



State of Hawaii Department of Health
Adult Mental Health Division (AMHD)
Behavioral Health Administration (BHA)

WEBINAR 4 OF 4

HAWAII OD2A
P2P WEBINAR SERIES

From Data to Dashboard:

*Inclusive and integrated approach to substance use
and mental health issues in Hawaii*

PRESENTERS

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THURSDAY, AUGUST 4, 2022
3:30 pm EST [9:30 am HST]



Learning Objectives

- Describe **data sources** that can be used to examine **polysubstance use** and where to find them
- Identify **databases** that include **co-occurring disorders**
- Be able to **assess for** and **identify potential linkages** that could be used in **each state**
- Be able to describe the **limitations and/or challenges** in collecting these data and how to **overcome them** in a way that allows for **linkage opportunities**



Polysubstance Use



Learning Objective (1)

- Describe **data sources** that can be used to examine **polysubstance use** and where to find them



Polysubstance Use:

Definition – Centers for Disease Control & Prevention (CDC)

POLYSUBSTANCE USE

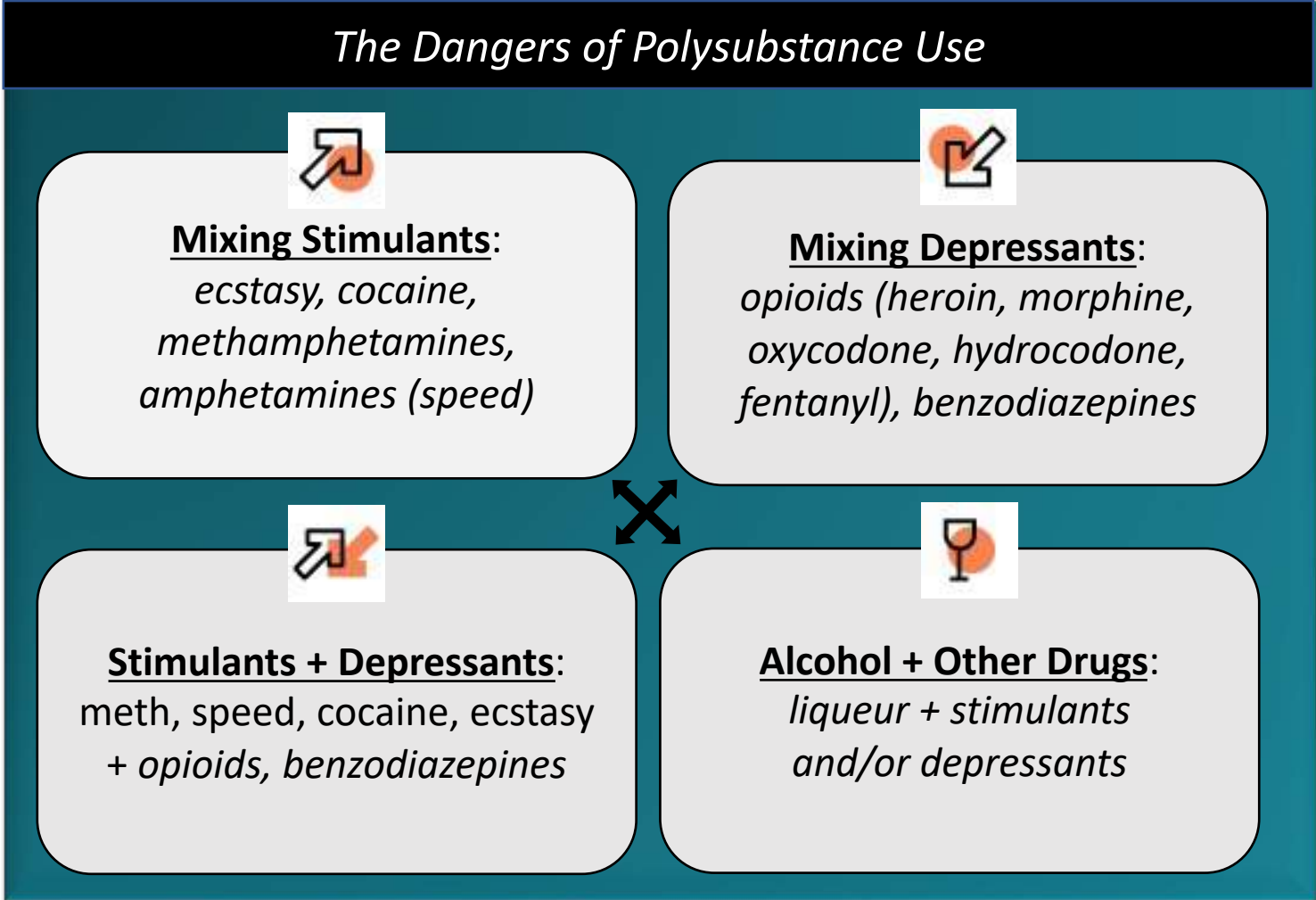
Two (2) or more substances are taken together or within a short time period, either intentionally or unintentionally

Intentional Use

Person takes a drug to increase or decrease the effects of another drug or wants effects of the combination

(Un)intentional Use

Person takes drugs mixed or cut with other substances, like fentanyl, without their knowledge





Polysubstance Use: *Publication Search - Web of Science (1972 – 2017)*

Total Publications

3,498

2017

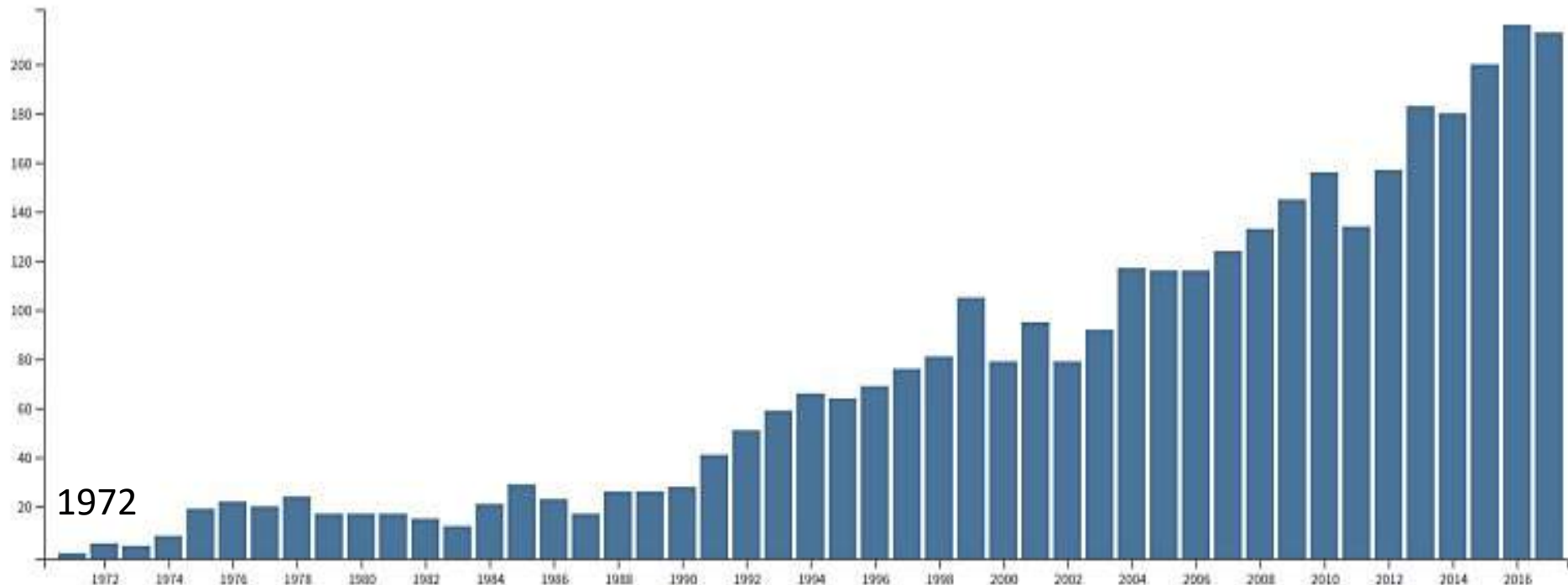


Figure 1. Search Term Criteria:

[Polydrug]* OR
 [Polysubstance] OR
 [Multiple substance abuse] OR
 [Multiple drug abuse] OR
 [Multiple drug use] OR
 [Mixed drug abuse] OR
 [Mixed substance abuse]

(Kataja et al, 2018)

DATA SOURCE

Web of Science Database

BRIEF DESCRIPTION

Paid-access platform with access to multiple databases for reference and citation data from academic journals and conference proceedings

DATA TYPE

Resource repository

USE

Identify prevalence of opioid abuse alone and with mental illness; co-occurring and polysubstance/polydrug use



Polysubstance Use: National Survey on Drug Use and Health (NSDUH)

The **2020 National Survey on Drug Use and Health (NSDUH)** indicated **40.3 million people aged 12+ (or 14.5%)** had a **substance use disorder (SUD)** in the past year, including:

- **28.3 million (70%)** with **alcohol use disorder**
- **18.4 million (46%)** with **illicit drug* use disorder**
- **6.5 million (16%)** with **Both**
 - **Alcohol use disorder (AUD)**
 - **Illicit drug use disorder (IDUD)**

Polysubstance use

***Illicit drugs:** *marijuana, cocaine, methamphetamine, heroin, misused Rx pain relivers, hallucinogens*



DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
National Survey on Drug Use and Health (NSDUH)	National survey, self-report, provides estimates of substance use & mental illness at national, state, and substate levels	Survey	Identify prevalence of opioid abuse alone and with mental illness; polysubstance use, co-occurring



Polysubstance Use: State Unintentional Drug Overdose Reporting System (SUDORS)

Figure 2. Distribution of opioid/stimulant involvement in drug overdose deaths by geographic region* – State Unintentional Drug Overdose Reporting System (SUDORS), 25 jurisdictions, Jan – Jun 2019

