

# 2013

Hawai'i State Epidemiological Outcomes Workgroup

## State Epidemiological Profile: Selected Alcohol and Substance Use Indicators



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## Executive Summary

In 2012, the Hawai'i State Epidemiological Outcomes Workgroup (SEOW) received funding from the Center of Substance Abuse Prevention (CSAP). The Hawai'i SEOW is a continuation of the State Prevention Frame State Incentive Grant (SPF-SIG) initiative from 2006 – 2011, and consists of members, primarily directors, epidemiologist or data managers, from government, educational, and community agencies involved in research or data collection and utilization. In order to address the issues of substance abuse on a broader scale, all substances, age groups and indicators were taken into consideration for the priority selection process. The Hawai'i SEOW selected the following indicators to be highlighted in this year's State Epidemiological Profile:

- Youth consumption within past 30 days (alcohol, marijuana, cocaine, any illicit drug)
- Adult consumption within past 30 days (alcohol, marijuana, any illicit drug)
- Consumption before the age of 13 (alcohol, marijuana)
- Adult binge use (alcohol)
- Consumption within last 3 months of pregnancy (alcohol)
- Youth substance abuse or dependence (alcohol, any illicit drug)
- Adult substance abuse or dependence (alcohol, any illicit drug)
- Drivers in fatal crash that were alcohol positive
- Youth driving after alcohol consumption
- Adult driving after alcohol consumption
- Deaths by drug overdose
- Mental health admissions reporting any use of alcohol

Data gaps are seen in prescription drug misuse, substance abuse by ethnic sub-groups, specific populations, and mental health related comorbidities. Additional data may fill the knowledge gaps and will better identify the risk and protective factors that are associated with substance abuse and mental health.

## Introduction

### **BACKGROUND & PURPOSE**

The Hawai'i State Epidemiological Outcomes Workgroup (SEOW) was established in March 2006 with grant funds from the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Substance Abuse Prevention (CSAP) to the Hawai'i State Department of Health, Alcohol and Drug Abuse Division (ADAD). Due to staff transitions, limited resources and expertise, ADAD has found it challenging to sustain the SEOW and the accomplishments of the SPF-SIG project. However, in November 2012, ADAD was awarded a ten-month CSAP funded subcontract through Synectics for Management Decisions, Inc., to revive the SEOW for the purposes of applying the lessons learned in substance abuse prevention data collection and reporting to broader behavioral health issues. The revived SEOW is a partnership between ADAD, University of Hawai'i Office of Public Health Studies, and interested community stakeholders. The SEOW is comprised of members, primarily directors, epidemiologist or data managers, from government, educational, and community agencies involved in research or data collection and utilization. The purpose of the state epidemiological profile is to summarize and characterize behavioral health indicators related to the substance abuse area.

### **PROFILE DEVELOPMENT**

A general meeting with SEOW members was held in April 2013 to determine the data sources, substances, and indicators to be focused on. A web based questionnaire was sent to the members after the meeting to gather a general consensus on the high priority substance abuse indicators of Hawai'i that should be highlighted in the report. The main purpose of the questionnaire was to reach out to members who could not attend the meeting and to objectively identify top priority indicators. Results from both the meeting and questionnaire guided the profile content. SEOW members were also contacted individually throughout the profile development process for consultation in specific areas of their expertise.

### **HAWAI'I DEMOGRAPHIC**

The state of Hawai'i has a population of approximately 1.3 million. According to the 2010 Census, Hawai'i's population is comprised of 42.2% White, 2.9% Black, 2.5% American Indian/Alaskan Native, 57.2% Asian, 25.2% Native Hawaiian/ Other Pacific Islander, 8.8% Hispanic, and 2.5% some other race. The percentages of race sum up to be higher than 100%. Since 23.5% of the population in Hawai'i are of two or more races, the overall demographic count include race alone or in combination with one or more races. Individuals who indicated two or more races are classified in another category. Hawai'i is a chain of islands located in the middle of the vast Pacific Ocean. The entire state consists of eight major islands that are separated into five counties with the capital, Honolulu, located on Oahu (table 1). Since these counties are geographically separated by the ocean, the population summary differs between islands. Figure 2 describes Hawai'i's social and economic characteristics by county. Native Hawaiians/Pacific Islanders are highlighted in the population count because Hawai'i is the traditional homeland for Native Hawaiians.

County	Island
Hawai'i	Big Island
Honolulu	O'ahu
Kalawao	Moloka'i
Kaua'i	Kaua'i, Ni'ihau
Maui	Maui, Lāna'i, Kaho'olawe, Moloka'i

