The 2019-2020 Hawai‘i Student Alcohol, Tobacco, and Other Drug Use Survey

Selected Hawai‘i State & County Level Results

University of Hawai'i at Mānoa JABSOM Department of Psychiatry

In partnership with the Hawai‘i State Department of Health Alcohol & Drug Abuse Division

Presented to: Hawai‘i State Epidemiologic Outcomes Workgroup

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The findings from the ATOD Survey disseminated here are solely the views presented by the authors and do not necessarily represent the views of the sponsoring or partnering agencies.

Unless otherwise indicated, all data presented utilize findings from the Data Source: University of Hawai‘i Department of Psychiatry, 2019-2020 Hawai‘i Student ATOD Survey.

Mahalo nui loa to John Valera, AICP and Dr. Jared Yurow, PsyD from ADAD for their support and collaboration.

Mahalo nui loa to the ATODS Team for their immense effort and dedication to this project.

We wish to extend our greatest appreciation to all the school administrators, staff, and students who participated in the survey – their support made this project possible.

For further information from the ATOD Survey State and Regional Level Reports please visit: https://health.hawaii.gov/atod-survey/
The recurrent use of alcohol and/or drugs causes clinically significant impairment. Including: health problems, disability, and failure to meet responsibilities at work, school, or home.

SAMHSA, 2020

2019-2020 Hawai‘i Student Alcohol, Tobacco, and Other Drug Use (ATOD) Survey

- Statewide school-based youth needs assessment conducted by UH JABSOM Department of Psychiatry for DOH Alcohol and Drug Abuse Division, in collaboration with Hawai‘i DOE
- Examine substance use treatment and prevention need and related risk or protective factors for Hawai‘i middle and high school students
Timeline

2019

School Outreach
Fall Survey Administration

2020

State level Analyses & Report Writing
Regional level Analyses, Report Writing & Dissemination to Schools

Spring Survey Administration (before COVID-19 shutdown)
Data Entry, Cleaning, Merging
Data Coding & State level Analyses

2021

2022

Continued Dissemination
Methods

- Student survey data with weighted statewide sample (n=8,225)
- Public middle and high schools (8th, 10th, 12th grades)
- Sampled schools at community region level for island representation including high-need but under-resourced; sampled classes for 8th, 10th, and 12th grades in Fall 2019-Spring 2020 (SY 2020)
- Community-based field site coordinators, primarily online survey administration resulted in overall 88.5% participation rate
- Descriptive, Chi-square Analysis & Modeling by Substance, Ethnicity, Grade, Gender Group, Risk & Protective Factors
  - CRAFFT screener: Risk + Probable Substance Use Disorder
  - Alcohol, Cigarettes, Vaping/E-cigarettes, Marijuana
County & State Demographics: Grade

<table>
<thead>
<tr>
<th></th>
<th>8th</th>
<th>10th</th>
<th>12th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawai‘i</td>
<td>31.8</td>
<td>33.1</td>
<td>35.1</td>
</tr>
<tr>
<td>Honolulu</td>
<td>32.9</td>
<td>35.2</td>
<td>31.9</td>
</tr>
<tr>
<td>Kaua‘i</td>
<td>32.6</td>
<td></td>
<td>44.2</td>
</tr>
<tr>
<td>Maui</td>
<td></td>
<td>41.5</td>
<td>37.7</td>
</tr>
<tr>
<td>State</td>
<td></td>
<td>33.6</td>
<td>35.6</td>
</tr>
</tbody>
</table>
County & State Demographics: Gender
County & State Demographics: Primary Race/Ethnicity
Important to Maintain Cultural Traditions: 59.5%
Strong Ethnic Belonging: 85.3%

Other Demographics (%):
- Primary Household Language Other than English: 17.7%
- Regular Place to Sleep Other than Home: 5.5%
- Mother/Guardian’s Education < college degree: 51.3%
- Father/Guardian’s Education < college degree: 51.9%
- Family member in Active Military, Reserve, or National Guard: 17.2%
- Self or family member lives on Hawaiian homestead: 26.7%
Statewide Estimate for Probable Substance Use Disorder (11.1%)*

More than 1:10

Middle and High School students have a probable substance use disorder

Screening for a Probable Substance Use Disorder

More than doubles from middle to high school

Gender Diverse students are more likely to have a substance use disorder

- 8th grade: Male - 6.6%, Female - 12%, Gender Diverse - 15%
- 10th grade: Male - 8.8%, Female - 13.1%, Gender Diverse - 24.4%
- 12th grade: Male - 8.8%, Female - 13.1%, Gender Diverse - 24.4%
Estimated Treatment Need % CRAFFT Screen

