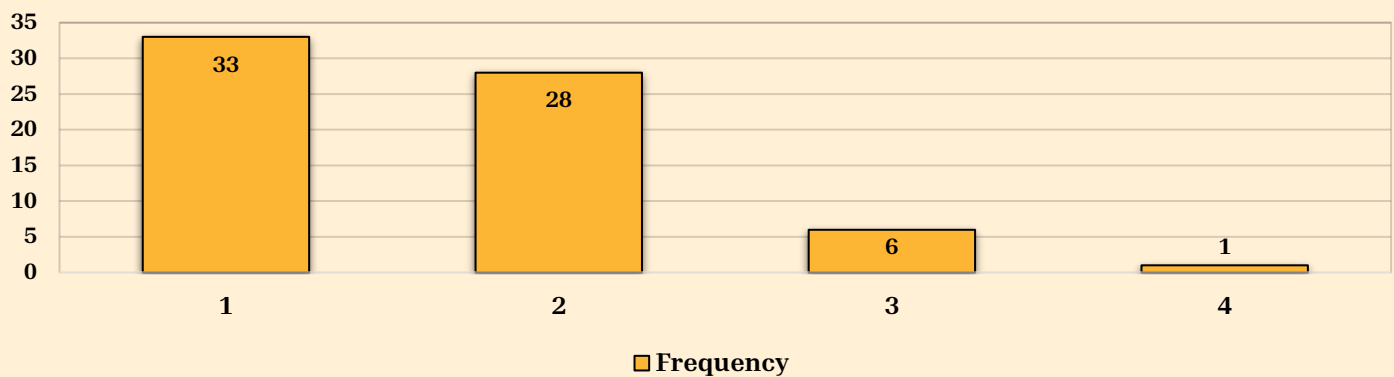
...who have had suicidal ideation

10%

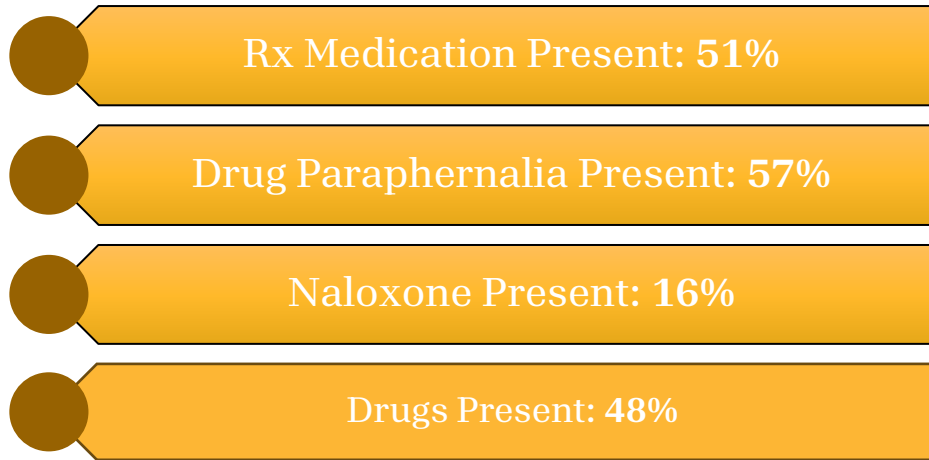
...with previous suicide attempts

