

Stimulant Overdose Surveillance Report Georgia 2020

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

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



Stimulant Overdose Surveillance, Georgia, 2020

The purpose of this report is to describe fatal (mortality) and nonfatal (morbidity) stimulant poisoning hospitalizations and deaths in Georgia during 2018, 2019, and 2020, including those involving prescription stimulants (e.g., Adderall, Ritalin, etc.), and illicit stimulants (e.g., cocaine, methamphetamine, etc.). Stimulant overdose data was analyzed by the Georgia Department of Public Health (DPH) Epidemiology Program, Drug Surveillance Unit, using Georgia hospital discharge inpatient and emergency department (ED) visit data, and DPH Vital Records death data.

Key Findings

Stimulant poisoning morbidity and mortality are increasing in Georgia.

Mortality

- From 2018 to 2019, stimulant poisoning deaths increased by 7%, from 775 to 830 deaths.
- From 2019 to 2020, stimulant poisoning deaths increased by 20%, from 830 to 996 deaths.
- In 2020, there were more deaths from amphetamine poisoning than any other stimulant.
- White persons were 1.2 times more likely to die from stimulant poisoning and 3.8 times more likely to die from amphetamine poisoning than black persons.
- Black persons were 2.7 times more likely to die from cocaine poisoning than white persons.
- Males aged 35-44 died more frequently from stimulant poisoning than males and females in any other age group.

Morbidity

- From 2018 to 2019, stimulant poisoning hospitalizations decreased by <1% and stimulant poisoning emergency department visits decreased by <1%.
- From 2019 to 2020, stimulant poisoning hospitalizations decreased by 6.2% and stimulant poisoning emergency department visits decreased by 6.0%.
- In Georgia in 2020:
 - 2,515 emergency department visits and 1,632 hospitalizations were due to stimulant poisoning.
 - 1,091 emergency department visits and 908 hospitalizations were due to cocaine poisoning.
 - 1,214 emergency department visits and 733 hospitalizations were due to amphetamine poisoning.
- White persons were 2.4 times more likely to visit an ED and 2.7 times more likely to be hospitalized due to amphetamine poisoning than black persons.
- Black persons were 6.7 times more likely to visit an ED and 8.2 times more likely to be hospitalized due to cocaine poisoning than white persons.
- Males aged 35-44 years visited an ED and were hospitalized due to amphetamine poisoning more frequently than males and females in any other age group.

Note: further information about opioid-related hospitalizations and deaths in Georgia can be found in the Drug Surveillance published online at <https://dph.georgia.gov/epidemiology/drug-surveillance-unit>.

Deaths Involving Stimulants (Mortality), Georgia, 2020

Data Source

Drug-related deaths were derived from DPH Vital Records death certificates for all deaths that occurred in Georgia during 2018-2020. Data records are continuously updated (corrected, amended or deleted) as more information becomes available, therefore, reports represent the most current data, and future reports may reflect updated data.

Case Definitions (*Note: categories are not mutually exclusive, includes only drug overdose deaths caused by acute poisoning*)

Deaths involving ANY DRUG:

May involve any over-the-counter, prescription, or illicit drug

Deaths with any of the following ICD-10 codes as any underlying cause of death: X40-44, X60-64, X85, Y10-14

Deaths involving ALL STIMULANTS:

Includes prescription stimulants (e.g. Adderall, Ritalin, etc.), over-the-counter stimulants (e.g. caffeine, ephedrine, etc.) and illicit stimulants (e.g. cocaine, methamphetamine, ecstasy, etc.)

1. Deaths with any of the following ICD-10 codes as any underlying cause of death: X40-44, X60-64, X85, Y10-14 AND any of the following ICD-10 codes as any other listed cause of death: T40.5, T43.6

OR

2. Any cause of death text field contains the following keywords: 5F-ADB, adderall, amphetamine, bath salt, bath salts, bathsalt, biphphetamine, BK-DMBDB, bk-dmbdb, cathinone, coca leaf, cocaine, concerta, crack, crystal meth, dexedrine, dextroamphetamine, ecstasy, ephedrine, flakka, focalin, khat, levoamphetamine, lisdexamphetamine, MDA, MDMA, methamphetamine, methylin, mollie, molly, pseudoephedrine, psychostimulant, ritalin, speed, speedball, stimulant, vyvanse

Deaths involving COCAINE

1. Deaths with any of the following ICD-10 codes as any underlying cause of death: X40-44, X60-64, X85, Y10-14 AND the following ICD-10 code as any other listed cause of death: T40.5

OR

2. Any cause of death text field contains the following keywords: coca leaf, cocaine, crack

Deaths involving OTHER STIMULANTS with abuse potential

Includes prescription stimulants (e.g. Adderall, Ritalin, Concerta, etc.), over-the-counter (e.g. caffeine) and illicit stimulants (e.g. crystal meth, ecstasy, MDMA, etc.)

1. Deaths with any of the following ICD-10 codes as any underlying cause of death: X40-44, X60-64, X85, Y10-14 AND any of the following ICD-10 codes as any other listed cause of death: T43.6

OR

2. Any cause of death text field contains the following keywords: 5F-ADB, adderall, amphetamine, bath salt, bath salts, bathsalt, biphphetamine, BK-DMBDB, bk-dmbdb, cathinone, concerta, crystal meth, dexedrine, dextroamphetamine, ecstasy, ephedrine, flakka, focalin, khat, levoamphetamine, lisdexamphetamine, MDA, MDMA, methamphetamine, methylin, mollie, molly, pseudoephedrine, psychostimulant, ritalin, speed, speedball, stimulant, Vyvanse

Other Definitions or Limitations

Overdose death county represents the county of residence.

Rate indicates deaths per 100,000 population using Census data as the denominator, and all rates are age-adjusted unless age category is presented.

Rates for categories with fewer than 5 deaths may not be accurate and are not presented in this report.

ICD-10 Code Description

X40-X44 (accidental poisoning by drugs), X60-X64 (intentional self-poisoning by drugs), X85 (assault by drug poisoning), Y10-Y14 (drug poisoning of undetermined intent), T40.5 (poisoning by cocaine), T43.6 (poisoning by psychostimulants with abuse potential)

Emergency Department Visits and Hospitalizations Involving Stimulants (Morbidity), Georgia, 2020

Data Source

Nonfatal ED visits or hospitalizations were derived from Georgia hospital discharge inpatient and ED visit data, and included all ED visits or hospitalizations occurring in a non-Federal acute care hospital in Georgia, among Georgia residents, with a discharge diagnosis indicating disorders or poisoning due to stimulant use during 2018-2020. Data records are continuously updated (corrected, amended or deleted) as more information becomes available, therefore, reports represent the most current data, and future reports may reflect updated data.