- Hawai‘i County: 70.3%
  - Screen Neg: 18.1%
  - Screen Pos: 11.6%
  - Probable SUD: 11.6%

- Honolulu: 75.5%
  - Screen Neg: 13.4%
  - Screen Pos: 11.1%
  - Probable SUD: 11.1%

- Kaua‘i: 69.9%
  - Screen Neg: 15.8%
  - Screen Pos: 14.3%
  - Probable SUD: 15.8%

- Maui: 72.5%
  - Screen Neg: 15.1%
  - Screen Pos: 12.4%
  - Probable SUD: 15.1%

- State: 74.5%
  - Screen Neg: 14.3%
  - Screen Pos: 11.1%
  - Probable SUD: 11.1%
Mental Health & Attention Screen

Mental Health (PHQ-4\textsuperscript{1}) & Attentional Disorder (PSC-Attention\textsuperscript{2}) Screening (%)

<table>
<thead>
<tr>
<th>Region</th>
<th>Mild MH</th>
<th>Moderate MH</th>
<th>Severe MH</th>
<th>Attention Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawai’i</td>
<td>19.1</td>
<td>9.6</td>
<td>7.5</td>
<td>14.1</td>
</tr>
<tr>
<td>Honolulu</td>
<td>21.7</td>
<td>7.8</td>
<td>7.8</td>
<td>15.0</td>
</tr>
<tr>
<td>Kaua’i</td>
<td>15.0</td>
<td>11.6</td>
<td>15.0</td>
<td>13.9</td>
</tr>
<tr>
<td>Maui</td>
<td>30.3</td>
<td>9.4</td>
<td>9.3</td>
<td>15.0</td>
</tr>
<tr>
<td>State</td>
<td>19.5</td>
<td>8.6</td>
<td>8.0</td>
<td>15.2</td>
</tr>
</tbody>
</table>

CRAFFT Screen % by Mental Health Distress Severity

- **None**: 81.2%
- **Mild**: 68.8%
- **Moderate**: 60.2%
- **Severe**: 54.3%


Alcohol or Drug Treatment Need vs. Utilization

Probable SUD
(CRAFFT, n=897)

- 29% Got help
- 71% No help

Positive Risk for SUD
(CRAFFT, n=1157)

- 16.6% Got help
- 83.4% No help

4.5% of No/Low Risk Group (n=6014) getting some help from mostly school AND outside of school
Statewide Lifetime, Current & Moderate-Heavy Use

Overall Lifetime, Current (Past 30 days), & Moderate-Heavy (Past 30 days) Use (%)

<table>
<thead>
<tr>
<th></th>
<th>Alcohol</th>
<th>Binge Drinking</th>
<th>Tobacco cigarettes</th>
<th>Vaping</th>
<th>Marijuana</th>
<th>Marijuana-Alcohol together</th>
<th>Opioids</th>
<th>Sedatives &amp; Other Rx drugs</th>
<th>OTC Drugs</th>
<th>Steroids</th>
<th>Inhalants</th>
<th>Heroin</th>
<th>Cocaine</th>
<th>Methamphetamine</th>
<th>Hallucinogens</th>
<th>Other Illicit Drugs</th>
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</thead>
<tbody>
<tr>
<td>State Lifetime Use</td>
<td>52.1</td>
<td>26.8</td>
<td>19.2</td>
<td>44.2</td>
<td>33.2</td>
<td>N/A</td>
<td>3.6</td>
<td>6.2</td>
<td>11.9</td>
<td>2.1</td>
<td>5.3</td>
<td>1.0</td>
<td>3.1</td>
<td>1.6</td>
<td>4.3</td>
<td>3.3</td>
</tr>
<tr>
<td>State Current Use</td>
<td>27.3</td>
<td>13.9</td>
<td>8.4</td>
<td>25.9</td>
<td>20.3</td>
<td>12.8</td>
<td>1.6</td>
<td>2.8</td>
<td>5.0</td>
<td>1.3</td>
<td>2.3</td>
<td>0.7</td>
<td>1.6</td>
<td>0.8</td>
<td>2.0</td>
<td>1.5</td>
</tr>
<tr>
<td>State Mod-Heavy Use</td>
<td>5.3</td>
<td>3.5</td>
<td>3.7</td>
<td>13.8</td>
<td>9.3</td>
<td>3.8</td>
<td>0.7</td>
<td>0.8</td>
<td>1.2</td>
<td>0.6</td>
<td>0.8</td>
<td>0.5</td>
<td>0.6</td>
<td>0.5</td>
<td>0.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>
County & State - Current Alcohol & Substance Use

