

Characteristics of Unintentional Drug Overdose Deaths Before and During the COVID-19 Pandemic

**Drug Surveillance Unit
Epidemiology Section
Division of Health Protection
Georgia Department of Public Health**

<https://dph.georgia.gov/drug-surveillance-unit>



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Drug overdoses and overdose deaths have been increasing both in Georgia and nationally throughout the COVID-19 pandemic (national data can be found [here](#)). The COVID-19 crisis created unique challenges for those in treatment and recovery, including physical distancing, quarantine, and other public health measures that have disrupted access to medication and other support services for many people¹.

The purpose of this report is to describe the potential effects of the COVID-19 pandemic on unintentional drug overdose deaths by comparing 2020 and 2019 drug overdose death data, including describing the mental health, substance use, and life stressors circumstances surrounding those deaths. Drug overdose data were analyzed by the Georgia Department of Public Health (DPH) Epidemiology Program, Drug Surveillance Unit (DSU), using Georgia's State Unintentional Drug Overdose Reporting System (SUDORS) data.

Key Findings

- Compared to 2019, in 2020:
 - Unintentional drug overdose deaths involving all drugs increased 41%, from 1285 in 2019 to 1812 in 2020.
 - Opioid-involved unintentional drug overdose deaths increased 55.1%
 - Rx opioid-involved unintentional drug overdose deaths increased 14.5%
 - Heroin-involved unintentional drug overdose deaths increased 35.6%
 - Fentanyl-involved unintentional drug overdose deaths increased 139.4%
 - Stimulant-involved unintentional drug overdose deaths increased 32.6%
 - Benzodiazepine-involved unintentional drug overdose deaths increased 61.4%
- 17.4% of unintentional drug overdose deaths in Georgia tested positive for alcohol in 2019, while 23.1% tested positive for alcohol in 2020.
- From 2019 to 2020, there was a 39.7% increase in diagnosed mental health problems at the time of fatal overdose.
- From 2019 to 2020, there was a 47.5% increase in known substance abuse issues among those who died of overdose.
- From 2019 to 2020, there was a 38.3% increase in decedents who experienced a previous overdose and a 73.7% increase in decedents who had experienced opioid use relapse prior to their fatal overdose.
- From 2019 to 2020, there was a 44.7% increase in decedents who were experiencing homelessness at the time of their fatal overdose.
- From 2019 to 2020, there was a 421% increase in overdose decedents who experienced a recent medical crisis within one month of their fatal overdose.
- Evidence of injection drug use among fatal overdoses increased 63.1% from 2019 to 2020.
- Injuries occurring in Georgia's largest metro counties (Cobb, DeKalb, Fulton, Gwinnett) increased 42.6% from 2019 to 2020.

¹ National Institute on Drug Abuse (2021, September 8). *COVID-19 and Substance Use*. <https://www.drugabuse.gov/drug-topics/comorbidity/covid-19-substance-use>

Unintentional Drug Overdose Deaths, Georgia, 2019-2020

Data Source

The State Unintentional Drug Overdose Reporting System (SUDORS) collects detailed investigative and toxicological information from Coroners/Medical Examiners about unintentional and undetermined-intent drug overdose deaths, to better understand the changing nature of the opioid epidemic and inform key stakeholders. Unintentional drug overdose deaths were derived from the death certificates of Georgia and non-Georgia residents who died in Georgia. Drug overdose deaths are deaths where the death certificate (DC) AND/OR the coroner or medical examiner (CME) report indicates that acute drug toxicity directly caused the death.

Case Definitions

(Note: categories are not mutually exclusive)

All drug overdose death

Includes any case with an over-the-counter, prescription, or illicit drug listed in the cause of death. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results are also included.

Opioid-involved overdose death

Includes any case with an opioid listed in the cause of death. Involves both prescription opioid pain relievers (e.g., hydrocodone, oxycodone, and morphine), opioids used to treat addiction (e.g., methadone), as well as heroin and synthetic opioids (e.g., fentanyl that may be prescription or illicitly manufactured). Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for opioids are also included.

Rx Opioid-involved overdose death

Includes any case with a prescription opioid listed in the cause of death, including morphine, codeine, oxycodone, oxymorphone, tramadol, buprenorphine, methadone, hydrocodone, hydromorphone, meperidine, tapentadol, noscapine, dihydrocodeine, prescription fentanyl, alfentanil, sufentanil, or other prescription opioid. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for Rx opioids are also included.

Heroin-involved overdose death

Includes any case with heroin and/or heroin metabolite listed in the cause of death. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for heroin and/or heroin metabolite are also included.