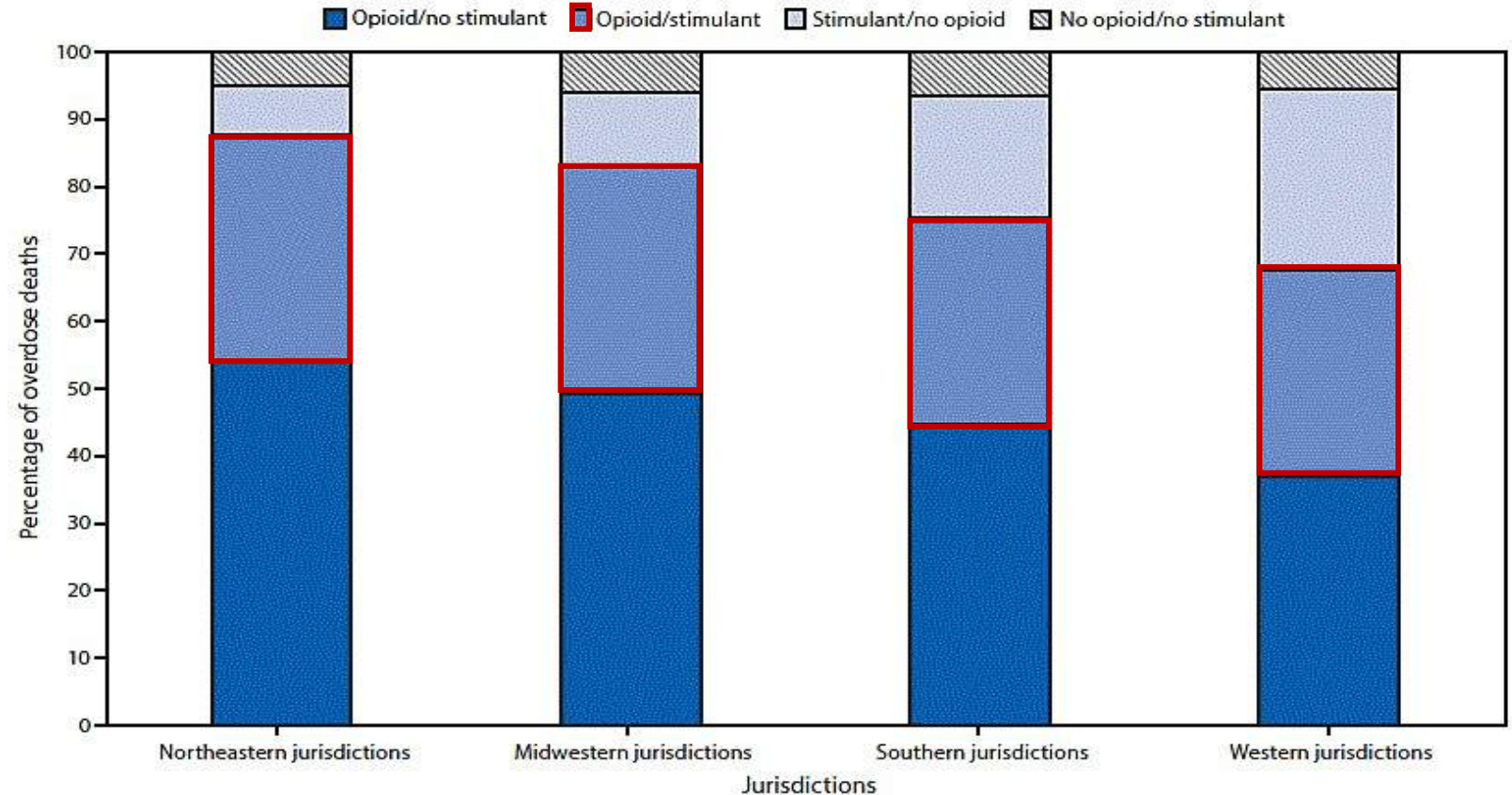
***JURISDICTIONS (n=25; including D.C.):**

Northeastern: Connecticut, Maine, Massachusetts, New Jersey, Pennsylvania, Rhode Island, and Vermont

Midwestern: Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin;

Southern: Delaware, District of Columbia, Georgia, Kentucky, North Carolina, Oklahoma, Tennessee, and West Virginia;

Western: Alaska, Nevada, Utah, and Washington.



DATA SOURCE

State Unintentional Drug Overdose Reporting System (SUDORS)

BRIEF DESCRIPTION

Provides comprehensive data on unintentional and undetermined intent drug overdose deaths

DATA TYPE

Death certificates, Medical Examiner/Coroner Reports, Postmortem Toxicology

USE

Unintentional & undetermined drug overdose mortality data



Polysubstance Use: High Intensity Drug Trafficking Areas (HIDTA)

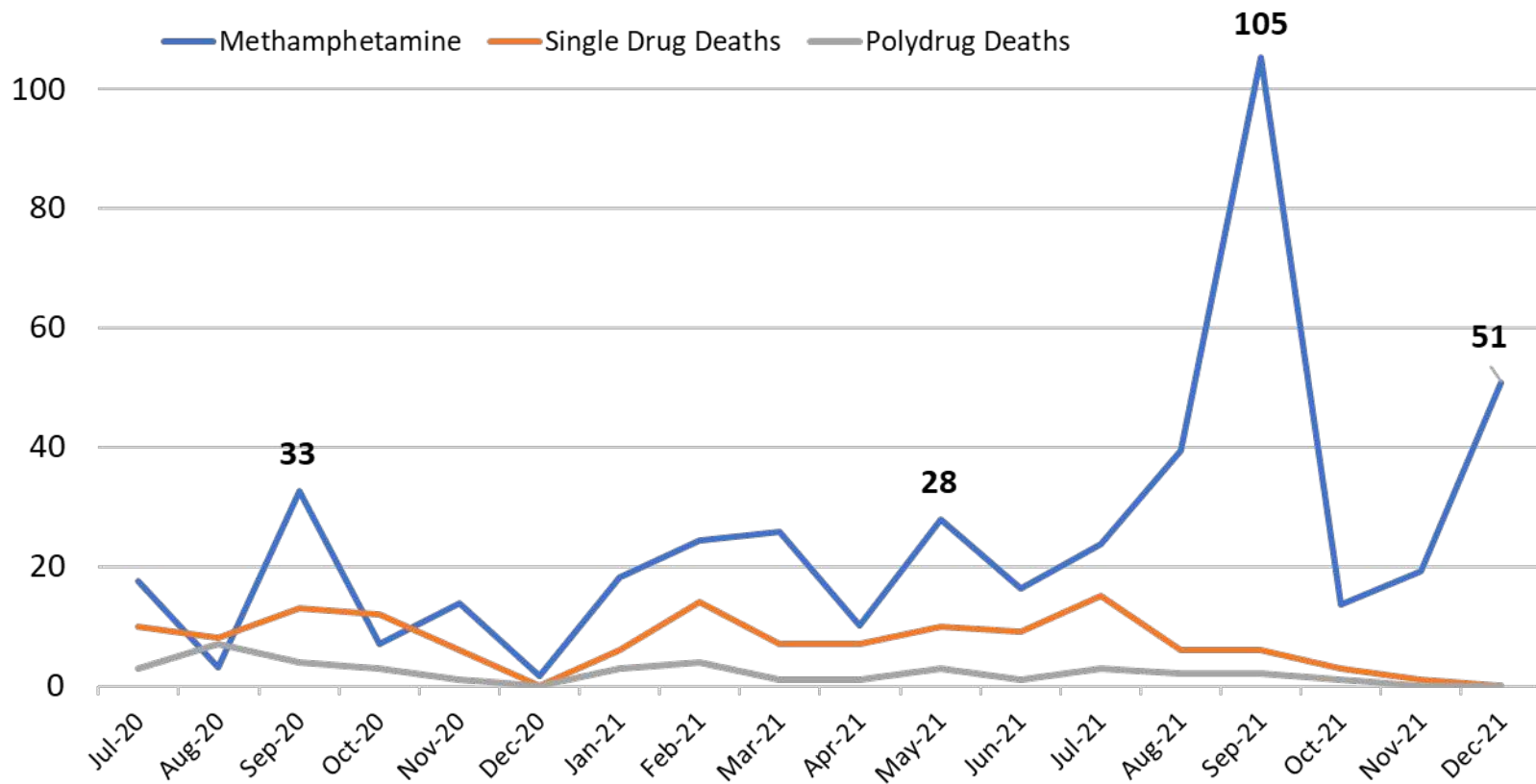


Figure 3. Methamphetamine Seizures (Weight), Single Drug- and Polydrug Deaths (Number), July 2020 – December 2021, Hawaii HIDTA

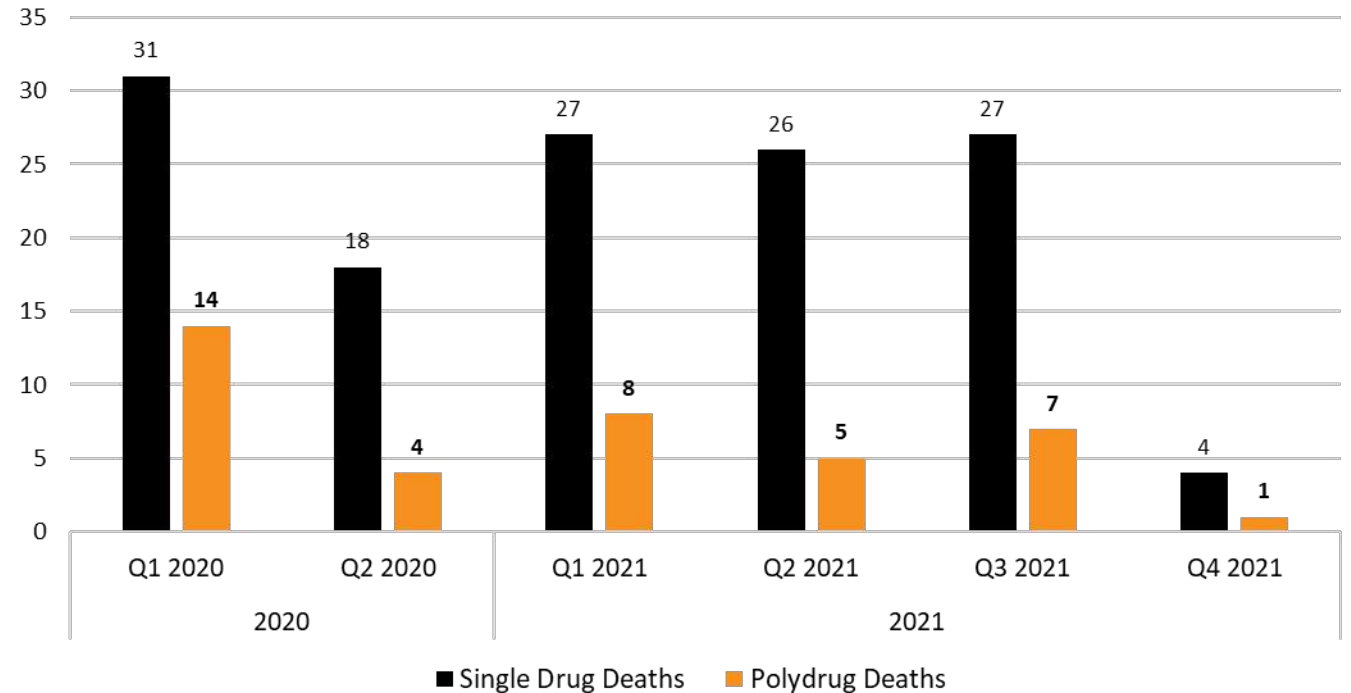
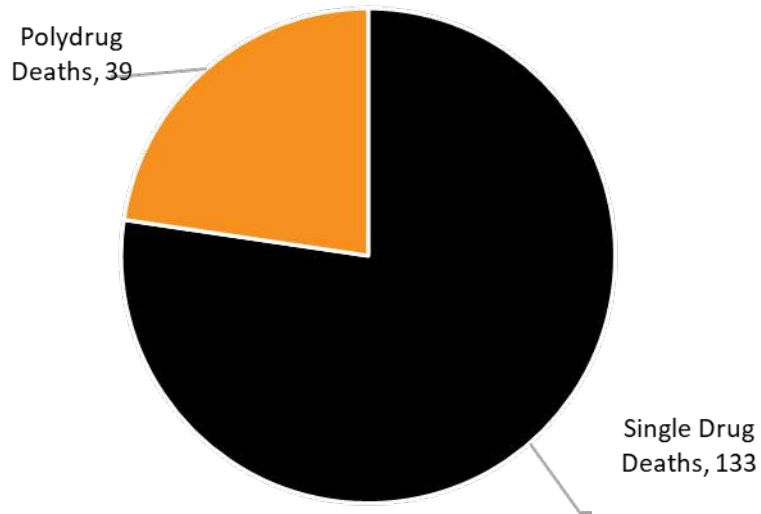
Drug Seizures <--> Drug Availability?

