



**Department of Health
Adult Mental Health Division (AMHD) in collaboration with the
Pacific Health Analytics Collaborative**

Using Data to Inform Practice: The Role of Overdose Data to Action (OD2A) in Advancing Care in Hawai‘i



August 5, 2021

**Presented By: Amy Curtis, Ph.D.
Administrator, AMHD**

Objectives:



1. Summarize purpose of OD2A
2. Outline initial project efforts and findings
3. Discuss future directions regarding polysubstance and co-occurring substance use and mental illness data in Hawai'i

Target audience: These activities are intended for social workers as well as other allied health and human service professionals.



Background

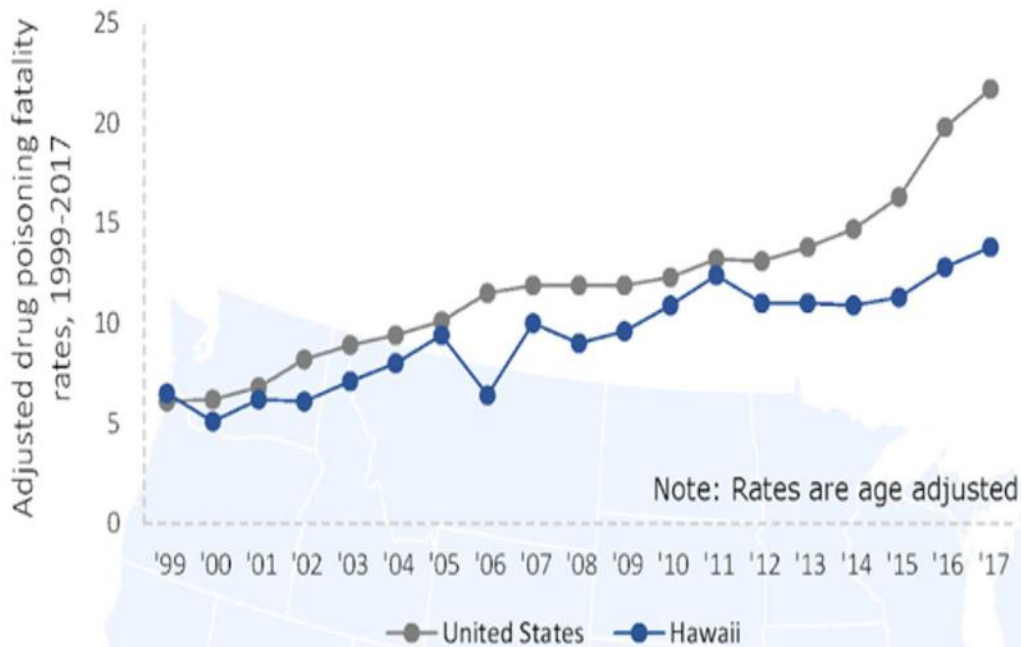
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National Context

In 20 years, death rates from drug poisonings have doubled in Hawai'i

Deaths from drug poisonings are increasing nationally. Rates in Hawai'i followed the US closely until 2010



Drug poisonings account for the
largest share
of fatal injuries in Hawai'i



Opioids and Overdose: Hawaii

OPIOIDS ARE THE LEADING CAUSE OF OVERDOSE AND OVERDOSE DEATH

From August 2017 to August 2018, there were 384 opioid overdoses, and 59 of these were fatal. **Opioids are especially dangerous when combined with alcohol or other drugs.**

According to a 2014 National Survey on Drug Use and Health, 75 percent of opioid misuse started with people using medication that wasn't prescribed for them.

NALOXONE CAN REVERSE AN OVERDOSE

When used properly, the drug Naloxone can successfully reverse an overdose. **People who use opioids should carry Naloxone with them at all times in case of overdose.** From August 2017 to August 2018, 1,332 EMS patients in Hawai'i were treated with Naloxone.



Opioids Data: Hawaii

HAWAI'I OPIOID DATA

59

Opioid-Related Fatal Overdoses¹

384

Nonfatal Opioid
Overdoses²

180

Opioid-related Calls To
The Hawaii Poison
Hotline³

503

Admitted To
Treatment Program

1,332

EMS Patients Treated
with Naloxone⁴



Progress Indicators: Hawaii

PROGRESS INDICATORS

151,218

OPIOID PRESCRIPTIONS DISPENSED LAST QUARTER⁵

9%

Avg. Morphine Daily
Dosage⁶

21,736

Prescribers with
"lookups"⁷

61

Admitted To
Treatment Program⁸

14%

Opioid Days That
Overlap with
Benzodiazepine
Prescriptions Last
Quarter⁹

CDC Overdose Data to Action (OD2A): Components and Strategies

HAWAII
OPIOID
INITIATIVE

Pūpūkahi i holomua
Unite to move forward

**Overdose
Data**

To

Action

**Surveillance
Component**

**Prevention
Component**



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CDC Components and Strategies

Surveillance Component

- **Strategy 1:** Morbidity
- **Strategy 2:** Mortality
- **Strategy 3:** Innovative Projects

Prevention Component

- **Strategy 4:** Prescription Drug Monitoring Program (PDMP)
- **Strategy 5:** State-local Integration
- **Strategy 6:** Linkage to Care
- **Strategy 7:** Providers & Health Systems Support
- **Strategy 8:** Public Safety Partnerships
- Peer-to-Peer



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Pūpūkahi i holomua
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Overdose
Data

To

Action

Surveillance Component

01

Emergency
Department Data



Laulima Data Alliance

02

Drug Overdose
Death Data



03

Innovative
Surveillance



Interagency Council
on Intermediate
Sanctions

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Overdose
Data

To

Action

HAWAII
OPIOID
INITIATIVE

Pūpūkahi i holomua
Unite to move forward

Prevention Component

04	Prescription Drug Monitoring Programs (PDMPs)	<ul style="list-style-type: none">• Universal use among providers• Inclusion of more timely data• Sending proactive provider reports
05	State-local Integration	<ul style="list-style-type: none">• Mini-grants and subawards to counties and communities• Build capacity for surveillance/prevention
06	Linkage to Care	<ul style="list-style-type: none">• Increase and improve coordination• Integrate technology
07	Providers and Health Systems Support	<ul style="list-style-type: none">• Implement and embed portions of guidelines
08	Public Safety Partnerships	<ul style="list-style-type: none">• Develop plans to expand ODMAP• Share data through ICIS with Judiciary and Public Health