Table 1. Division of counties in the state of Hawai'i

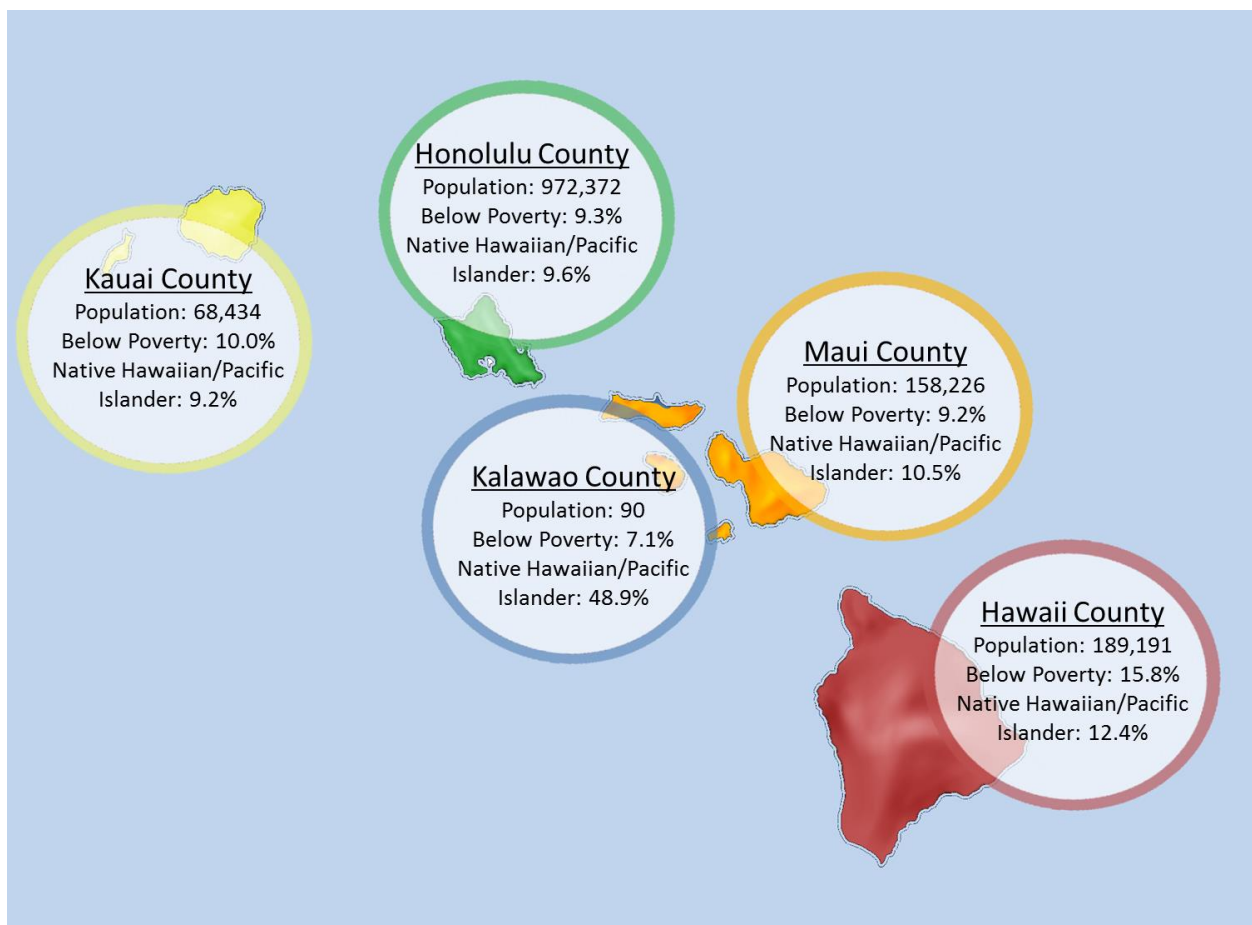


Figure 1. Hawai'i social and economic characteristics by county



## Data Sources

### SECTION OVERVIEW

Data sources were selected based on data availability and recommendations by the SEOW. This section provides a brief description of the primary data sources and secondary data resources that were used in the State Epidemiological Profile along with their limitations. Primary data sources are collected and analyzed firsthand. Secondary data resources are entities that aggregate available data into an accessible format. Data source limitations were evaluated based on the following criteria: data availability, methodology of data collection, frequency of data collection, and population sampled. These criteria should be taken into consideration prior to utilizing data for legislative or program decisions.

### PRIMARY DATA SOURCES

#### **Source: National Survey on Drug Use and Health (NSDUH)**

**Description:** Annual nationwide survey funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) that interviews approximately 70,000 randomly selected individuals ages 12 and over. Data from NSDUH give state-level estimates on the use of tobacco products, alcohol, illicit drugs and mental health. Randomly selected participants are given cash incentives and interviewed in their home by a professional interviewer of the Research Triangle Institute (RTI).

**Limitations:** Most recent data available is 2010. Survey methodology may cause response and/or social desirability bias. Respondents may answer questions based upon their perception of their interviewer's desired response.

#### **Source: Behavioral Risk Factor Surveillance System (BRFSS)**

**Description:** BRFSS conducted more than 500,000 telephone-based interviews in 2011, making the BRFSS the largest telephone survey in the world. The surveys were developed and conducted to monitor state and county-level prevalence of the major behavioral risks among adults associated with premature morbidity and mortality. New weighting methodology (ranking, or iterative proportional fitting) was implemented in the 2011 collection to replace post stratification weighting method used with previous BRFSS data sets. In addition, cellular telephone use was incorporated.

**Limitations:** The most recent data collected was in 2011. Survey methodology may cause social desirability bias. Respondents may answer questions based upon their perception of their interviewer's desired response.

#### **Source: Youth Risk Behavior Surveillance System (YRBSS)**

**Description:** The YRBS monitors six types of health-risk behaviors that contribute to the leading causes of death and disability among youth. This includes behaviors that contribute to unintended injuries/violence, sexual behaviors that contribute to unintended pregnancy/STD transmission, alcohol and other drug use, tobacco use, unhealthy dietary behaviors, and

inadequate physical activity. The 2011 YRBSS included a national school-based survey conducted among students in grades 9–12.

**Limitations:** Most recent data available is 2011. Counties that have a response rate of less than 60% are not analyzed. Hawai'i collects YRBSS data on students in middle school; however, comparable national data is not available.

**Source: Pregnancy Risk Assessment Monitoring System (PRAMS)**

**Description:** PRAMS collects state-specific, population-based data on maternal attitudes and experiences before, during, and shortly after pregnancy. Hawai'i state surveys between 2,200 and 2,400 women per year. Participating women are given a choice to complete a paper or telephone survey.

**Limitations:** Most recent data available is 2011. Survey methodology may be inconsistent (mail and telephone method). Telephone survey may cause social desirability bias. Respondents may answer questions based upon their perception of their interviewer's desired response.

## **SECONDARY DATA RESOURCES**

**Resource: Hawai'i Health Data Warehouse (HHDW)**

**Description:** HHDW is a project created through the partnership between the Hawai'i State Department of Health (DOH) and the University of Hawai'i's John A Burns School of Medicine (JABSOM). The Research Corporation of the University of Hawaii (RCUH) functions as the Human Resource and Accounting arms for HHDW. HHDW was created by DOH to address and monitor the Health People 2010 goals. It is a data resource that houses available data regarding health for the state of Hawai'i in the five interrelated components: schools, communities, public and professional education, research and evaluation, and Nutrition Education Network.

