



# Rapid Review of Literature on Behavioral Health During Pandemic

Version 1.0

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**Summary:** This rapid literature review was conducted to assess how the pandemic has impacted substance use, mental health, and behavioral health in general and specifically in the state of Hawaii. Overall, the evidence from Hawai'i and outside of Hawai'i indicate a worsening in trends for behavioral health such as increases in depression, anxiety, psychological distress, loneliness, and social isolation, which are well known to increase use of substances in certain populations. Furthermore, reduced access to previously available health care services such as substance use treatment due to social distancing measures and fear of Covid-19 may also be leading to an increase in the use of substances in certain populations.

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## Background

The main focus of public health in 2020 has been the COVID-19 pandemic. While it is important to control the spread of this virus, other health crises have not disappeared, some even worsening during this tumultuous time. The purpose of this rapid review of literature is to assess how the pandemic has impacted substance use, mental health, and behavioral health in general and specifically in the state of Hawai'i.

## Methodology and Search Terms

This rapid review was conducted between 11/16/20 to 11/18/20 at the request of the Hawai'i Department of Health Alcohol and Drug Abuse Division. Google, Google Scholar and PubMed databases were searched with the following terms: "youth" + "substance use" + "2020" + "drinking" + "hawaii" + "COVID-19" + "quarantine" + "underage drinking" + "alcohol use". All articles including news articles were included for review.

## Results

Overall, the evidence from Hawai'i and outside of Hawai'i indicate a worsening in trends for

behavioral health such as increases in depression, anxiety, psychological distress, loneliness, and social isolation, which are well known to increase use of substances in certain populations. Furthermore, reduced access to previously available health care services such as substance use treatment due to social distancing measures and fear of Covid-19 may also be leading to an increase in the use of substances in certain populations.

## Evidence from Hawai'i

According to the Hawai'i Behavioral Health Dashboard, the Hawai'i CARES 24/7 hotline, a free public resource available to any callers seeking crisis support and access to treatment and recovery for substance use and mental health conditions, has experienced call volume in June 2020 and July 2021 at its highest levels seen in the last 7 years. Visit <https://www.hawaii.edu/aging/dashboard> to explore other insights and data about Hawai'i's behavioral health situation.

In Hawaii, one person dies by suicide every two days with an average of 190 a year. The observed increases in demand for Hawai'i CARES hotline and greater morbidity in terms of poor metrics in behavioral health does not necessarily translate or convert to greater mortality. Lyte (2020) reports that suicides appear in Hawaii during the first 6 months

of the pandemic are lower than previous years, with 76 suicide deaths from April-September, compared to an average of 99 during this period from 2015 to 2019. This estimate, however, does not take into account attempted suicides, where there is an estimated 4 to 5 for every fatality nor does it account for potential misclassification of deaths and potential changes in investigation practices that may have occurred as a result of Covid-19 including the stigma associated with suicide.

The Household Pulse Survey is an experimental data product conducted by the U.S. Census Bureau in partnership with multiple federal agencies to provide near real-time data on the social and economic impacts of Covid-19, including trends in health care access and mental health from collaboration with the National Center for Health Statistics (NCHS). From the latest Week 18 (October 28 through November 9) data, 37.0% and 30.1% of adults in Hawai'i have symptoms of anxiety disorder and depressive disorder, respectively, which is slightly higher than the 36.3% and 27.7% for overall adults in the U.S. These numbers show that symptoms of anxiety and depression have sharply risen during the Covid-19 pandemic when previously during January to June 2019 8.2% and 6.6% of adults had symptoms of anxiety disorder and depressive disorder.

With the onset of the pandemic, Hawai'i saw high unemployment for workers in hospitality in tourism, children sent home from school, and overall uncertainty. Hawai'i's youth face new challenges that can impact their mental and physical health and substance use. Several news articles reported local challenges experienced in Hawai'i's population.

As poor home situations can be a determinant for youth outcomes, the pandemic removes some of the sources of information as children are sent home for distance learning. According to Avenado (2020), teachers and school workers are the more reliable reporters of abuse. Additionally, social

workers are unable to continue standard face-to-face check-ins of foster youth (except for emergencies), which often provide further information into the children's home lives. While reports from neighbors and other family members have risen this year, those who regularly work with the youth are able to provide more reliable reports of potential abuse.

Children facing adverse experiences, particularly domestic violence, are more likely to be runaways (Mangieri 2020). Runaways are at danger for sex trafficking and drugs, where some runaways may exchange sex for food or housing. While this year saw attention to missing youth on the island of Hawai'i being widely discussed, O'ahu island saw three to four times as many missing children.

The CDC reported survey results during COVID-19 that found one in four young people (18-24) had seriously considered suicide in the past 30 days. Joaquin's 2020 article details the increased suicidality and ideations due to uncertainty, worry about contracting COVID-19, prolonged closure of facilities including schools, fewer health extracurricular activities, and inability to socialize in normal ways.

Local data for liquor sales in Honolulu from the Hawai'i State Department of Taxation data from May to August 2020 saw an increase in liquor sales, despite the drop in overall sales due to the reduced volume of tourists in March and April. Sales of liquor is not necessarily indicative of consumption of liquor which is not available.

As discussed above, these risk factors can lead to increased substance use among youth. With lockdowns and stay at home orders, the governor allowed establishments with liquor licenses to sell unopened beer, wine, or pre-packaged cocktails, and even allowing for home delivery (Cerizo 2020).