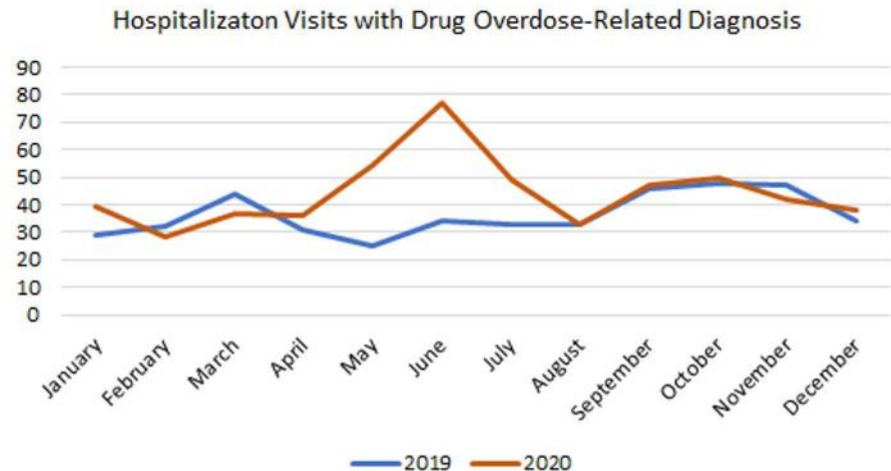


Strategy 1 - Morbidity

- **Collect and disseminate timely emergency department (ED) data on suspected all drug, all opioid, heroin, and stimulant overdoses**
 - Collaborate with HAH Laulima for DOH to receive quarterly data ED data from all hospitals statewide
 - Submit quarterly inpatient and outpatient hospitalization data to CDC
- **Develop a prevention action strategy for data products that will be disseminated in year 2 in conjunction with the HOI workgroups and Laulima**
- **Develop and implement a multi-level data quality assurance**
 - Use reproducible programming algorithm R statistical language for implementing data quality assurance.

Emergency Department Visits & Hospitalizations - Suspected Drug Overdose Diagnosis

- In 2020, there were a total of 530 hospitalizations related to drug overdose
 - Peaked at 77 hospitalizations in June
 - Nearly 60% increase in hospitalizations related to suspected stimulant overdose since 2019
- Suspected opioid overdose
 - 2020 - 104 hospitalizations
 - 2019 - 99 hospitalizations
- Suspected heroin overdose
 - 2020 - 20 hospitalizations
 - 2019 - 13 hospitalizations
- Suspected stimulant overdose
 - 2020 - 235 hospitalizations
 - 2019 - 147 hospitalizations



Data Source: Laulima Data Alliance

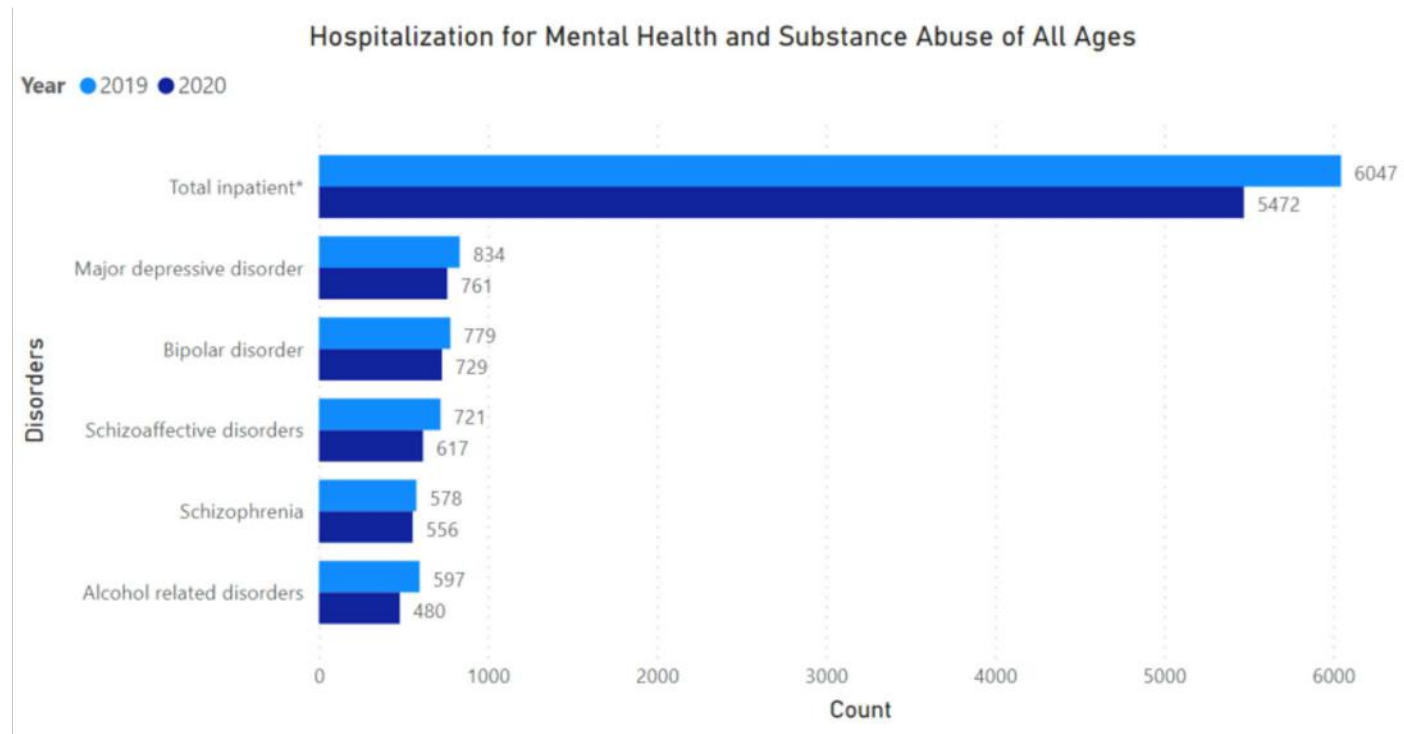
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Hospitalizations - Related to Behavioral Health



