Methodology and Limitations for the Alaska Substance Use Dashboard

Drug Categories

Each tab in the interactive dashboard includes data categories that can be selected by the user. These drug categories are **not mutually exclusive**. For example, an overdose death that involved both heroin and methamphetamine would appear in overdose death counts and rates in the 'Opioids (All)', 'Heroin', and 'Methamphetamine' categories.

Reference for Regions

A reference for the Public Health Regions can be found at the following link: <u>CDPHP - PHR</u>. This list is kept updated by the Division of Chronic Disease Prevention and Health Promotion in the event of any changes in borough/census areas.

Data Availability

A downloadable data table is available which allows users to view data years as submitted by data providers. This table is not visible upon opening the display but is available for download. Additional data years may be included in the table which are not included in the interactive dashboard.

Notes for suppression and statistical unreliability

When rates are suppressed or statistically unreliable, they will be noted as such in the downloadable data table under the heading 'Data Notes'. For data where the count and rate for a particular region is suppressed, they will appear as 'null' values in the dashboard. Standards for suppression and statistical unreliability is described for each data source in the following section if applicable.

Additionally, the <u>Epidemiology Bulletins</u> website provides access to bulletins and reports published on individual substances of abuse to provide avenues for further research. A search option, <u>Epi Bulletin search</u> can be accessed at the top of the Epidemiology Bulletins website.

Data Sources

A. Alaska Youth Risk Behavior Survey (YRBS)

1. The Alaska YRBS data are sourced from the Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. Statewide estimates were obtained from the 'YRBS: Youth Risk Behavior Survey – Statewide (Traditional)' query module. Regional estimates were obtained from the 'YRBS: Youth Risk Behavior Survey – Local (Alternative, Correctional, and Traditional)' query module, filtered to include only traditional high school students. YRBS query modules can be accessed through the following link: CDPHP - YRBS.

2. A list of YRBS Indicators included in the dashboard are as follows:

- a. Traditional High School Students Who Reported Ever Using Substances:
 - 1. Drinking Alcohol
 - 2. Using Cocaine
 - 3. Using Ecstasy
 - 4. Using Heroin
 - 5. Using Marijuana
 - 6. Using Meth
 - 7. Using Synthetic Marijuana (Spice)
- b. Traditional High School Students Who Reported Using Substances Before Age 13:
 - 1. Drinking Alcohol
 - 2. Using Marijuana
- c. Traditional High School Students Who Reported Using Substances in the Past Month:
 - 1. Binge Drinking
 - A. The CDC definition for Binge Drinking can be found at the following link: CDC Binge Drinking.
 - 2. Drinking Alcohol
 - 3. Using Marijuana
- 3. Confidence intervals are not shown visually in the dashboard, but are available in the downloadable data file.

B. Alaska Behavioral Risk Factor Surveillance System (BRFSS)

- 1. Estimates were obtained from the 'BRFSS: Behavioral Risk Factor Surveillance System' query module. The Alaska BRFSS data are sourced from the Alaska Department of Health, Division of Public Health, Section of Chronic Disease Prevention and Health Promotion. BRFSS query modules are located in the new Alaska BRFSS Data Center and can be accessed through the following link: <u>ANTHC EpiCenter BRFSS</u>. More information about Alaska BRFSS, methodology, questionnaires, and the Data Center, can be accessed through the following link: <u>CDPHP BRFSS</u>.
- 2. A list of BRFSS Indicators included in the dashboard are as follows:
 - a. Adults Who Reported Binge Drinking in the Past Month:
 - 1. The CDC definition for Binge Drinking can be found under YRBS.
 - b. Adults Who Reported Drinking Alcohol in the Past Month
 - c. Adults Who Reported Using Marijuana in the Past Month