Case Definitions (*Note: categories are not mutually exclusive*)

ED visit or hospitalization involving poisoning by any drug

May include any over-the-counter, prescription, or illicit drug

Any mention of ICD-10CM codes: T36-T50

AND 5th or 6th character: 1-4, and a 7th character of A or missing

ED visit or hospitalization involving use of ALL STIMULANTS

Includes prescription stimulants (e.g. Adderall, Ritalin, etc.), over-the-counter stimulants (e.g. caffeine, ephedrine, etc.) and illicit stimulants (e.g. speed, ecstasy, methamphetamine, etc.)

Any mention of ICD-10CM codes: T40.5X, T43.60, T43.61, T43.62, T43.63, T43.69, T44.99, T50.5X, T65.21, T65.22

AND 5th or 6th character: 1-4, and a 7th character of A or missing

ED visit or hospitalization involving use of COCAINE

Any mention of ICD-10CM codes: T40.5X

AND 5th or 6th character: 1-4, and a 7th character of A or missing

ED visit or hospitalization involving use of AMPHETAMINES

Includes prescription amphetamines (e.g. Adderall, etc.) and illicit amphetamines (e.g. speed, ecstasy, methamphetamine, etc.)

Any mention of ICD-10CM codes: T43.62

AND 6th character: 1-4, and a 7th character of A or missing

ED visit or hospitalization involving use of OTHER STIMULANTS

Includes over-the-counter stimulants (e.g. caffeine, nicotine [chewing tobacco, cigarettes, nicotine insecticides, etc.], decongestants [ephedrine, pseudoephedrine, dopamine, etc.]) and prescription stimulants [Ritalin, appetite suppressants]).

1. Any mention of ICD-10CM codes: T43.60, T43.61, T43.63, T43.69, T44.99, T50.5X, T65.21, T65.22

AND

5th or 6th character: 1-4, and a 7th character of A or missing

Other definitions or limitations

County indicates the patient's county of residence.

Only Black and White are indicated for race because of incomplete or sparse data on other races and ethnicities.

Patients that were admitted through the ED and subsequently hospitalized appear in both the ED and inpatient data.

Rate indicates ED visits or hospitalizations per 100,000 population using Census data as the denominator, and all rates are age-adjusted unless age category is presented.

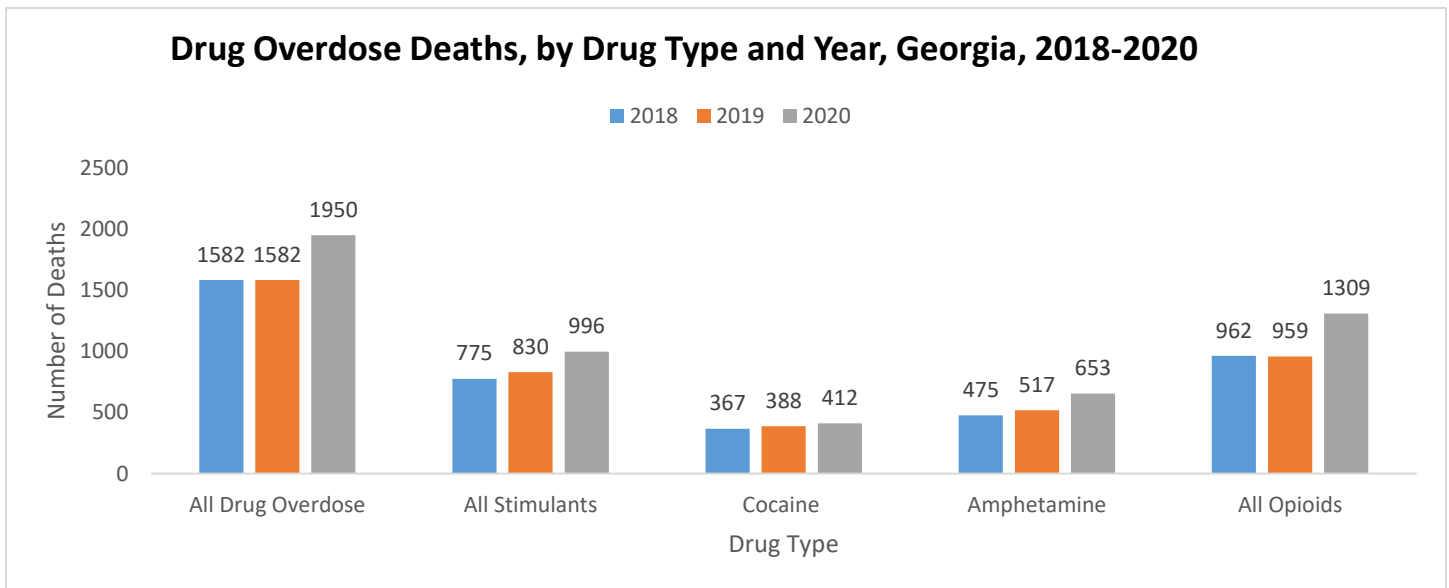
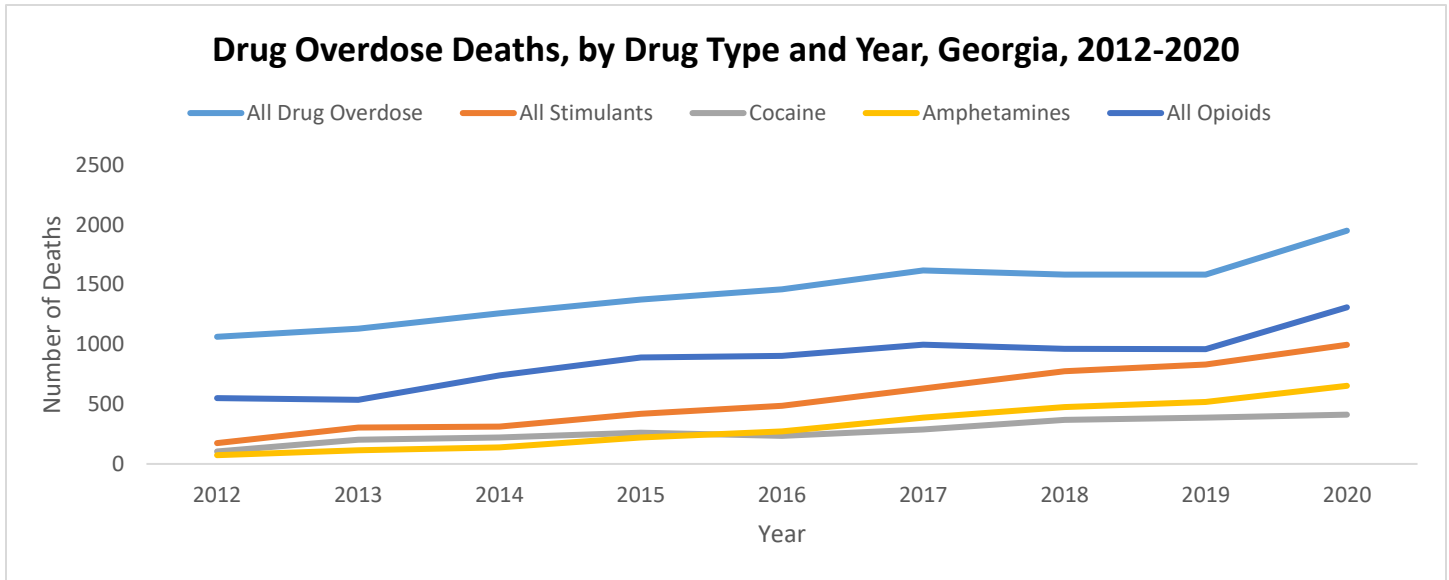
Rates for categories with <5 ED visits or hospitalizations may not be accurate and are not presented in this report.

