Annual Report of Drug-Related Emergency Department Visits

LOUISIANA OPIOID SURVEILLANCE PROGRAM

May 2023

LOUISIANA DEPARTMENT OF HEALTH

What is Emergency Department Syndromic Surveillance Data?

THIS REPORT USES SYNDROMIC SURVEILLANCE DATA FROM EMERGENCY DEPARTMENTS TO ANALYZE NON-FATAL OVERDOSE TRENDS IN LOUISIANA.

WHAT IS EMERGENCY DEPARTMENT SYNDROMIC SURVEILLANCE?

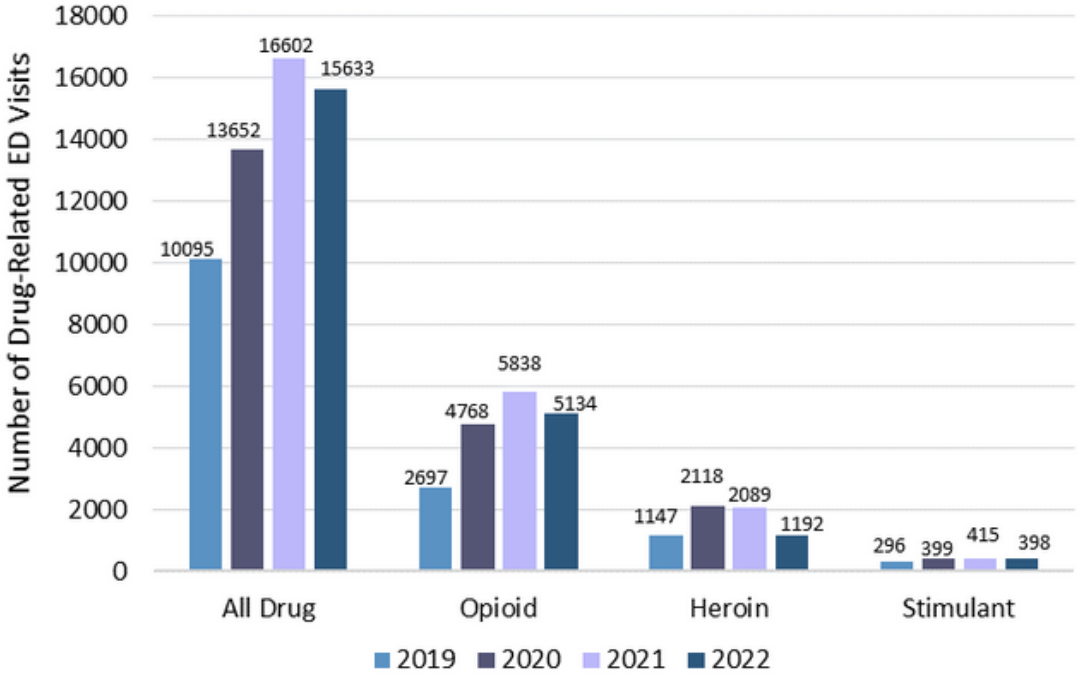
Emergency Department Syndromic Surveillance (EDSS) data are used as an early detection method for potential clusters or outbreaks tracking suspected drug overdose-involved emergency department (ED) visits based on the patient's chief complaint upon presentation and/or discharge. Participating Louisiana hospitals submit these EDSS data to a common electronic system to more efficiently share and track data. Syndromic surveillance enables early detection of adverse health conditions and outbreaks, leading to more efficient interventions and preventative measures. Louisiana accepts syndromic surveillance data from emergency departments.

- Drug-specific category data can include both illicit and prescription drugs, as ED visits may include overdoses involving multiple substances. Specific drugs are identified using the chief complaint and/or discharge diagnosis fields and are not meant to be comprehensive.
- All data does not exclude patients ≤14 years of age. Counts represent the number of ED visits instead of the number of patients, therefore, patients with repeat visits may have been counted more than once.
- Drug overdose syndromic surveillance (SS) data is limited and based on accuracy of chief complaint and/or discharge diagnosis and what is reported to the National Syndromic Surveillance Program's BioSense Platform. Data are subject to change due to the current number of participating facilities and/or improvements to data quality.
- Data shown on this report may underrepresent the true burden of drug overdose in Louisiana. Several additions to the number of participating facilities statewide, which may account for minor changes to the current data.
- Due to Covid-19 pandemic there were months when total ED visits were low.