Fentanyl-involved overdose death

Includes any case with fentanyl and/or fentanyl metabolite listed in the cause of death. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for fentanyl and/or fentanyl metabolite are also included.

Stimulant-involved overdose death

Includes any case with cocaine and/or amphetamines listed in the cause of death. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for amphetamines and/or cocaine are also included.

Benzodiazepine-involved overdose death

Includes any case with a benzodiazepine listed in the cause of death. Deaths with vague cause of death text (e.g. "mixed drug toxicity" or "polysubstance overdose") that have positive tox results for benzodiazepines are also included.

Other Definitions or Limitations

Healthcare Essential Workers

As defined by the CDC [ACIP Categories of essential workers](#), includes all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials. This includes persons not directly involved in patient care, but potentially exposed to infectious agents while working in a healthcare setting.

Non-Healthcare Essential Workers

As defined by the CDC [ACIP Categories of essential workers](#), includes workers who are essential to maintain critical infrastructure and continue critical services and functions. Frontline essential workers (1b) includes the subset of essential workers likely at highest risk for work-related exposure to SARS-CoV-2, the virus that causes COVID-19, because their work-related duties must be performed on-site and involve being in close proximity (<6 feet) to the public or to coworkers. Other essential workers (1c) include essential workers not included in Phase 1a or 1b.

Data quality is dependent upon the level of detail in medical examiner and coroner reports and the reception of the reports from those entities.

Data is subject to change due to data quality improvements. Data shown on this report may not depict the true burden of overdose deaths in Georgia.

Georgia's Public Health State of Emergency for the COVID-19 Pandemic was declared on March 14, 2020.

Underlying Cause of Death ICD-10 Code Description

Unintentional poisoning

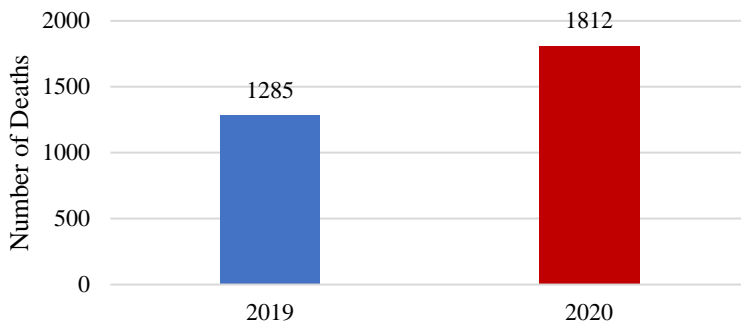
X40 (accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics), X41 (accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified), X42 (accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens), not elsewhere classified), X43 (accidental poisoning by and exposure to other drugs acting on the autonomic nervous system), X44 (accidental poisoning by and exposure to other and unspecified drugs, medicaments and biological substances)

Poisoning of undetermined intent

Y10 (poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics, undetermined intent), Y11 (poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, undetermined intent) Y12 (poisoning by and exposure to narcotics and psychodysleptics (hallucinogens), not elsewhere classified, undetermined intent), Y13 (poisoning by and exposure to other drugs acting on the autonomic nervous system, undetermined intent), Y14 (poisoning by and exposure to other and unspecified drugs, medicaments and biological substances, undetermined intent)

Selected Demographics of Unintentional Drug Overdose Deaths

Total Overdose Deaths, Georgia, 2019 - 2020

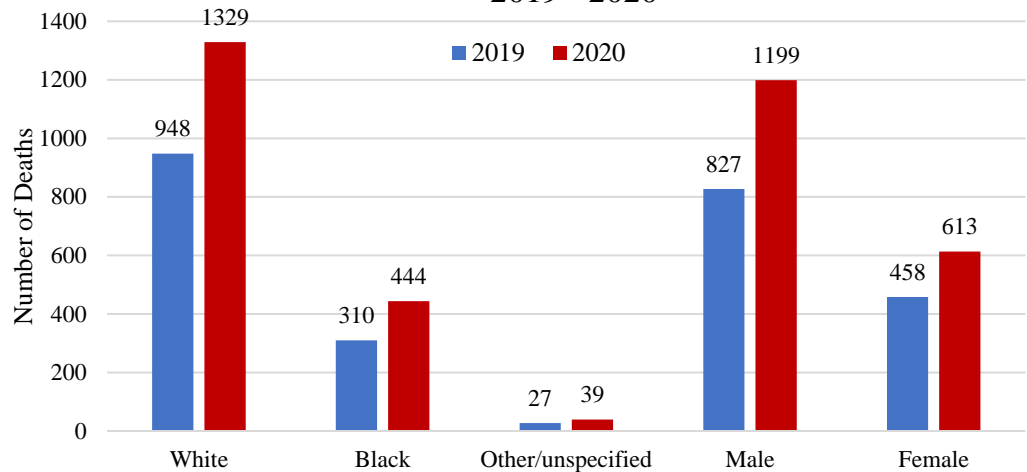


From 2019 to 2020, unintentional drug overdose deaths increased 41% statewide.