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
High Intensity Drug Trafficking Areas (HIDTA) Annual Threat Assessment Data	Provides drug trafficking insights and guidance for strategic planning; includes law enforcement KIs, annual reports, autopsy and toxicology reports	Survey	To identify drug trafficking trends and substance use mortality data; co-occurring; poly-drug enterprises



Polysubstance Use: High Intensity Drug Trafficking Areas (HIDTA)

Figures 4-5. Single Drug- and Polydrug Deaths by Quarter, July 2020 – Dec 2021, Hawaii HIDTA



DATA SOURCE

High Intensity Drug Trafficking Areas (HIDTA) Annual Threat Assessment Data

BRIEF DESCRIPTION

Provides drug trafficking insights and guidance for strategic planning; includes law enforcement KIs, annual reports, autopsy and toxicology reports

DATA TYPE

Survey

USE

To identify drug trafficking trends and substance use mortality data; co-occurring; poly-drug enterprises



Polysubstance Use: Morbidity and Mortality Weekly Report (MMWR) - CDC

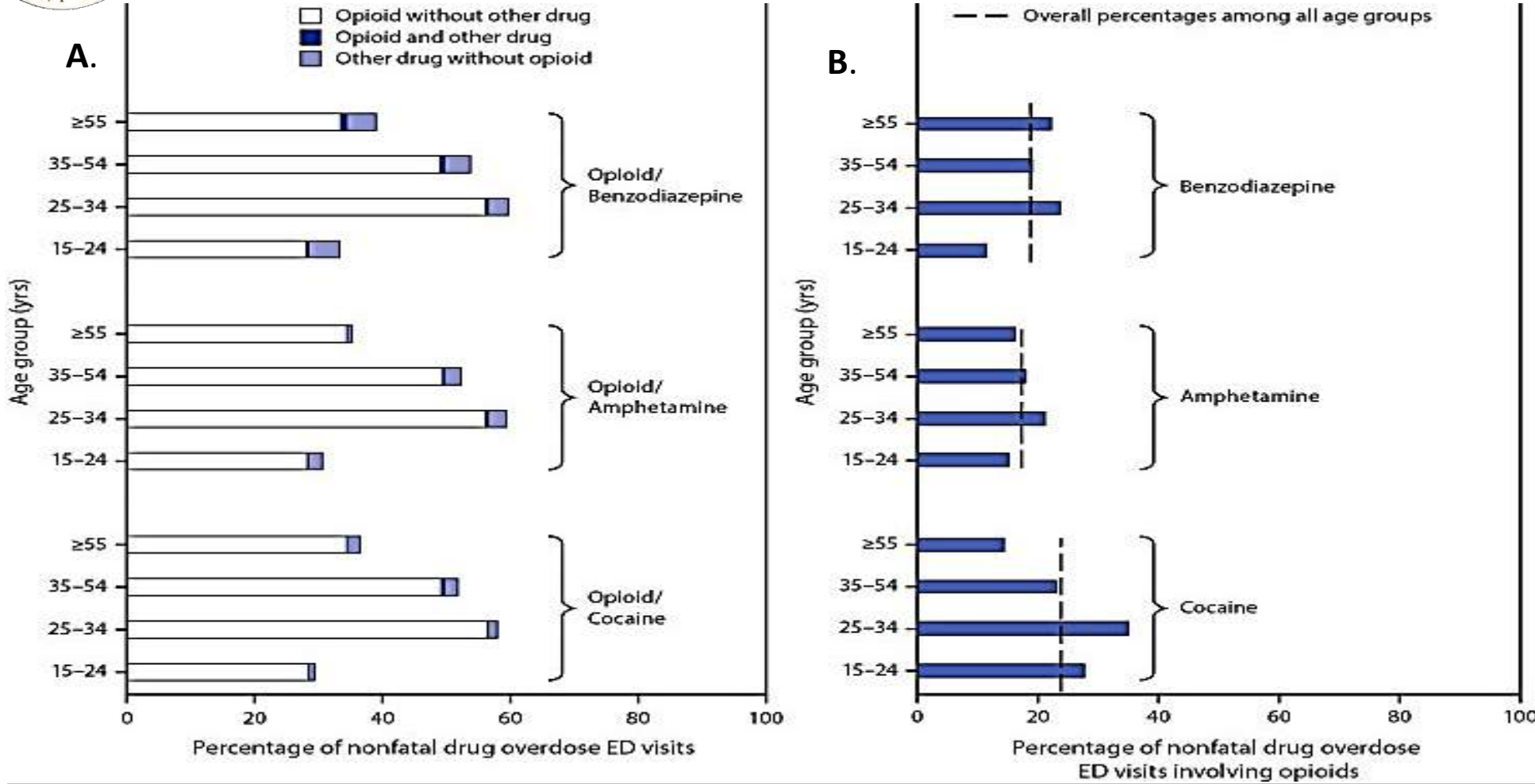


Figure 6 (A-B). Percentage of ED visits for nonfatal overdoses involving combinations of opioids with and without cocaine, amphetamines, or benzodiazepines and percentage of cocaine, amphetamine, and benzodiazepine overdoses involving opioids by age group, 2018-2019 (left)

***U.S. States included (n=29):**

Alabama, Arizona, Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Kansas, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, New Mexico, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Washington, West Virginia, and Wisconsin.

DATA SOURCE

Morbidity and Mortality Weekly Report (MMWR) – CDC

BRIEF DESCRIPTION

Weekly epidemiological digest for the U.S. published by the CDC

DATA TYPE

CDC, national contributors

USE

Morbidity and mortality prevalence data



Polysubstance Use: National Vital Statistics System (NVSS) – CDC Wonder

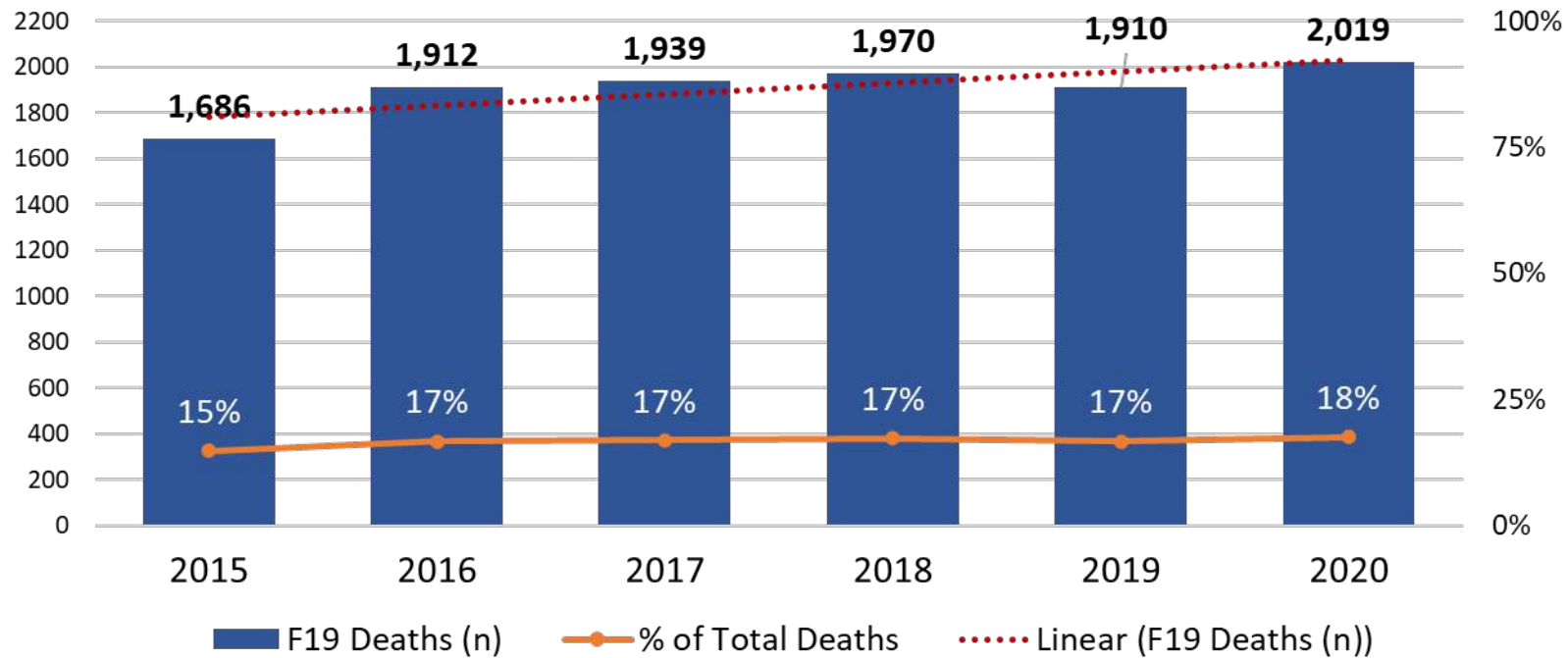


Figure 7. Underlying Cause of Death due to Mental and Behavioral Disorders due to Multiple Drug Use and/or Use of Other Psychoactive Substances (ICD-10 Code: F19) per 100,000 Population for All Ages from 2015 – 2020, United States, NVSS – CDC Wonder Data Request

DATA SOURCE

National Vital Statistics System (NVSS)
National Center for Health Statistics (NCHS)

CDC: Wonder Tool

BRIEF DESCRIPTION

Inter-governmental system of data sharing on the vital statistics of the U.S. population

A data visualization gallery pulling NVSS data on drug poisoning deaths at national, state, & county levels