ICD-10 CM Code Description

Poisoning by: T36-T50 (range includes all drugs), T40.5X (cocaine), T43.60 (unspecified psychostimulants), T43.61 (caffeine), T43.62 (amphetamines), T43.63 (methylphenidate), T43.69 (other psychostimulants), T44.99 (incl. ephedrine) T50.5X (appetite suppressants) T65.21 (chewing tobacco), T65.22 (cigarettes); *5th or 6th Character:* 1 (accidental, unintentional), 2 (intentional self-harm), 3 (assault), 4 (undetermined intent); *7th Character:* A (initial encounter) or missing

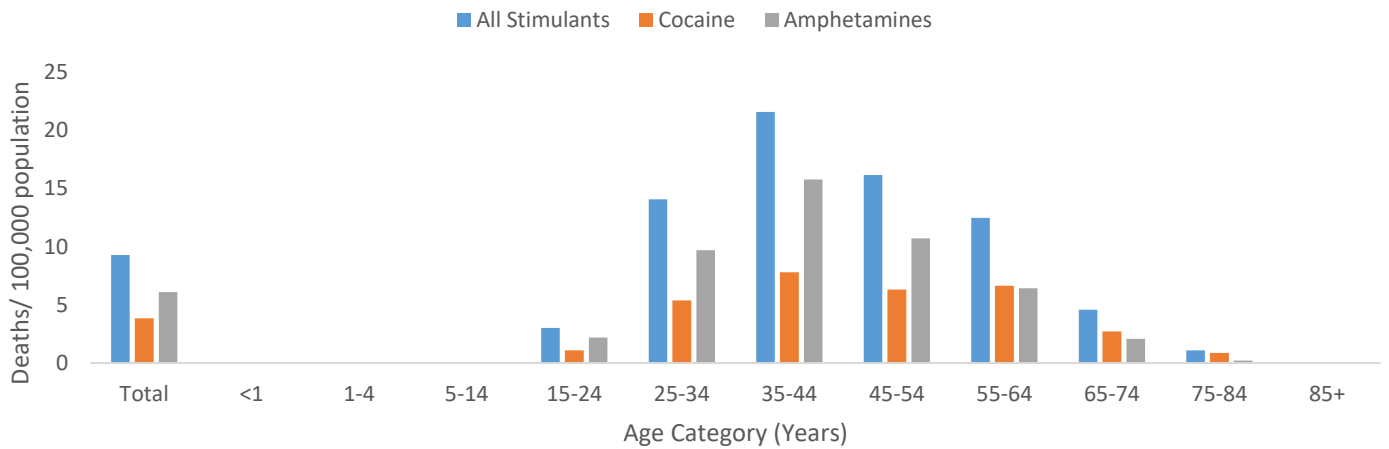
Drug Deaths Involving Stimulants (Mortality)

**Note: Categories are not mutually exclusive and may include any over-the-counter, prescription, or illicit substances. Statistics refer to all overdose deaths in the state of Georgia (permanent residents and non-residents).*



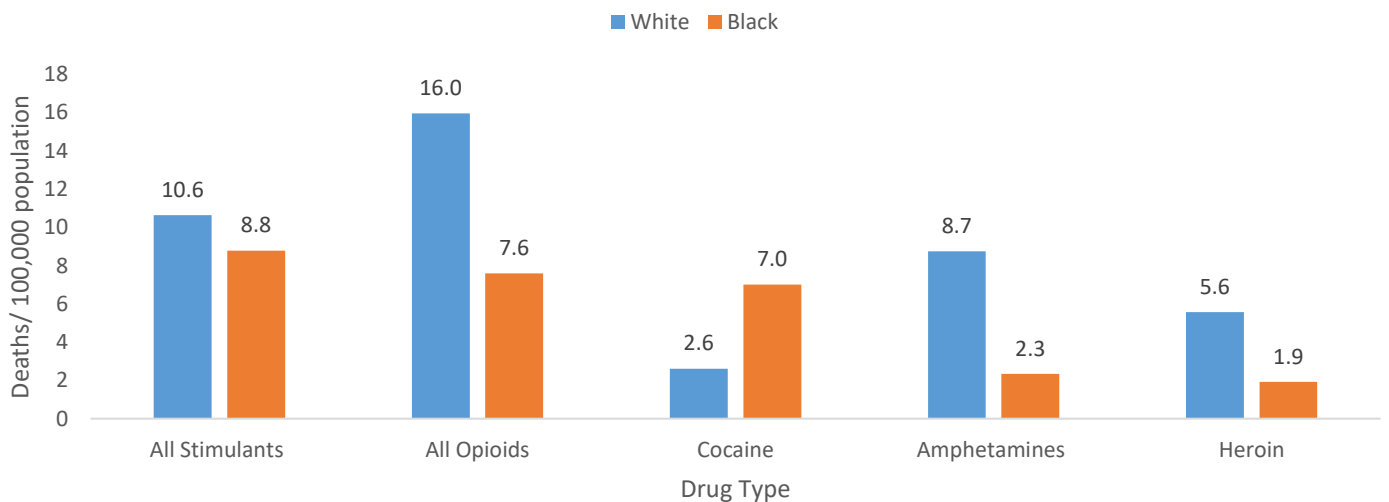
- From 2018 to 2019, there was a 7% increase in stimulant poisoning deaths, a 6% increase in cocaine poisoning deaths, and a 9% increase in amphetamine poisoning deaths.
- From 2019 to 2020, there was a 20% increase in stimulant poisoning deaths, a 6% increase in cocaine poisoning deaths, and a 26% increase in amphetamine poisoning deaths.
- From 2018 to 2019 there was a <1% decrease in opioid poisoning deaths.
- From 2019 to 2020, there was a 36% increase in opioid poisoning deaths.