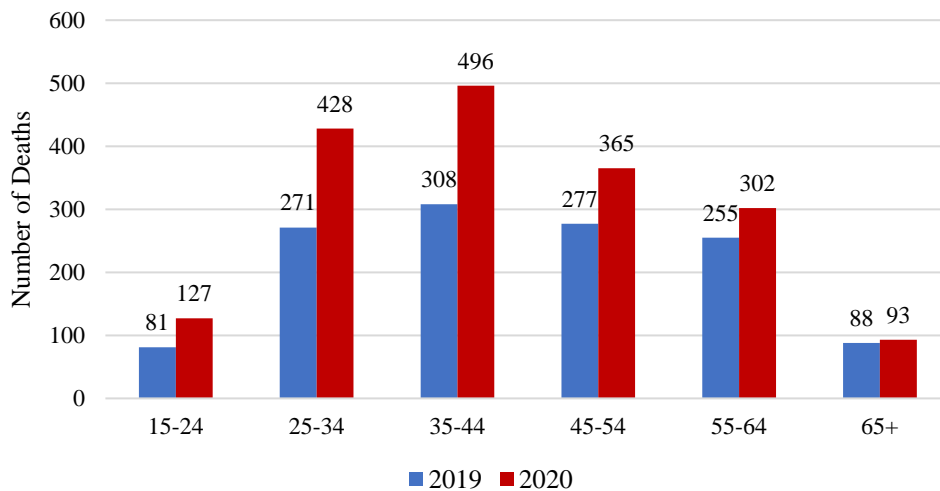
From 2019 to 2020, unintentional drug overdose deaths increased:

- 40% among white persons
- 43% among black persons
- 44% among all other race² groups
- 45% among males
- 34% among females

Unintentional Overdose Deaths by Race and Sex, Georgia, 2019 - 2020



Unintentional Drug Overdose Deaths by Age Group³, Georgia, 2019-2020



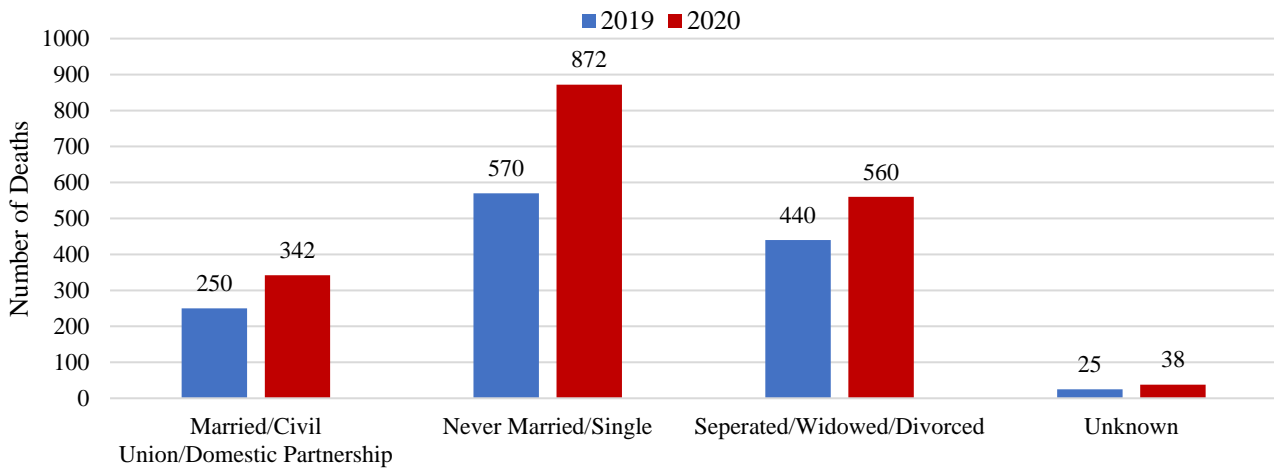
From 2019 to 2020, unintentional drug overdose deaths increased:

- 57% among ages 15-24
- 58% among ages 25-34
- 61% among ages 35-44
- 32% among ages 45-54
- 18% among ages 55-64
- 6% among ages 65+

² Includes decedents categorized as Asian, Pacific Islander, American Indian, Other, and unspecified.