**Limitations:** Specific to each included data source.

**Resource: Behavioral Health Indicator System (BHIS)**

**Description:** BHIS is an interactive, web-based data and monitoring system supported by the CSAP for the SEOW. The goal of this site is to create a comprehensive national and state-level interactive substance abuse monitoring system and host key mental/behavioral health indicators and shared risk/protective factors as they relate to substance abuse.

**Limitations:** BHIS presents only state-level data.

## Data Assistance

### SECTION OVERVIEW

Data of select indicators are presented in bar graphs. The purpose is for stakeholders to utilize these graphs to help further their efforts in substance abuse prevention. The follow sub-sections are figurative explanations of how to read and interpret these graphs, therefore maximizing its efficiency.

### HOW TO READ GRAPHS

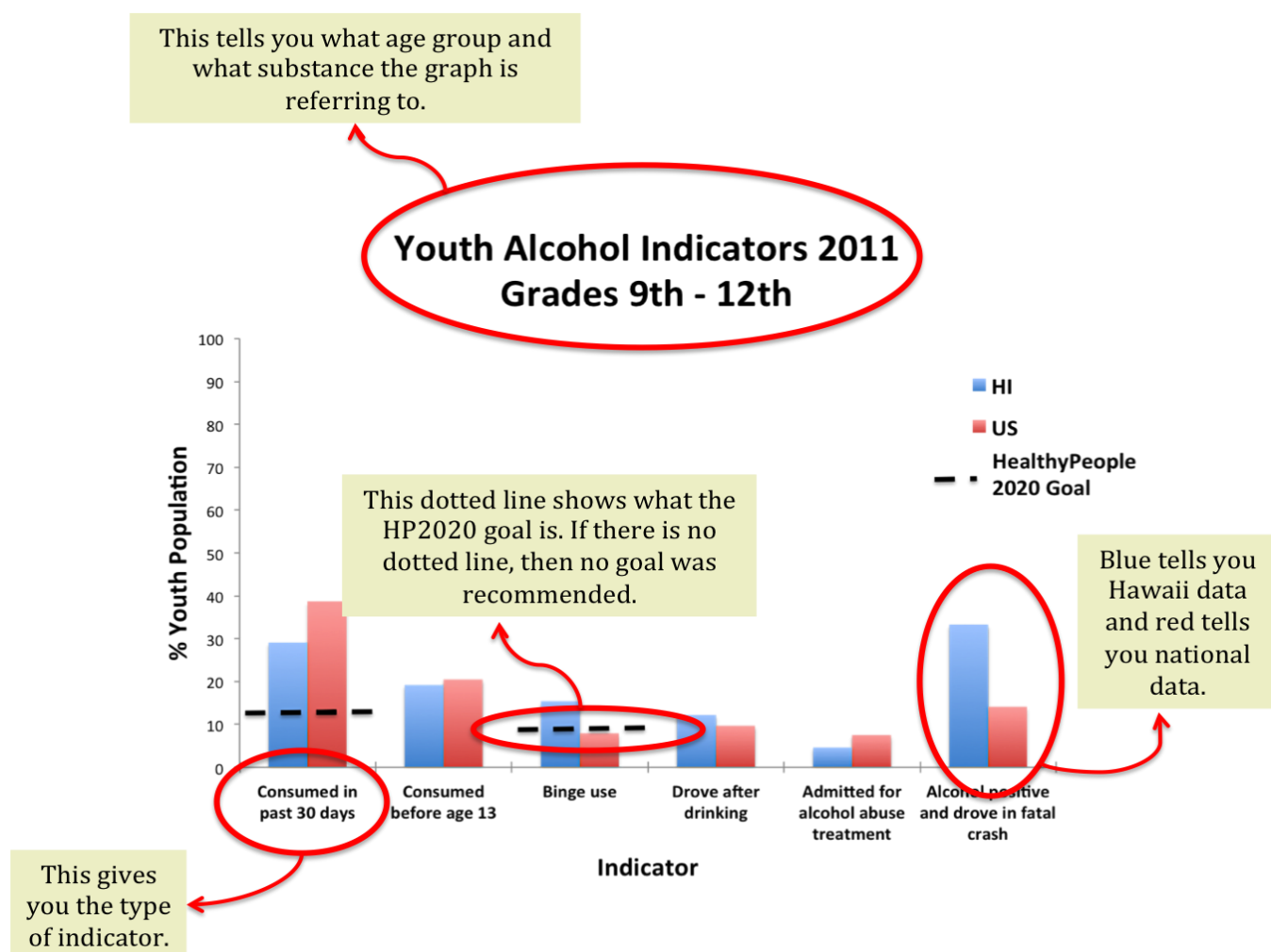


Figure 2. How to read graphs