3%

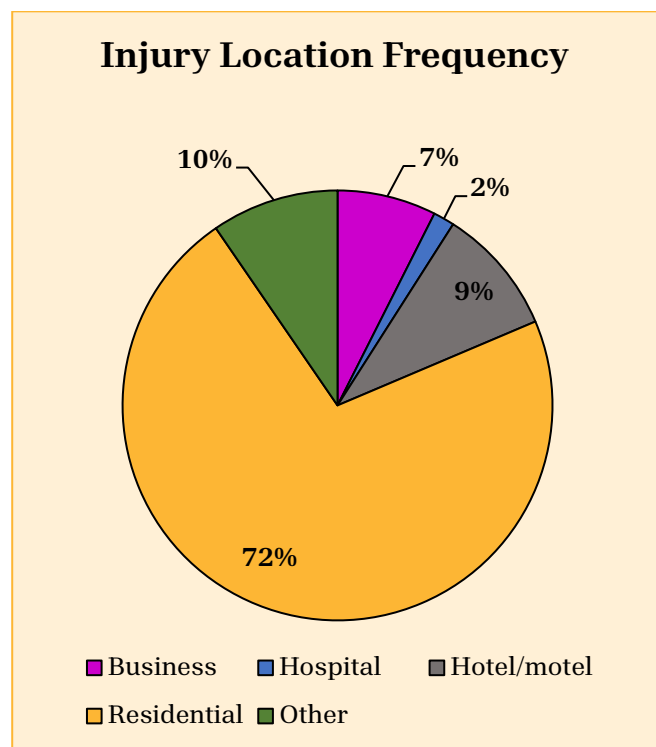
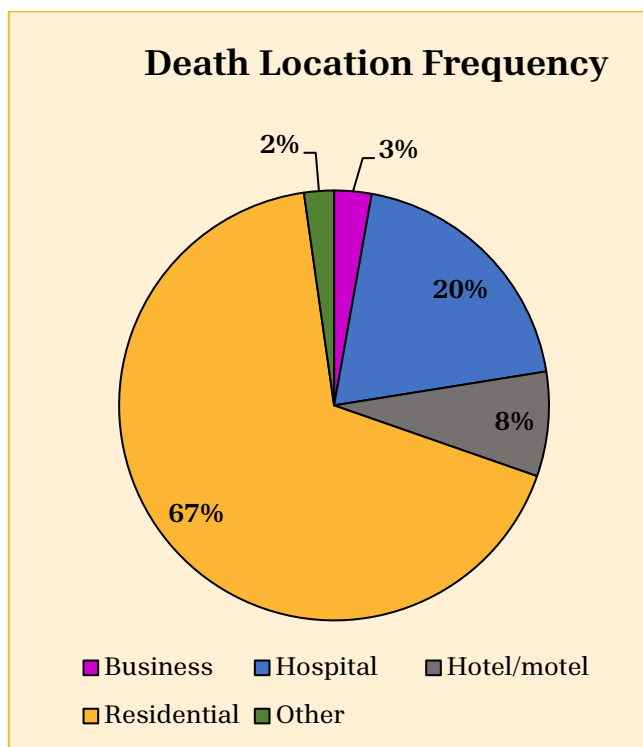
Number of Mental Illness Diagnoses