³ Excludes decedents aged <15 due to extremely low counts.

Unintentional Overdose Deaths by Marital Status⁴, Georgia, 2019 - 2020



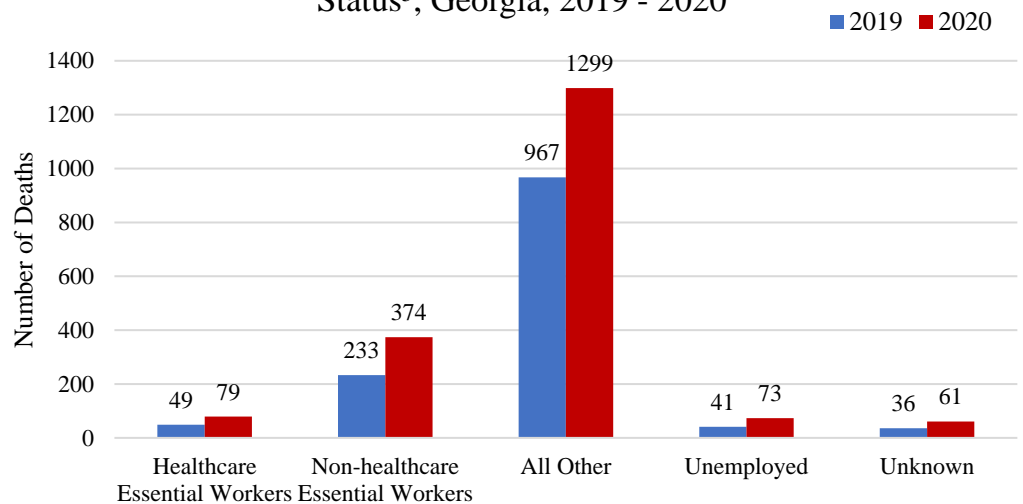
From 2019 to 2020, unintentional drug overdose deaths increased:

- 37% among decedents who were in a marriage, civil union, or domestic partnership
- 53% among decedents that are single, or were never married
- 27% among decedents that were separated, widowed, or divorced
- 52% among decedents with an unknown marital status

From 2019 to 2020, unintentional drug overdose deaths increased:

- 61% among Healthcare Essential workers⁶
- 61% among Essential workers⁷
- 78% among unemployed decedents
- 34% among all other workers

Unintentional Overdose Decedents by Essential Worker Status⁵, Georgia, 2019 - 2020



⁴ Based on marital status at time of death.

⁵ Based on reported occupation at time of death; As defined by the CDC [ACIP Categories of essential workers](#).

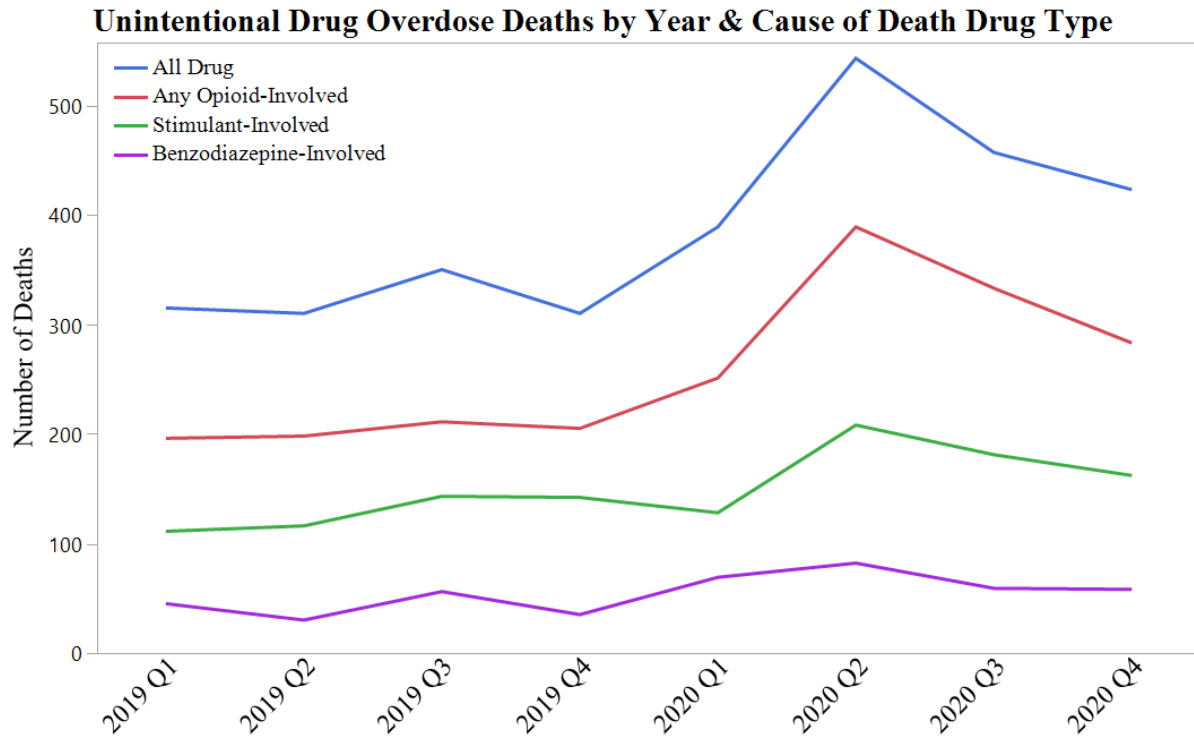
⁶ Includes all paid and unpaid persons serving in healthcare settings who have the potential for direct or indirect exposure to patients or infectious materials. This includes persons not directly involved in patient care, but potentially exposed to infectious agents while working in a healthcare setting.

