DOSE Digest

DRUG OVERDOSE SURVEILLANCE AND EPIDEMIOLOGY

OVERDOSE DATA2ACTION IN STATES

Happy Spring! Welcome to the **DOSE Digest** for March 2025! This digest includes updates from CDC, results from recent DOSE data submissions, important data submission details, spotlights on projects from health departments and other partners, and recent publications. If your jurisdiction would like to be featured in a future issue, please reach out to DOSE@cdc.gov.

UPDATES FROM CDC

Next DOSE Quarterly Call:

- The next DOSE Quarterly Call will be **Thursday, May 15th, 2025, from 3:00–4:30pm EST**.

February 2025 DOSE Quarterly Call Materials

- The most recent DOSE Quarterly Call was held on February 20, 2025. A recording is available on the DOP TAC. The theme focused on overdose anomaly detections and lessons learned for responding to overdose spikes and clusters. In Georgia, they developed a Weekly Overdose Syndromic Surveillance (SyS) Report, and in New Jersey, their Suspected Overdose Alerting Program (SOAP) created an overdose threshold in their EpiCenter system. Both the Weekly Overdose SyS Reports and EpiCenter utilize DOSE syndromic surveillance data in their anomaly detections. These data, along with other data sources like EMS and ODMAP, are used to identify potential spikes at the local level which is then shared with local health departments and community partners to enhance evidenced-based prevention efforts. These data were also used to identify other potential cases associated with the outbreak but may not have been detected through existing surveillance mechanisms. Both teams have tracked their spike and cluster detections over time since 2019 and modified their methods to best suit their community needs. They have also expanded their drug detection with the expansion of drugs being monitored within the DOSE Syndromic Surveillance program. A special thanks to all presenters for sharing their novel approaches into this critical work.

December 2024 DOSE Quarterly Call Materials

- Thank you all for attending December's DOSE Quarterly Call! A recording is available on the TAC. We enjoyed hearing from our state partners virtually. A special thanks to all presenters for sharing their important surveillance work. To recap what was shared:
  - Maryland detailed their Tableau dashboard development and the interactive features they incorporated for a variety of audiences (https://health.maryland.gov/dataoffice/Pages/mdh-dashboards.aspx).
  - Oregon highlighted features of their R Shiny overdose dashboard and the process taken to incorporate end user requests (https://oregoninjurydata.shinyapps.io/overdose/).
  - CDC DOSE team discussed the latest updates and features of the revamped DOSE Discharge Dashboard.

- **Meetings and Conferences**
  - Below are some upcoming conferences (not sponsored by the DOSE Team):
    - Rx and Illicit Drug Summit 2025, April 21–24, 2025 Nashville, TN
    - CSTE Annual Conference, June 8–12, 2025, Grand Rapids, MI
    - College of Problems on Drug Dependence (CPDD) Annual Conference, June 14–18, 2025, New Orleans, LA

- **Updates to DOSE Discharge/Billing Technical Guidance (v5.0)**
  - Technical Guidance v5.0 includes updates to R coding, revisions to the annual aggregate templates, and additions to the FAQs.
  - All Technical Guidance Materials (v5.0) are available on Centers for Disease Control (sharefile.com) and will be added to the DOP TAC Strategy 2 page soon.

DOSE Technical Assistance Reminder: Please continue emailing DOSE@cdc.gov with TA questions.

LATEST TRENDS FOR DOSE SYNDROMIC DATA*

	January **2025** vs. January **2024**
All Drug	**-14.3%**
All Opioids	**-20.5%**
Fentanyl	**-17.1%**
Heroin	**-33.0%**
All Stimulants	**-18.4%**
Cocaine	**-15.6%**
Methamphetamine	**-18.9%**
Benzodiazepine	**-12.9%**

Bolded percentages represent a statistically significant ($p<0.05$) increase/decrease.
*47 jurisdictions included

Across 47 jurisdictions, rates of emergency department visits for nonfatal overdoses decreased significantly for all drug indicators from January 2024 to January 2025. These changes are similar, albeit smaller, from the previous DOSE Digest issue (August 2023 vs. August 2024 comparison). While these continued declines are encouraging, more time is needed to determine whether these apparent decreases will be part of an ongoing downward trend. CDC will continue to monitor these trends.

DOSE DATA SUBMISSION TIMELINESS

SYNDROMIC:

- **March 2025 Monthly:** Among **47** jurisdictions, **42 (89%)** submitted data/metadata on time.

UPCOMING DOSE DEADLINES

Monthly Syndromic Data

Due date	Time period
Monday, April 7, 2025	**February 1–28, 2025**
Monday, May 5, 2025	**March 1–31, 2025**

OD2A-State Data Product Submission Year 2

Please note that Year 2 Data Product Submissions are due ***August 2025***, but you don't need to wait! Send your Data Products to DOSE@cdc.gov, and cc your Project Officer.

For more information, reference Appendix 3 of the OD2A in States Notice of Funding Opportunity.

STATE SPOTLIGHT: NEW MEXICO

Background from CDC. A guiding principle for the Overdose to Action in State (OD2A-S) is to use data to inform and tailor prevention strategies. As part of the OD2A-S Strategy 2 requirements, recipients must disseminate two or more DOSE data products per year to key local partners and/or the public beginning in the second or third year of funding. Forms of data sharing include data dashboards, web pages, reports, presentations, or peer-reviewed manuscripts. OD2A-S recipients are encouraged to select data products based on partner interest and the needs of the community.

Data Dissemination Approaches: Tailored Regional Substance Use Reports

The monthly substance use reports for New Mexico are run by region on the 15th of the month for the previous month, using New Mexico Department of Health (NMDOH)'s syndromic surveillance database. Emergency department (ED) visit data are collected from participating non-federal hospitals. Indian Health Service and Veteran's Administration data are not included, which leads to undercounts of American Indian/Alaska Natives and Veterans. Thirty-three counties are represented in Northwest, Northeast, Southwest, and Southeast regions. The overdose cases are suspected, and drug involvement is based on the chief complaint and discharge diagnosis fields. Drug categories are not exclusive. The reports conform to NMDOH's Small Numbers Rule, which means that if the population from which the numerator is derived is less than 20, and the numerator itself is one to three, those numbers are suppressed. Rates that can be used to determine the value of suppressed cells are also suppressed. Some data are aggregated due to the small number of substance-related ED visits in the region. Regional population by race and ethnicity is derived using population estimates for comparison with ED visits by race/ethnicity.