## HOW TO INTERPRET GRAPHS

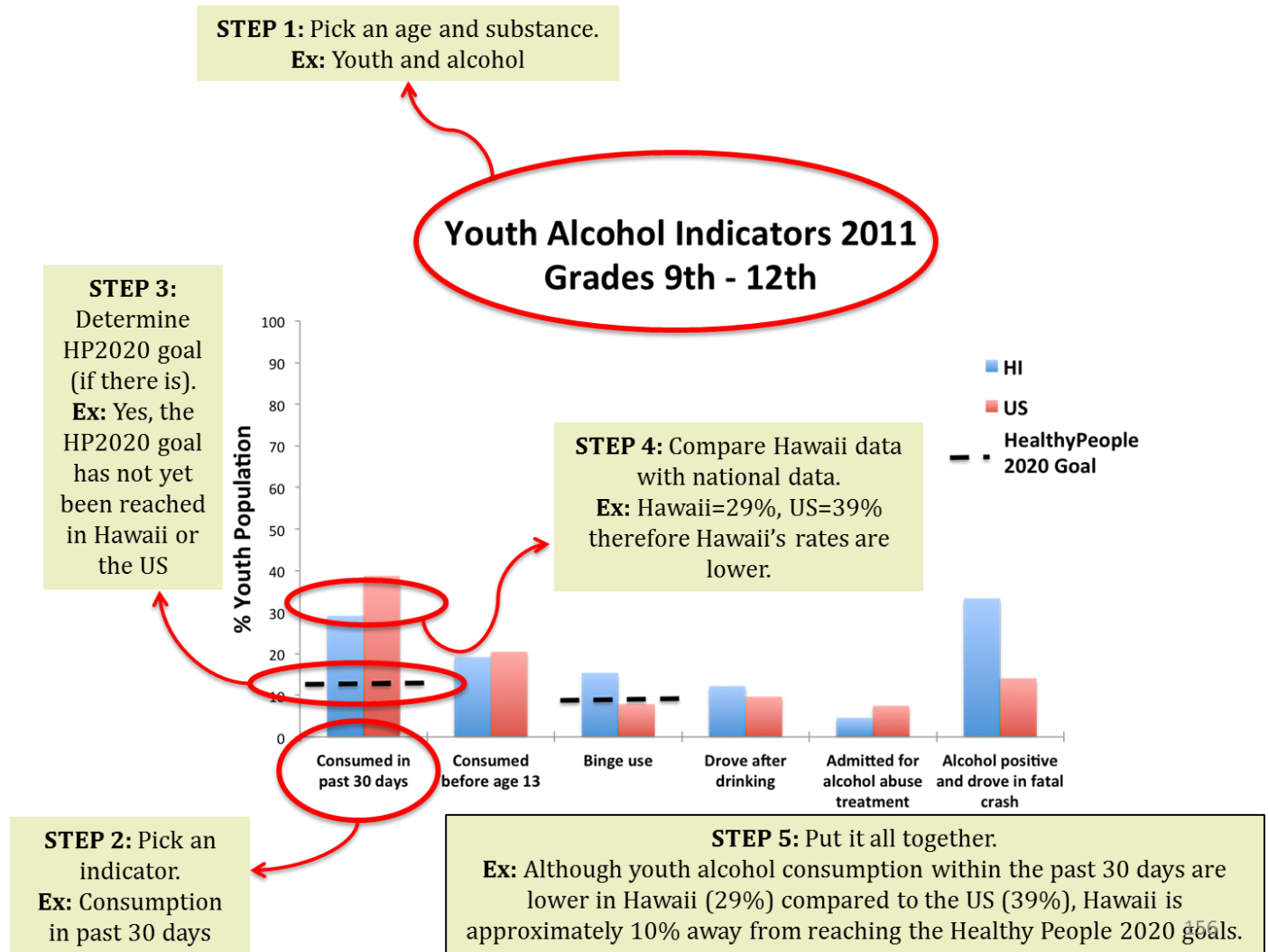


Figure 3. How to interpret graphs

## Indicators

### SECTION OVERVIEW

A web-based survey (appendix B) regarding high priority substance abuse indicators was distributed to SEOW members. Of the nine members who were e-mailed, 55% responded. Members were asked to rate the priority of substance abuse indicators, on a scale of 1 – 5, available for the state of Hawai'i ('5' being the highest priority, '1' being lowest priority). In addition to consulting with the SEOW members, the Healthy People 2020 objectives were also taken into account. Healthy People provides science-based 10-year national objectives. The baseline data used for Healthy People 2020 is from 2008. This section presents the most recent data by substance, age group, and indicators. National prevalence and Healthy People 2020 goals by percentage are also presented upon availability. Note that not all indicators have a Healthy People 2020 goal.