Scene Findings

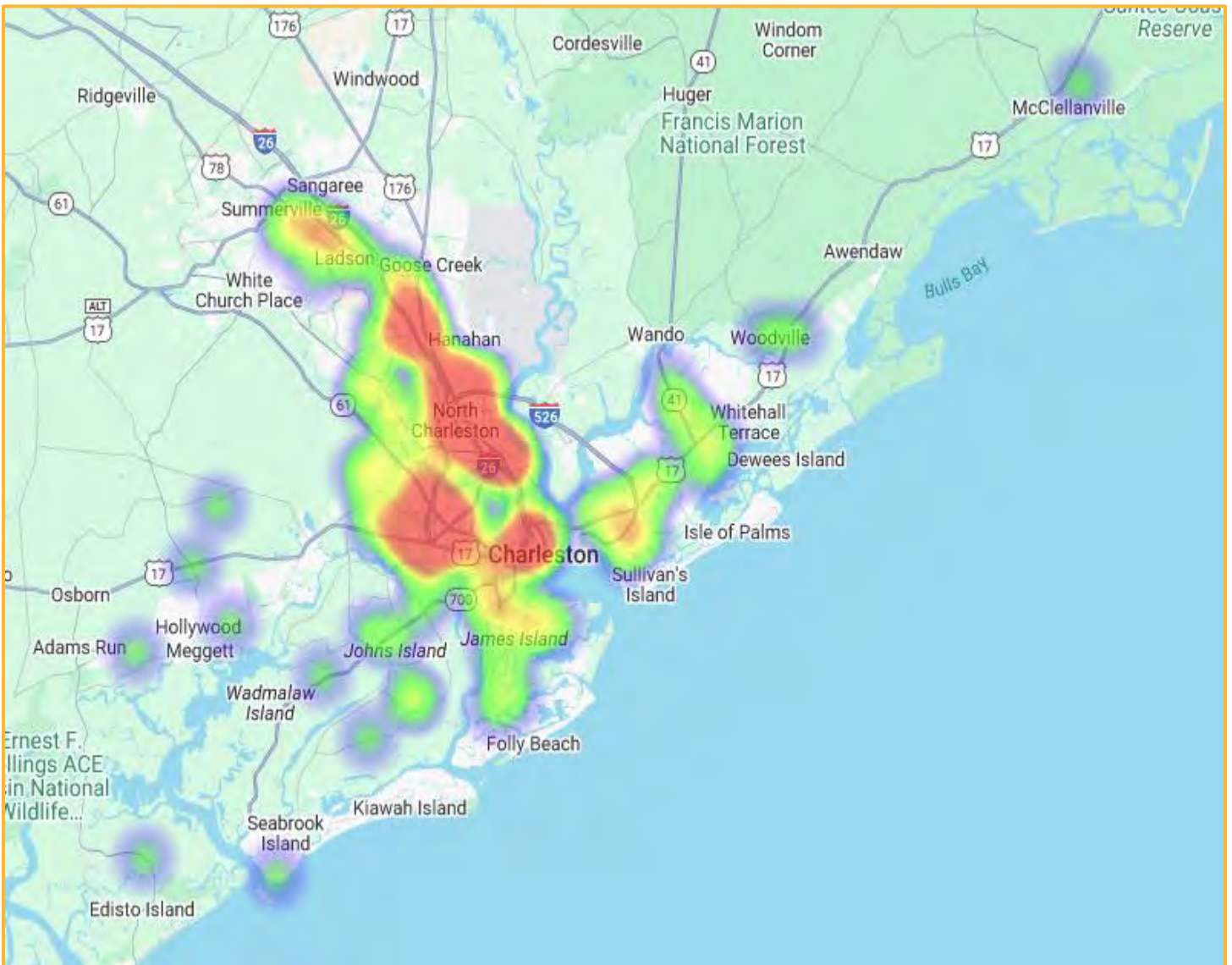


Injury & Death Location



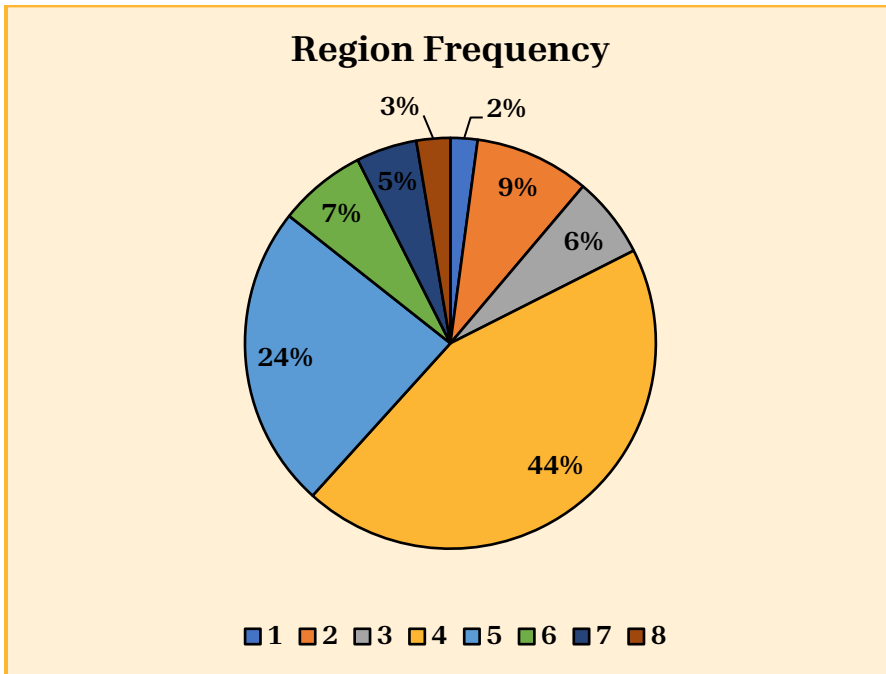
- Injury location can be different from death location in some cases typically due to individuals being transported to the hospital followed by pronouncement of death.
- Other-Death Location= Abandoned Building (1); Tugboat (1); Church (1); City Park (1).
- Other-Injury Location= Unknown (1); Wooded Area (11); City Park (1); Church (1); Car (2); Bus Stop (1); Tugboat (1); Abandoned Building (1).