The entire script for each region is run in R and the reports are generated in R Markdown. The output for each region is reviewed, ensuring there are no formatting issues or small numbers violations. The reports are posted to Community Network and Tribal Communities groups on NMDOH's Basecamp, where stakeholders and team members can view non-fatal substance use data trends by region. The drug categories displayed in each of the regional reports are based on the interests of community partners who utilize the data as a resource. The data are utilized in outreach efforts on drug prevention, needs assessments, and presentations to educational institutions.

A sample of one of the New Mexico reports is included at the end of this PDF.

For more information, contact Percis.Drew@doh.nm.gov.

If you would like to be featured in a future state spotlight highlighting recent accomplishments from your state, please email DOSE@cdc.gov.

PARTNER SPOTLIGHT: DAWN

Staying in the Know: Resources for Informing Surveillance Efforts

The Drug Abuse Warning Network (DAWN), out of SAMHSA, is a nationwide public health surveillance system that captures data on emergency department visits related to recent substance use and misuse directly from the electronic health records of participating hospitals.

Recently, DAWN published National Estimates from Drug-Related Emergency Department Visits, 2023 and new drug street names appearing in DAWN data.

> "[The report on national estimates] provided weighted national estimates [comparing 2023 data to 2022]. The frequency of substance-related visits increased by 5.8 percent compared to estimates in 2022. Rates of all substance-related ED visits from participating hospitals were highest among individuals with the following characteristics: males (2,668 per 100,000), individuals who were not Hispanic or Latino (2,391 per 100,000), and Black individuals, after accounting for the underlying population (4,053 per 100,000 versus 1,736 per 100,000 in the next highest subpopulation). The top substances reported were alcohol, cannabis, opioids, methamphetamines, cocaine, and benzodiazepines."

For more information on DAWN, visit their website.

RECENT DOSE TEAM PUBLICATIONS

Study Finds CDC's Drug Overdose Surveillance and Epidemiology (DOSE) System an Accurate and Timely Estimator of State-Level Nonfatal Drug Overdose Rates

A recently published study in *Injury Prevention* determined CDC's relatively new DOSE system performed as well as an already established, state-level surveillance system (the Healthcare Cost and Utilization Project) in accurately estimating nonfatal overdose rates from 2018–2020 across 18 states. Moreover, while emergency department and inpatient discharge data on nonfatal overdoses can often lag by several years, the DOSE system can often provide estimates within about a 7 month lag, though some data may experience longer delays Read the full study: https://injuryprevention.bmj.com/content/early/2024/12/24/ip-2024-045446.full

REMINDERS

- ❑ Be sure to reach out to your Project Officer and/or DOSE@CDC.gov if you have any questions or concerns.
- ❑ Our assigned state morbidity science officers are available to answer questions via the DOSE helpdesk (DOSE@cdc.gov).

- ❑ Please check out the NSSP Community of Practice Slack channel #drug-overdose-use to converse with other jurisdictions about nonfatal overdose surveillance: https://nsspcop.slack.com/archives/C020S2HPUSF

HELPFUL LINKS

Technical Guidance Resources : DOP TAC Strategy 2 Page

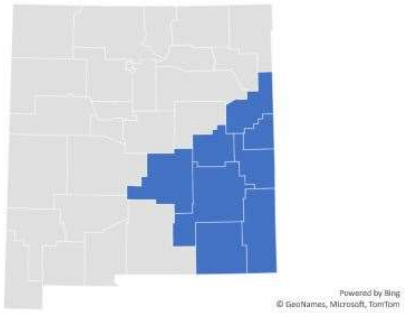
This resource is intended only for OD2A-S recipients as part of technical assistance and has not been cleared. Please do not share with others not funded through the OD2A cooperative agreements.

Southeast Monthly Substance Use Report

December 2024

This report encompasses data from the following New Mexico counties: Chaves, Curry, De Baca, Eddy, Lea, Lincoln, Quay and Roosevelt.

This report was generated using data from NMDOH's syndromic surveillance database. Syndromic surveillance is a passive surveillance system of emergency department (ED) visits in New Mexico that provides the state with near real-time data about emergency department visits.



A few things to keep in mind regarding syndromic surveillance data:

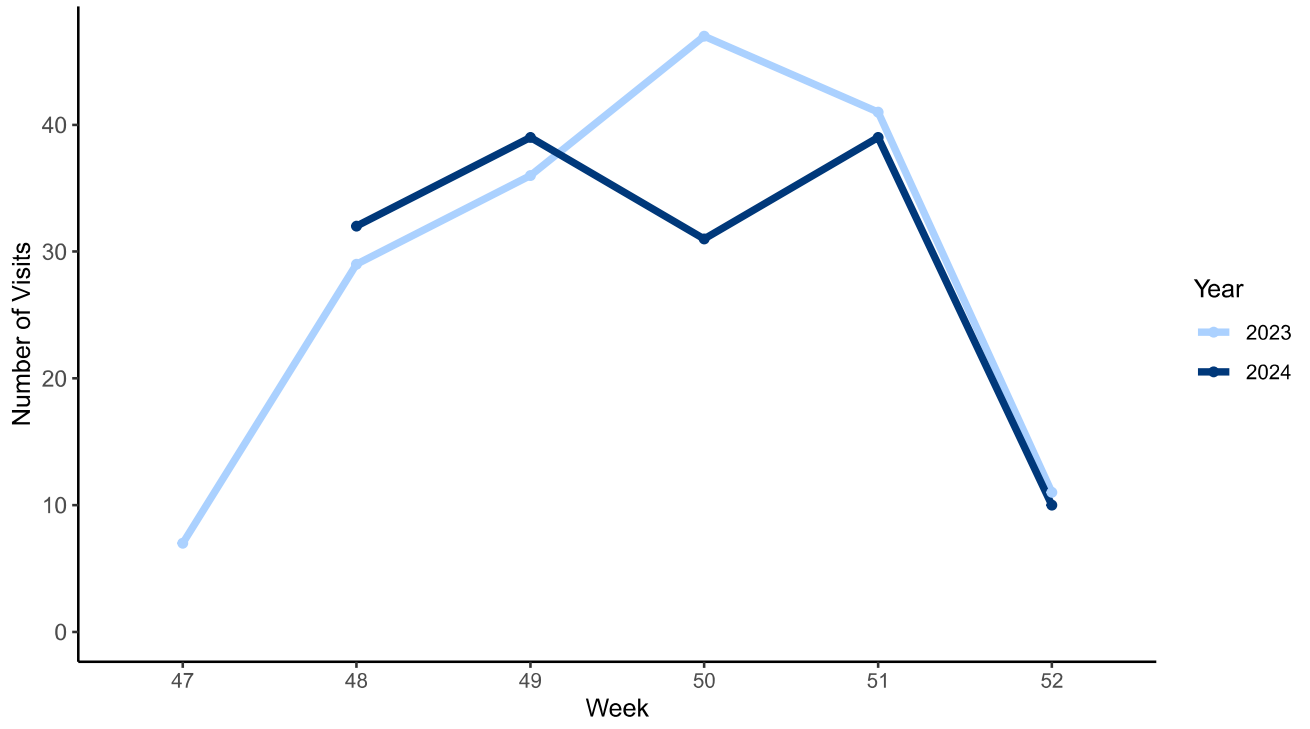
- 93% of non-federal hospitals in NM send ED data to NMDOH.
- All drug overdoses are suspected, meaning a patient presents with the symptoms of an overdose and/or the patient revives after naloxone administration, but when a drug screening hasn't been done. Drug involvement is often based upon the chief complaint and discharge diagnosis fields, and drug categories are not exclusive.
- Indian Health Service and Veteran's Administration data are **not** included. This leads to undercounts of these particular populations.
- To protect the privacy of patients, this report conforms to NMDOH's Small Numbers Rule. This means that if the population from which the numerator is derived is less than 20, and the numerator itself is one to three, those numbers are not shown. Rates that can be used to determine the value of suppressed cells are also suppressed.
- Location is based on facility location.
- Data drops in the first or last week of the graph are often due to only part of the week belonging to the month in question.