- **Mental health and substance abuse total inpatient discharges and top 5 disorders**



Note: Total Inpatient is all hospitalizations related to mental health and substance use across all ages

Data Source: Laulima Data Alliance

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Emergency Department Visits & Hospitalizations - Co-occurring Severe Mental Illness & Substance Use Disorder

- **Discharges related to Eligible Severe Mental Illness (SMI) diagnosis as defined by MedQUEST Community Care Services Re-Evaluation Criteria**
 - Substance Induced Psychosis (includes Alcohol, Opioid, Cannabis, Sedative, Cocaine, Other Stimulant, Hallucinogen, Inhalant, Other Substance) - F10.1Sx, F10.2Sx, F10.9Sx F11.1Sx, F11.2Sx, F11.9Sx F12.1Sx, F12.2Sx, F12.9Sx F13.1Sx, F13.2Sx, F13.9Sx F14.1Sx, F14.2Sx, F14.9Sx FIS.ISx, F15.2Sx, F15.9Sx F16.1Sx, F16.2Sx, F16.9Sx F18.1Sx, F18.2Sx, F18.9Sx F19.1Sx, F19.2Sx, F19.9Sx
 - Post Traumatic Stress Disorder - F43.1
 - Schizophrenia - F20.x, includes schizophreniform disorder F20.81
 - Schizoaffective Disorder - F25.x
 - Delusional Disorder - F22
 - Bipolar Disorder - F30.xx, F31.xx
 - Major Depressive Disorder, Severe - F32.3, F33.2, F33.3
- **Determining number of discharges related to both SMI and substance use disorder diagnoses**



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Emergency Department Visits & Hospitalizations - Related to Behavioral Health

- Data are being added to the Hawaii Behavioral Health Dashboard (www.hawaii.edu/aging/dashboard)



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Strategy 2 - Mortality

- **Collect and disseminate descriptions of drug overdose death circumstances**
 - Death certificates
 - Medical examiner/coroner data (e.g., toxicology)
- **Collaborate with OHSM, Medical Coroners, and Police Departments to develop a plan to receive timely data on drug overdose death circumstances for submission**
 - National Violent Death Reporting System
 - Statewide Unintentional Drug Overdose Reporting System
- **Develop Data Quality Assurance Framework**
 - Implement multi-level data quality assurance framework to ensure high quality data at every stage
 - Implement Data Quality Assurance Framework



Strategy 3 - Innovative Projects

- **Implement innovative surveillance to support related interventions**
- **Identify data sources for the possibility of finding innovative surveillance linkages to care, and develop and implement a plan for data linkages and analysis.**
- **Innovative Surveillance of Linkage to Care - Data Governance**
- **Linking Overdose Data with Risk/Protective Factor Data**



Innovative Surveillance - Data Linkages

- Currently, there is limited information on substance use and overdose risk among individuals in the criminal justice system in Hawai'i.
- Linking specific datasets from different sources will help to provide a more comprehensive understanding of their substance use disorders and type/level of treatment received.

AMHD

- AVATAR Electronic Health Record System

ICIS

- Adult Substance Use Survey (ASUS)
- Composite Recommended Treatment Level

ADAD

- Web Infrastructure for Treatment Services (WITS) Electronic Health Record System

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Innovative Surveillance - Data Linkages

- **Focusing on AMHD-ICIS data linkage**
 - Overlapping population of individuals in the Hawai'i State Hospital and individuals who went through the criminal justice system
- **Data exploration and cleaning of ICIS and AMHD data which has been extracted and loaded**
- **Selecting and reviewing identifiers for matching**
 - Full Name
 - Date of Birth
 - Gender



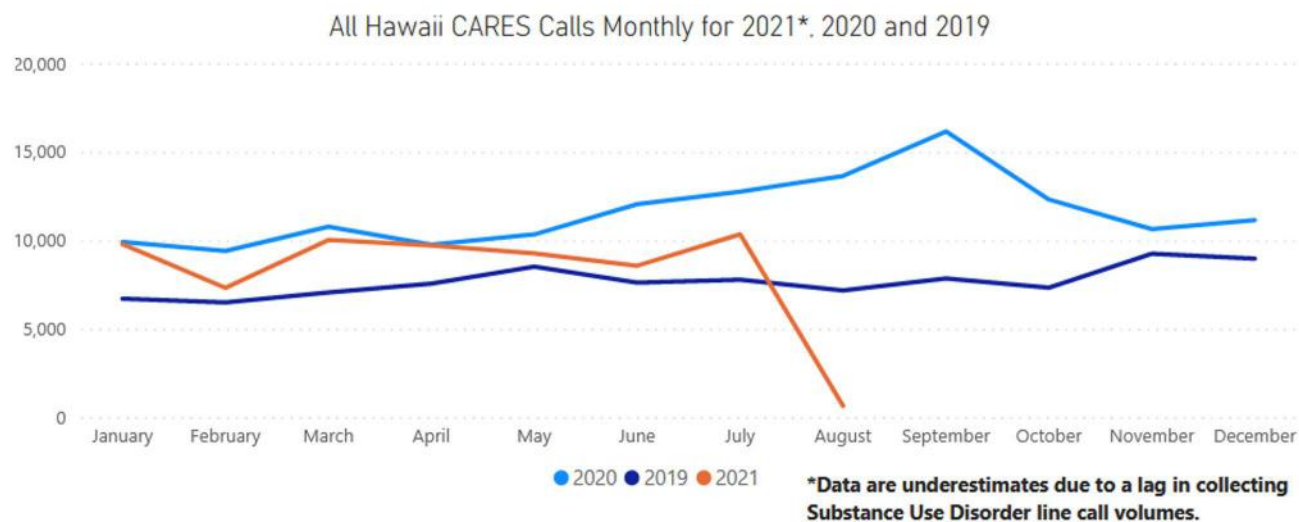
Innovative Surveillance - Data Linkages

- **Built relationships with AMHD, ADAD, ICIS, and UH in order to established a collaborative and trusted framework for data sharing**
 - Regular check-in meetings
 - Partner buy-in
- **Created documentation for data governance and management**
- **Data access to ICIS-ASUS & AMHD-AVATAR data (Hawai'i State Hospital)**
- **Role of public university in providing capacity, technical assistance, workforce, and training**