### ALCOHOL

#### Youth Alcohol Indicators 2011 Grades 9th - 12th

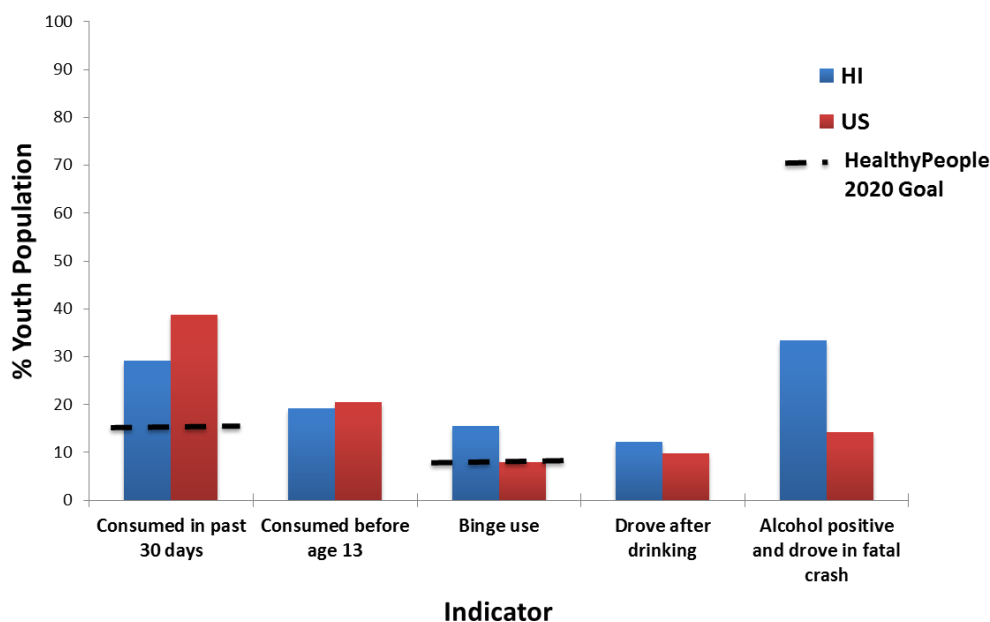


Figure 4. Youth alcohol indicator 2011

## Adult Alcohol Indicators 2010 Ages 18+

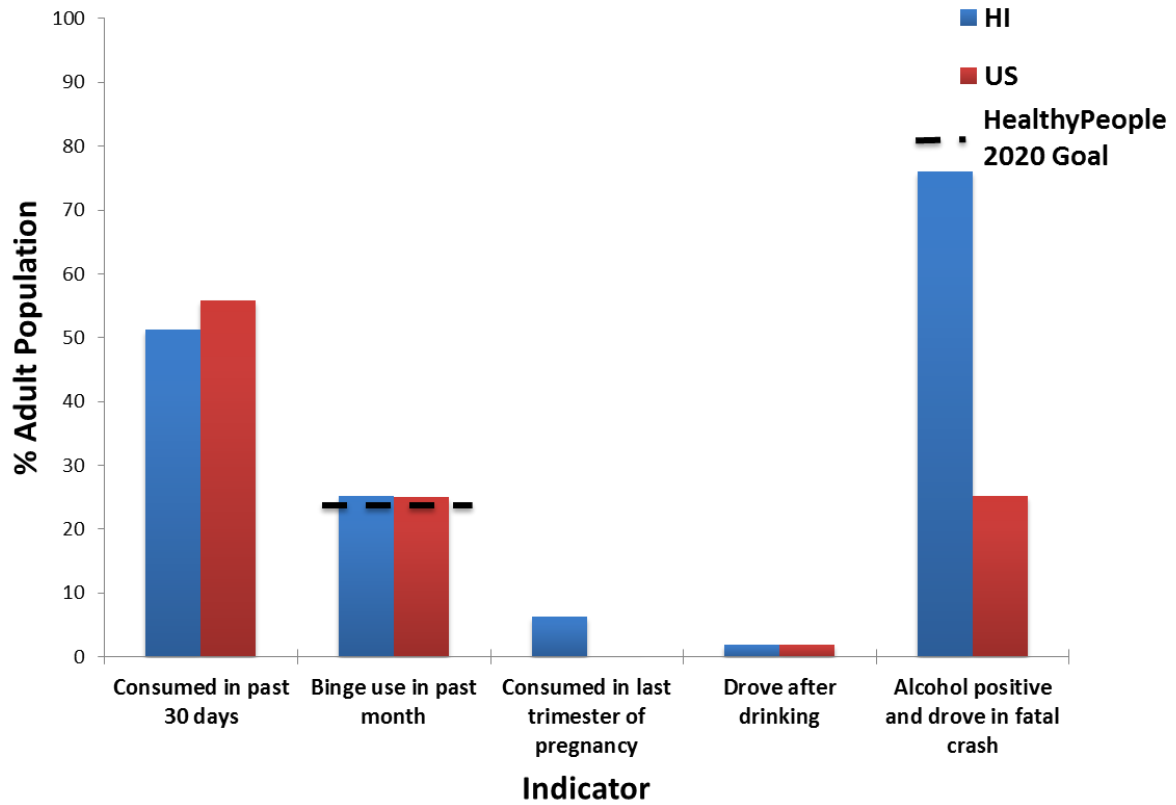


Figure 5. Adult alcohol indicator 2010

## MARIJUANA

### Youth Marijuana Indicators 2011 Grades 9th - 12th

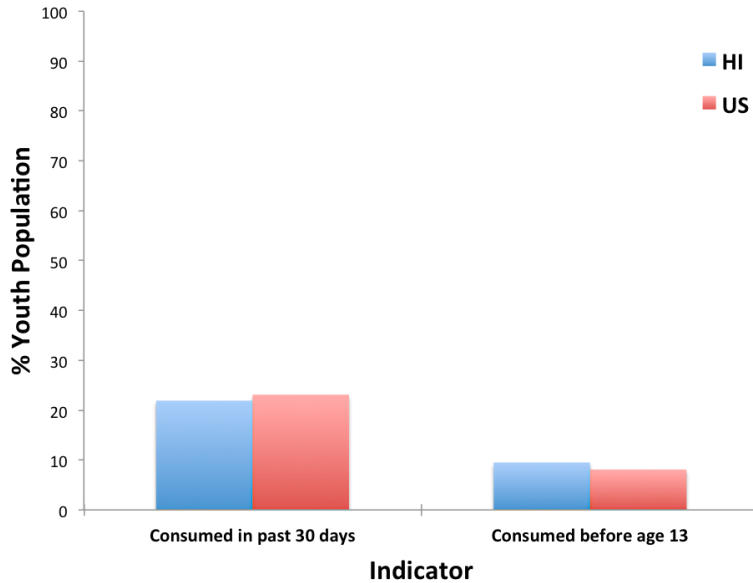


Figure 6. Youth marijuana indicator 2011

### Adult Marijuana Indicators 2010 Ages 18+

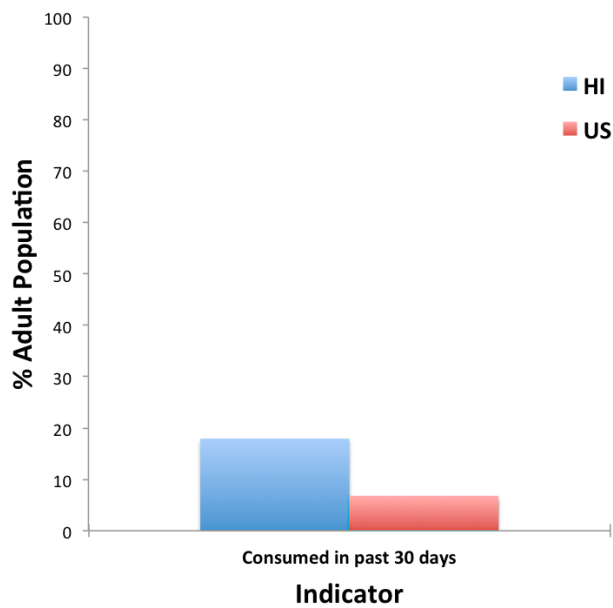


Figure 7. Adult marijuana indicator 2010

## ANY ILLICIT DRUG

### Youth Any Illicit Drug Indicators 2010 Ages 12 - 17

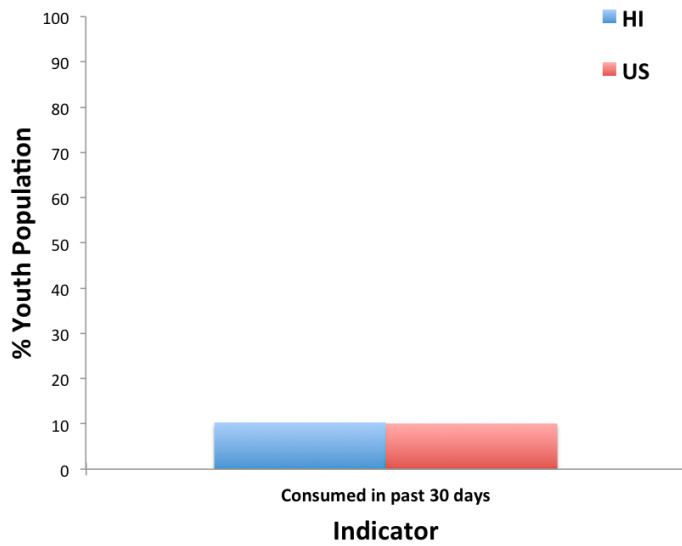


Figure 8. Youth illicit drug indicator 2010

### Adult Any Illicit Drug Indicators 2010 Ages 18+

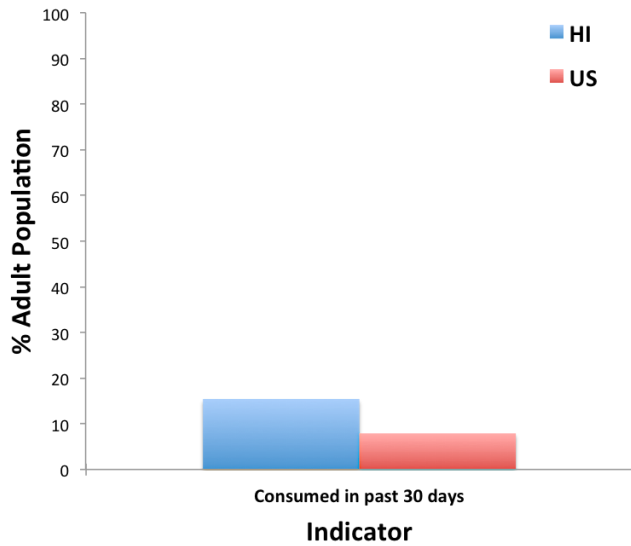


Figure 9. Adult illicit drug indicator 2010



ANY SUBSTANCE

Any Substances Indicators 2009  
Ages 12+

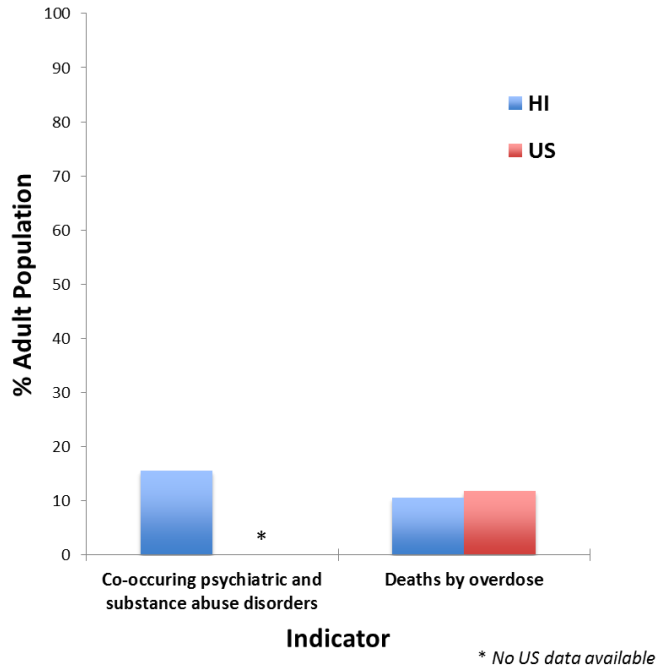


Figure 10. All ages any substance indicator 2009

## Significance of Data

### **YOUTH ALCOHOL**

In 2010, nationwide there were approximately 189,000 emergency room visits by persons under the age of 21 for injuries and other conditions linked to alcohol. Research has shown that adolescents who begin drinking at an early stage in life are at greater risk of developing alcohol dependency, which may lead to exacerbating negative outcomes such as school and social problems. In addition, young drivers are 17 times more likely to die in a crash when they have a blood alcohol concentration of 0.08%.