Population estimates are from 2023.

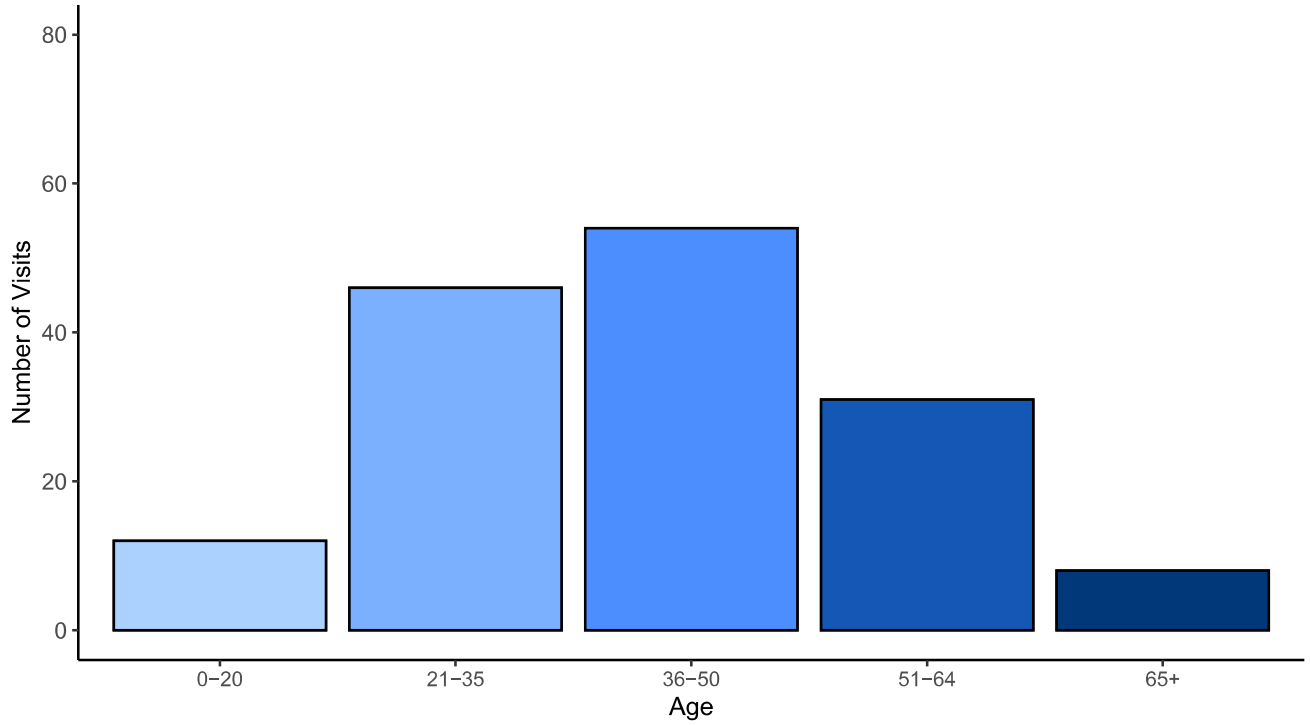
Alcohol

Two years of data are compared by week. Comparison data are from December 2023 (n=171).

Alcohol-Involved ED Visits, December 2024 (n=151)



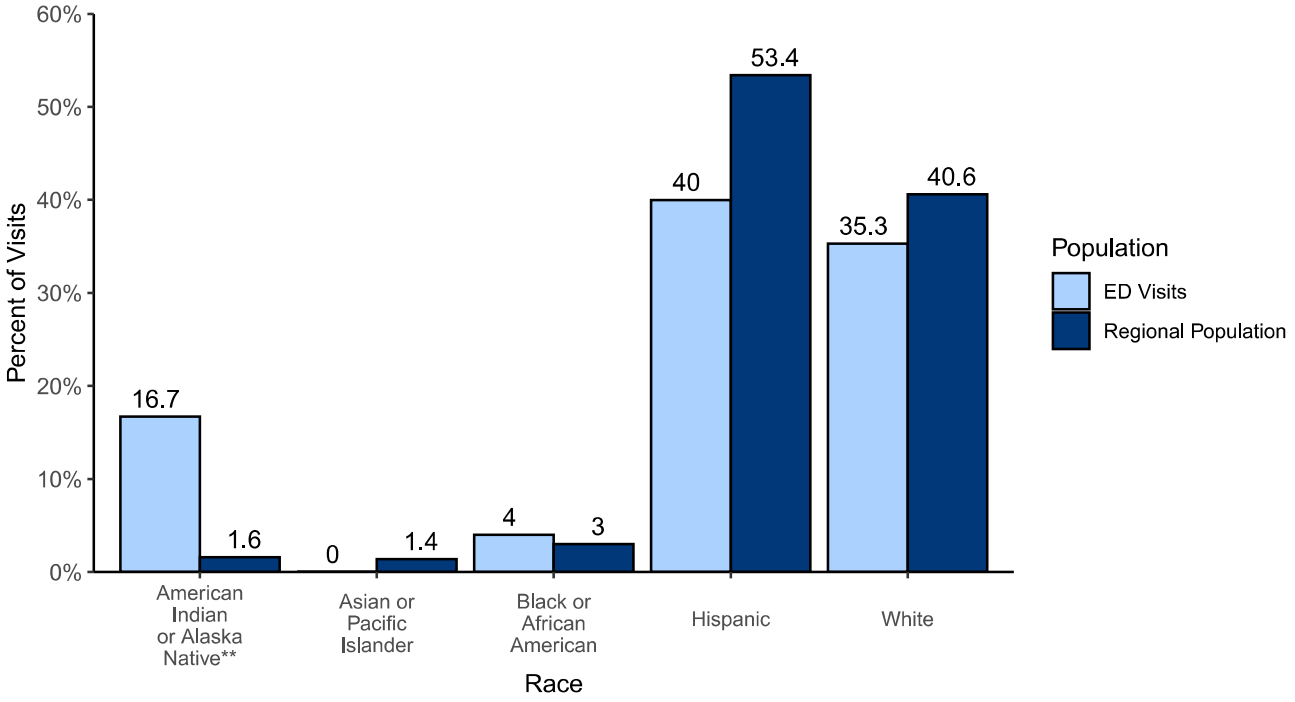
Alcohol-Involved ED Visits by Age, December 2024 (n=151)