WHAT IS BioSense?

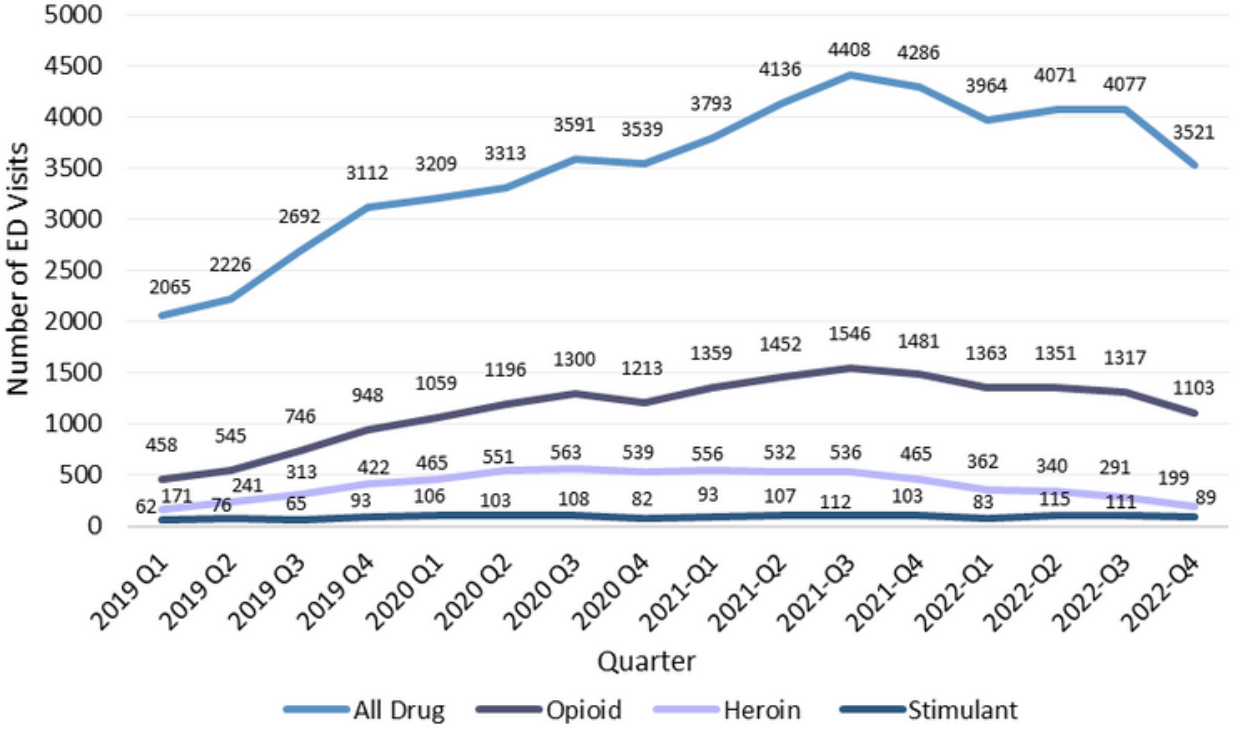
BioSense (National Syndromic Surveillance Program) is a secured electronic health data system integrated through a shared platform. The public health community uses analytic tools on the platform to analyze data received as soon as 24 hours after a patient's visit to a participating facility. **As of the date of this report, BioSense reporting captures data from 89% of hospitals statewide, accounting for 92% of total emergency department visits in Louisiana.**

Emergency Department Visits by Year



From 2019 to 2022, there was a 55% increase in all drug-related ED visits, a 90% increase in opioid-related ED visits, a 4% increase in heroin-related ED visits, and a 34% increase in stimulant-related ED visits. The total number of drug overdose-related ED visits has increased by 7% from 2019 through 2022.