Current Alcohol & Substance Use in the Past 30 days (%)
County & State – Moderate-Heavy Alcohol & Substance Use

Mod-Heavy (6+ times) Alcohol & Substance Use in the Past 30 days (%)

- Alcohol & Substance Use in the Past 30 days (%):
  - Alcohol: Hawai’i County Mod-Heavy Use = 6.0, Honolulu County Mod-Heavy Use = 4.9, Kaua’i Mod-Heavy Use = 5.3, Maui County Mod-Heavy Use = 4.7, State Mod-Heavy Use = 4.7
  - Tobacco cigarettes: Hawai’i County Mod-Heavy Use = 3.2, Honolulu County Mod-Heavy Use = 4.1, Kaua’i Mod-Heavy Use = 4.5, Maui County Mod-Heavy Use = 3.7, State Mod-Heavy Use = 3.7
  - Vaping: Hawai’i County Mod-Heavy Use = 14.6, Honolulu County Mod-Heavy Use = 12.7, Kaua’i Mod-Heavy Use = 16.7, Maui County Mod-Heavy Use = 15.4, State Mod-Heavy Use = 13.8
  - Marijuana: Hawai’i County Mod-Heavy Use = 10.1, Honolulu County Mod-Heavy Use = 8.9, Kaua’i Mod-Heavy Use = 11.0, Maui County Mod-Heavy Use = 9.4, State Mod-Heavy Use = 9.3
  - Marijuana-Alcohol together: Hawai’i County Mod-Heavy Use = 4.9, Honolulu County Mod-Heavy Use = 3.1, Kaua’i Mod-Heavy Use = 4.6, Maui County Mod-Heavy Use = 3.8, State Mod-Heavy Use = 3.8
Statewide Current Alcohol & Substance Use by Grade

Alcohol & Substance Use in the Past 30 Days by Grade (%)
Statewide Current Alcohol & Substance Use by Gender

Alcohol & Substance Use in Past 30 Days by Gender (%)

- Male
  - Alcohol
  - Vape
  - Marijuana
  - Binge drinking
  - Tobacco cigarettes
  - OTC Drugs
  - Sedatives & Other Rx Drugs
  - Opioids
  - Cocaine
  - Methamphetamine
  - Heroin
  - Steroids

- Female
  - Alcohol
  - Vape
  - Marijuana
  - Binge drinking
  - Tobacco cigarettes
  - OTC Drugs
  - Sedatives & Other Rx Drugs
  - Opioids
  - Cocaine
  - Methamphetamine
  - Heroin
  - Steroids

- TGGM
  - Alcohol
  - Vape
  - Marijuana
  - Binge drinking
  - Tobacco cigarettes
  - OTC Drugs
  - Sedatives & Other Rx Drugs
  - Opioids
  - Cocaine
  - Methamphetamine
  - Heroin
  - Steroids
Statewide Current Alcohol & Substance Use by Primary Race/Ethnicity

Alcohol & Substance Use in the Past 30 days by Primary Ethnicity/Race (%)

- Alcohol
- Vape/E-cigarettes
- Marijuana
- Marijuana-Alcohol Together
- Binge Drinking
- Tobacco Cigarettes
- OTC Drugs
- Sedatives & Other Rx Drugs
- Cocaine
- Methamphetamine

Data categories include:
- Filipino
- Japanese
- Other Asian
- Hispanic/Latino
- Native Hawaiian
- Other Pacific Islander
- White
- Mix - Native Hawaiian
- Mix - Not Native Hawaiian
- Other
Early Initiation of Substance Use

- “Early initiation” to refer to a person’s first use of a substance occurring at age 13 or younger
- Alcohol, vapes, and tobacco cigarettes more often reported as being first used at ≤ age 13
- Early peak for first alcohol use and continues throughout adolescence
- Vaping, marijuana, tobacco cigarettes peak around age 13 (middle school)
- Binge drinking peak around ages 15-16 (high school)
Cultural Factors & Statewide Moderate-Heavy Use