Hawaii CARES - Call Volumes



- Between 2019 and 2020, total inbound calls to the line increased by 50.5% (increase of 46,603 calls)
- Highest number of calls in a single month in September 2020 with 16,158 calls



All Hawaii CARES Calls

85,327

2018

92,258

2019

138,856

2020

29,908

2021

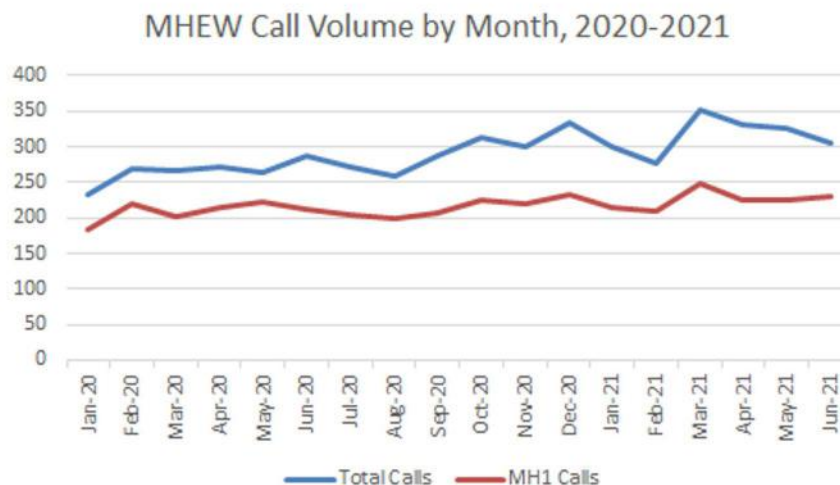
Data Source: [Hawaii CARES Dashboard](#), [Hawaii Behavioral Health Dashboard](#)

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Mental Health Emergency Worker (MHEW) - Call Volumes



- **5,248 calls in total since January 2020**
 - Approximately 74% of calls (3,898) resulted in MH1 responses
- **1,825 calls from the Honolulu Police Department in 2021**
 - 72% (1,304) MH1 calls
- **64 calls from the Maui Police Department in 2021**
 - 80% (51) MH1 calls

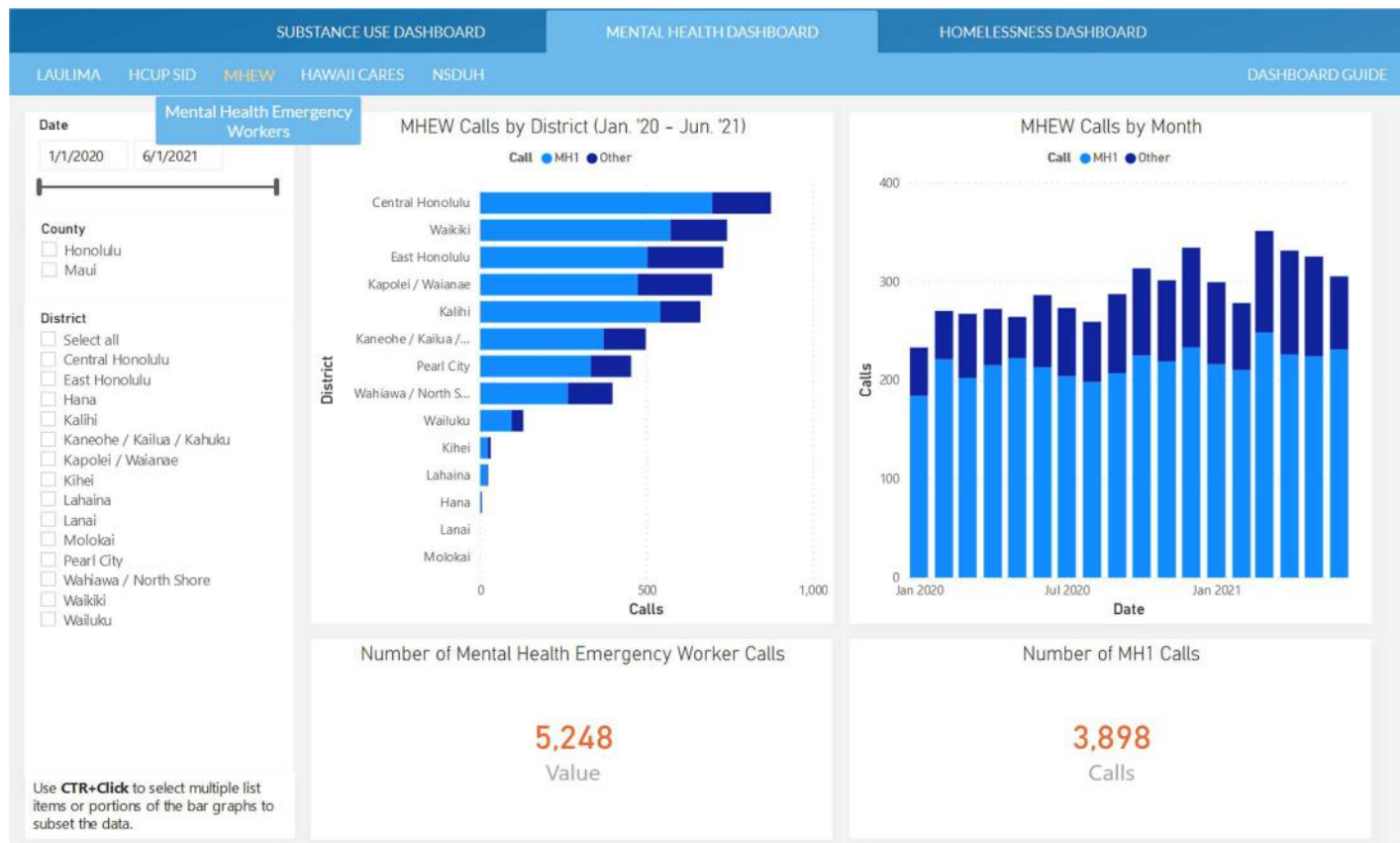


Data Source: Mental Health Emergency Worker Call Volume Data
Prepared by: Pacific Health Analytics Collaborative