Emergency Department Visits by Quarter



From the first quarter of 2021 through the fourth quarter of 2022, there was a 7% decrease in all drug-related ED visits, a 19% decrease in opioid-related ED visits, a 64% decrease in heroin-related ED visits, and a 4% decrease in stimulant-related ED visits. Quarterly data was analyzed from a monthly comparison of ED visits statewide; thus, the percent changes over time vary between annual and quarterly data and are illustrated by slightly varied trends in the graphs above.

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative

ALL DRUG-RELATED ED VISITS

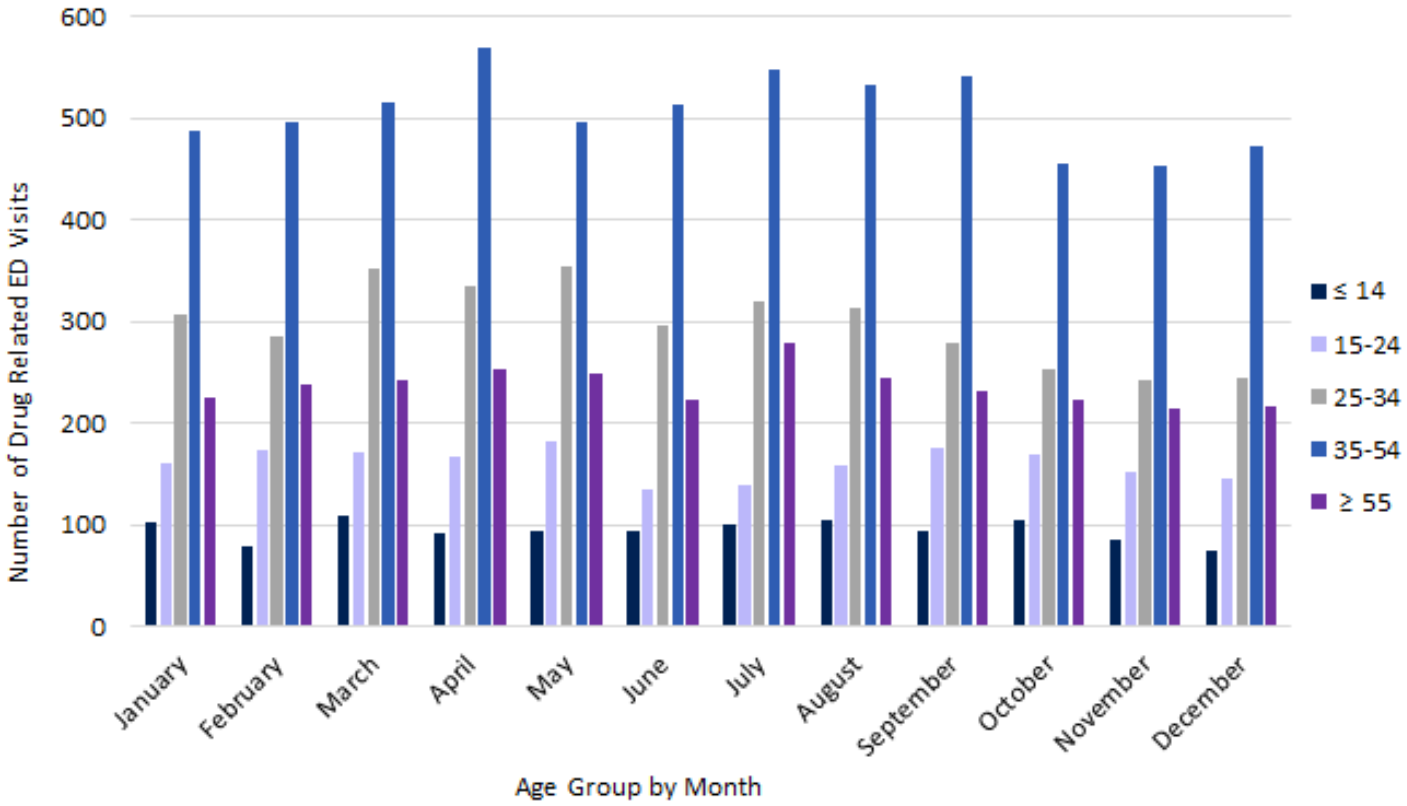
% Total Male and Female Visits, 2021

All drug-related ED visits in 2021 were comprised of 6425 females (39%) and 10082 males (61%).