MOD-HEAVY USE BY PRIMARY HOUSEHOLD LANGUAGE (%)

Alcohol  | Tobacco cigarettes  | Vape  | Marijuana
---|---|---|---
Other: 9.6 | 4.3 | 2.7 | 6.4
English: 14.6 | 9.8 | 5.3 | 3.9

MOD-HEAVY USE BY STRONG SENSE OF ETHNIC BELONGING (%)

Alcohol  | Tobacco cigarettes  | Vape  | Marijuana
---|---|---|---
Strongly/Agree: 13.5 | 8.7 | 5.5 | 3.5
Strongly/Disagree: 15 | 12.6 | 6.2 | 4.8
Statewide Access to Alcohol/Substances & Location of Use

How Usually Get Substances in Past 12 Months (%)

Where Usually Use Substances in Past 12 Months (%)

Alcohol Access  Marijuana Access  Tobacco/Vape Access  Other Drugs

Alcohol  Marijuana  Tobacco/Vape  Other Drugs
85.7% reported having received some type of prevention education, primarily from family (69.8%) or at school (67.8%).

84% reported having viewed or heard some kind of public awareness messages:
- TV/internet channels (56.8%)
- Social media apps (58.8%)
- Ads on device (51%)
- Printed media like posters/signs (45.9%)

Almost 10% of students thought it was safe for a woman to drink regularly (daily, weekly) and including occasionally (monthly), during pregnancy.
Social-Ecological Modeling-Informed Important Factors

**Protective Factors**

**Community**
- 44.2% Encouragement
- 69.4% Positive social norms for youth (non)use of alcohol

**School**
- 47.3% Climate/Enjoyment

**Peer**
- 41.1% Friends enjoy school

**Family**
- 66.4% Talking to family about a problem
- 90.6% Clear rules & consequences about using alcohol & drugs

**Individual**
- 86% Disapproval of substance use
- 73.9% Academic achievement

**Risk Factors**

**Community**
- 55.8% Ease of access to substances
- 31.4% Neighborhood substance use
- 19.8% Neighborhood crime/drug selling

**Peer**
- 42.3% Close friends offer alcohol/marijuana
- 37.8% Peer exposure to alcohol/marijuana use
- 13.3% Close friends approve of alcohol/marijuana

**Family**
- 20.3% Exposure to parent alcohol use
- 6.7% Relative marijuana use
- 29.2% Lived with someone with a substance use problem

**Individual**
- 21.8% Suspension or expulsion
- 19.9% Skipping class
- 43.3% Done something crazy
- 40.9% Depression
Resilience Model for Any Substance Use
• Overall ~11% screen as PSUD, and 14% additional for positive risk
• Treatment need more than doubles from middle to high school
• Gender diverse students are smallest proportion but at highest risk
• Students who primarily identify as Pacific Islander, Native Hawaiian (including 2 or more ethnicities), Hispanic/Latino more likely to have a PSUD and also to use alcohol/vape/marijuana
• More than 1/3 of students endorse mental health distress, which is associated with having a PSUD
• Less than 1/3 of students in PSUD range receiving help (school or outside of school)
• Alcohol, vaping, and marijuana most used substances in the past month – also substances that students more often try before age 13
More Key Takeaways

• Students most commonly acquire alcohol, tobacco/vape, and marijuana from being GIVEN to them, giving money to buy for them, while at school, or taking (alcohol) from a family member.

• Common places where student use alcohol, tobacco/vape, and marijuana are their or someone else’s home, public places, and at school or when riding/driving in a vehicle (vape and marijuana).

• Large majority of students receive substance use prevention education and messaging from family, school, TV/internet channels, social media, device ads, and printed media.

• Risk factors in all domains contribute to adversity, but resilience factors like community validation of prosocial beliefs, school climate, relationships, self-efficacy & cultural connection are important for reducing likelihood of substance use.
Potential Implications for Practice & Prevention

- School and community resources for addressing vape use
- Outreach or monitoring for transgender/other gender minority students at higher risk
- MH screeners and behavioral health integration in schools and community settings to address co-occurring mental health issues and substance use
- Prevention efforts for alcohol and other substances in early initiation, including education and awareness around prenatal alcohol use
- Integrating culturally-based approaches into prevention and treatment for enhancing resilience and improving care
Mahalo!

Contact: Jane Onoye, PhD  onoyej@dop.hawaii.edu