2024 Charleston County Heatmap

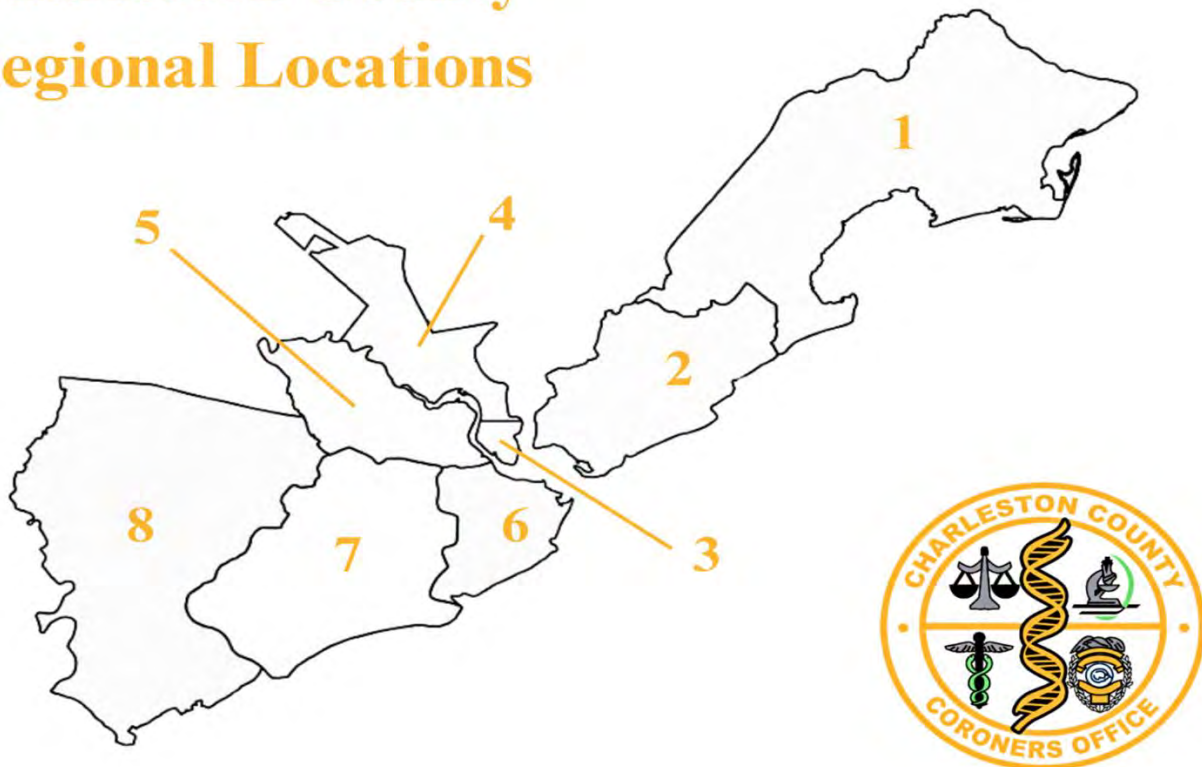


Note: The heatmap references the injury location associated with cases with a manner of death of Accident, Homicide, Suicide, and Undetermined.

Regional Location



Charleston County Regional Locations



Note: The Region Map references the injury location associated with cases with a manner of death of Accident, Homicide, Suicide, and Undetermined.

Rapid Blood Screening

The Charleston County Coroner's Office performs qualitative rapid blood screening on all in-house autopsies and toxicology-only cases using a Randox® Evidence MultiSTAT unit that detects 20 different drugs of abuse (Figure 36). The Coroner's Office largely adheres to the National Association of Medical Examiners recommendation that all suspected drug-related deaths undergo full autopsy, regardless of screening results. Screening guides investigations, especially when illicit drugs are detected in decedents who were not originally suspected to have died due to drug toxicity.

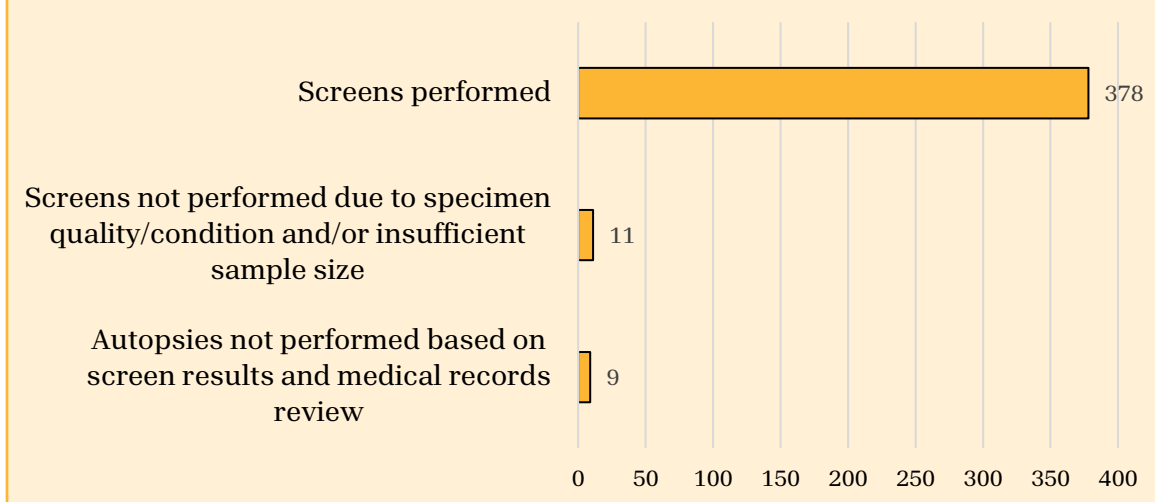
Rapid screening provides preliminary toxicology results that allow for timelier data for law enforcement, harm reduction efforts, and public health stakeholders. Death certificates are signed as pending until laboratory-based confirmatory toxicology testing with interpretation by forensic toxicologist is completed. All opioid case data is closely monitored by in-house opioid specialists.