% Total Male and Female Visits, 2022

All drug-related ED visits in 2022 were comprised of 6229 females (40%) and 9341 males (60%).

Total All Drug Overdose ED Visits by Age Group, 2022



The greatest number of all drug-related ED visits in 2022 occurred among those 35-54 years. On average, this age group had 2.5 times more ED visits compared to other age groups.

Parishes with Highest All Drug-Related ED Visit Counts, 2022

Orleans, Jefferson, St. Tammany, East Baton Rouge, and Livingston

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative

OPIOID-RELATED ED VISITS

% Total Male and Female Visits, 2021

Opioid-related ED visits in 2021 were comprised of 1694 females (29%) and 4124 males (71%).

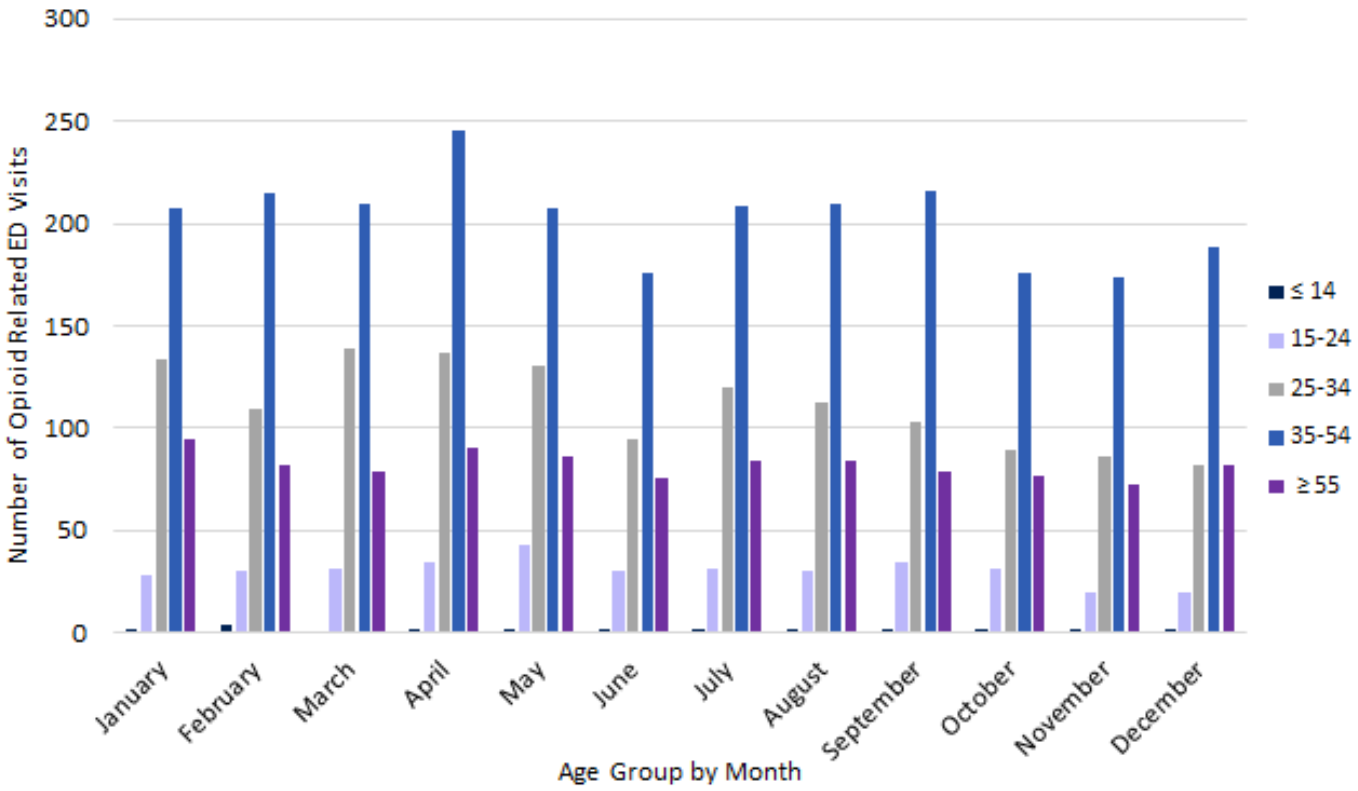
= 10% Female

= 10% Male