DATA TYPE

Opioid use, overdose deaths

Death Certificate

USE

Uses mortality data to determine overdose death counts

Drug poisoning mortality data with visualization tools

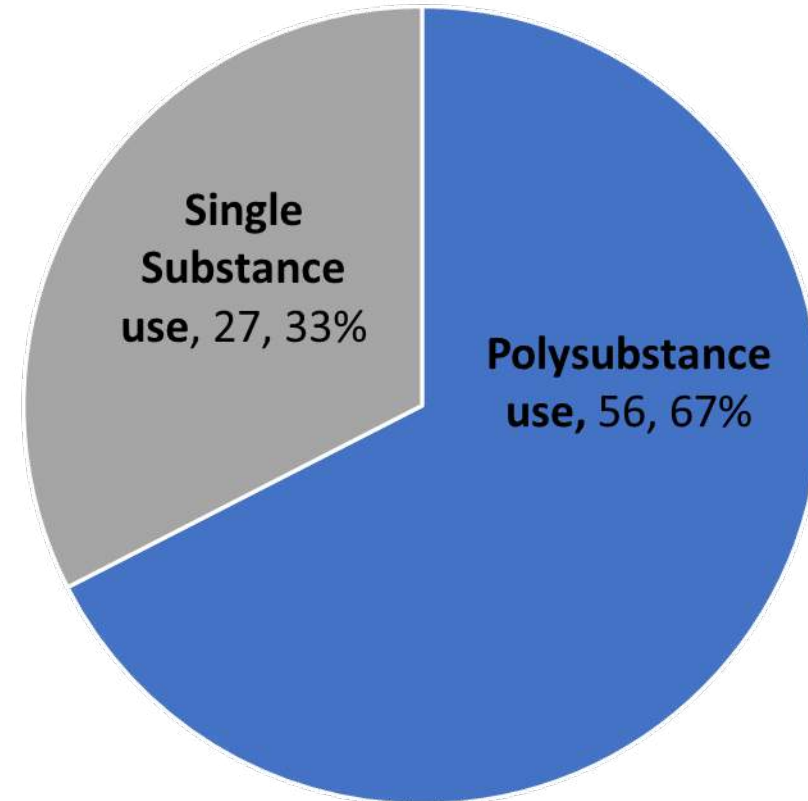


Polysubstance Use – Health & Harm Reduction Center (HI) Syringe Exchange Program Annual Report - 2020

Figure 8. Naloxone Trainees, 2020 Hawaii Syringe Exchange Program, Hawaii Health & Harm Reduction Center, (n=83)

Of the **83 trainees** who reported **substance use disorder (SUD)** over the **past 30 days**:

- **67% (n = 56)** reported **polysubstance use**
- **33% (n=27)** reported **single substance use**



DATA SOURCE

BRIEF DESCRIPTION

DATA TYPE

USE

Syringe Exchange Programs (SEPs)
Syringe Services Programs (SSPs)
Needle Exchange Programs (NEPs)

Community-based programs that provide access to sterile needs & syringes; many collect data via daily logs, participant ID card registry databases

Survey, registrant databases

Identify prevalence of injection drug use for youth & adults, participant demographics, co-occurring & polysubstance use



Co-occurring Disorders



Learning Objective (2)

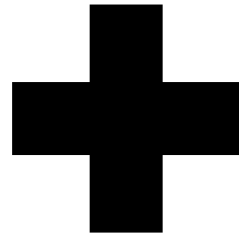
- Identify **data sources** that include **co-occurring disorders**



Co-occurring Disorders: *Substance Use Disorder (SUD) & Mental Illness*

Substance
use
Disorder

- Alcohol
- Marijuana
- Nicotine
- Opioid
- Stimulant



Mental
Health
Disorder

- Anxiety
- Bipolar
- Depression
- PTSD
- Schizophrenia



Co-
occurring
Disorder

Complexities of Comorbidity

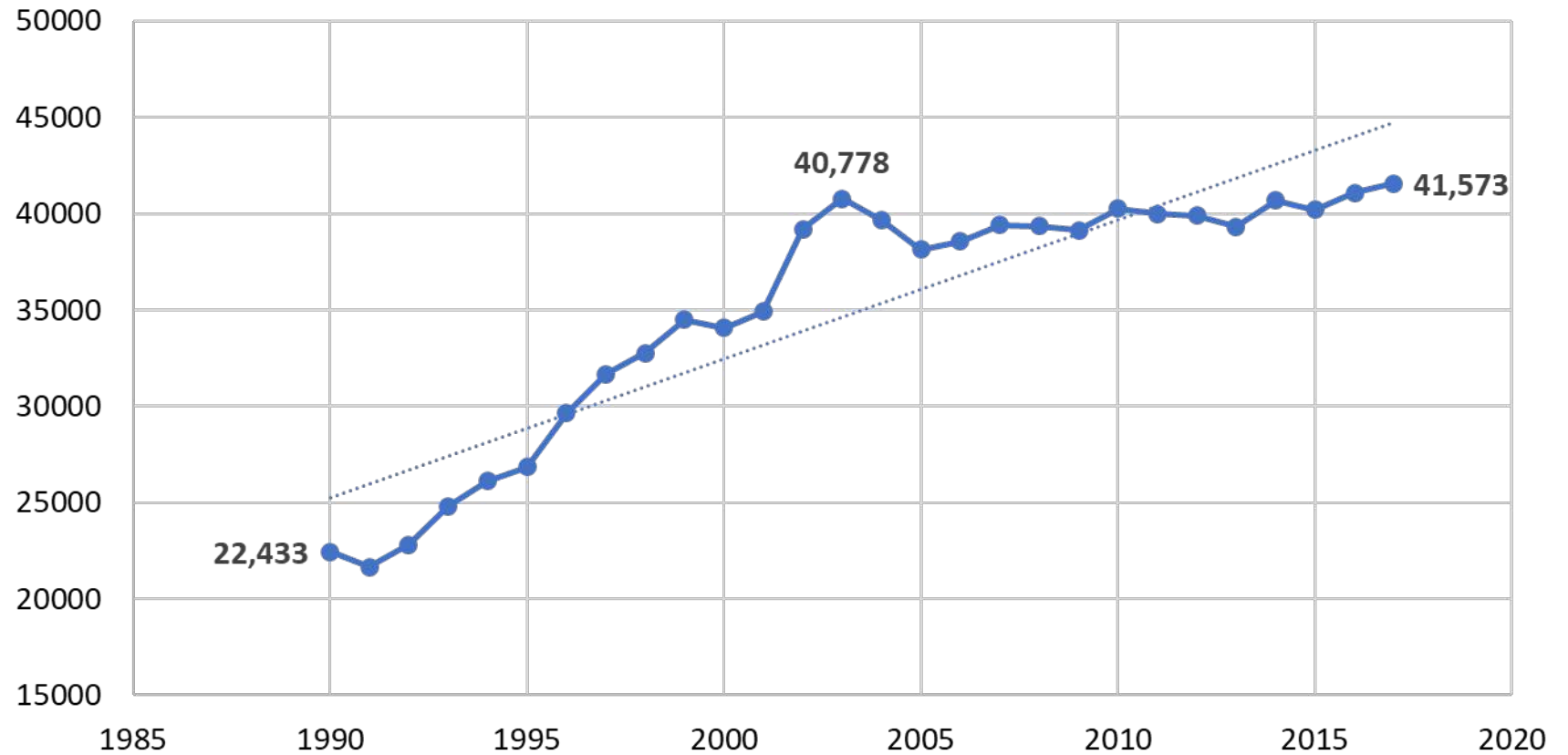
- Can exacerbate each other
- “The Cart or the Horse?”
- Both disorders need attention



Co-occurring Disorders: Institute for Health Metrics and Evaluations (IHME)

Figure 9. Deaths from Any Mental Illness (AMI) and Substance Use Disorders (SUD), Global Burden of Disease, United States, 1990-2017

AMI + SUD Deaths nearly DOUBLED between 1990 and 2017



DATA SOURCE

Institute for Health Metrics and Evaluations (IHME)

BRIEF DESCRIPTION

Independence population health research organization, get estimates on SUD & Mental Illness

DATA TYPE

Survey

USE

Identify prevalence of opioid abuse alone and with mental illness; co-occurring



Co-occurring Disorders – U.S. Adults 18 and Older

National Survey on Drug Use and Health (NSDUH; 2020)

- **52.9 million** have **any mental illness (AMI)**
- **37.9 million** have a **substance use disorder (SUD)**
- **17.0 million** had both **AMI and SUD**
- **11.6 million** with a **serious mental illness (SMI)** have used **opioids** in past year
- **5.7 million** were diagnosed with a **SMI and SUD** in past year

People with co-occurring disorders are at **higher risk** for **poor outcomes**:

- Symptom relapse
- Hospitalizations
- Financial challenges
- Social isolation
- Homelessness
- Incarceration

= co-occurring disorders

DATA SOURCE

BRIEF DESCRIPTION

DATA TYPE

USE

National Survey on Drug Use and Health (NSDUH)

National survey, self-report, provides estimates of substance use & mental illness at national, state, and substate levels

Survey

Identify prevalence of opioid abuse alone and with mental illness; polysubstance use, co-occurring

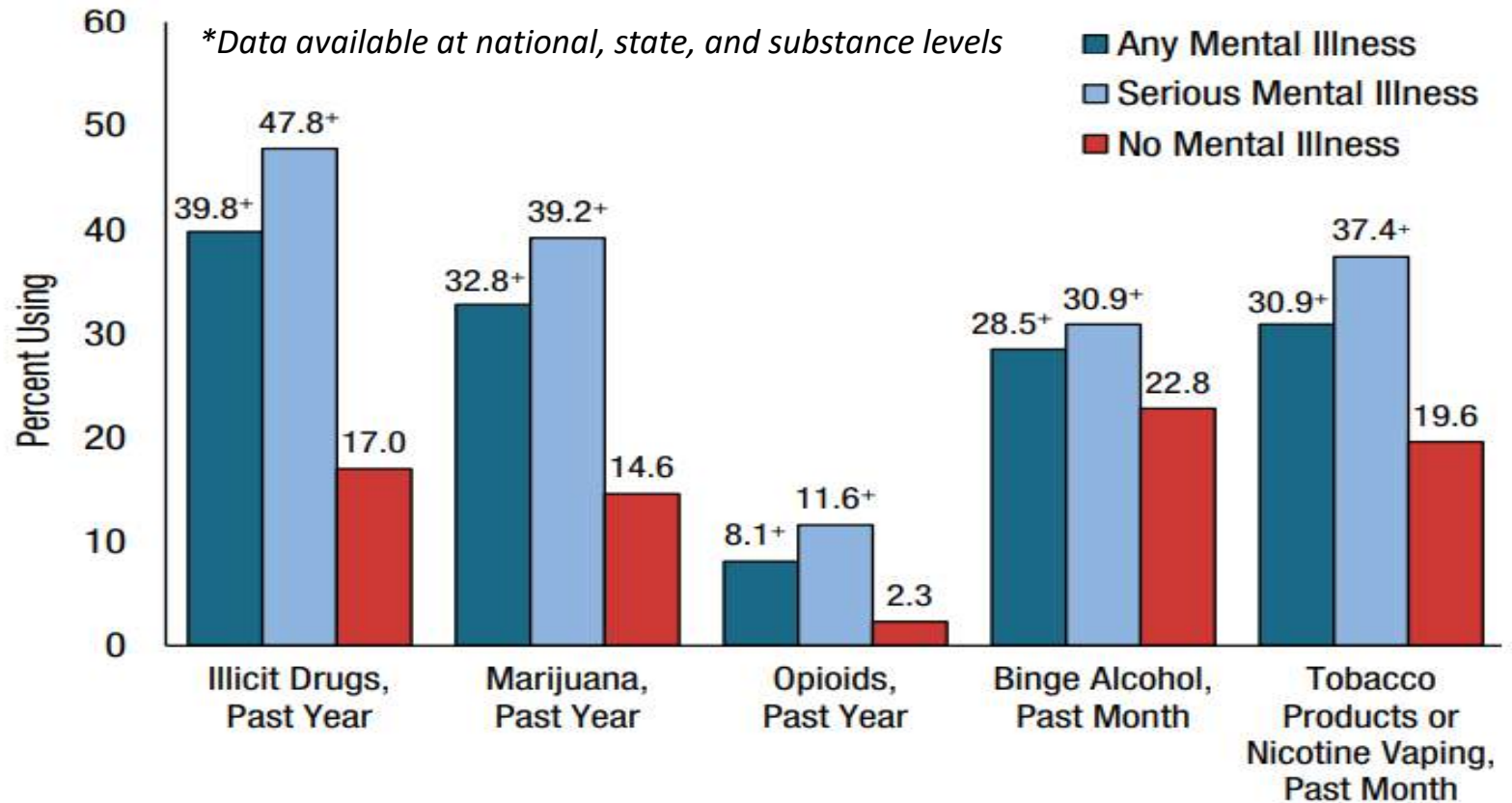


Co-occurring Disorders: National Survey on Drug Use and Health (NSDUH)