In 2024, a total of 378 rapid blood screens were performed. Eleven screens were not performed due to specimen quality/condition and/or insufficient sample size. In 9 cases, autopsies were not performed based on screen results and thorough review of the medical history (Figure 37). Figure 38 illustrates the percentages of each drug/drug class detected for all 378 screens performed in 2024.

Figure 36. Randox® Evidence

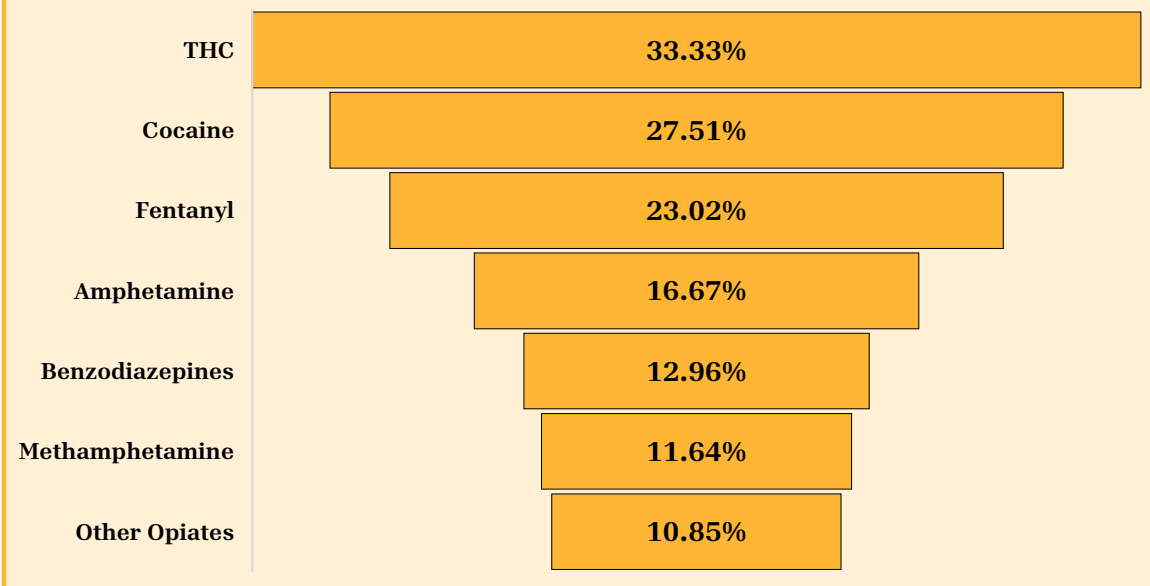


Figure 37. Rapid Blood Screening Totals, 2024



2024 Annual Drug Report

Figure 38. Drug/Drug Classes Detected During Rapid Blood Screening, 2024 (n=378)



Toxicology Results

2024 Drug Combinations	
<i>Substance Combination</i>	<i>Cases</i>
Cocaine	25
Fentanyl	13
Methamphetamine	10
Fentanyl, Cocaine	10
Fentanyl, Xylazine, Methamphetamine	7
Fentanyl, Cocaine, Ethanol	6
Fentanyl, Xylazine	5
Fentanyl, Methamphetamine	4
Fentanyl, Xylazine, Cocaine	3
Fentanyl, Ethanol	3
Methadone	2
Fentanyl, Xylazine, Ethanol	2
Fentanyl, Xylazine, Cocaine, Ethanol	2
Fentanyl, Methamphetamine, Xylazine	2
Zolpidem, Ethanol	2
Fentanyl, Cocaine, Xylazine	2
Fentanyl, Acetyl-Fentanyl, Cocaine	2
Cocaine, Ethanol	2
Fentanyl, Heroin	2
Fentanyl, Xylazine, Mitragynine, Ethanol	1