% Total Male and Female Visits, 2022

Opioid-related ED visits in 2022 were comprised of 1621 (32%) and 3500 males (68%).

Total Opioid Overdose ED Visits by Age Group, 2022



The greatest number of opioid-related ED visits in 2022 occurred among those 35-54 years. On average, this age group had 3.6 times more ED visits compared to other age groups.

Parishes with Highest Opioid-Related ED Visit Counts, 2022

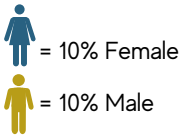
Orleans, Jefferson, St. Tammany,
Livingston, and East Baton Rouge

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative

HEROIN-RELATED ED VISITS

% Total Male and Female Visits, 2021

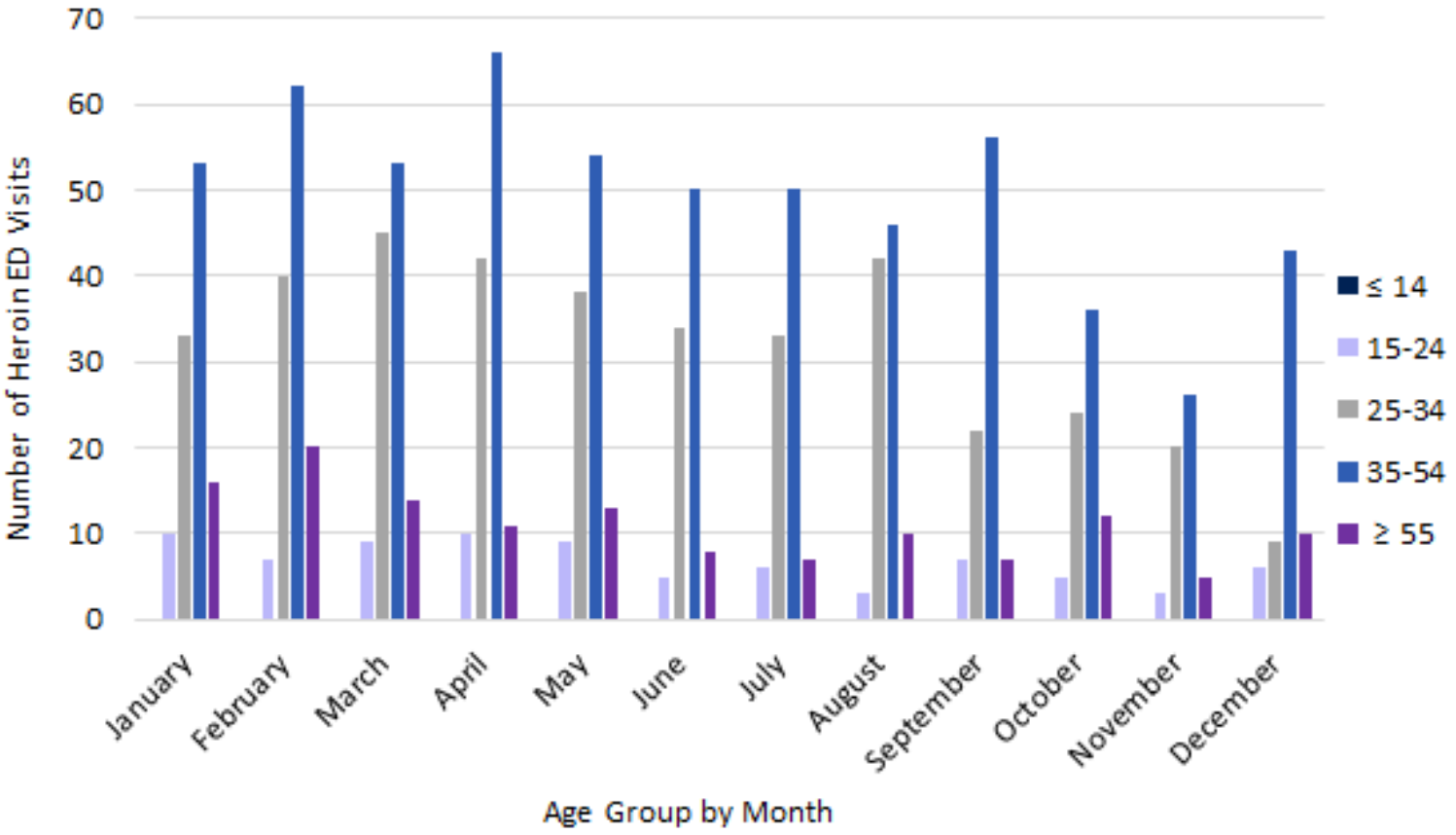
Heroin-related ED visits in 2021 were comprised of 535 females (26%) and 1542 males (74%).