Figure 10. Substance Use among Adults Aged 18 or Older by Mental Illness Status; 2020

Those with **Serious Mental Illness (SMI)** in past year were **more likely** than those without mental illness to be:

- users of **illicit drugs (47.8%)**
- users of **marijuana (39.2%)**
- misusers of **opioids (11.6%)**
- binge **alcohol users (30.9%)**



DATA SOURCE

National Survey on Drug Use and Health (NSDUH)

BRIEF DESCRIPTION

National survey, self-report, provides estimates of substance use & mental illness at national, state, and substate levels

DATA TYPE

Survey

USE

Identify prevalence of opioid abuse alone and with mental illness; co-occurring

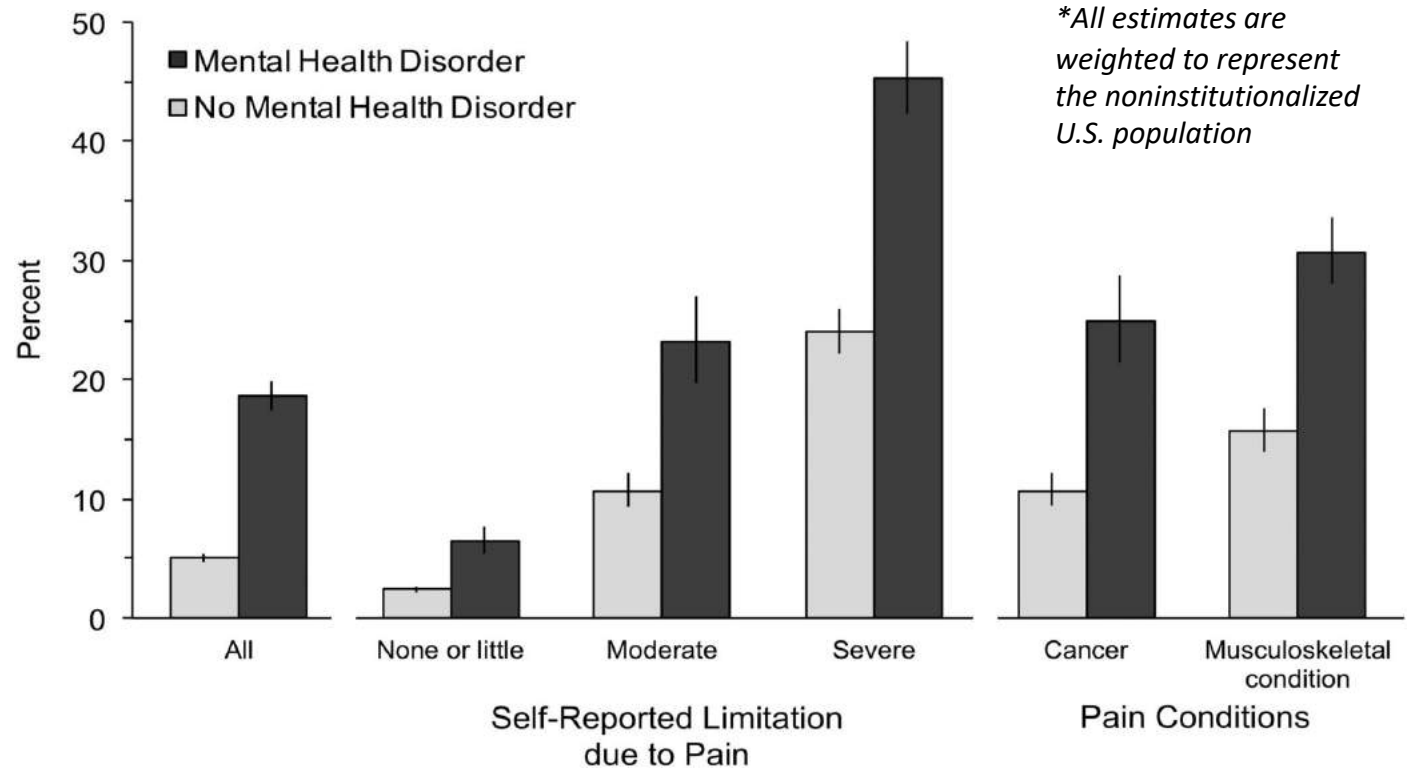


Co-occurring Disorders: *Prescription Distribution & Mental Health*

Figure 11. Estimated Percentages of U.S. Adults with and without Mental Health Disorders who use Rx opioids, according to selected characteristics. (Davis et al., 2017)

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

~**16%** of U.S. Adults with mental health disorders receive **OVER HALF** of all opioids prescribed (**60 million; 51.4%**).

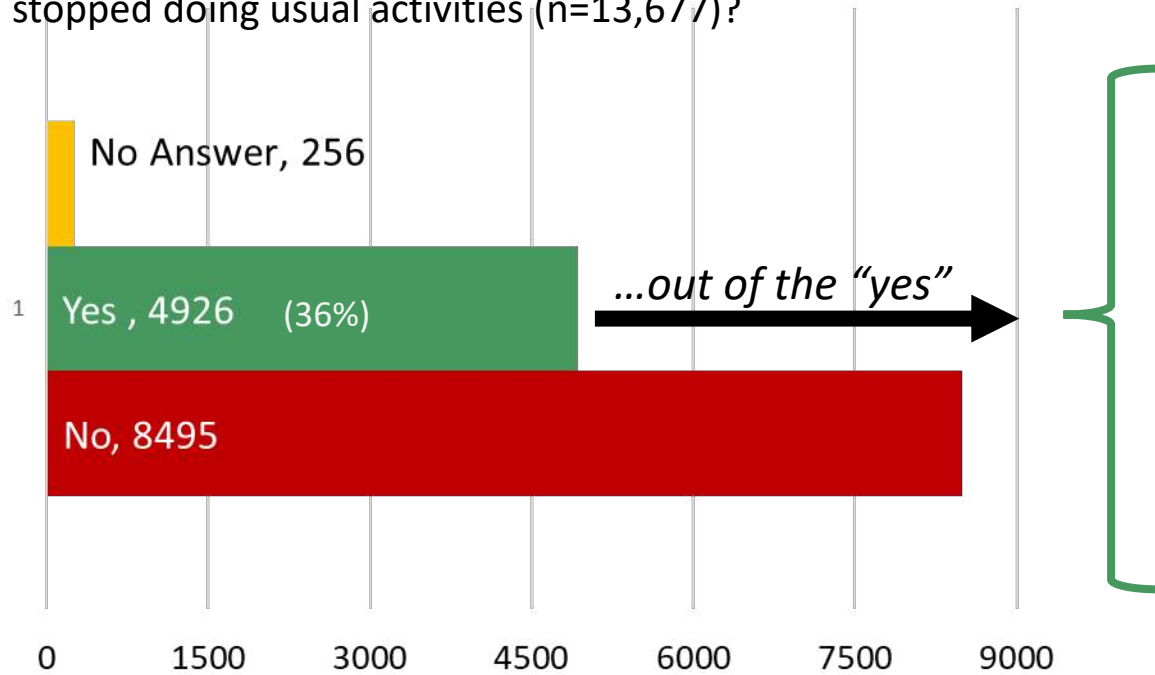


DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Medical Expenditure Panel Survey (MEPS)	National survey; estimates of health expenditure, utilization, health status, payment sources, health insurance among noninstitutionalized, nonmilitary U.S. Population	Survey	Identify prevalence of opioid abuse alone and with mental illness; co-occurring; polysubstance use

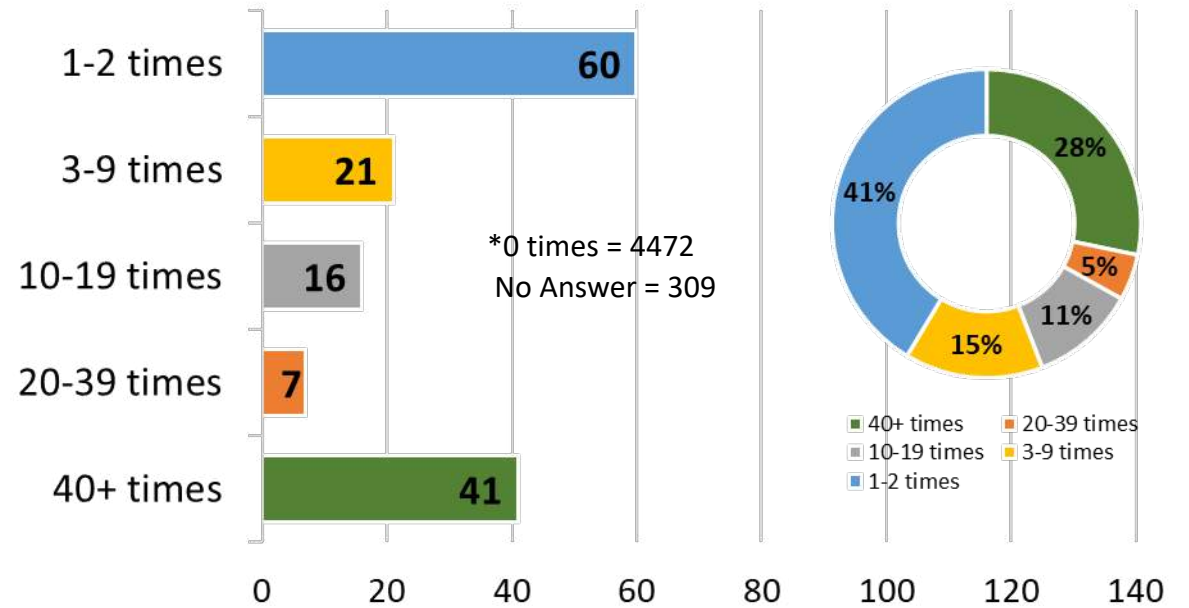


Co-occurring Disorders: Youth Risk Behavior Survey (YRBS) - 2019

F12 - Q25. During past 12 months, did you ever **feel so sad or hopeless** almost every day for 2 weeks or more in a row that you stopped doing usual activities (n=13,677)?



F13 - Q53. During your life, how many times have you used **methamphetamines** (also called speed, crystal meth, crank, ice, or meth) (n = 4,926)?



DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Youth Risk Behavior Survey (YRBS)	National survey, youth risk assessment, self-report	Survey	Get state estimates on use; include first substance use data; mental health and substance use data



Co-occurring Disorders: National Violent Death Reporting System (NVDRS)

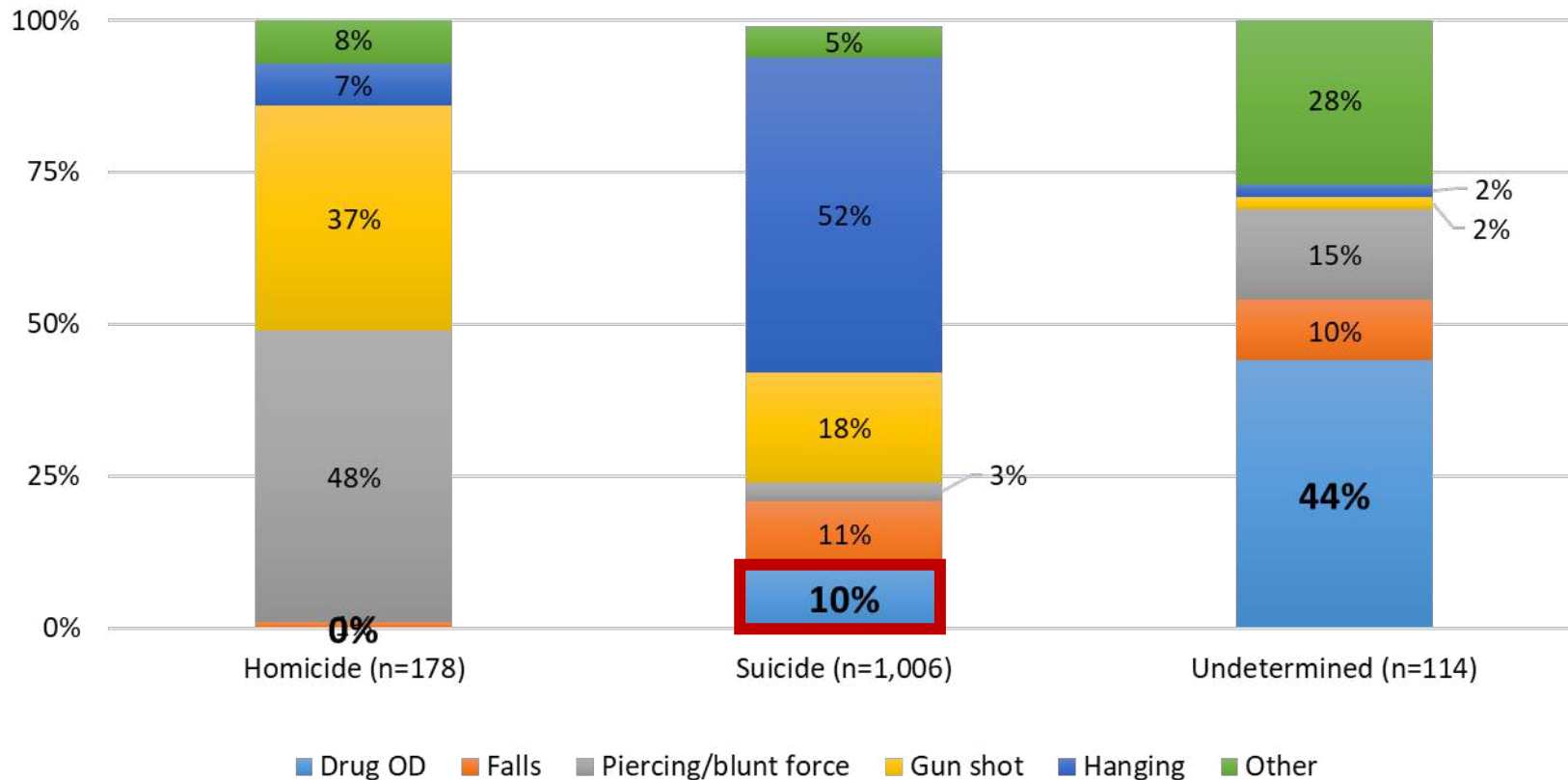


Figure 14. Hawaii Death Certificate, National Violent Death Reporting System (NVDRS) Data, All Ages, 2015-2019 (n=1298)

Drug overdoses account for 10% of suicide deaths (n=1,006) in Hawaii from 2015-2019

OD Drugs (~75% tested):
 36% positive for illicit (incl. opiates):
 - 16% marijuana; 13% meth
 - 12% opiates; 2% cocaine

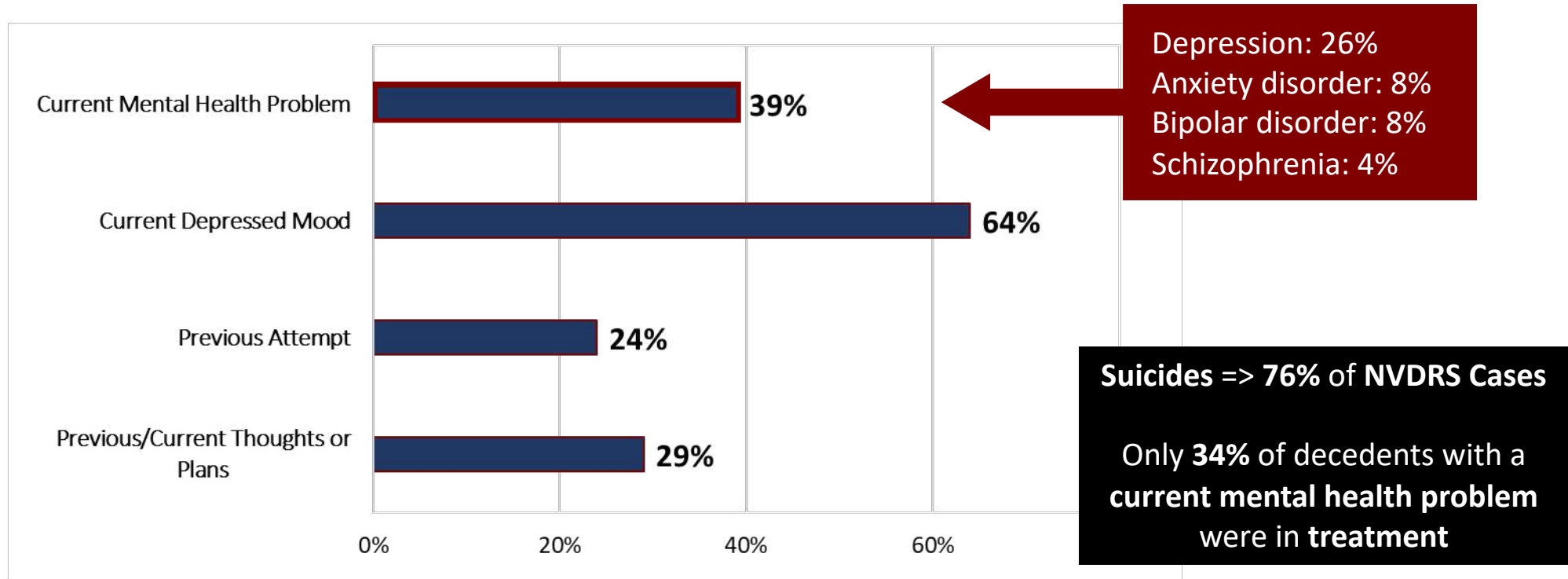
**All 50 U.S. states, Washington, D.C. & Puerto Rico submit data into NVDRS*

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
National Violent Death Reporting System (NVDRS) + SUDORS (OD2A)	National active surveillance system initiated by CDC to collect data re: violent deaths in the United States	De-identified, multi-state, case-level data; law enforcement & medical examiner invest. reports	Trends in violent deaths, including homicides and suicides/undetermined cause of death



Co-occurring Disorders: National Violent Death Reporting System (NVDRS)

Figure 15. Indications of Mental Illness among **Suicide Victims**, NVDRS Data, 2015-2019 – Hawaii



DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
National Violent Death Reporting System (NVDRS)	National active surveillance system initiated by CDC to collect data re: violent deaths in the United States	De-identified, multi-state, case-level data; law enforcement & medical examiner invest. reports	Trends in violent deaths, including homicides and suicides/undetermined cause of death



Co-occurring Disorders: Quality of Life Index (QOLI) – AMHD, Hawaii - 2021

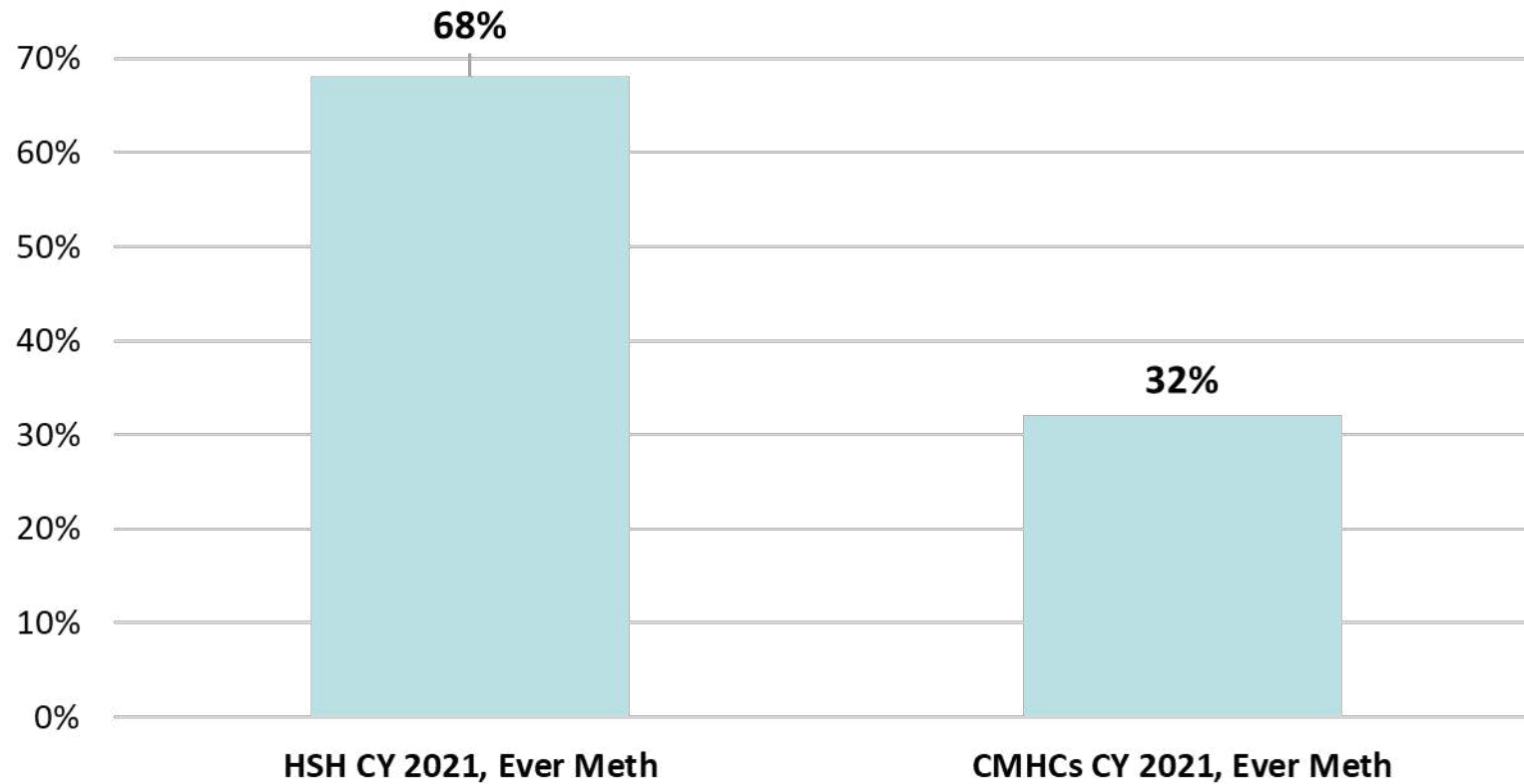


Figure 16. Percent (%) Methamphetamine Involvement, AMHD, 2021 Quality of Life Index (QOLI) Results, n= 792