2024 Annual Drug Report

Fentanyl, Oxycodone, Diphenhydramine, Memantine, Alprazolam	1
Oxycodone, Oxymorphone, Pregabalin, Alprazolam	1
Ethanol, Isopropyl	1
Fentanyl, Xylazine, Amphetamine	1
Ethanol, Methadone, Alprazolam	1
Methamphetamine, Ethanol	1
Ethanol, Phenobarbital, Bupropion, Buprenorphine, Hydroxyzine, Diazepam	1
Fentanyl, Mitragynine, Ethanol	1
amitriptyline, nortriptyline, zolpidem, quetiapine, lorazepam, Dextro-Levo-Methmorphan	1
Fentanyl, Para-Fluorofentanyl, Xylazine, Methamphetamine	1
Amphetamine, Methamphetamine	1
Ethanol	1
Fentanyl, Alprazolam, Hydroxyzine	1
Methadone, Methamphetamine	1
Fentanyl, Amphetamine, Cyclobenzaprine, Alprazolam	1
N-Pyrrolidino protonitazene, cocaine, fentanyl	1
Fentanyl, Bromazepam	1
Ethanol, Diphenhydramine	1
Fentanyl, Bromazepam, Methamphetamine	1
Fentanyl, Nitrous Oxide, Bromazepam, Cocaine	1
Fentanyl, Bromazepam, Mitragynine, Methamphetamine	1
Fentanyl, Para-fluorofentanyl, Methadone	1
Fentanyl, Bromazepam, Sertraline, Promethazine	1
Cocaine, Opiates	1
Fentanyl, Clonazepam, Ethanol, Amphetamine	1
Diazepam, Ethanol	1
Bromazepam, Hydrocodone, Hydromorphone, Alprazolam	1
Ethanol, Alprazolam, Citalopram	1
Fentanyl, Cocaine, Bromazepam, Xylazine	1
Fluoxetine, Oxycodone, Gabapentin, Clonazepam	1
Fentanyl, Cocaine, Diphenhydramine, Ethanol	1
Methamphetamine, Cocaine	1
Amitriptyline	1
morphine, lorazepam, haloperidol, citalopram/escitalopram	1
Fentanyl, Cocaine, Ethanol, Alprazolam, Diphenhydramine	1
Oxycodone, Diphenhydramine, Diazepam	1
Fentanyl, Cocaine, Ketamine	1
Rocuronium	1
Fentanyl, Cocaine, Methadone	1
Fentanyl, Methamphetamine, Xylazine, Cocaine	1
Fentanyl, Cocaine, Methamphetamine	1
Fentanyl, Morphine, Hydromorphone	1

2024 Annual Drug Report

Fentanyl, Cocaine, Methamphetamine, Bromazolam, Ethanol	1
fentanyl, oxycodone, bupropion, duloxetine, mirtazapine	1
Fentanyl, Cocaine, Oxycodone	1
Fentanyl, Para-Fluorofentanyl	1
Cocaine, Benzodiazepines	1
Fentanyl, Para-Fluorofentanyl, Xylazine	1
Fentanyl, Cocaine, Xylazine, Ethanol	1
Fentanyl, Xylazine, Heroin, Ethanol	1
Fentanyl, Cocaine, Xylazine, Methamphetamine	1
Fentanyl, Xylazine, Alprazolam, Ethanol	1
Fentanyl, Cocaine, Xylazine, Mitragynine	1
Cyclobenzaprine, Dextro-Levo-Methmorphan, Clonazepam, Acetaminophen	1
Fentanyl, Diphenhydramine	1
Fentanyl, Xylazine, Cocaine, Methamphetamine, Buprenorphine, Gabapentin, Trazadone	1
Fentanyl, Diphenhydramine, Hydromorphone, Promethazine	1
Fentanyl, Xylazine, Loperamide	1
cocaine, cocaethylene, fentanyl, para-fluorofentanyl, Ethanol	1
Fentanyl, Xylazine, Mitragynine	1
Fentanyl, Ethanol, Methamphetamine	1
Fentanyl, Xylazine, Oxycodone	1
Venlafaxine	1
Ethanol, Cocaine	1
Amitriptyline, Alprazolam, Ethanol	1
ethanol, cocaine, Cocaethylene, methamphetamine	1
Acetaminophen, Hydrocodone, Oxycodone, Trazadone	1
Methamphetamine, Cocaine, Haloperidol, Aripiprazole	1
Fentanyl, Hydrocodone, Gabapentin	1
Morphine	1
Cocaine, Fentanyl	1
N-dimethylpentylone, xylazine, methamphetamine, fentanyl, Acetyl-Fentanyl	1
Fentanyl, Methamphetamine, Cocaine, Sertraline	1
N-Pyrrolidino protonitazene, Mitragynine, temazepam	1
Fentanyl, Methamphetamine, Diphenhydramine	1
Oxycodone, Oxymorphone	1
Fentanyl, Methamphetamine, Gabapentin	1
Oxycodone, Phentermine, Gabapentin, Olanzapine, Duloxetine, Promethazine, Clonazepam	1
Fentanyl, Methamphetamine, Hydroxyzine	1
Unknown Substances	1
Fentanyl, Methamphetamine, Morphine, Norbuprenorphine	1
cocaine, methamphetamine, doxepin, ethanol, olanzapine, hydroxyzine, citalopram/escitalopram	1
Fentanyl, Heroin, Mitragynine	1
Fentanyl, Heroin, Xylazine, Methamphetamine	1