Alcohol-Involved ED Visits by Sex, December 2024 (n=151)

Sex	Number of Visits
Female	45
Male	106

Alcohol-Involved ED Visits by Race/Ethnicity, December 2024



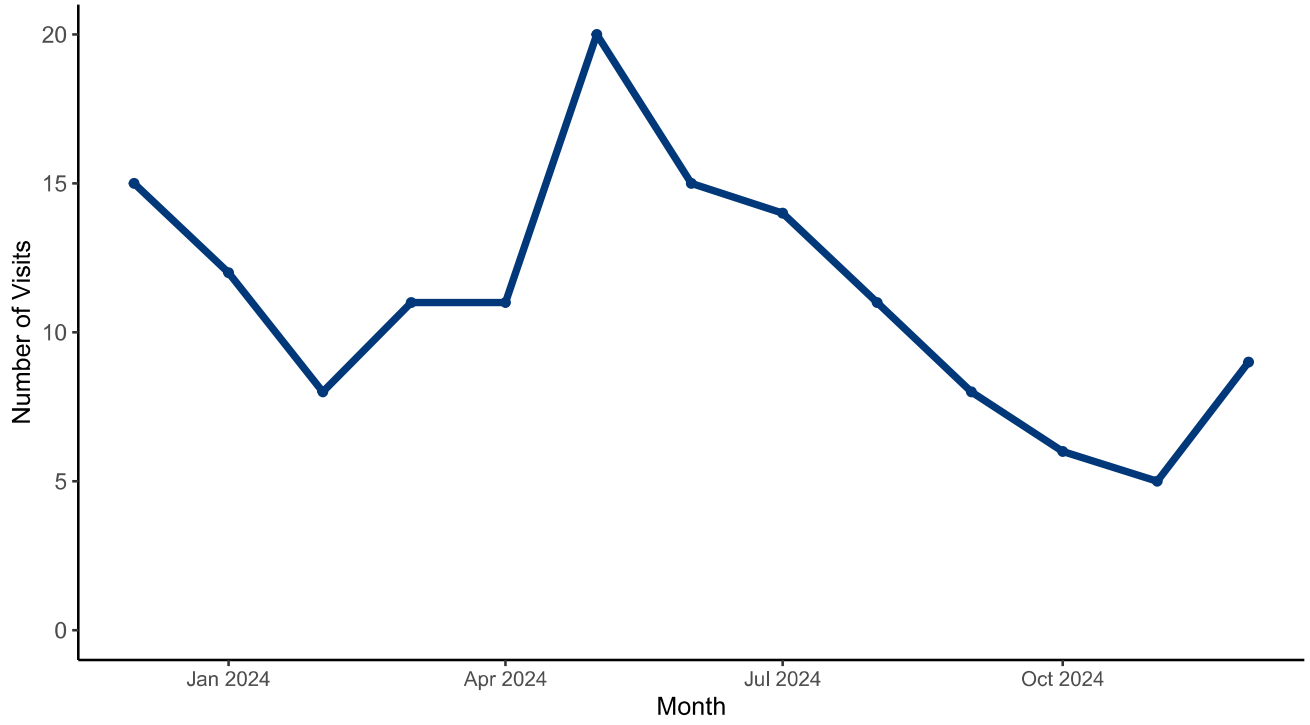
**The number of American Indian/Alaska Natives are likely undercounted.

Because Indian Health Service data are not included in this report, the number of ED visits for American Indian/Alaska Native peoples are going to be under-counted. Therefore the burden of disease on that particular population cannot be deduced from this graph. The light blue bars represent the racial breakdown of the alcohol ED visits, and the dark blue bars represent the racial breakdown of the SE public health region overall. **A small percentage of the ED visits for alcohol were for people who had a missing value for race, or were coded as "Other race". They are not represented on this graph.**