⁷ Includes workers who are essential to maintain critical infrastructure and continue critical services and functions including: Frontline essential workers (1b): The subset of essential workers likely at highest risk for work-related exposure to SARS-CoV-2, the virus that causes COVID-19, because their work-related duties must be performed on-site and involve being in close proximity (<6 feet) to the public or to coworkers; Other essential workers (1c): Essential workers not included in Phase 1a or 1b.

Toxicology Analysis

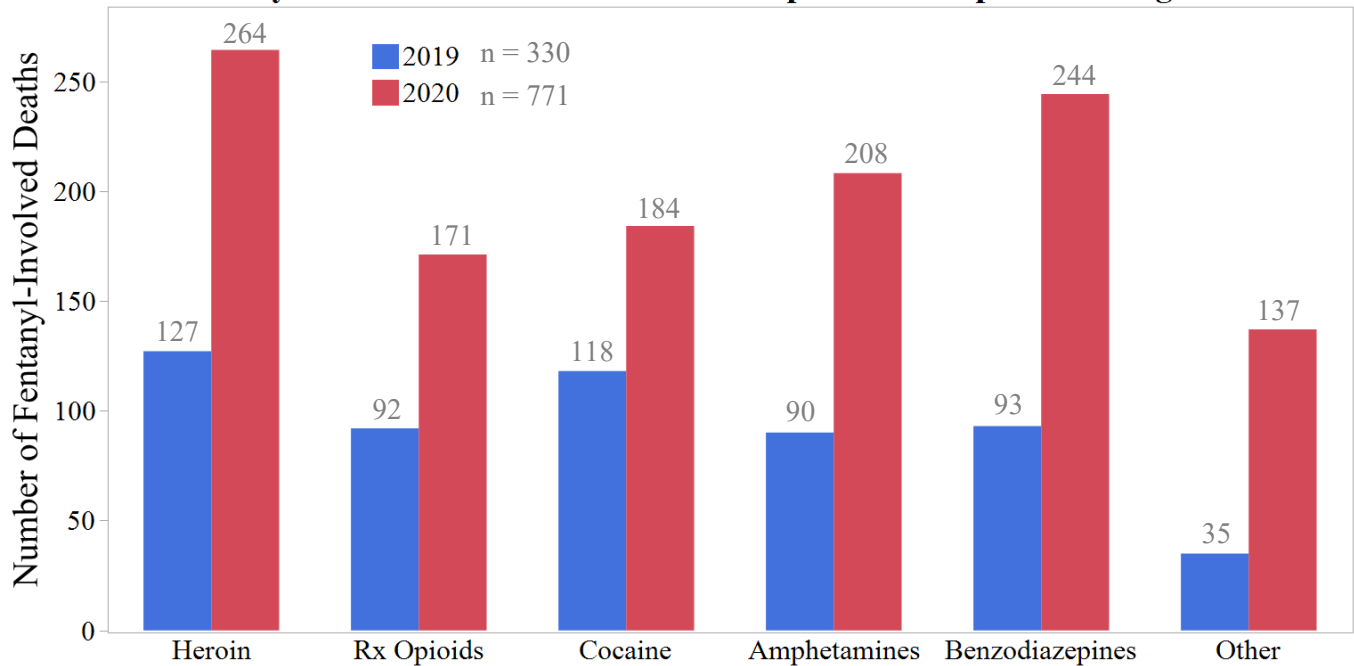
Unintentional Drug Overdose Deaths by Year & Cause of Death Drug Type			
Drug Class/Substance	2019 # (%*) n=1285	2020 # (%*) n=1812	% Change (count)
All Drug	1285 (100.0)	1812 (100.0)	41.0%
Opioid-Involved	810 (63.0)	1256 (69.1)	55.1%
Rx Opioid-Involved	311 (24.2)	356 (19.6)	14.5%
Heroin-Involved	309 (24.0)	419 (23.1)	35.6%
Fentanyl-Involved	343 (26.7)	821 (45.3)	139.4%
Stimulant-Involved	512 (39.8)	679 (37.5)	32.6%
Benzodiazepine-Involved	166 (12.9)	268 (14.8)	61.4%