2024 Annual Drug Report

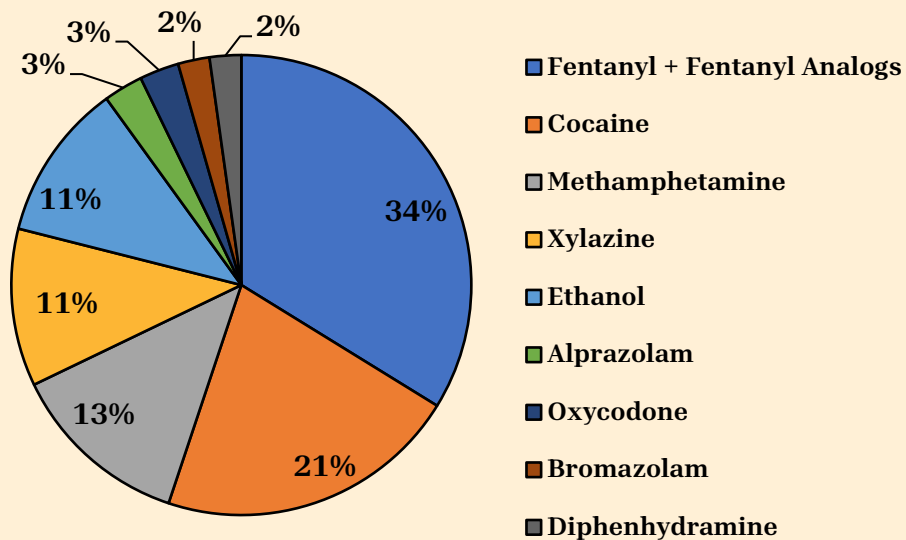
Note:

- Aggregate toxicology data includes deaths with a manner of Accident, Suicide, Homicide, and Undetermined.
- Cases that had the same substance combination were consolidated in the above graphic.
- One case displays as 'Unknown Substances', the circumstances are due to hospital UDS which does not capture comprehensive toxicology results of all substances. Results were positive for Benzodiazepines and Opiates.

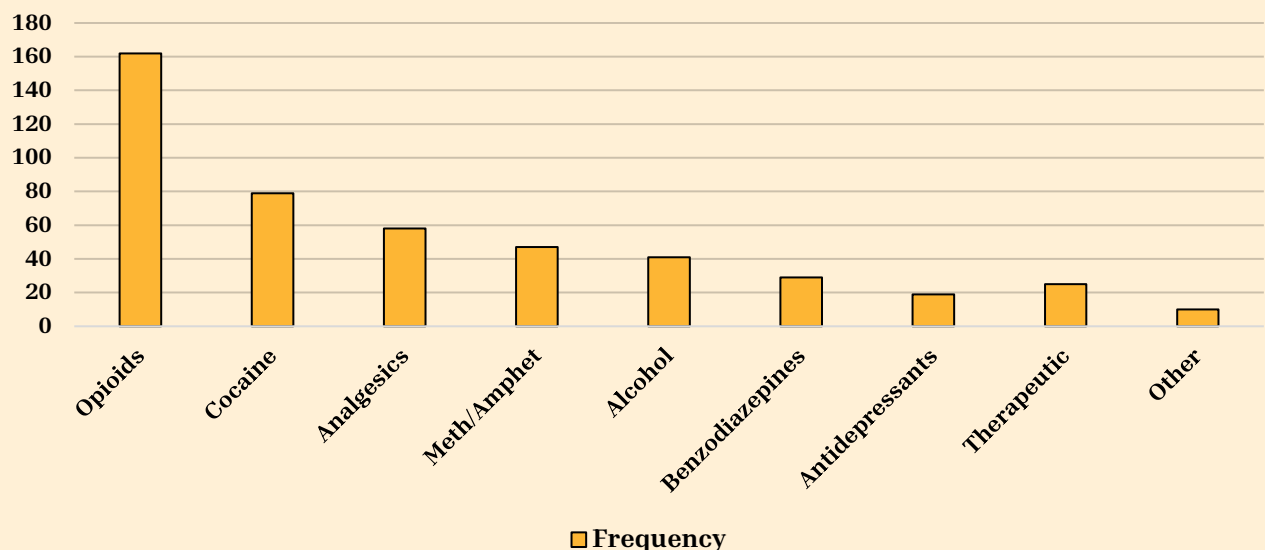
Average
Number of
Substances
Found in
Mixed-Drug
Cases