### **ADULT ALCOHOL**

Approximately 75,000 deaths each year in the U.S. are attributed to excessive alcohol use. Excessive alcohol use is strongly associated with injuries, violence, fetal alcohol syndrome, chronic liver disease, and risk of other acute and chronic health effects. During pregnancy, exposure to alcohol during pregnancy can damage the fetus in all trimesters. Driving after drinking can affect everyone (passenger, pedestrian, other drivers) through deaths, injuries, and personal tragedies.

### **ILLICIT DRUGS**

In 2008, the Drug Abuse Warning Network estimates that prescription or over-the-counter drugs used non-medically were involved in 1 million emergency department visits, and illicit drugs were also involved in 1 million visits.

### **MARIJUANA**

Marijuana users who take large doses of the drug may experience acute psychosis and other psychological problems. Early marijuana use is highly associated with declined IQ and increased substance abuse.

### **CO-OCCURRING MENTAL HEALTH AND SUBSTANCE ABUSE**

Identifying mental health admissions concurrently with any use of substance can contribute to the consequential risk factor knowledge base.

### **ALCOHOL ABUSE TREATMENT ADMISSION**

A significant amount of persons ages 12 or older needed treatments for their alcohol problem in the past year. The majority (87.4%) of those who needed alcohol treatment either did not perceive the need for treatment or did not receive it.