*Percent indicates the percent of the total number of SUDORS cases for the respective year. Categories are not mutually exclusive.



- 85% of unintentional drug overdose deaths tested positive for more than 2 substances in 2019 compared to 83% in 2020.
 - The median number of substances present was four in both 2019 and 2020.
- 17.4% of unintentional drug overdose deaths tested positive for alcohol in 2019 compared to 23.1% in 2020.

Fentanyl-Involved Overdose Deaths & Opioid/Non-Opioid Pairings



*Categories are not mutually exclusive.

- During 2021, the DPH Drug Surveillance Unit has received reports from communities across the state of multiple fatal and non-fatal overdoses which are believed to be related to street drugs laced with fentanyl (a dangerous and potentially lethal opioid), including counterfeit pills, heroin, and cocaine.
- In 2020, 93.9% of fentanyl-involved overdose deaths involved at least one additional substance.
- From 2019 to 2020, fentanyl-involved overdose deaths increased:
 - 107.9% among cases that also tested positive for heroin.
 - 85.9% among cases that also tested positive for prescription opioids.
 - 55.9% among cases that also tested positive for cocaine.
 - 131.1% among cases that also tested positive for amphetamines.
 - 162.4% among cases that also tested positive for benzodiazepines.

Circumstances Surrounding Fatal Overdose⁸

Mental Health			
Circumstance	2019 # (%*) n=1285	2020 # (%*) n=1812	% Change (count)
Decedent had history of treatment for mental health or substance abuse (either current and/or past)	266 (20.7)	335 (18.5)	25.9%
Decedent had diagnosed mental health problem at the time of death ⁹	262 (20.4)	366 (20.2)	39.7%
Decedent was undergoing mental health/substance abuse treatment at the time of death ¹⁰	203 (15.8)	243 (13.4)	19.7%
Decedent had any history of suicide attempts, plans, and/or thoughts	89 (6.9)	114 (6.3)	28.1%

**Percent indicates the percent of the total number of SUDORS cases for the respective year. Categories are not mutually exclusive.*

⁸ The Circumstances Tables capture specific circumstantial information surrounding the decedent's fatal overdose. This includes the decedent's mental health and substance use histories, and other notable life stressors. The circumstances are derived from information provided in Coroner/Medical Examiner Investigation Reports and Emergency Medical Services Record narratives. For cases where a circumstance is not endorsed, the presence of that circumstance is either No or Unknown.

⁹ Decedent was known to have an unresolved mental health problem at the time of the fatal overdose. Mental health problems include those disorders and syndromes listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) with the exception of alcohol and other substance dependence.

¹⁰ Decedent was known to be receiving treatment for mental health/substance abuse at the time of the overdose. This includes but is not limited to: inpatient and outpatient rehabilitation, receiving Medication-Assisted Therapy (MAT) for drug abuse, was seeing a psychiatrist, was prescribed medications specifically for mental health treatment, was committed to a mental institution, and/or was going to Alcoholics or Narcotics Anonymous at the time of the fatal overdose.

Substance Use			
Circumstance	2019 # (%*) n=1285	2020 # (%*) n=1812	% Change (count)
Decedent had known substance abuse issue	1042 (81.1)	1537 (84.8)	47.5%
Decedent had known alcohol problem ¹¹	216 (16.8)	246 (13.6)	13.9%
Decedent had experienced a previous overdose (prior to fatal overdose)	115 (8.9)	159 (8.8)	38.3%
Within last month	33 (2.6)	43 (2.4)	30.3%
Between a month and a year ago	23 (1.8)	27 (1.5)	17.4%
More than a year ago	18 (1.4)	25 (1.4)	38.9%
Decedent had opioid use relapse (prior to fatal overdose)	76 (5.9)	132 (7.3)	73.7%
Relapse occurred <2 weeks before fatal overdose	48 (3.7)	75 (4.1)	56.3%
Relapse occurred between 2 weeks and 3 months of fatal overdose	7 (.5)	22 (1.2)	214.3%
Relapse mentioned, timing unknown	21 (1.6)	35 (1.9)	66.7%
Decedent had history of treatment for substance abuse ¹²	131 (10.2)	183 (10.1)	39.7%
Current treatment at time of death	56 (4.4)	81 (4.5)	44.6%
No current treatment, but treated in the past	75 (5.8)	102 (5.6)	36.0%
Decedent had change in drug use behavior within one month of fatal overdose	14 (1.1)	17 (.9)	21.4%
Decedent was known to use Marijuana products	54 (4.2)	89 (4.9)	64.8%