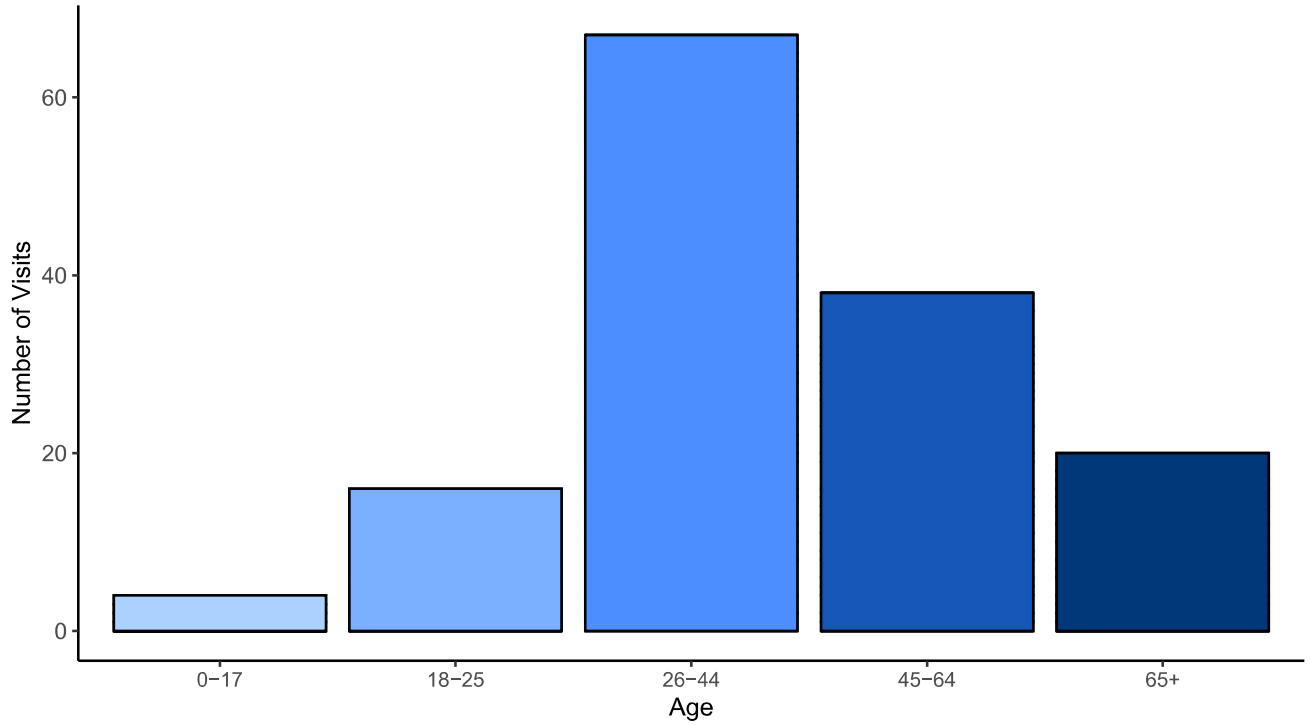
Opioids

This category includes both prescription and illicit opioids.

Opioid Overdose ED Visits, December 2023-2024 (n=145)



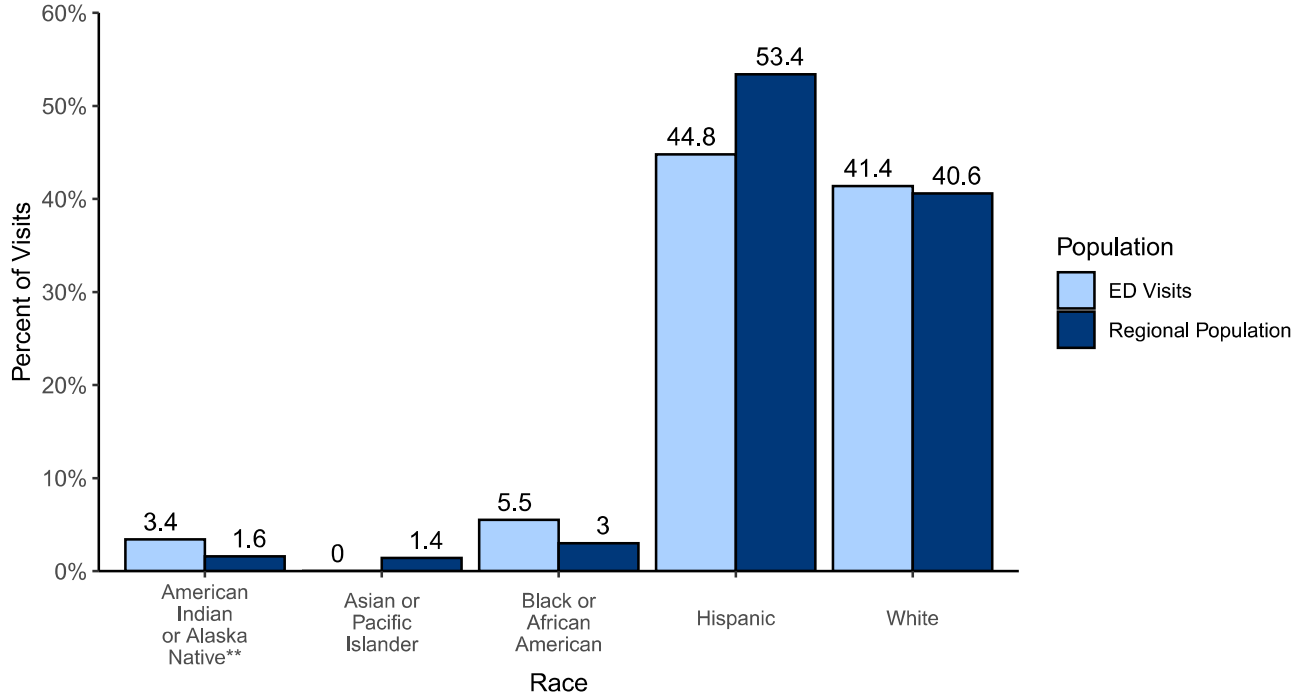
Opioid Overdose ED Visits by Age, December 2023-2024 (n=145)



Opioid Overdose ED Visits by Sex, December 2023-2024 (n=145)