While photo IDs must match the purchaser, community members still worried that the policy would lead to increased access for youth. Additionally, Avendano (2020) reports increases in

high school students using e-cigarettes, with 1 in 3 Hawai'i high school students reporting use in 2019. A Stanford study found that young people who vaped are five to seven times more likely to be infected with COVID-19 than those who do not. Community members worry that Hawai'i youth are being targeted with flavor options such as "Hawaiian POG" and "Hawaii Sweet Roll."

### **Evidence from Outside Hawai'i**

Studies conducted thus far have found that the pandemic has worsened mental and physical health of youth through increased stress and isolation, as well as decreased access to resources, all of which can lead to increased substance use. Some programs have tried to address these concerns.

As the first country to have vast spread of COVID-19 and thus one of the first to apply quarantine and lockdown measures, China has provided the world some insight into what other nations may see in the months after them. Chen et. al. (2020) report their findings of a cross-sectional survey administered to youth in Guiyang, China in April, 2020. Of the 1,036 youth that replied, 11.78% were found to have depression, 18.92% had anxiety, and 6.56% had both. They do not compare this to previous levels, but did find that gender, age, education of parents, having a companion on weekdays, and physical exercise impacted the prevalence of these issues. As having a weekday companion and physical exercise decreased the mental health problems, they recommend the promotion of these activities.

Another nation that has seen a large spread of the virus is India. Saurabh & Ranjan (2020) evaluate their survey of 121 children and their parents to see how people were complying with quarantine guidelines and what the psychological impact on children has been. They found only 7.43% of children complied with all requirements, while a larger 17.35% complied with community protective

measures, and 10.71% with household safety measures. They found that quarantined children expressed greater psychological distress in the form of worry, helplessness, and fear.

In a report conducted by de Figueiredo et. al., they compiled the likely mental health outcomes of youth during this time. Withdrawal from school, social life, and outdoor activities, as well as possible increased exposure to poor home lives with evidence of increasing domestic abuse, can lead to increased stress levels. High stress in children has been seen to manifest into depression through adulthood and impair neurodevelopment. Higher stress and social isolation can manifest into physical health decline as well through higher or lower food consumption of individuals. (Brown et. al. (2020) found that the pandemic has exacerbated youth obesity, which had already been on a concerning rise.) These factors can also lead to coping through substance abuse.

Cohen and Bosk (2020) continue to find these concerning trends and emphasize the even stronger impacts that may be seen in vulnerable youth. Homeless, maltreated, and LGBTQ youth and youth with substance use disorders are at greater risk during this time. They are more likely to have exposure to possible negative interactions and face limited resources as medical staff are needed to fight the spread of COVID-19. Decreasing in person options may also negatively impact these individuals as they are less likely to have internet access to use telehealth and other distanced options.

A study to look specifically at youth substance use during this time was conducted and evaluated in Dumas et. al. (2020). In April of 2020, 1,054 Canadian adolescents, with a mean age of 16.68, took an online survey about their frequency of alcohol use, binge drinking, cannabis use, and vaping before and after the implementation of social distancing. They found that the percent of users of most substances decreased, but those that

continued use did so at a higher frequency. They found that 49.3% of respondents used substances alone, 31.6% with peers via technology, and 23.6% with peers face-to-face. They found that youth concerned with their peer reputation were more likely to use substances if they had low self-reported popularity. Depression and fear of COVID-19 predicted solitary substance use. They were concerned as well about possible increased parent permissiveness, which predicts faster escalations to heavier drinking.

Additional studies have found similar trends. Know the Truth (KTT), a Minnesota based substance use prevention program, found that 71% of youth surveyed believe that youth substance use has increased or thought about using a new substance since pandemic began. Cohen et. al. (2020) found that 4% of youth surveyed in Broward County, Florida increased or initiated substance use, and many respondents reported increased boredom and loneliness.

As concerns about the impacts of the current situation on youth substance use rise, some programs have provided recommendations and updates for helping youth with opioid specific use disorders. Hogue et. al. (2021) discuss the importance of tele-interventions of treatment services. Even prior to the pandemic, youth and their families are difficult to engage and retain in medication for opioid use disorder (MOUD) treatment. They believe that tele-interventions can be used now and after the emergency to increase family involvement across MOUD services. Their report includes case vignettes to illustrate provider-delivered and direct-to-family tele-intervention strategies. They propose a framework to help engage and retain youth through increased family involvement. They find that providing training for families to support the youth and understand the treatment can increase

engagement and retention. Using technology and telemedicine can make involvement easier for busy families or those without access to transportation for in person care. Using the new technologies can provide in-time support as well.

Wenzel & Fisherman (2020) evaluated a pilot study of a program targeting this issue. They respond to the disproportionate vulnerability of youth to SUDs during the pandemic. In general, youth have low rates of pharmacotherapy initiation, substantial difficulties with retention in treatment, and poorer treatment outcomes compared to older adults. Extended release medication and home delivery have been used to counter this issue. They develop and test a Youth Opioid Recovery Support (YORS) intervention for young adults with OUD and who are on extended release medication. The main components include home delivery, engagement of families in collaboration treatment planning and monitoring focusing on medication adherence, assertive outreach in the form of text messaging and social media to track and engage youth and their families, and contingency management using incentives to promote medication adherence. To adapt to COVID-19 regulations and concerns, they shift to using a mobile delivery van. Each van is staffed with a nurse and therapist to deliver the medication and provide treatment, as well as having a physician available via phone to help with any other issues. They found positive feedback from the pilot patients and staff. They are able to prevent spread of the virus by not entering patients' homes where they may live with elderly family or in crowded group-homes. Patients also expressed that they felt less embarrassed receiving treatment in the van than having clinical staff enter their homes. Some patients did express privacy concerns with the program, and staff found that they were less in contact with family who can help the patient engage with and retain treatment participation.

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