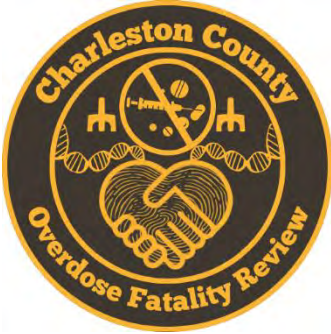
3

Most Common Substances



Substance Categories





Charleston County Overdose Fatality Review

In November 2024, the Charleston County Coroner's Office initiated the Overdose Fatality Review in response to the frequency of drug-related fatalities due to the Opioid Crisis. The Overdose Fatality Review aims to identify system gaps and develop innovative, community-specific strategies for overdose prevention and intervention. This process involves confidential reviews of individual deaths conducted by a multidisciplinary team.

The case review process provides insights into a person's life history with a focus on various factors such as drug use, existing health conditions, significant health events, and social-emotional trauma, including adverse childhood experiences. It also considers interactions with law enforcement and the criminal justice system, SUD treatment history, and additional contextual factors specific to the Charleston area. The goal of this review is to gain a deeper understanding of the missed opportunities for prevention and intervention that could have potentially prevented an overdose death.

By conducting these reviews, jurisdictions identify patterns of need and opportunity within specific agencies and across various systems. By incorporating input from public health, medical, and behavioral health providers, first responders, and the community, the members of the OFR can develop program and policy recommendations. These recommendations aim to enhance coordination and collaboration among agencies and improve the availability of community resources to prevent future overdose deaths.

Reviews Conducted

6

Initiatives Supported from trends found in Case Reviews

- Expanding support resources such as peer support, SUD treatment options, and pre-release planning for individuals booked into Al Cannon
- Collaborative harm reduction initiatives targeting at-risk populations identified by cross-agency data sharing.
- Increasing public awareness of the risks of illicit substance use, about substance use disorder, and to decrease stigma associated with substance use and medically assisted treatment.

Agencies in Attendance

- The Charleston Center
- Charleston County Sheriff's Office
- WakeUp Carolina
- Oxford House
- Favor Lowcountry
- MUSC ED
- Roper St Francis ED
- Mount Pleasant Police Department
- Narcotics Officers
- North Charleston Police Department
- One80 Place
- Emergency Medical Services
- The Solicitor's Office
- Drug Court
- HIDTA
- City of Charleston Police Department
- The CDC Foundation
- Al Cannon Detention Center

Highlights

Novel Substances

Xylazine
(39 Deaths)

- Only approved for veterinary use.
- Used for sedation, anesthesia, muscle relaxation, and analgesia

Buprenorphine/Methadone
(9 Deaths)

- Both substances are used for medically assisted treatment for substance use disorder.

Bromazolam
(8 Deaths)

- Designer benzodiazepine that has similar effects to alprazolam and diazepam
- Not FDA approved in the United States

Para-Fluorofentanyl
(5 Deaths)

- Analogue of fentanyl that causes similar effects to fentanyl.
- Reportedly more toxic than fentanyl
- Not Approved for medical use in the United States

Acetyl-Fentanyl
(3 Deaths)

- Analogue of fentanyl that causes similar effects to fentanyl.
- Not approved for medical use in the United States

N-Pyrrolidino protonitazene
(2 Deaths)

- Synthetic Opioid 25 times greater in potency than fentanyl.

Most Frequent Substance Combinations

Cocaine	25
Fentanyl	13
Methamphetamine	10
Fentanyl, Cocaine	10
Fentanyl, Xylazine, Methamphetamine	7
Fentanyl, Cocaine, Ethanol	6
Fentanyl, Xylazine	5