Stimulant-Related Overdose Death Rates, by Age and Drug Type, Georgia, 2020



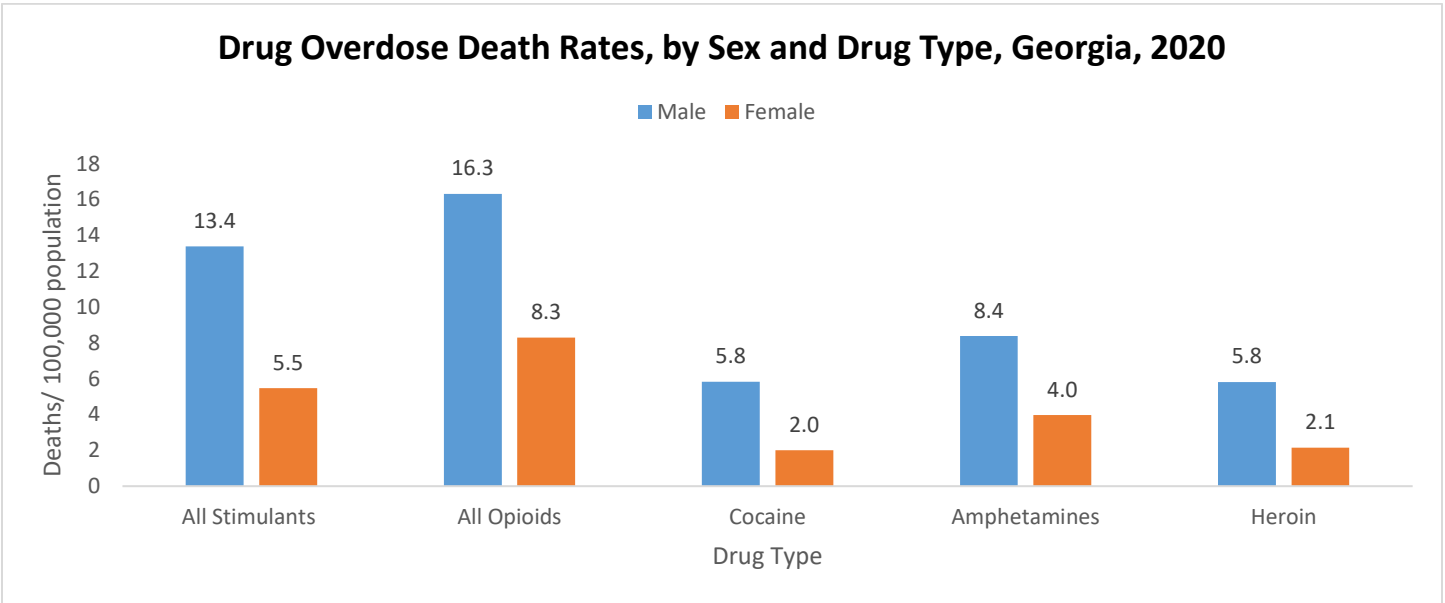
- Persons aged 35-44 years died more frequently from amphetamine poisoning than from cocaine poisoning.
- Persons aged 55 years or older died more frequently from cocaine poisoning than from amphetamine poisoning.
- Persons aged 35-44 had the highest rates for both amphetamine poisoning deaths and cocaine poisoning.

Drug Overdose Death Rates, by Race and Drug Type, Georgia, 2020



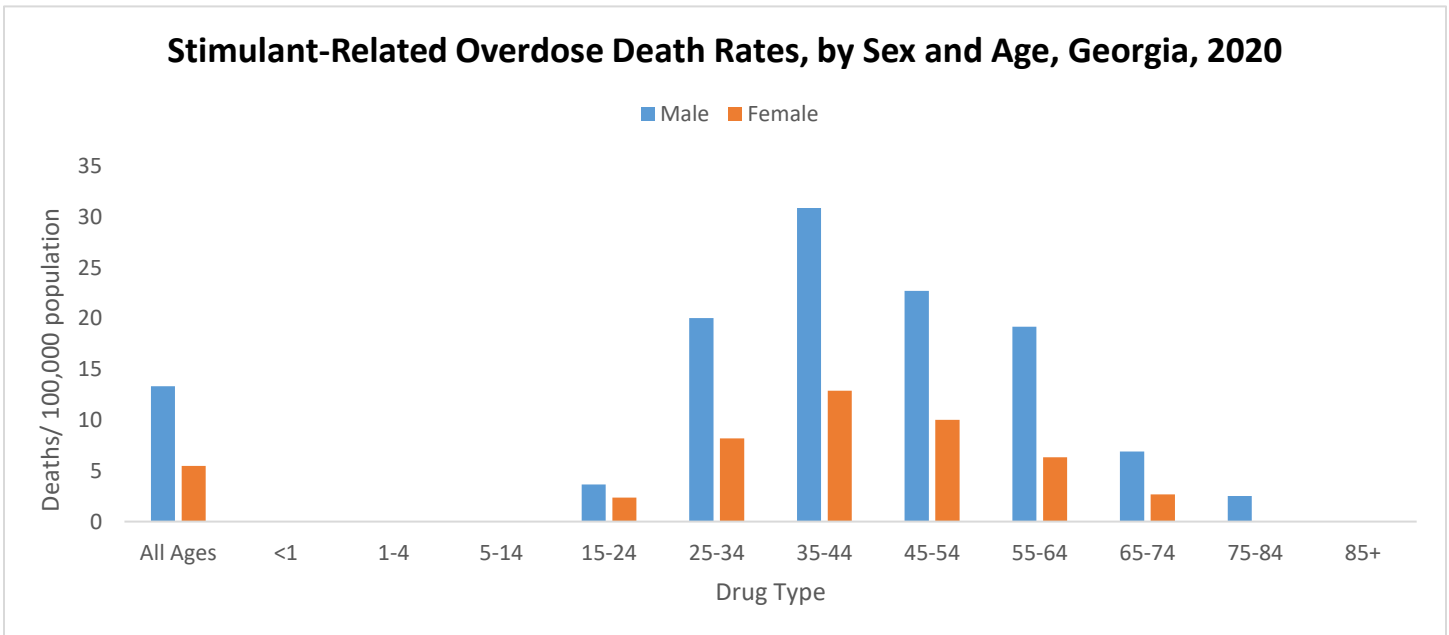
- White persons were 1.2 times more likely to die from stimulant poisoning, 2.1 times more likely to die from opioid poisoning, and 3.8 times more likely to die from amphetamine poisoning than black persons.
- Black persons were 2.7 times more likely to die from cocaine poisoning than white persons.