Mental Health Emergency Worker (MHEW) - Call Volumes



- Data are being added to the Hawaii Behavioral Health Dashboard (www.hawaii.edu/aging/dashboard)



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Strategy 4 - Prescription Drug Monitoring Program



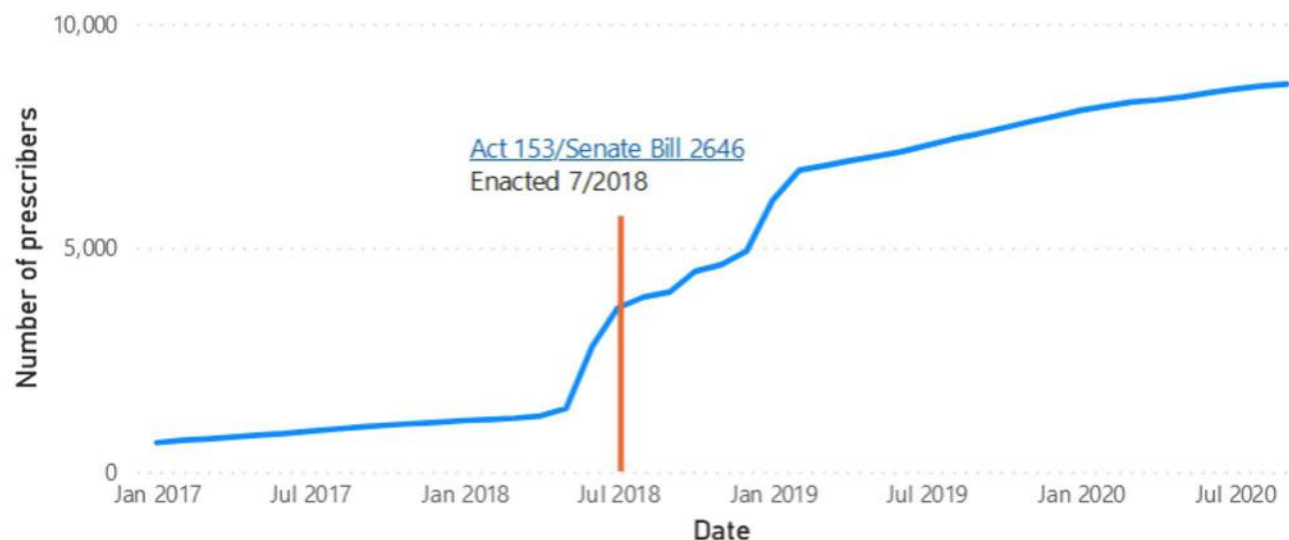
- **Enhanced Prescription Drug Monitoring Programs Funding Activities**
- **Integrate the PDMP with other health systems data**
- **Integrate PDMP data with VA hospital data**
- **Integrate PDMP data with electronic health records (EHRs)**
- **Establish Rx Check Hub**
- **Other sub-activities as needed to integrate PDMPs across state lines / interstate interoperability**

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Prescription Drug Monitoring Program (PDMP) - Prescribers

- **PDMP contains information on dispensed schedules II - IV controlled substances**
- **Number of registered prescribers has increased since the PDMP registration mandate**

Monthly number of registered prescribers for the Hawai'i PDMP. Jan 2017 – Sept 2020. HI

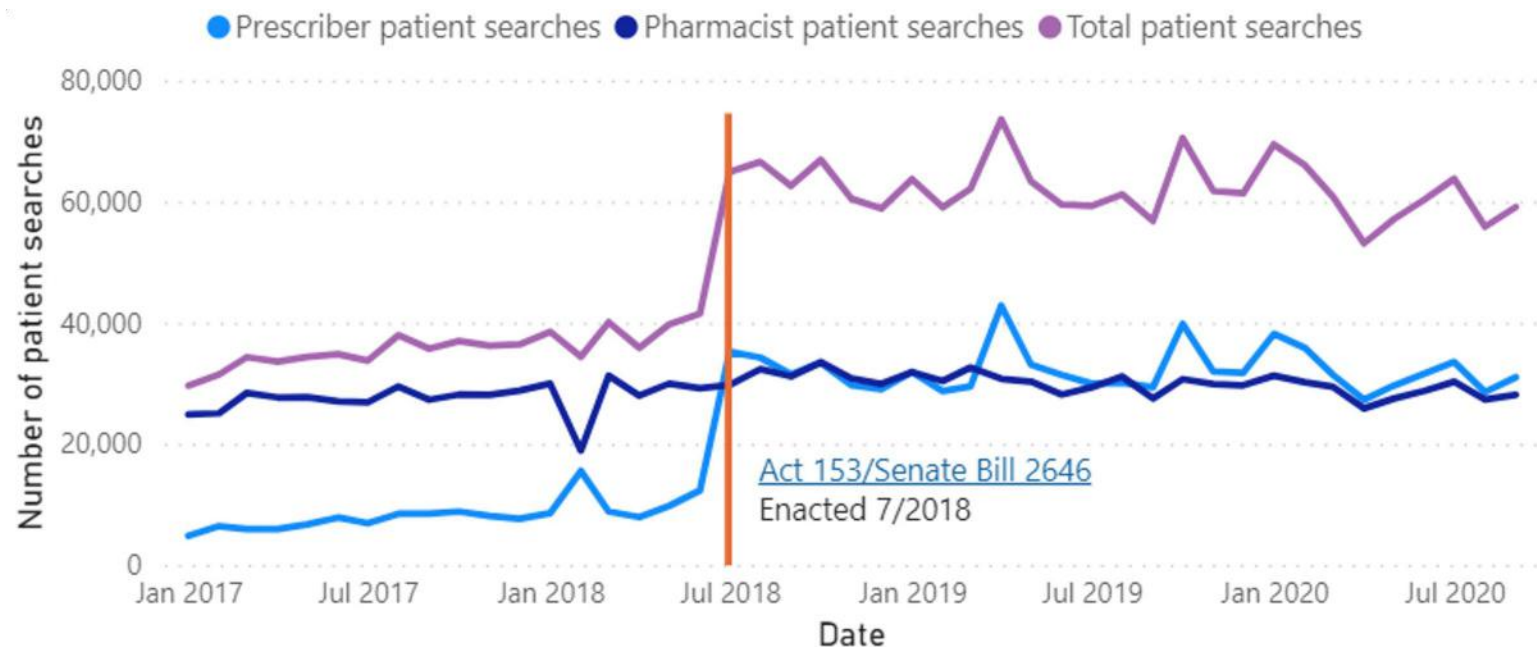


Data Source: Hawaii Prescription Drug Monitoring Program; Daniel Galanis, PhD, Hawaii State Department of Health
Prepared by: Pacific Health Analytics Collaborative