Sex	Number of Visits
Female	59
Male	86

Opioid Overdose ED Visits by Race/Ethnicity, December 2023-2024



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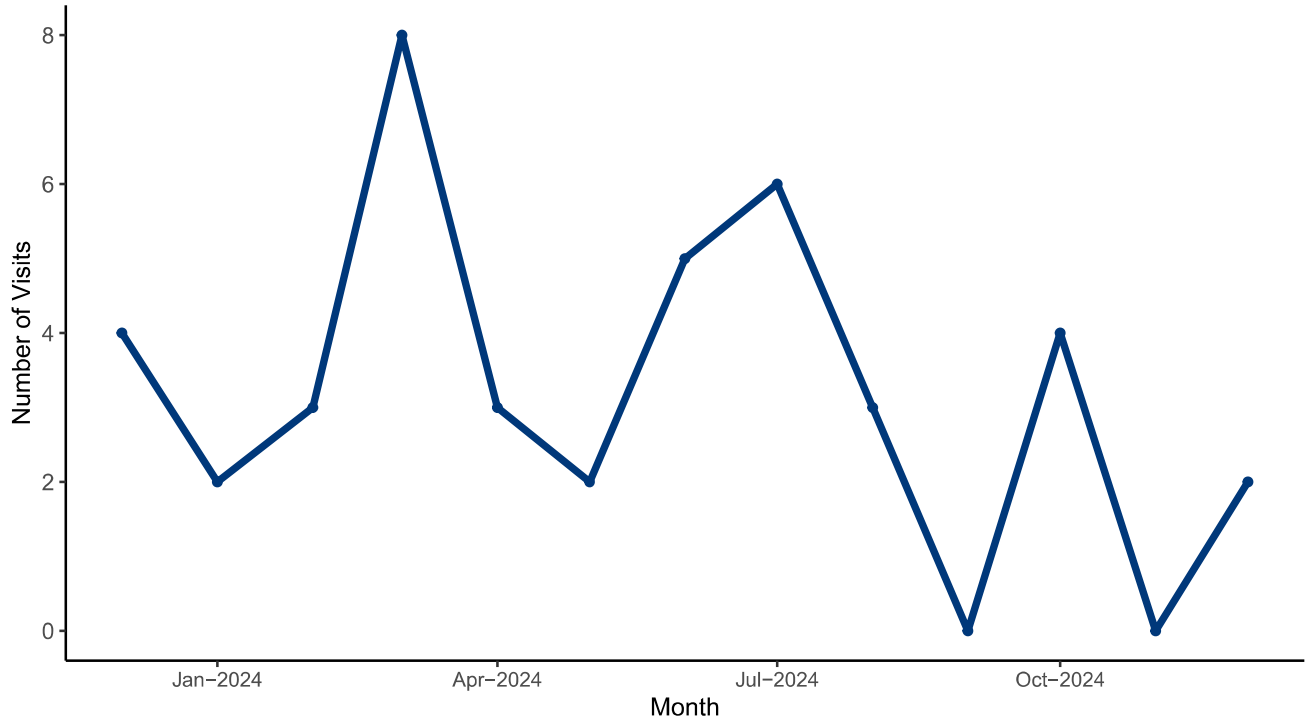
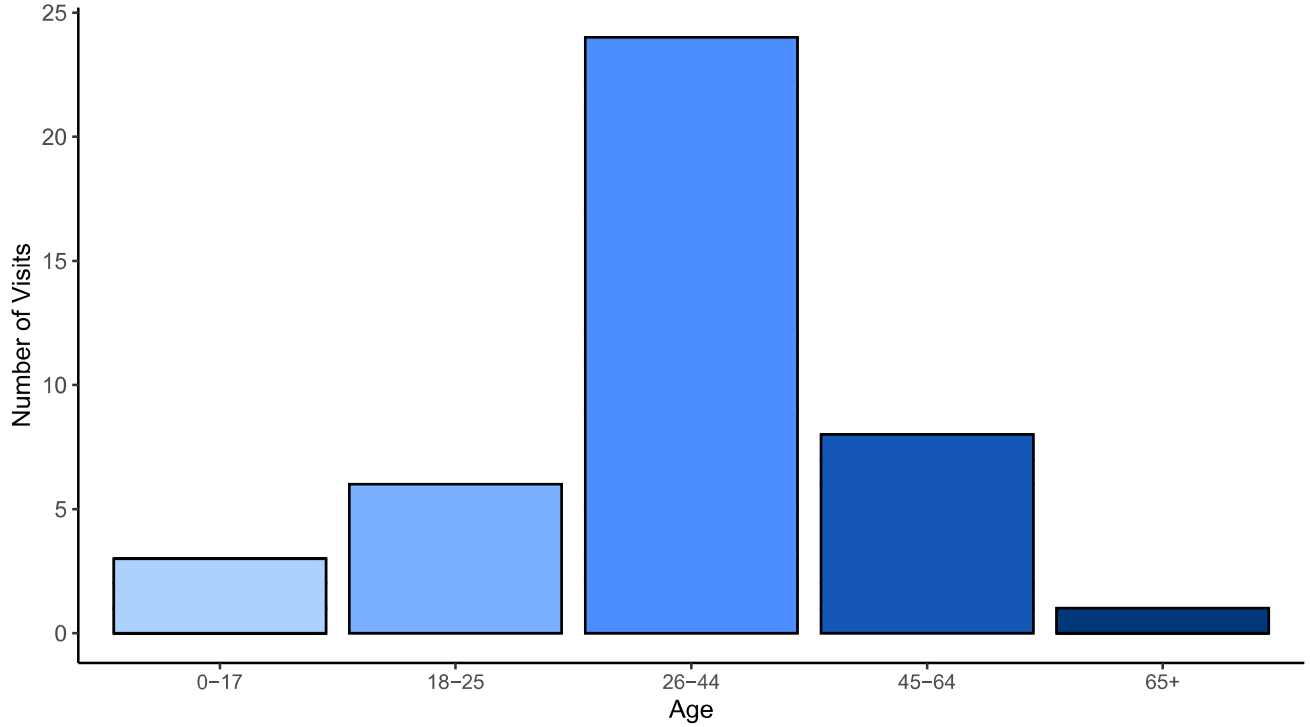
Stimulants

This category includes substances like methamphetamine, cocaine, MDMA, crack cocaine, and ecstasy (not exhaustive).

Stimulant-Involved ED Visits, December 2023-2024 (n=42)



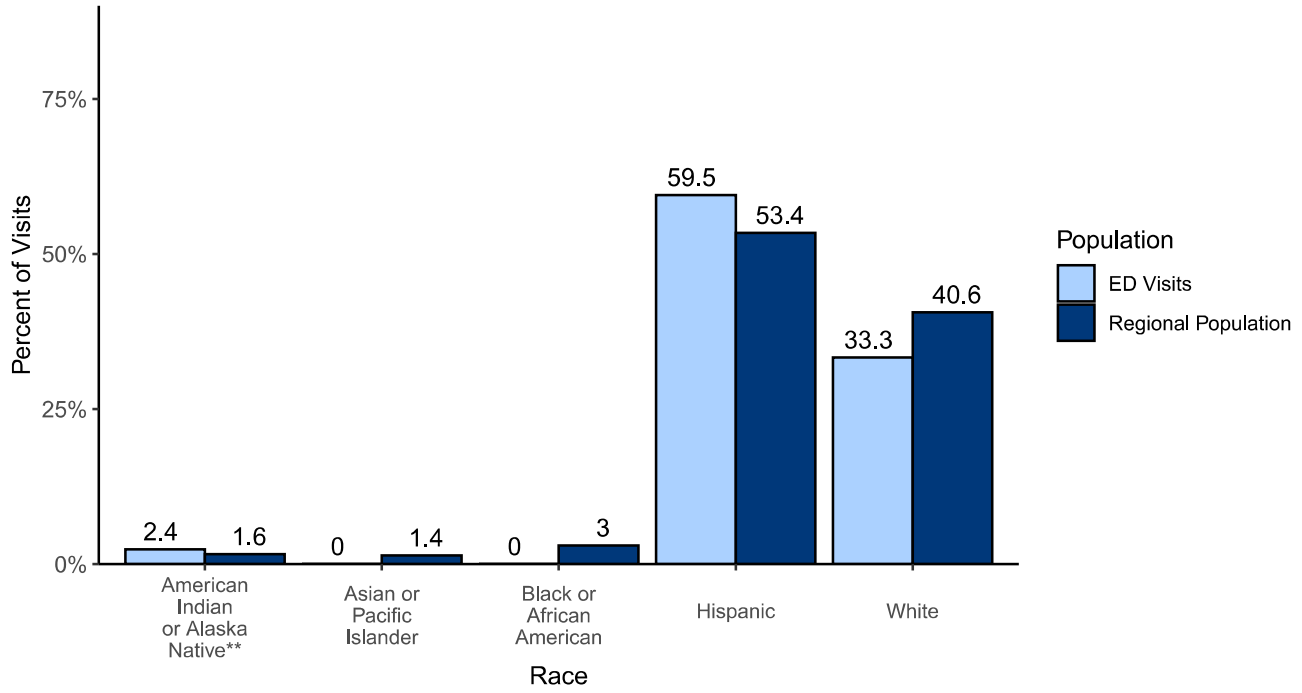
Stimulant-Involved ED Visits by Age, December 2023-2024 (n=42)