*Percent indicates the percent of the total number of SUDORS cases for the respective year. Categories are not mutually exclusive.

¹¹ Decedent had a drinking problem or was addicted to alcohol at the time of the overdose; this excludes occasional drinking and resolved drinking problems.

¹² Decedent was noted to have received current or past treatment for any substance use disorder (i.e., drug dependence or addiction), excluding alcohol. Treatment includes: inpatient and outpatient rehabilitation, receiving Medication-Assisted Treatment (MAT) for drug abuse, was seeing a psychiatrist, and/or was going to Alcoholics or Narcotics Anonymous at the time of the fatal overdose.

Life Stressors			
Circumstance	2019 # (%*) n=1285	2020 # (%*) n=1812	% Change (count)
Decedent was experiencing homelessness at the time of fatal overdose ¹³	38 (3.0)	55 (3.0)	44.7%
Decedent experienced an eviction, loss of home or housing insecurity within a month of fatal overdose	6 (.5)	33 (1.8)	N/A**
Decedent was noted to have a family or intimate partner problem within a month of fatal overdose	3 (.2)	23 (1.3)	N/A**
Decedent experienced a death of family member or friend, or anniversary of traumatic event within a month of fatal overdose	8 (.6)	22 (1.2)	N/A**
Decedent was released from an institution within 30 days prior to fatal overdose	150 (11.7)	197 (10.9)	31.3%
Jail, prison, or detention facility	38 (3.0)	50 (2.8)	31.6%
Healthcare facility	64 (5.0)	90 (5.0)	40.6%
Supervised residential facility related to alcohol or substance abuse	45 (3.5)	51 (2.8)	13.3%
Decedent experienced a recent medical crisis within one month of fatal overdose ¹⁴	19 (1.5)	99 (5.5)	421.1%

*Percent indicates the percent of the total number of SUDORS cases for the respective year. Categories are not mutually exclusive.

** Percent changes for counts less than 10 may be unstable and are not presented

¹³ Homeless status includes individuals living without shelter or living in homeless shelters, abandoned buildings, local campgrounds. Homeless status does not include individuals living at motels, staying with friends, or currently housing individuals with pending evictions.

¹⁴ Decedent was noted to have experienced a medical crisis within one month of fatal overdose. A medical crisis can be acute conditions or recent changes in chronic conditions. This category excludes previous overdoses and includes, but is not limited to, surgery, injury, diagnosis of a new illness, or flare up of pain.

Changes in Drug Use Behavior ¹⁵				
Year	Ingestion ¹⁶ # (%*)	Injection ¹⁷ # (%*)	Snorting/Sniffing ¹⁸ # (%*)	Other ¹⁹ /Unknown Route of Administration # (%*)
2019 n=1285	394 (30.7)	252 (19.6)	82 (6.4)	641 (49.9)
2020 n=1812	288 (21.4)	411 (22.7)	137 (7.6)	981 (54.1)

*Percent indicates the percent of the total number of SUDORS cases for the respective year. Categories are not mutually exclusive.

- Evidence of ingestion drug use among fatal overdoses decreased 26.9% from 2019 to 2020.
- Evidence of injection drug use among fatal overdoses increased 63.1% from 2019 to 2020.

¹⁵ These data were derived from route of drug administration based on scene evidence information (E.g., witness report of injection drug use, needle/syringe on scene, track marks on decedent, etc.) provided in Coroner/Medical Examiner Investigation Reports and Emergency Medical Services Record narratives.

¹⁶ Any indication that substance(s) used leading up to the fatal overdose were orally ingested including witness reports of taking pills or tablets orally or ingesting liquid orally (e.g., liquid methadone), or the discovery of prescription pills, prescription bottles, liquid substance(s), or vials containing liquid substances at the scene of the overdose or on the decedent's body.