Drug Overdose Death Rates, by Sex and Drug Type, Georgia, 2020



- Males were 2.4 times more likely to die from stimulant poisoning than females, and 2.0 times more likely to die from opioid poisoning than females.
- Males were 2.9 times more likely to die from a cocaine poisoning than females, and 2.1 times more likely to die from amphetamine poisoning than females.

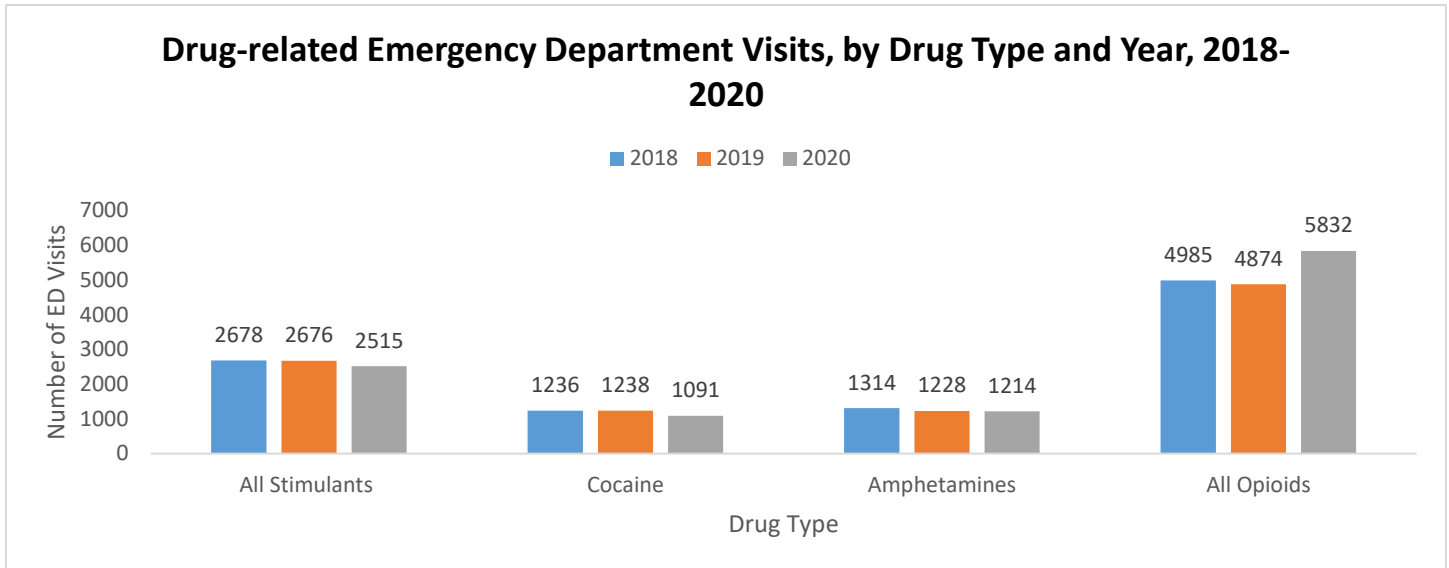
Stimulant-Related Overdose Death Rates, by Sex and Age, Georgia, 2020



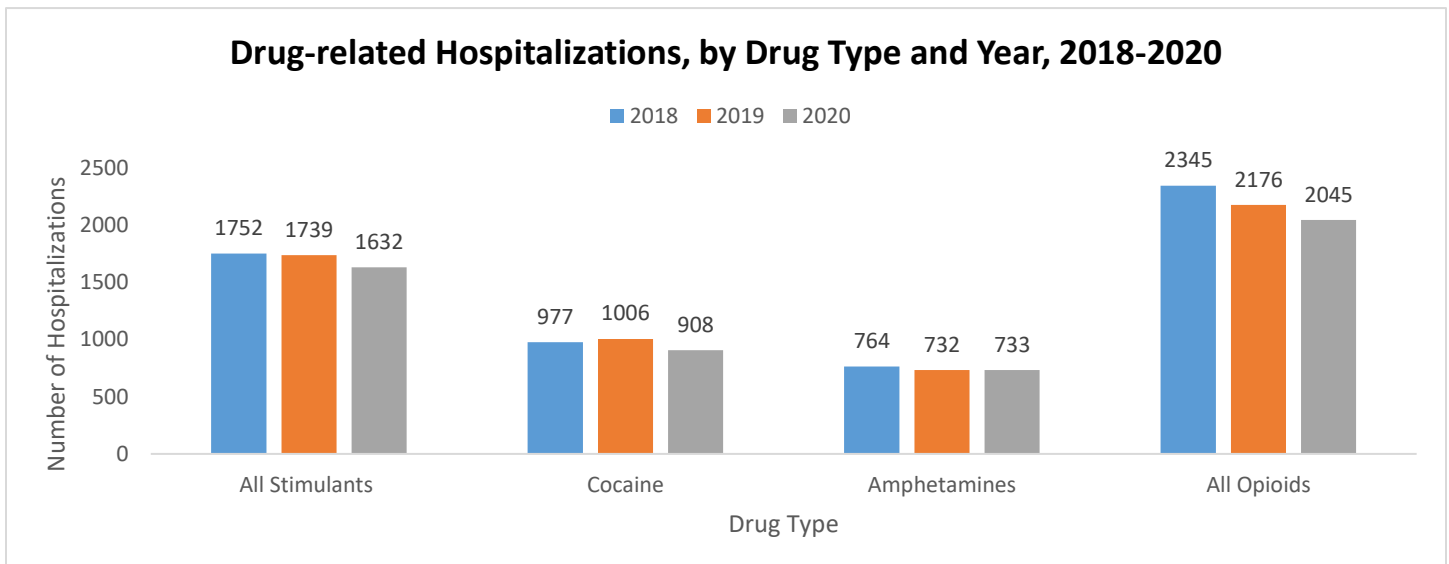
- Males died more frequently from stimulant poisoning than females in every age category.
- Males aged 35-44 died more frequently from stimulant poisoning than males in any other age category.
- Females aged 35-44 died more frequently from stimulant poisoning than females in any other age category.