Stimulant-Involved ED Visits by Sex,December 2023-2024 (n=42)

Sex	Number of Visits
Female	18
Male	24

Stimulant-Involved ED Visits by Race/Ethnicity, December 2023-2024



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Benzodiazepines

Benzodiazepine Overdose ED Visits, December 2023-2024 (n=15)

Substance	Number of Visits
Benzodiazepine Overdose	15

Benzodiazepine Overdose ED Visits by Age, December 2023-2024 (n=15)

Age	Number of Visits
0-17	*
18-25	*
26-44	*
45-64	*
65+	5

Benzodiazepine Overdose ED Visits by Sex, December 2023-2024 (n=15)

Sex	Number of Visits
Female	8
Male	7

Benzodiazepine Overdose ED Visits by Race/Ethnicity, December 2023-2024

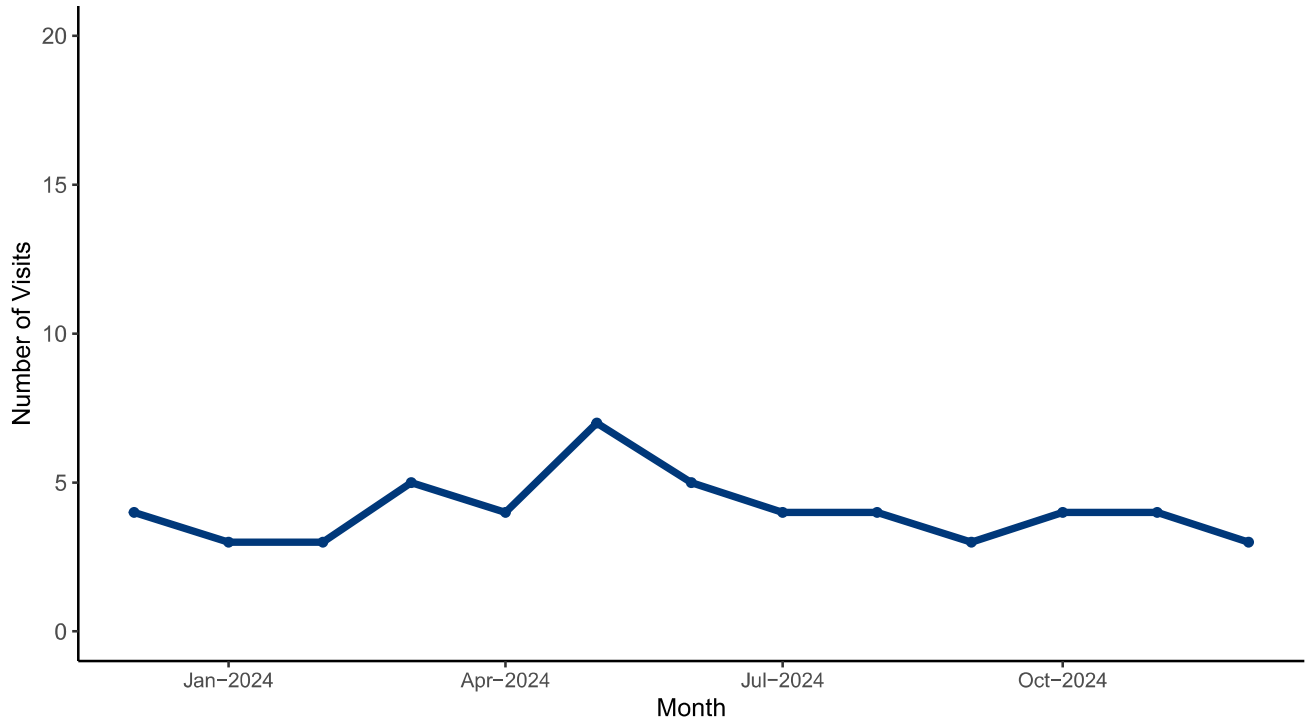
Race	Number of Visits
American Indian or Alaska Native**	*
Asian or Pacific Islander	*
Black or African American	*
Hispanic	5
White	10

Because Indian Health Service data are not included in this report, the number of ED visits for American Indian/Alaska Native peoples are going to be under-counted. Therefore the burden of disease on that particular population cannot be deduced from this table.