## How to Access Additional Data

Below is a list of web addresses by data source that will lead you directly to the entire dataset. Additional indicators may be found in the datasets.

### **BRFSS**

<http://apps.nccd.cdc.gov/BRFSS/>

Use the drop down menu to select the state, year and category of data you wish to see.

### **YRBS**

<http://apps.nccd.cdc.gov/youthonline/App/Default.aspx>

The Youth Online Interactive Tables from YRBS allows you to browse data by state, health topics, age group, and ethnicities. A new feature allows you to compare data and calculate the significance of the difference between variables such as age group or ethnicity.

### **NSDUH**

<http://www.samhsa.gov/data/NSDUH/2k10ResultsTables/NSDUHTables2010R/HTM/TOC.htm>

The table of contents is comprised of hyperlinks that take you directly to the substance of your choice. Then another series of hyperlinks are presented. The hyperlink label is the title of the graph that you will be led to.

### **HHDW**

<http://www.hhdw.org/>

Data reports from primary data sources with data representing the state of Hawai'i are listed on this website by category, data source, ethnicity, county and Healthy People 2020 objectives.

## Data Limitations and Gaps

Similar to most states, Hawai'i has data gaps and limitations in the substance abuse and mental health areas. These gaps should be addressed in order to expand the knowledge base of specific populations, substances, risk, and protective factors and assist in proper allocations of resources. Available state-level substance abuse data was compiled and examined by substance, indicator type, ethnicity, age group, and units measured. The following is a list of data gaps that have been identified.

- Prescription drug misuse  
Although prescription drug misuse is designated as a national epidemic, Hawai'i has limited data on this topic. Currently the only indicator available is "use of any prescription drug within a lifetime."
- Data by ethnicity  
The ethnic make-up of Hawai'i is unique compared to the rest of the states. The majority of the individuals are of Asian race. In addition, a substantial proportion of the population consists of Native Hawaiians and Pacific Islanders. Since each ethnicity has different culture, history, traditions, and social characteristics, it would be more useful if the data was segregated by ethnic sub-groups (Native Hawaiians, Micronesian, Samoan, Vietnamese, Japanese, Chinese, etc.).
- Consistent indicators  
A consistent set of indicators to measure each substance will be useful in comparing the priorities by substance. Certain substances, such as alcohol are thoroughly measured whereas others, such as heroin, are not.
- Adult indicators  
Although youth substance use patterns may predict the substance use behaviors in the adult phase of an individual, a set of summary statistics is still more accurate than estimated data. Currently there are more indicators measured amongst youth than adults. Consistent indicators should be used to track prevalence.
- Mental health related  
Additional mental health related indicators other than mental health admission records will be useful in examining the mental health and substance abuse association.
- Additional Substances  
Additional data is needed on other substances such as methamphetamine, heroin, synthetics, and prescription drugs.

## Appendix A. References

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## Appendix B. SEOW Substance Abuse Priority Indicators Survey

### SEOW Hawaii State Epidemiology Profile Priorities

Aloha. Thank you again for attending and contributing to the SEOW meeting. This is a follow up questionnaire to gather recommendations from SEOW members regarding high priority substance abuse indicators that should be highlighted in the epidemiology profiles. This questionnaire will take approximately 10 minutes to complete.

The State Epidemiology Profile is a reference guide for substance abuse sources, key indicators, estimates and trends. The State Profile is aimed towards state level and federal audiences. The following questions will ask you to prioritize a set of indicators by substance. Population will be taken into consideration depending on the recommended high priority indicators and data available.

#### 1. Demographic Information

- a. Name: \_\_\_\_\_
- b. Department/Organization: \_\_\_\_\_
- c. Email Address: \_\_\_\_\_
- d. Phone number: \_\_\_\_\_

#### 2. Alcohol Indicators

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| a. Abuse or dependence (self-reported).....   | 1 | 2 | 3 | 4 | 5 |
| b. Consumption within past 30 days .....  | 1 | 2 | 3 | 4 | 5 |
| c. Consumption of 5 or more drinks on at least one occasion within the past 30 days ..... | 1 | 2 | 3 | 4 | 5 |
| d. Consumption before age 13 .....  | 1 | 2 | 3 | 4 | 5 |
| e. Consumption – binge use .....  | 1 | 2 | 3 | 4 | 5 |
| f. Consumption – current use .....  | 1 | 2 | 3 | 4 | 5 |
| g. Consumption – heavy use .....  | 1 | 2 | 3 | 4 | 5 |
| h. Fatal motor vehicle crashes involved with alcohol....                                  | 1 | 2 | 3 | 4 | 5 |
| i. Death sustained in alcohol involved crashes.....                                       | 1 | 2 | 3 | 4 | 5 |
| j. Drivers in fatal crashes where were alcohol negative .....                             | 1 | 2 | 3 | 4 | 5 |
| k. Drivers in fatal crashes who were alcohol positive...                                  | 1 | 2 | 3 | 4 | 5 |
| l. Driving while drinking.....  | 1 | 2 | 3 | 4 | 5 |
| m. Riding with someone who had been drinking.....   | 1 | 2 | 3 | 4 | 5 |
| n. Perceived great risk from 5 or more drinks, once/twice a week .....                    | 1 | 2 | 3 | 4 | 5 |
| o. Needing but not receiving treatment .....  | 1 | 2 | 3 | 4 | 5 |
| p. Domestic violence caregiver risk – nonvictims.....                                     | 1 | 2 | 3 | 4 | 5 |
| q. Domestic violence caregiver – victims.....   | 1 | 2 | 3 | 4 | 5 |

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| r. Consumption within last 3 months of pregnancy..... | 1 | 2 | 3 | 4 | 5 |
| s. Mental health – Admissions reporting any use ..... | 1 | 2 | 3 | 4 | 5 |
| t. Lives with substance abuser .....                  | 1 | 2 | 3 | 4 | 5 |
| u. Other: _____ .....                                 | 1 | 2 | 3 | 4 | 5 |