Prescription Drug Monitoring Program (PDMP) - Patient Searches

- Total patient searches have increased since the PDMP use mandate was instituted in 2018

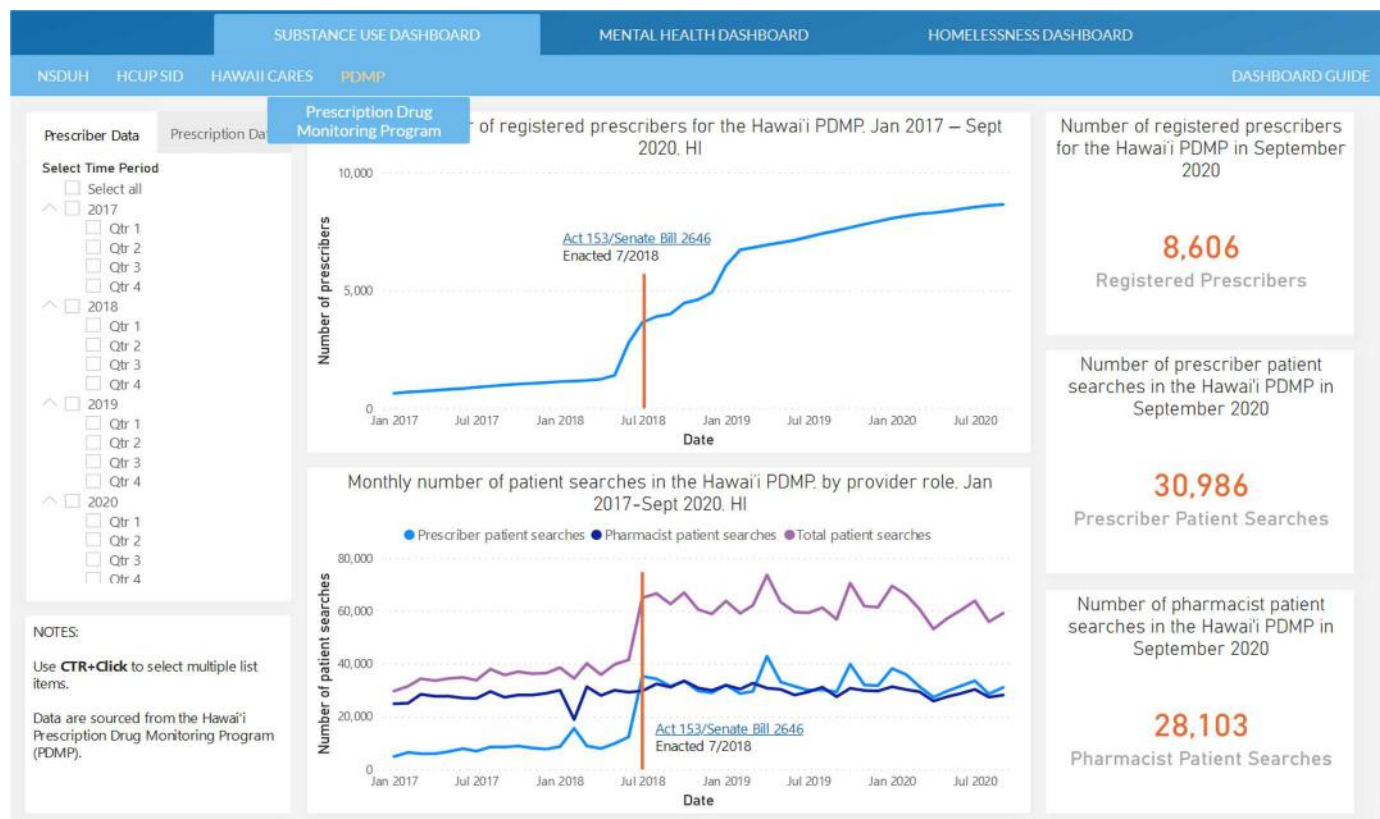


Data Source: Hawaii Prescription Drug Monitoring Program; Daniel Galanis, PhD, Hawaii State Department of Health
Prepared by: Pacific Health Analytics Collaborative



Prescription Drug Monitoring Program (PDMP)

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Strategy 5 - State and Local Integration

- **Capacity building for more effective and sustainable integrated surveillance prevention and response efforts**
- **Prevention and response strategies at the state and local level**

Care Coordination and Capacity Building (C3) Activities

- **Provide webinars on overdose prevention education**
 - 13 total webinars to date
- **Provide Workforce Development Program**
 - A professional development experience for Social Work and Public Health undergraduate/graduate student fellows.
- **The 2021 WFD program began on June 1st. There are 16 student Fellows**
 - 5 community agencies: Big Island Substance Abuse Council, EndMeth, Hawai'i Health and Harm Reduction Center (HHHRC), Hawai'i State Rural Health Association, and West Hawai'i Community Health Center
- **Develop and disseminate overdose prevention materials (e.g., infographics)**





Strategy 5 - State and Local Integration

- **Build collaboration with local partners to increase overdose prevention activities**
- **Hawaii will allocate 20% of their prevention component award to fund targeted mini grants and sub- awards to counties / cities / communities**