Emergency Department Visits and Hospitalizations (Morbidity) Involving Stimulants

*Note: Categories are not mutually exclusive and may include over-the-counter, prescription, or illicit substances in each.

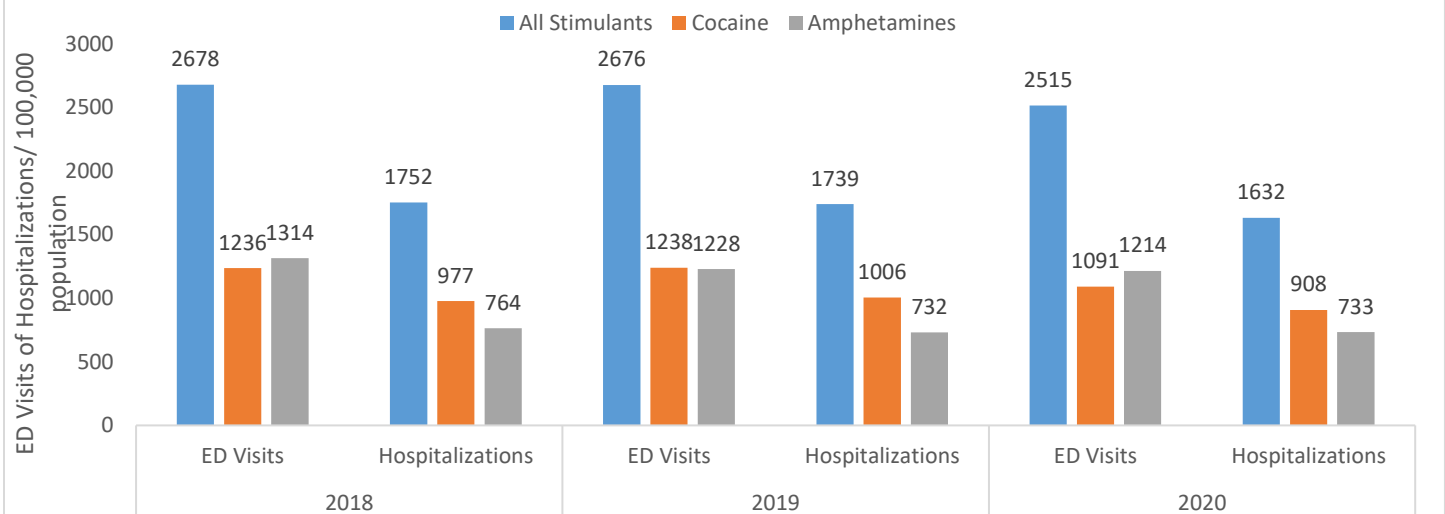


- ED visits due to stimulant poisoning decreased by <1% from 2018 to 2019, and decreased by 6.1% from 2019 to 2020.
- ED visits due to cocaine poisoning increased by <1% while amphetamine poisoning decreased by 7% from 2018 to 2019.
- ED visits due to cocaine poisoning and amphetamine poisoning decreased by 11.9% and 1.1% respectively from 2019 to 2020.



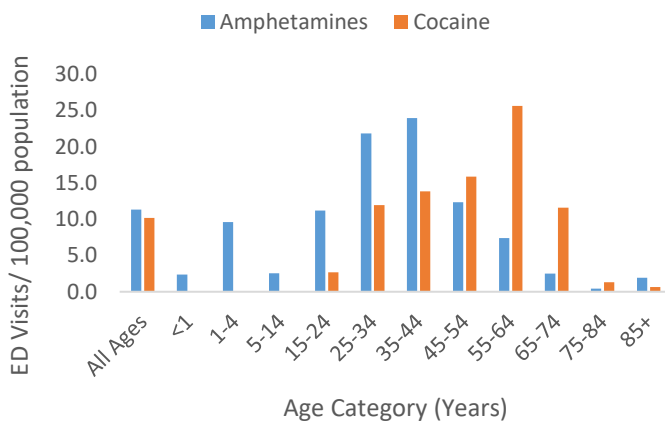
- From 2018 to 2019, stimulant poisoning hospitalizations decreased by <1%, and decreased by 6.2% from 2019 to 2020.
- From 2018 to 2019, cocaine poisoning hospitalizations increased by 3%, while amphetamine poisoning hospitalizations decreased by 4.1%.
- From 2019 to 2020, cocaine poisoning hospitalizations decreased by 9.7% while amphetamine poisoning hospitalizations increased by 0.1%.

Stimulant-Specific Emergency Department Visits and Hospitalization, by Drug Type, Georgia, 2018-2020

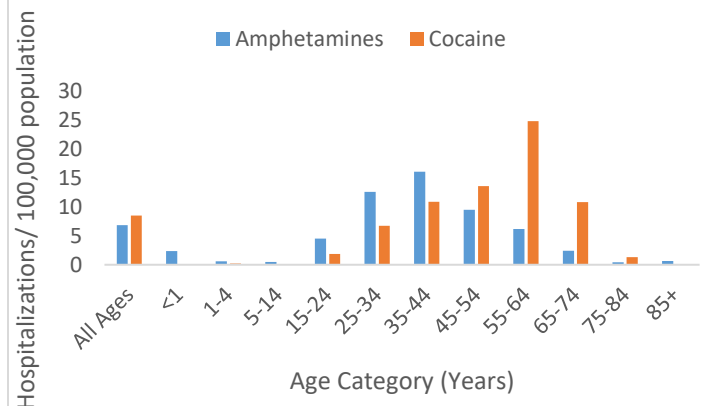


- From 2018 to 2019, cocaine poisoning ED visits increased by <1% while amphetamine poisoning visits decreased by 41.9%.
- From 2019 to 2020, ED visits for cocaine poisoning and amphetamine poisoning visits decreased by 11.9% and 1.1% respectively.