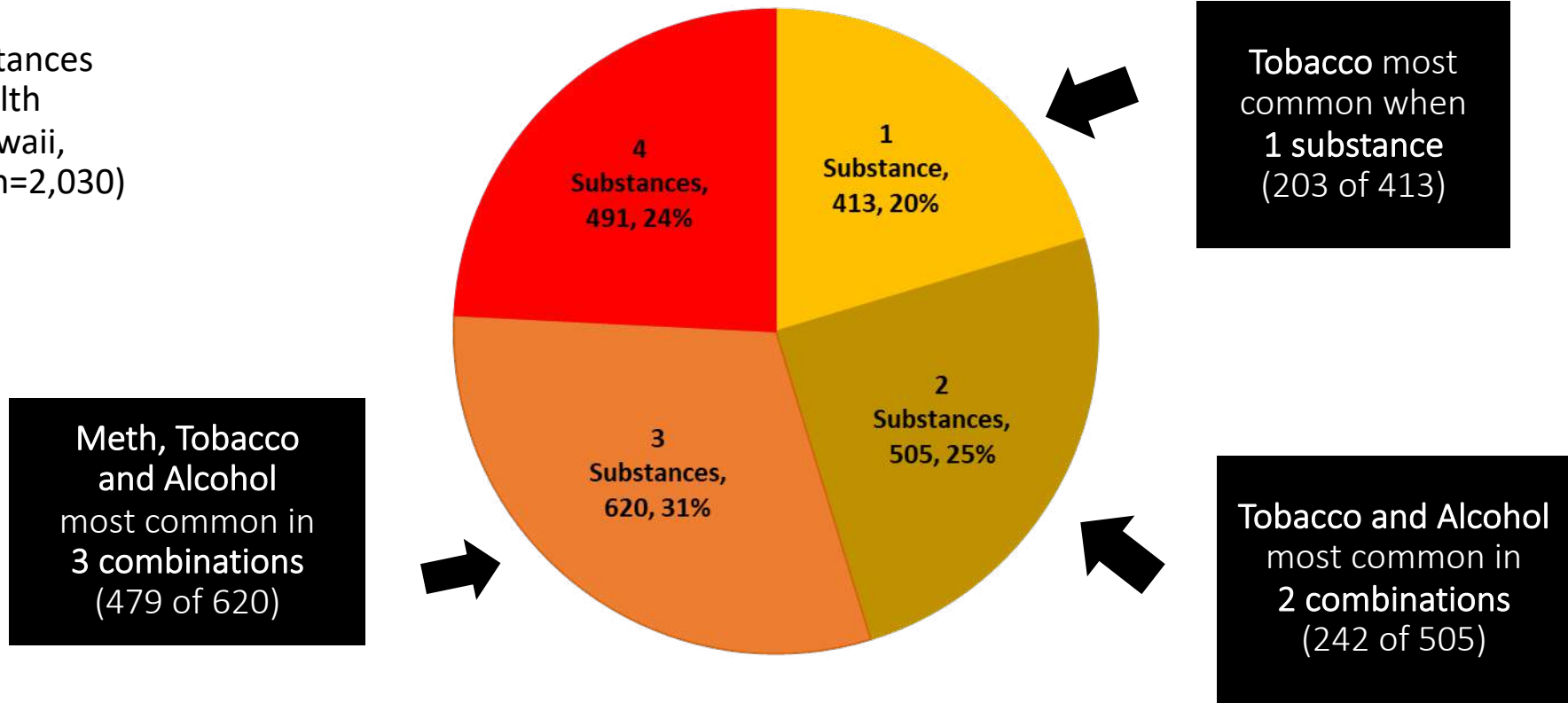
Nationally, in comparison, approximately **1.1% of Adults Aged 26+ use Meth**

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Quality of Life Index (QOLI)	Instrument used by state-level adult mental health divisions	Survey	To collect data on consumers' quality of life including mental health, housing, employment, SUD



Co-occurring Disorders & Polysubstance use: Quality of Life Index (QOLI) – AMHD, Hawaii

Figure 17. Number of Substances Used Per Adult Mental Health Division (AMHD) Client, Hawaii, QOLI, 2018 – 2022 (Aug); (n=2,030)



DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Quality of Life Index (QOLI)	Instrument used by adult mental health division	Survey	To collect data on consumers' quality of life including mental health, housing, employment, SUD



Co-occurring Disorders: *Meth Use Data Summary – AMHD, Hawaii*

- **Meth use is high in Hawaii** as well as:
 - Among Adult Mental Health consumers
 - Even more so among:
 - those (re)admitted to Inpatient State Psychiatric Hospital
 - those in Intensive Case Management Program (ICM+)
- Substance use (SU) relapse/current use related to ability to remain in community* and participation in positive activities for those in ICM+

**successful community tenure here defined as not institutionalized within 6 months of HSH discharge)*



Data Sources: *Linkage opportunities*



Learning Objective (3)

- Be able to **assess for and identify potential linkages** that could be used in **each state**



Data Linkages:

Real-Life Example – Criminal Justice System

- Currently, there is **limited information** on **substance use**, **mental health**, and **overdose risk** among individuals in the **criminal justice system** in Hawaii.
- **Example:** Manuscript currently under Review (Fontanilla et al, 2022) – [HI DOH (AMHD) + UH + ICIS] *“Linking Public Health and Public Safety Data on Co-occurring Disorders among Adults in Hawaii’s Criminal Justice System”*; Journal of Public Health Management and Practice





Data Linkages:

Real-Life Example – Criminal Justice System

- **Focusing on Mental Health & Public Safety/Law Enforcement data linkage**
 - **Example:** *Overlapping population of individuals in the Hawai'i State Hospital and individuals who went through the criminal justice system*
- **Data exploration and cleaning of Mental Health & Public Safety/Law Enforcement data after having been extracted and loaded**
- **Selecting and reviewing identifiers for matching**
 - Full Name
 - Date of Birth
 - Gender



Data Linkage Opportunities

- **Build relationships with Public Safety/Law Enforcement, Mental Health Divisions, and State-funded Substance Use Programs to establish a collaborative and trusted framework for data sharing**
 - Partner buy-in
 - Regular check-in meetings
- **Create documentation for data governance and management**
- **Data access granted to each respective entity**
- **Don't forget the role of public universities in providing capacity, technical assistance, workforce, and training**



Data Linkages – Part I:

State-level Opportunities with Hawaii Examples



DATA SOURCE (State-level)	DATA SOURCE (Hawaii Example)	BRIEF DESCRIPTION	DATA TYPE	USE
Criminal Justice/Public Safety/Law Enforcement + Electronic Health Record (EHR) of Inpatient State Psychiatric Facility	<i>Interagency Council on Intermediate Sanctions (ICIS) – Adult Substance Use Survey (ASUS)* & AMHD – EHR AVATAR for the Hawaii State Hospital (HSH)</i> <i>* Fontanilla et al, 2022 – manuscript under review</i>	Overlapping population of individuals in the Hawaii State Hospital and individuals who went through the criminal justice system	Substance use and mental health public safety data; behavioral health treatment state DOH data	Monitor adult alcohol & other drug use; substance use & mental health issues concurrently
High Intensity Drug Trafficking Area (HIDTA) + Medical Examiner/ Coroner’s Office	<i>Hawaii HIDTA & Medical Examiner/Coroners’ Offices</i>	Linking drug seizure data to overdose mortality/ death data	Drug seizure, substance use (including opioids and stimulants), fatal drug overdose deaths	Monitor trends / any correlation(s) between drug seizures and overdose mortality
HIDTA + Data Warehouse (analytics & reporting) + State DOH Adult Mental Health Division	<i>Hawaii HIDTA & Laulima Data Alliance & Adult Mental Health Division (AMHD)</i>	Linking drug seizure data to nonfatal inpatient and outpatient overdose morbidity data	Drug seizure, substance use (including opioids and stimulants), nonfatal drug overdose	Monitor trends / any correlation(s) between drug seizures and nonfatal drug overdose – morbidity



Data Linkages – Part II:

State-level Opportunities with Hawaii Examples



DATA SOURCE (State-level)	DATA SOURCE (Hawaii Example)	BRIEF DESCRIPTION	DATA TYPE	USE
State Department of Health: - Alcohol & Drug Abuse Division - Adult Mental Health Division - Child & Adolescent Mental Health	<i>Hawaii State Department of Health - Alcohol & Drug Abuse Division (ADAD) + Adult Mental Health Division (AMHD) + Child & Adolescent Mental Health Division (CAMHD)</i>	Linkage of state department of health consumer reports for divisions tasked with addressing mental health and substance use in adults & child/adolescents	Consumer reports, Quality of Life Index (QOLI)	Identify overlap between division consumers for data-informed decision making; crisis response
Criminal Justice/Public Safety/Law Enforcement + State Department of Health - Alcohol & Drug Abuse Division	<i>ICIS-ASUS & Alcohol and Drug Abuse Division (ADAD) Web Infrastructure Treatment Services (WITS)</i>	Linkage of adult substance use survey data and SUD treatment dataset	Self-reported substance use & SUD treatment	Assess adult alcohol and other drug use involvement and possible treatment options based on existing data, if any
State Unintentional Drug Overdose Reporting System (SUDORS) + State Prescription Drug Monitoring Program (PDMP)	<i>SUDORS & Hawaii PDMP</i>	Linkage of unintentional & undetermined overdose deaths with decedent PDMP data	Unintentional & undetermined overdose deaths	Build more robust, comprehensive overdose death data repository



Data Collection Limitations: *Examples & Possible Solutions*

Learning Objective (4)

- Be able to describe the **limitations and/or challenges** in collecting polysubstance use and co-occurring disorder data and how to overcome them in a way that allows for linkage opportunities



Data Limitations – General (Overdose Data)

Co-occurring Disorders & Polysubstance Use

Challenges

1. Hospital/Medical Records

- a. Lack of timely patient testing, if tested at all
- b. Screening only for opiates
- c. No distinction between illicit and prescribed