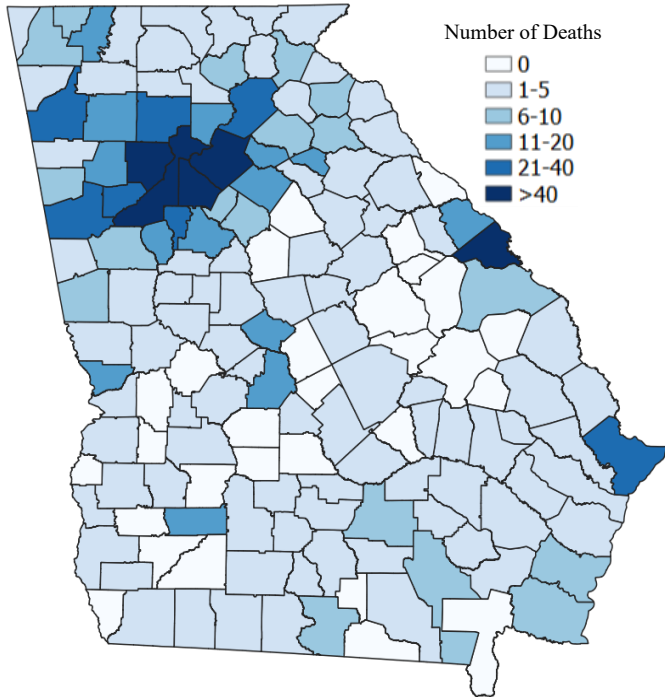
¹⁷ Witness, death scene, or autopsy evidence suggests that the victim injected substance(s) leading up to the fatal overdose including track marks on decedent or tourniquet, cooker, needle/syringe, and/or filter were found on the scene or on decedent.

¹⁸ Any indication that substance(s) used leading up to the fatal overdose were snorted or sniffed including witness reports of snorting (also called insufflation) or sniffing or drug paraphernalia at the overdose scene associated with snorting or sniffing including straws, rolled paper or dollar bills, razor blades, powder on table/mirror, and/or powder on decedent's nose.

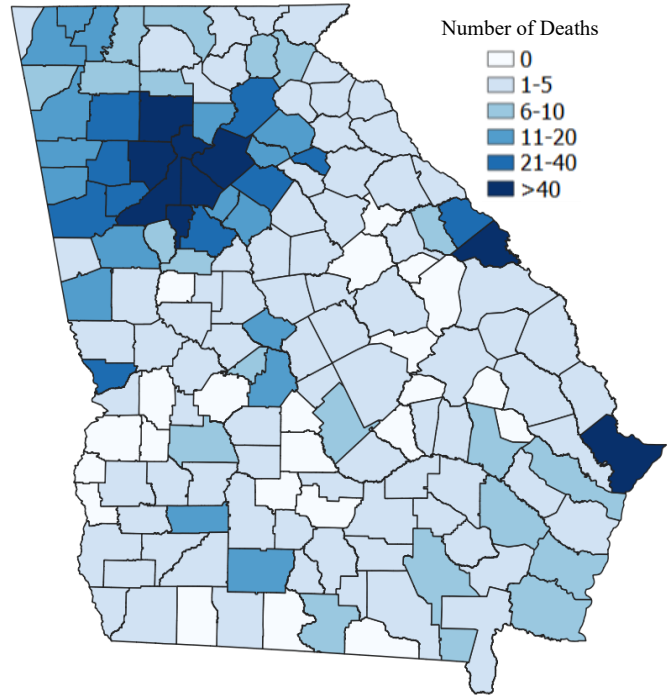
¹⁹ Other routes of administration include smoking, transdermal, suppository, sublingual, and buccal.

Location of Injury²⁰

**2019 All Drug Overdose Deaths
by County of Injury**



**2020 All Drug Overdose Deaths
by County of Injury**



- Injuries occurring in Georgia’s largest metro counties (Cobb, DeKalb, Fulton, Gwinnett) increased 42.6% from 2019 to 2020.
- 81.8% of Georgia counties had at least one injury in 2019, while 85.5% of Georgia counties had at least one injury in 2020.

Top 5 Locations of Injury	2019 # (%*) n=1285	2020 # (%*) n=1812	% Change (count)
House, apartment	860 (67.0)	1178 (65.9)	37.0%
Hotel/motel	59 (4.6)	125 (6.9)	111.9%
Motor vehicle (excluding school bus and public transportation)	54 (4.2)	62 (3.4)	14.8%
Other commercial establishment (e.g., grocery store, retail outlet, laundry mat)	17 (1.3)	21 (1.2)	23.5%
Jail, prison, detention facility	15 (1.2)	14 (0.8)	-6.7%

**Percent indicates the percent of the total number of SUDORS cases for the respective year.*

²⁰ Location of injury indicates where onset of overdose symptoms occurred.