Stimulant-related ED Visit Rates, by Drug Type and Age, Georgia, 2020

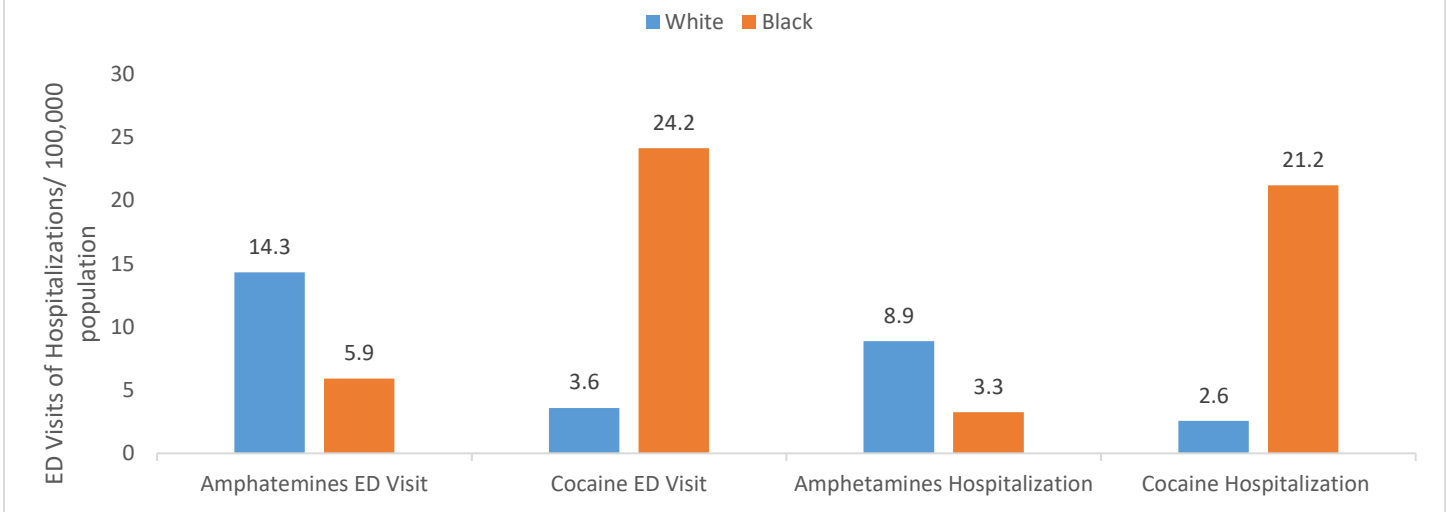


Stimulant-related Hospitalization Rates, by Drug Type and Age, Georgia, 2020



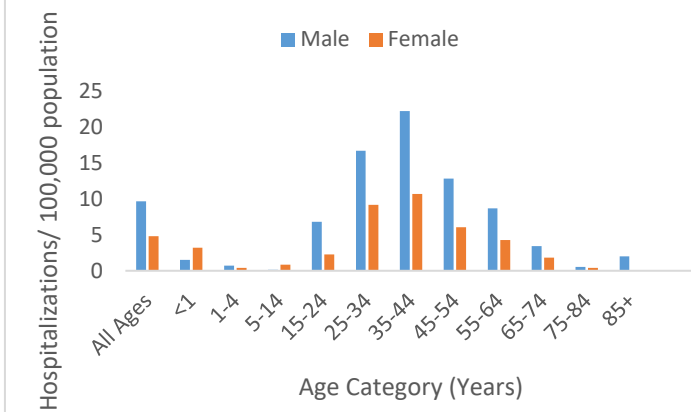
- Persons aged 35-44 years were more likely to visit an ED or be hospitalized due to amphetamine poisoning than persons of other age categories.
- Persons aged 55-64 years were more likely to visit an ED or be hospitalized due to cocaine poisoning than persons of other age categories

Stimulant-related ED Visit and Hospitalization Rates, by Drug Type and Race, Georgia, 2020

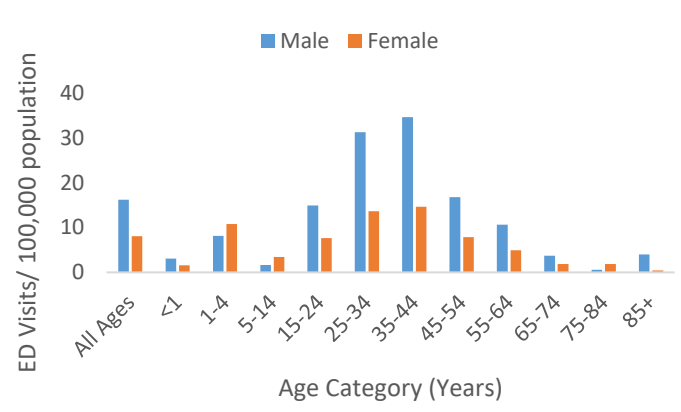


- Whites were 2.4 times more likely to visit an ED and 2.7 times more likely to be hospitalized due to amphetamine poisoning than Blacks.
- Blacks were 6.7 times more likely to visit an ED and 8.2 times more likely to be hospitalized due to cocaine-poisoning than Whites.