% Total Male and Female Visits, 2022

Heroin-related ED visits in 2022 were comprised of 149 females (37%) and 249 males (63%).

Total Heroin Overdose ED Visits by Age Group, 2022



The greatest number of heroin-related ED visits in 2022 occurred among those 35-54 years. On average, this age group had 4 times more ED visits compared to other age groups.

Parishes with Highest Heroin-Related ED Visit Counts, 2022

Acadia, Jefferson, Vernon, Orleans, Rapides, and St. Tammany

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative

STIMULANT-RELATED ED VISITS

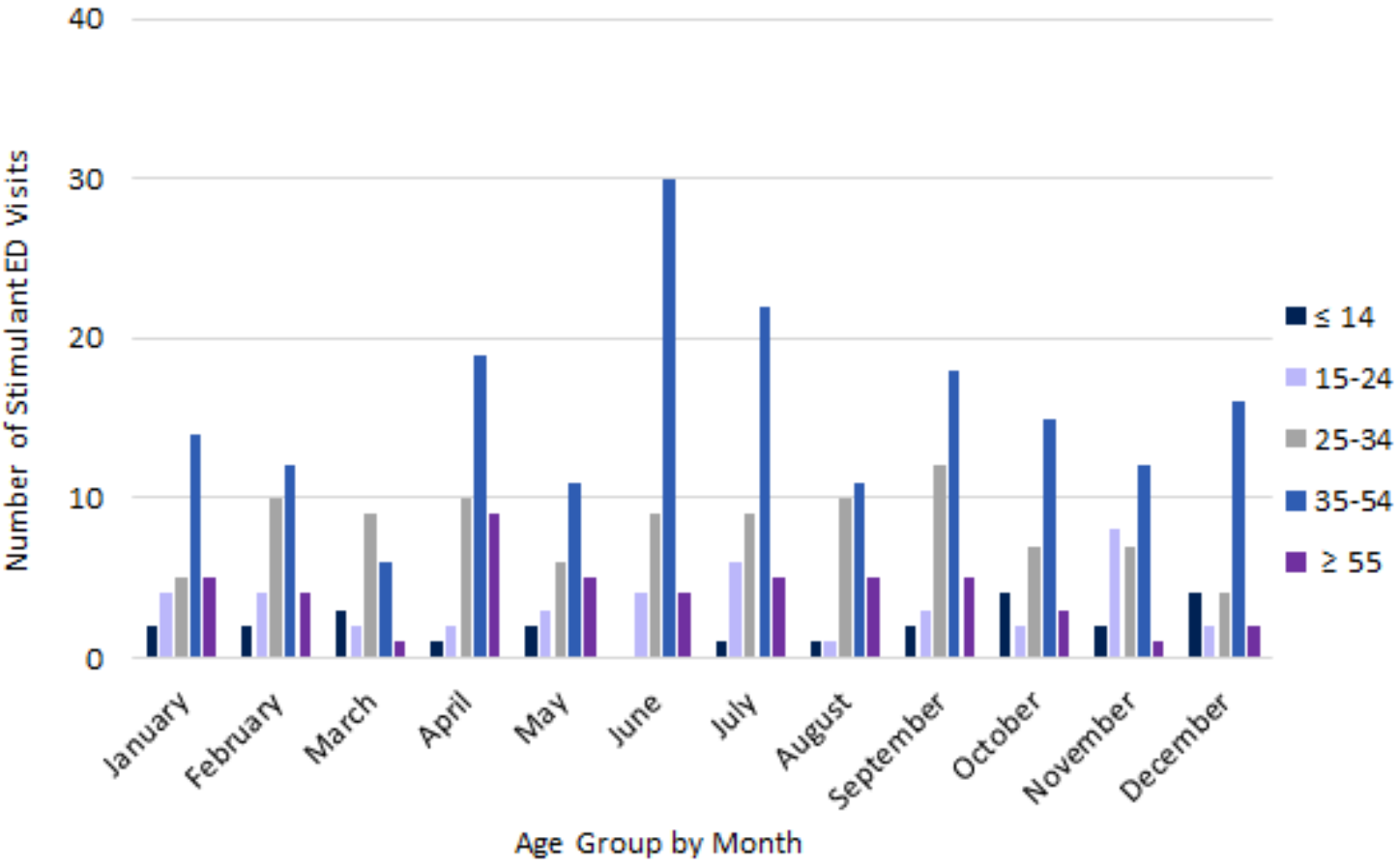
% Total Male and Female Visits, 2021

Stimulant-related ED visits in 2021 were comprised of 139 females (34%) and 274 males (66%).

% Total Male and Female Visits, 2022

Stimulant-related ED visits in 2022 were comprised of 149 females (37%) and 249 males (63%).

Total Stimulant Overdose ED Visits by Age Group, 2022



The greatest number of stimulant-related ED visits in 2022 occurred among those 35-54 years. On average, this age group had 3.8 times more ED visits compared to other age groups.

Parishes with Highest Stimulant-Related ED Visit Counts, 2022

Orleans, Jefferson, Livingston,
St. Tammany, and East Baton Rouge

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative

SUMMARY

Overall, in 2022 the greatest number of ED visits for all drugs occurred in the third quarter (July-September). Opioid-related ED visits were the most common drug-related ED visit throughout 2022, compared to heroin and stimulant-related visits. Additionally, for all of the above categories, Louisiana saw a higher number of ED visits among males compared to females.