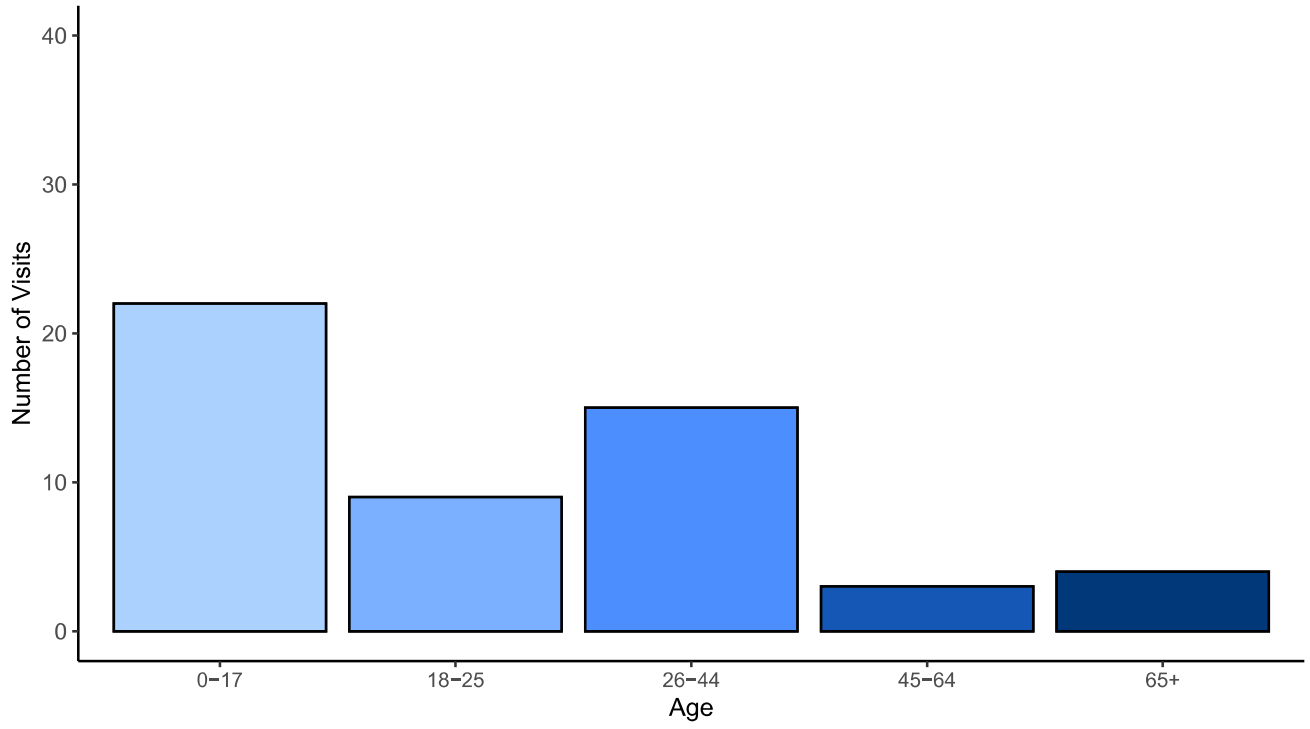
Cannabis

This section is made up of visits where the T40.7 ICD-10 code, "cannabis poisoning", is present in the discharge diagnosis field. Due to the recent legalization of cannabis for recreational use, the increase in visits for cannabis poisoning could be related to patients becoming more comfortable disclosing cannabis use to clinicians.

Cannabis Poisoning ED Visits, December 2023-2024 (n=53)



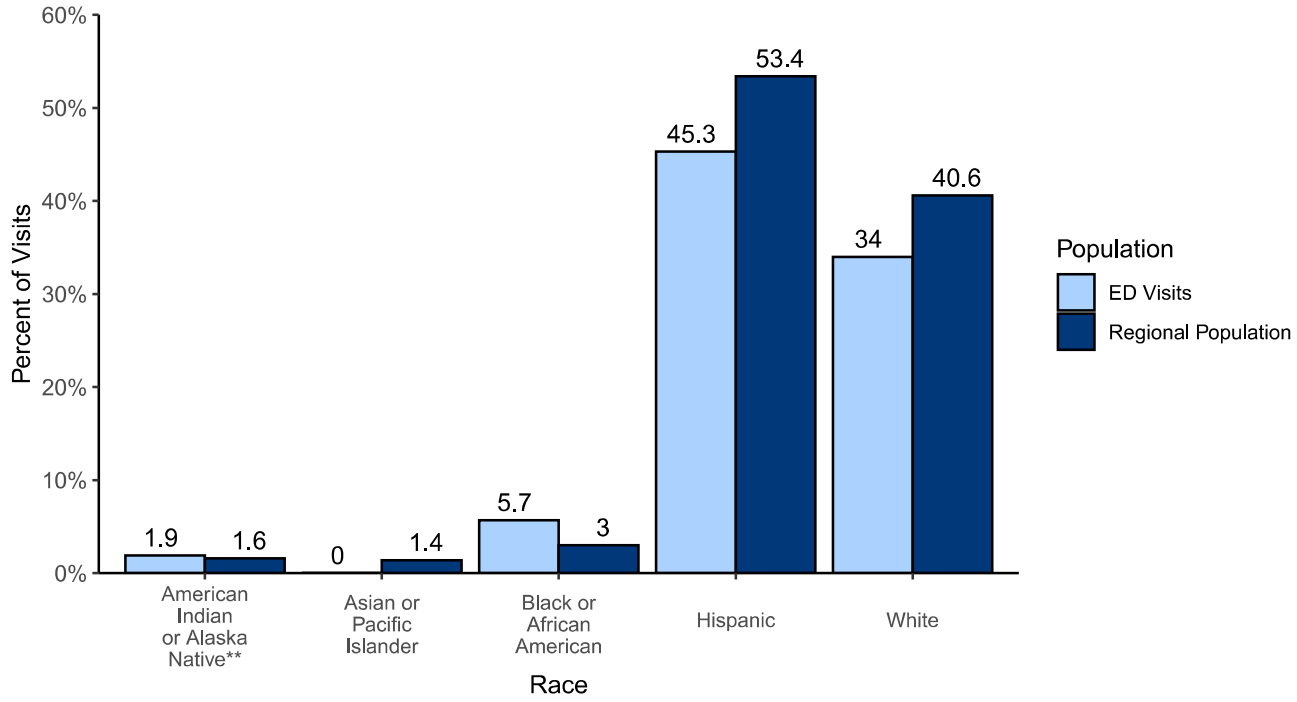
Cannabis Poisoning ED Visits by Age, December 2023-2024 (n=53)



Cannabis Poisoning ED Visits by Sex, December 2023-2024 (n=53)

Sex	Number of Visits
Female	29
Male	24

Cannabis Poisoning ED Visits by Race/Ethnicity, December 2023-2024



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Polysubstance Use

Polysubstance use is the intentional or unintentional consumption of one or more drugs either at the same time or within a short period of time. The drug categories presented here are not mutually exclusive. There are **0 visits** where polysubstance use was indicated.

This report includes data from the following hospitals:

- Artesia General Hospital
- Carlsbad Medical Center
- Covenant Health Hobbs Hospital
- Dan C. Trigg Memorial Hospital
- Eastern New Mexico Medical Center
- Lincoln County Medical Center
- Lovelace Regional Hospital
- Nor-Lea General Hospital
- Plains Regional Medical Center
- Roosevelt General Hospital

For questions, contact Percis Drew, DrPH, at percis.drew@doh.nm.gov.