Amphetamine-related Hospitalization Rates, by Sex and Age, Georgia, 2020

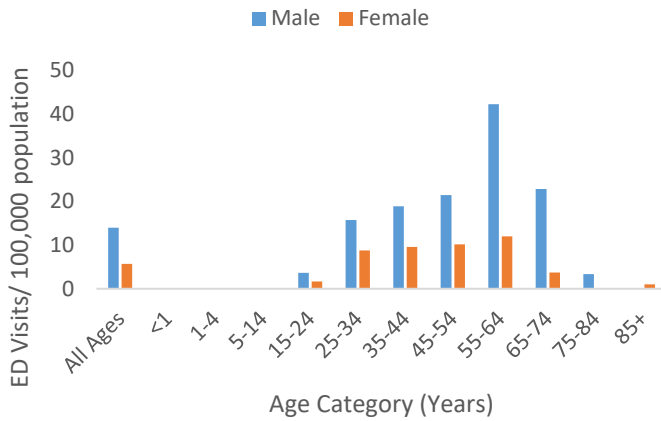


Amphetamine-related ED Visit Rates, by Sex and Age, Georgia, 2020

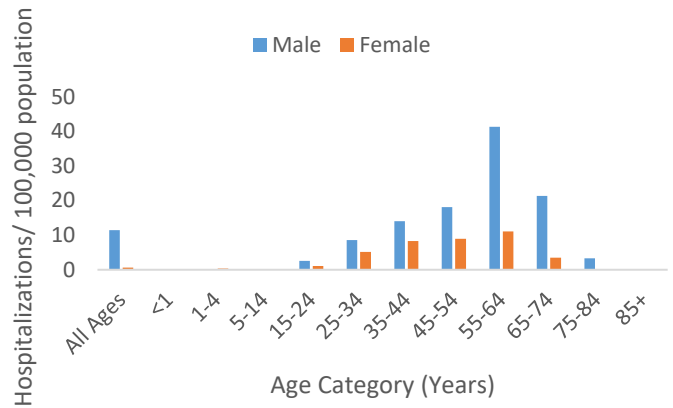


- Males aged 35-44 years visited an ED and were hospitalized due to amphetamine poisoning more frequently than males and females in any other age category.
- Both males and females aged 35-44 were hospitalized due to amphetamine poisoning most frequently than other age categories.

Cocaine-related ED Visit Rates, by Sex and Age, Georgia, 2020



Cocaine-related Hospitalization Rates, by Sex and Age, Georgia, 2020



- Males aged 55-64 years visited an ED due to cocaine poisoning more frequently than males and females in any other age category.
- Males aged 55-64 years were hospitalized due to cocaine poisoning more frequently than males and females in any other age category.
- Males in all age groups visited an ED or were hospitalized due to amphetamine or cocaine poisoning more frequently than females.

Deaths Involving Stimulants (Mortality) — Georgia, 2018–2020

Number, and age-adjusted rate (cases per 100,000 population)
Any category may include prescription and/ or illicit drugs, categories are not mutually exclusive

Year	Any Drug		Any Opioid		Any Stimulant		Cocaine		Amphetamines	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
2020	1950	18.2	1309	12.2	996	9.3	412	3.8	653	6.1
2019	1580	14.9	958	9.0	828	7.8	387	3.6	516	4.9
2018	1582	15.0	962	9.1	775	7.4	367	3.5	475	4.5

ED Visits and Hospitalizations Involving Stimulants (Morbidity) — Georgia, 2018–2020

Number, and age-adjusted rate (visits per 100,000 population)
Any category may include prescription and/ or illicit drugs, categories are not mutually exclusive

Year	Any Drug				Any Opioid				Any Stimulant				Cocaine				Amphetamines			
	ED Visits		Hospitalizations		ED Visits		Hospitalizations		ED Visits		Hospitalizations		ED Visits		Hospitalizations		ED Visits		Hospitalizations	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
2020	22944	214.4	8325	77.6	5832	54.4	2045	19.0	2515	23.5	1632	15.2	1091	10.2	908	8.5	1214	11.4	733	6.9
2019	23628	222.5	9384	88.4	4874	45.9	2175	20.5	2676	25.2	1739	16.4	1238	11.7	1006	9.5	1228	11.6	732	6.9
2018	23348	221.9	9400	89.6	4985	47.5	2353	22.5	2678	24.5	1738	16.5	1236	11.7	978	9.3	1314	12.5	765	7.3

Georgia Department of Public Health (DPH), Epidemiology Section, Drug Surveillance Unit

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

Morbidity and Mortality Involving Stimulants — Georgia, 2020 (for Emergency Department (ED) visits, inpatient hospitalizations, and deaths)

Number and rate (cases or visits per 100,000 population; rate is age-adjusted except when age categories are presented)
Any category may include prescription, and/ or illicit stimulants, categories are not mutually exclusive, rates for counts <5 are not presented

	All Stimulants					
	ED Visits		Hospitalizations		Deaths	
	No.	Rate	No.	Rate	No.	Rate
Total	2515	23.4	1632	15.2	921	8.8
Age group						
<1 year	4	N/A	3	N/A	0	N/A
1-4 years	73	14.0	4	N/A	0	N/A
5-14 years	71	5.0	15	1.1	0	N/A
15-24 years	291	20.0	104	7.1	40	2.8
25-34 years	554	36.8	287	19.1	195	13.1
35-44 years	543	38.9	366	26.2	267	19.3
45-54 years	396	28.5	313	22.5	211	15.1
55-64 years	435	32.9	406	30.7	159	12.2
65-74 years	133	13.9	125	13.0	44	4.8
75-84 years	8	1.7	8	1.7	5	1.1
85+ years	7	4.5	1	N/A	0	N/A
Sex (age group)						
Male	1685	32.4	1106	21.3	640	12.5
<1 year	3	N/A	1	N/A	0	N/A
1-4 years	32	12.1	2	N/A	0	N/A
5-14 years	24	3.3	3	N/A	0	N/A
15-24 years	183	24.7	68	9.2	23	3.1
25-34 years	376	50.2	186	24.8	138	18.6
35-44 years	365	54.2	230	34.2	186	28.0
45-54 years	265	39.4	208	30.9	141	21.0
55-64 years	320	50.8	302	47.9	117	18.9

65-74 years	105	24.1	98	22.5	30	7.1
75-84 years	7	3.5	7	3.5	5	2.6
85+ years	5	9.3	1	N/A	0	N/A
Female	828	15.2	525	9.5	281	5.2
<1 year	1	N/A	2	N/A	0	N/A
1-4 years	41	16.1	2	N/A	0	N/A
5-14 years	47	6.8	12	1.7	0	N/A
15-24 years	108	15.0	36	5.0	17	2.4
25-34 years	178	23.5	191	13.3	57	7.6
35-44 years	177	24.5	135	18.7	81	11.3
45-54 years	131	18.2	105	14.6	70	9.7
55-64 years	115	16.6	104	15.0	42	6.1
65-74 years	28	5.3	27	5.2	14	2.8
75-84 years	1	N/A	1	N/A	0	N/A
85+ years	1	N/A	0	N/A	0	N/A
Race						
White	1205	19.4	708	11.2	673	10.6
Black	1120	32.4	823	24.3	305	8.7

Georgia Department of Public Health (DPH), Epidemiology Section, Drug Surveillance Unit

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