Strategy 6 - Linkages to Care

- **Enhance programs and policies**
- **Collaborate with hospitals and police departments to develop a plan for referrals and linkages to care for persons who have experienced or are at risk of overdoses**
- **Enhance policies and programs to improve awareness and coordination**
- **Develop plan for design, development, and implementation of integrating BHA data systems.**
 - **Integrate Technology to Enhance Coordination through Integrated BHA Data System**

Strategy 7 - Providers & Health Systems Support

- **Guideline, Implementation, Clinical Education and Training**
- **Increase awareness of HOI opioid-prescribing guidelines among prescribers**
- **Implement and embed portions of various guidelines to advance guideline-concordant care within health systems**
 - CDC Guideline for Opioid Prescribing for Chronic Pain
 - Other Federal opioid guidelines
 - State-specific guidelines
 - Specialty-specific guidelines



Strategy 8 - Public Safety Partnerships

- **Data Sharing**
- **Execute contract and commence training for Adult Substance Use Survey (ASUS) upgrade public safety data system**
- **Overdose Detection Mapping Application Program (ODMAP) expansion plan**
- **Explore public safety and first responder collaborations**
- **Explore collaborations with public safety and first responders**

Peer to Peer Learning Coordinator

- Provide culturally anchored models for interprofessional care teams to other OD2A peer jurisdictions
- 8 Webinars completed in Years 1 & Year 2 of OD2A

Framework Clarity (Diagram)



Kanilehua (Rain)
True Wellness

Pahu Moanaliha (Aquifer)
Culture/Language Bearers

Mole (Taproot)
Immediate Relief from Within

Ma'alewa (Aerial Root)
Trusted Peers/Friends/Family

Pahu Ma'ukele (Surrounding Forest)
Doctors/Clinics/Community Resources

'Ōhi'a (*Metrosideros polymorpha*)
Public Health as a Relational Process

Using the 'ōhi'a tree as a metaphor, the Kanilehua Framework was designed to remind us of the many sources of healing we can call upon when we are in need. – Artwork: Jaki Knaus

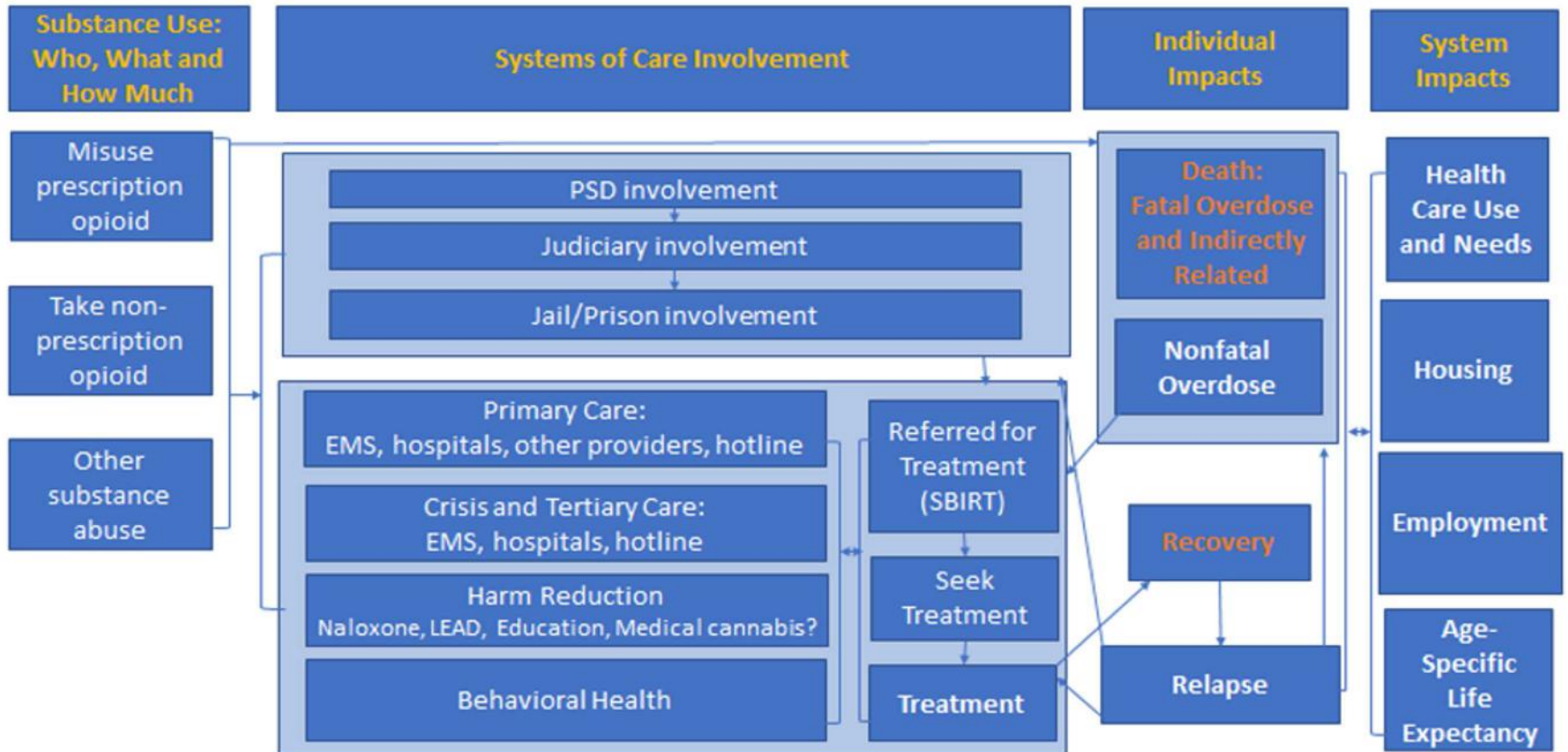
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Pacific Health Analytics Collaborative (PHAC)

- **PHAC works to improve lives through applied analytics and trusted partnership that drives better policy and practices in Hawai'i and the Pacific.**
- **PHAC works to build local workforce capacity to conduct rigorous interdisciplinary analysis informed by data, context, and evidence, grounded in sensitivity, and aligned to the public interest.**
- **PHAC is currently focused on the following areas:**
 - Data Analytics
 - Substance Use and Behavioral Health
 - Health Systems