**3. Any Drug Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| a. Deaths by drug related behavior .....                                 | 1 | 2 | 3 | 4 | 5 |
| b. Deaths by drug related overdose/poisoning.....                        | 1 | 2 | 3 | 4 | 5 |
| c. Deaths by overdose/poisoning .....                                    | 1 | 2 | 3 | 4 | 5 |
| d. Mental health – Admissions reporting any use.....                     | 1 | 2 | 3 | 4 | 5 |
| e. Mental health – Admissions reporting primary substance abuse<br>..... | 1 | 2 | 3 | 4 | 5 |
| f. Other: _____ .....  | 1 | 2 | 3 | 4 | 5 |

**4. Any Illegal drug/Prescription Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- |                                       |   |   |   |   |   |
|---------------------------------------|---|---|---|---|---|
| a. Lives with a substance abuser..... | 1 | 2 | 3 | 4 | 5 |
| b. Other: _____ .....                 | 1 | 2 | 3 | 4 | 5 |

**5. Any Illicit Drug Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| a. Abuse or dependence (self-reported) ..... | 1 | 2 | 3 | 4 | 5 |
| b. Needing but not receiving treatment.....  | 1 | 2 | 3 | 4 | 5 |
| c. Consumption within past 30 days .....     | 1 | 2 | 3 | 4 | 5 |
| d. Other: _____ .....                        | 1 | 2 | 3 | 4 | 5 |

**6. Any Substance Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| a. Mental health – Admissions reporting co-occurring psychiatric and substance abuse use<br>disorders..... | 1 | 2 | 3 | 4 | 5 |
| b. Consumption prior to last sexual intercourse .....  | 1 | 2 | 3 | 4 | 5 |

- c. Other: \_\_\_\_\_ 1 2 3 4 5

**7. Cocaine Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Mental health – Admissions reporting any use.....1 2 3 4 5
- b. Mental health – Admissions reporting primary substance abuse  
.....1 2 3 4 5
- c. Consumption within past 30 days.....1 2 3 4 5
- d. Consumption within lifetime .....1 2 3 4 5
- e. Other: \_\_\_\_\_ 1 2 3 4 5

**8. Ecstasy/MDMA Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within lifetime .....1 2 3 4 5
- b. Other: \_\_\_\_\_ 1 2 3 4 5

**9. Heroin Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within lifetime .....1 2 3 4 5
- b. Mental health – Admissions reporting primary substance abuse  
.....1 2 3 4 5
- c. Other: \_\_\_\_\_ 1 2 3 4 5

**10. Inhalants Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within past 30 days .....1 2 3 4 5
- b. Consumption within lifetime .....1 2 3 4 5
- c. Other: \_\_\_\_\_ 1 2 3 4 5

**11. Injection Drug Indicators**



On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within lifetime .....1      2      3      4      5
- b. Other: \_\_\_\_\_ .....1      2      3      4      5

**12. Marijuana Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption before age 13 .....1      2      3      4      5
- b. Consumption within past 30 days.....1      2      3      4      5
- c. Mental health – Admissions reporting any use.....1      2      3      4      5
- d. Mental health – Admission reporting primary substance abuse  
.....1      2      3      4      5
- e. Perceived great risk from smoking once a month ....1      2      3      4      5
- f. Other: \_\_\_\_\_ .....1      2      3      4      5

**13. Methamphetamine Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within a lifetime.....1      2      3      4      5
- b. Other: \_\_\_\_\_ .....1      2      3      4      5

**14. Prescription Drug Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within a lifetime.....1      2      3      4      5
- b. Other: \_\_\_\_\_ .....1      2      3      4      5

**15. Stimulants Indicators**

On a scale of 1-5, please assign a priority to each indicator. (“5” being highest priority, “1” being lowest priority) For each indicator that you’ve prioritized as “5-highest priority,” please briefly explain why.

- a. Consumption within a lifetime.....1      2      3      4      5
- b. Other: \_\_\_\_\_ .....1      2      3      4      5

16. If there are any other data on substances and indicators that have not been listed, please indicate them below along with the source.

## Appendix C. Substance Use Indicator Tables

### Alcohol

#### YOUTH

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	29.1	25.8 - 32.4	38.7	37.1 - 40.3	16.6
Consumed before age 13	19.2	17.9 - 20.5	20.5	19.2 - 21.8	---
Binge use	15.4	13.6 - 17.2	7.9	21.0 - 22.8	8.6
Drove after drinking	12.2	7.7 - 16.7	9.7	8.6 - 10.8	---
Alcohol positive and drove in fatal crash	33.3	---	14.1	---	---

#### ADULT

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	51.2	47.41 - 54.97	55.87	55.27 - 56.48	---
Binge use in past month	25.18	22.48 - 28.07	25	24.53 - 25.48	24.4
Consumed in last trimester of pregnancy	6.3	5.3 - 7.5	---	---	---
Drove after drinking	1.9	1.4 - 2.4	1.9	---	---
Alcohol positive and drove in fatal crash	76	---	25.15	---	---

### Marijuana

#### YOUTH

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	21.9	19.3 - 24.5	23.1	21.5 - 24.7	6
Consumed before age	9.5	8.2 - 10.8	8.1	7.2 - 9.0	---

## ADULT

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	7.88	6.29-9.81	6.71	9.47-6.96	---

## Illicit Drugs

## YOUTH

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	10.33	---	10.1	n/a	---

## ADULT

Indicator	HI	95% CI	US	95% CI	HP2020
Consumed in past 30 days	9.62	7.89-11.7	8.68	8.4-8.97	7.1

## Any substance

## ALL AGES

Indicator	HI	95% CI	US	95% CI
Co-occurring psychiatric and substance abuse disorders	15.6	n/a	-	
Deaths by overdose	10.6	n/a	11.9	n/a

## Admitted for Substance Abuse Treatment

## ALL AGES

Indicator	HI	95% CI	US	95% CI
Alcohol as primary substance	15.6	---	22.3	---
Marijuana as primary substance	30.9	---	18.6	---