C. Alaska Pregnancy Risk Assessment Monitoring System (PRAMS)

- 1. Estimates were obtained from the 'PRAMS: Pregnancy Risk Assessment Monitoring System'. The Alaska PRAMS data are sourced from the Alaska Department of Health, Division of Public Health, Section of Women's, Children's and Family Health. While a customizable query application for Alaska PRAMS data is being developed, data and data sheets can be requested through the following link: WCFH PRAMS.
- 2. A list of PRAMS Indicators included in the dashboard are as follows:
 - a. Pregnant Women Who Reported Binge Drinking During the Last 3 Months of Pregnancy

- 1. The CDC definition for Binge Drinking can be found under YRBS.
- b. Pregnant Women Who Reported Drinking Alcohol During the Last 3 Months of Pregnancy
- c. Pregnant Women Who Were Advised by Their Health Care Provider Not to Drink During Pregnancy
- d. Women Who Reported Using Marijuana During the Last 3 Months of Pregnancy

D. Alaska Health Facilities Data Reporting (HFDR) Program

- 1. The version of the HFDR dataset used in the analysis does not include hospital records from the two military hospitals in Alaska. As a result, the data available for this display captures 25 of 27 Alaska hospitals (92%).
- 2. Instances of drug- and alcohol-related hospital care were identified using principal or secondary diagnosis codes as follows. Drug-related discharges resulting from adverse effect of the drug or underdosing and encounters due to sequelae were excluded.
 - Alcohol: ICD 10-CM code T51.0
 - Opioids (All): ICD-10-CM codes T40.0-T40.4, T40.6
 - Opioid Pain Relievers (Natural, Semi-Synthetic, and Synthetic Opioids, Excluding Heroin): ICD-10-CM codes T40.2-T40.4
 - Benzodiazepines: ICD-10-CM code T42.4
- 3. Patients of unknown or out-of-state residence were included in the statewide total.
- 4. Regional estimates for individual years were suppressed for counts of 1–5, inclusive, for confidentiality. Rates were not reported for counts of less than 6.
- 5. Inpatient hospitalization counts include hospitalization at community hospitals, specialty hospitals (including psychiatric inpatient facilities), and long-term care hospitals (LTCH). Outpatient hospital care includes patients seen in emergency department outpatient facilities. This does not include outpatient surgery centers.

F. Alaska Health Analytics and Vital Records (HAVRS) Mortality Data

- 1. Counts and rates for Alaska Residents are provided by the Alaska Health Analytics and Vital Records Section (HAVRS): <u>HAVRS</u>. Additional information on publications and data statistics can be accessed through the following link: <u>HAVRS</u> <u>Data and Statistics</u>.
- 2. Age Adjusted Rates: Events per 100,000 population, age adjusted to year 2000 standard population.
- 3. Deaths were defined by the following underlying/contributing cause of death ICD-10 codes:
 - Alcohol-Induced: Underlying in X45, X65, Y15.
 - Opioids (All): Underlying in X40-X44, X60-X64, X85, Y10-Y14; Contributing in T400-T404, T406.

- Heroin: Underlying in X40-X44, X60-X64, X85, Y10-Y14. Contributing in T401.
- Opioid Pain Reliever (Natural, Semi-Synthetic, and Synthetic Opioids, Excluding Heroin): Underlying in X40-X44, X60-X64, X85, Y10-Y14; Contributing in T402-T404.
- <u>Fentanyl and Fentanyl Analogs</u>: Underlying in X40-X44, X60-X64, X85, Y10-Y14. Contributing in T404; Fentanyl cited in text literal fields.
- <u>Cocaine</u>: Underlying in X40-X44, X60-X64, X85, Y10-Y14. Contributing in T405.
- <u>Benzodiazepines</u>: Underlying in X40-X44, X60-X64, X85, Y10-Y14; Contributing in T424.
- <u>Methamphetamine</u>: Underlying in X40-X44, X60-X64, X85, Y10-Y14; Contributing in T436; Methamphetamine cited in text literal fields.
- 4. Regional estimates for individual years were suppressed for counts of 1–5, inclusive, for confidentiality. Multiyear counts or individual year counts outside this range were suppressed if they could be used to calculate a count that should be suppressed. Rates were not reported for counts of less than 6, and rates for counts fewer than 20 are statistically unreliable.