2. Household Surveys (e.g., NSDUH)

- a. Does not capture institutionalized populations
- b. Does not capture homeless populations

3. Incomplete; “dirty” data

4. Data availability delays

5. Inability to follow a single patient over time in a dataset

Solutions

1. Hospital/Medical Records

- a. Incorporate timely drug testing into evaluation check-lists
- b. Screen for high alert substances (e.g., meth, fentanyl)
- c. Continue de-stigmatization of MI & SUD for more accurate substance use reporting & dx coding at point of encounter

2. Household Surveys (e.g., NSDUH)

- a. Facilitate data linkages with criminal justice system
- b. Facilitate linkages w/ orgs serve homeless population

3. Standardization of data collection & cleaning processes

4. Relationship building, troubleshooting, and timeline creation

5. Centralized medical records; more robust data linkages



Data Limitations – **Topic Specific** *Co-occurring Disorders & Polysubstance Use*

Challenges

1. Primary diagnoses captured more consistently than secondary, tertiary, and subsequent diagnoses leading to underreporting
2. Discharge data – certain diagnoses are excluded (e.g., categorization as ‘not active user’ upon discharge) leading to not appropriately capturing at risk populations
3. ICD-9-CM to ICD-10-CM transition and impact on coding of mental health conditions
4. Self-reporting for MI diagnoses, SUD, & polysubstance use
5. Limited ability to accurately and reliably distinguish between concurrent and sequential polysubstance use

Solutions

1. Prioritizing documentation of secondary and subsequent diagnoses paired with toxicology results to supplement dx
2. Capture and retain diagnoses to capture full scope of patients’ substance use history to accurately capture at risk populations
3. Be aware of apparent differences between 2020 SUD estimates and those of prior years due to breaks in comparability
4. Validate self-reports using independent measure (e.g., structured diagnostic assessment) of MI & (clinical screen) SUD
5. Comprehensive point of care survey for self-report of concurrent and/or sequential polysubstance use



Summary:

Polysubstance Use & Co-occurring Disorders

- **Polysubstance use** and **co-occurring disorders** are important, emergent areas within context of drug overdose surveillance and prevention
- Understanding **polysubstance use** applies not only in the context of the **opioid epidemic** itself (e.g., use of both Rx and illicit opioids), but also in consideration of **co-occurring use of opioids** with a **wide array of other substances** (e.g., stimulants and benzodiazepines) that have the **potential to increase risk for adverse events**, lead to **relapse following a treatment** regimen, or to **overdose fatalities**.

- The relationship between **mental illness and opioid use** is **complex**; the identification of specific populations that rely heavily on opioids is of importance for **risk mitigation efforts**.
- We are seeing **worse outcomes** for those with **co-occurring disorders**, as people with mental illness are more likely to experience a substance use disorder leading to poor health (including quality of life) outcomes
- The co-occurring disorder population is an important one to consider, as there could be **targeted treatment modalities** that if investigated could prove effective.

- We have demonstrated there are **data available** – specific to **polysubstance use and co-occurring disorders** both **nationally & at state-level**
- It is **important** to start (or continue) to **monitor trends in your respective states/jurisdictions**—especially as we continue to see **increases in fentanyl** and other substances such as **methamphetamine**, specifically in Hawaii.

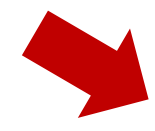


Behavioral Health in Hawaii: *Dashboard Development Timeline*

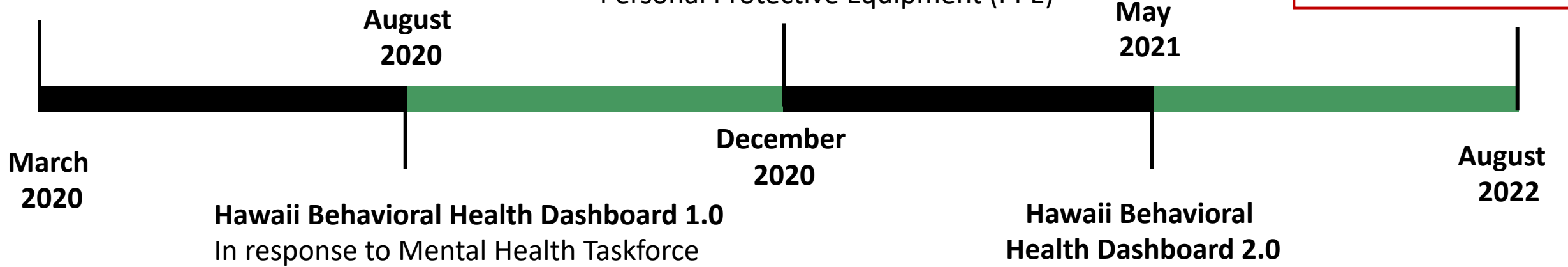
**Behavioral Health and Homelessness
Statewide Unified Response Group
(BHHSURG)**

BHHSURG Dashboards
-Hawaii CARES
-Isolation & Quarantine
-Personal Protective Equipment (PPE)

*To include data on polysubstance use
& co-occurring disorders~*



**Hawaii Behavioral
Health Dashboard 3.0**





Data Resources - Combined: *Polysubstance use & Co-occurring Disorders*

Learning Objectives (1-2)

- Describe data sources that can be used to examine **polysubstance use** and where to find them
- Identify databases that include **co-occurring disorders**




Data Sources for Reference – Available Nationally

Polysubstance Use & Co-occurring Disorders

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
National Survey on Drug Use and Health (NSDUH)	National survey, self-report, get state estimates on SUD & Mental Illness	Survey	Identify prevalence of opioid abuse alone and with mental illness; co-occurring
CDC: Wonder Tool Data Visualization Gallery	Drug poisoning deaths at the national, state, and county levels	Opioid use, overdose deaths	Trends in age-adj death rates for drug poisonings by demographic characteristics; includes co-occurring & polysubstance use
National Vital Statistics System (NVSS)	Inter-governmental system of data sharing on the vital statistics of the U.S. population	Opioid use, overdose deaths	Uses mortality data to determine overdose death counts
National Violent Death Reporting System (NVDARS)	National active surveillance system initiated by CDC to collect data re: violent deaths in the United States	De-identified, multi-state, case-level data; law enforcement & medical examiner invest. reports	Trends in violent deaths, including homicides and suicides/undetermined cause of death
Prescription Drug Monitoring Programs (PDMPs)	Mandatory recording of all Rx opioids (and controlled substances) dispensed at state-level	Billing data linked to toxicology data	Monitor substance use within inpatient settings

 = co-occurring only

 = polysubstance only

 = both




Data Sources for Reference – Available Nationally (cont.)

Polysubstance Use & Co-occurring Disorders

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
State Unintentional Drug Overdose Reporting System (SUDORS)	Provides comprehensive data on unintentional and undetermined intent drug overdose deaths	Death certificates, Medical Examiner/Coroner Reports, Postmortem Toxicology	Unintentional & undetermined drug overdose mortality data
Web of Science Database	Paid-access platform with access to multiple databases for reference and citation data from academic journals and conference proceedings	Resource repository	Identify prevalence of opioid abuse alone and with mental illness; co-occurring and polysubstance/polydrug use
National Electronic Health Records Survey (NEHRS) National Center for Health Statistics (NCHS)	National survey, annual source of information on use of electronic health record systems by office-based physicians & their practices	Survey	Identify prescribing habits for controlled substances; frequency of PDMP use in office-based physician/practice settings; state-wide availability
High Intensity Drug Trafficking Areas (HIDTA) Annual Threat Assessment Data	Provides drug trafficking insights and guidance for strategic planning; includes law enforcement kills, annual reports, autopsy and toxicology reports	Survey	To identify drug trafficking trends and substance use mortality data; co-occurring; poly-drug enterprises

 = co-occurring only

 = polysubstance only

 = both



Data Sources for Reference – Available Nationally (cont.)

Polysubstance Use & Co-occurring Disorders

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Hospital Medical Records & Lab Toxicology (Linked data)	Linkage of ED and inpatient medical records w/ toxicology results (alcohol levels & drug screens)	Substance use among hospital patients	Identify prevalence of substance use (including polysubstance use) among hospital patients
Death Certificates	Death certificate data with opioid-related ICD-10 underlying and contributing cause of death codes	Death certificate	General epidemiology of fatal overdoses
Autopsy Reports	Detailed information on fatal overdoses	Autopsy	Narrative description of victim's death and circumstances; assessment of comorbidities; toxicologic findings
Employment Drug Testing	Number (n) and percent (%) of employment drug tests with positive result for opioids (+ other substances)	Laboratory	Prevalence of positive tests for opioids and other SUD-related substances among those tested for employment
Behavioral Risk Factor Surveillance System (BRFSS)	National health telephone survey that collects state data re: health-related risk behaviors, chronic health conditions, and preventative service use	Survey	Determine trends in prescription pain meds use; access to illicit substances; co-occurring

= co-occurring only

= polysubstance only

= both




Data Sources for Reference – Available Nationally (cont.)

Polysubstance Use & Co-occurring Disorders

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
Quality of Life Index (QOLI)	Instrument used by adult mental health division	Survey	To collect data on consumers' quality of life including mental health, housing, employment, SUD
Syringe Exchange Programs (SEPs) Syringe Services Programs (SSPs) Needle Exchange Programs (NEPs)	Community-based programs that provide access to sterile needs & syringes; many collect data via daily logs, participant ID card registry databases	Survey, registrant databases	Identify prevalence of injection drug use for youth & adults, participant demographics, co-occurring & polysubstance use
PubMed (MEDLINE Database)	A free resource supporting the search and retrieval of biomedical and life sciences literature to improve health on a global scale	Survey	Identify prevalence of opioid abuse alone and with mental illness; co-occurring; polysubstance use

 = co-occurring only

 = polysubstance only

 = both



Data Sources for Reference – Hawaii State Polysubstance Use & Co-occurring Disorders

DATA SOURCE	BRIEF DESCRIPTION	DATA TYPE	USE
DOH Adult Mental Health Division (AMHD)	Co-occurring - under-insured or un-insured adults with severe mental illness (SMI)	Claims and dx data	Treatment, co-occurring only
DOH Child and Adolescent Mental Health Division (CAMHD)	Co-occurring – youth (generally lower SES with MH issues; not need to be severe)	Claims and dx data	Treatment, co-occurring only
Hawaii Poison Center (HPC)	Questions from public that might relate to substances and negative events	Opioid use	Freq of questions that relate to use of opioids
Prescription Drug Monitoring Program (PDMP) – Hawaii	Mandatory recording of all Rx opioids dispensed in Hawaii (except by military facilities and pharmacies)	Dispensed opioid Rx	Statewide, systematic monitoring of Rx opioid consumption by type, amount and county
Treatment Episode Data Set (TEDS)	State-specific trends in emergency room use.	Clinical: admissions and discharges	Trends in SUD emergency visits, co-occurring mental health disorders

= co-occurring only

= polysubstance only

= both



State of Hawaii Department of Health
Adult Mental Health Division (AMHD)
Behavioral Health Administration (BHA)

WEBINAR 4 OF 4

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P2P WEBINAR SERIES

Mahalo and Questions