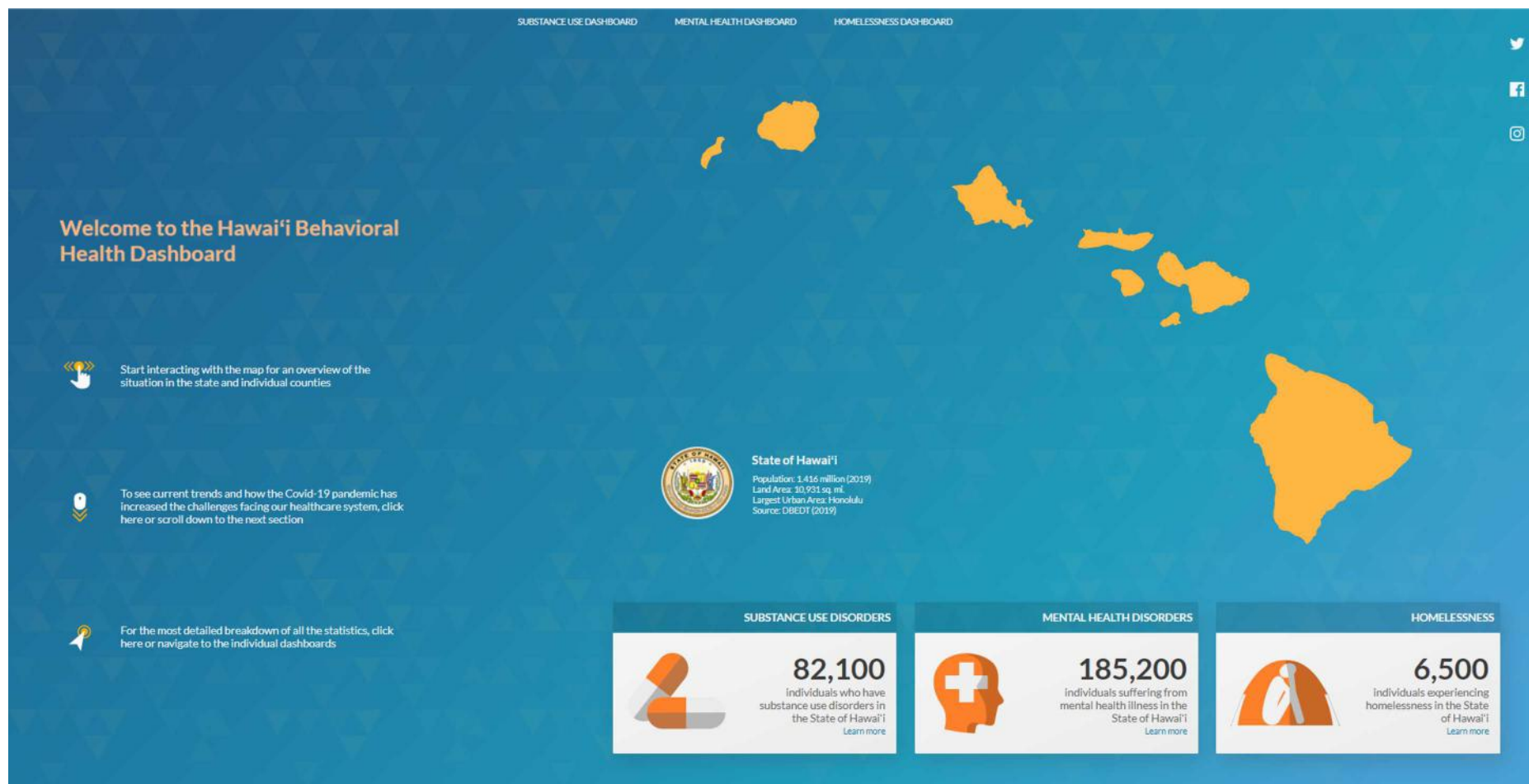


Individual and System Impacts of Opioid Epidemic: Logic Model



Visit the Hawaii Behavioral Health Dashboard

<https://www.hawaii.edu/aging/hbhd/>



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Healthy Hawai'i Vision 2030



The Department of Health is excited to partner with you as we find more ways together to use the **Overdose Data to Action Data** to Inform Practice in Advancing Care in Hawai'i.

MAHALO for all that you do



Future Directions



Opioids, SUDs, Mental Health, Polysubstance Use, Co-occurring Disorders

Mental Health



About 115 million opioid prescriptions are distributed each year in the US.

About 60 million (51.4%) of all opioid prescriptions are received by adults with a mental health disorder.

A sample of autopsy records from 2016 in Honolulu county found that 56 victims died of an overdose. Of which 68% had a history of mental illness.

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Co-occurring Disorders (among adults in the US)

- 46.6 million have a mental illness
- 19.7 million have a substance use disorder
- 9.2 million had both a mental illness and a substance use disorder
- 1.5 million with a SMI have misused opioids in the past year
- 550,000 were diagnosed with a SMI and an opioid use disorder.



Polysubstance Use

The 2019 National Survey on Drug Use and Health indicated past-month heavy Alcohol Use was related to past-year:

- 7.2 million marijuana use
- 1.5 million opioid misuse
- 1.8 million cocaine use
- 269,000 methamphetamine use

US Adults with multiple Substance Use Disorders (SUDs):

- 45.8% Tobacco Use Disorder
- 63.6% Alcohol Use Disorder
- 87.5% Opioid Use Disorder
- 93.8% Heroin Use Disorder
- 90.2% Cocaine Use Disorder
- 73.8% Cannabis Use Disorder



Adult Mental Health Division (AMHD) Mental Health and Substance Use Resources

Who can help?

- **Hawai'i CARES**
 - Oahu: 832-3100
 - Neighbor Islands: 1-800-753-6879
 - Crisis **TEXT** Line: 741741; Text "Aloha"
- **National Suicide Prevention Lifeline**
 - 1-800-273-TALK (8255)
 - Military/Veterans Press 1
- **Military One Source**
 - 1-800-342-9647
- **Hawai'i Poison Hotline**
 - 1-800-222-1222



Department of Health Adult Mental Health Division (AMHD)



Mahalo and Questions