Current data suggest a slight downward trend in emergency department visits related to each drug category (heroin, opioid, stimulant, and all drugs). While this is not necessarily predictive of future overdose deaths, improvements in research, education, access to treatment and preventative services could potentially lead to further decreases in drug-related morbidity and mortality in Louisiana.

The data presented in this factsheet had potential limitations including demographic information, omitting counts from findings that were too low to impact the overall trends in data, and the lack of standardized data collection methods among ED facilities statewide. Additionally, counts too low to determine trends in data or to impact trends with significant counts were suppressed; this could have led to minor limitations in the results and slightly underrepresented the entire Louisiana population. Finally, ED facilities throughout the state may have variations in data collection methods, which may have affected final counts. Despite the above caveats, EDSS data remains a relevant and important tool in providing measurable information to better respond to and improve the current drug overdose crisis in Louisiana.

Additionally, more detailed information related to this data can be found on the web pages below:
https://www.cdc.gov/nssp/overview.html#bioSense
https://www.cdc.gov/nssp/images/nsspinfo/Final_NSSP-Infographic.pdf
https://ldh.la.gov/page/299

Source: National Syndromic Surveillance Program BioSense, Bureau of Infectious Disease Epidemiology Section, analyzed 01/2023 by the Louisiana Opioid Surveillance Initiative