

# **Epidemiology of drug overdoses in Hawaii**

***Dan Galanis, PhD  
EMS & Injury Prevention System Branch  
Hawaii Department of Health***

***[daniel.galanis@doh.hawaii.gov](mailto:daniel.galanis@doh.hawaii.gov)***

# Overview of presentation

## ■ Fatal drug overdoses

### *Death certificate database*

- 10-year period of 2014 through 2023

### *Death certificates linked to autopsy records (toxicology)*

- 4-year period of 2020 through 2023

## ■ Statewide and county-level description

### *Annual trends*

### *Victim demographics*

### *Specific substances: fentanyl and methamphetamine*

- Co-occurrence, aka polysubstance

## ■ EMS-attended overdoses from fentanyl (10/2021-7/2024)

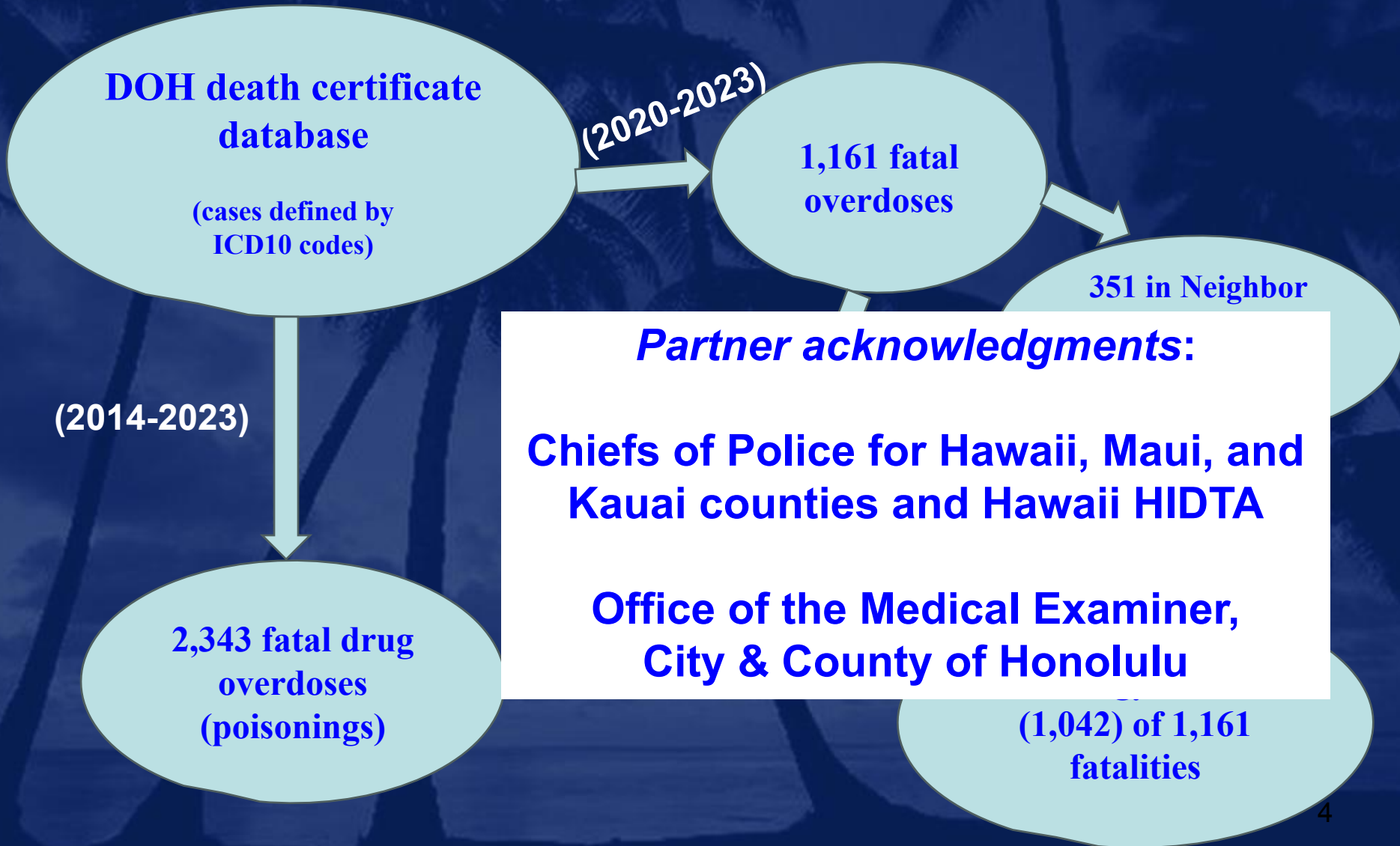
### *Trends*

### *Importance of pre-EMS provision of naloxone*

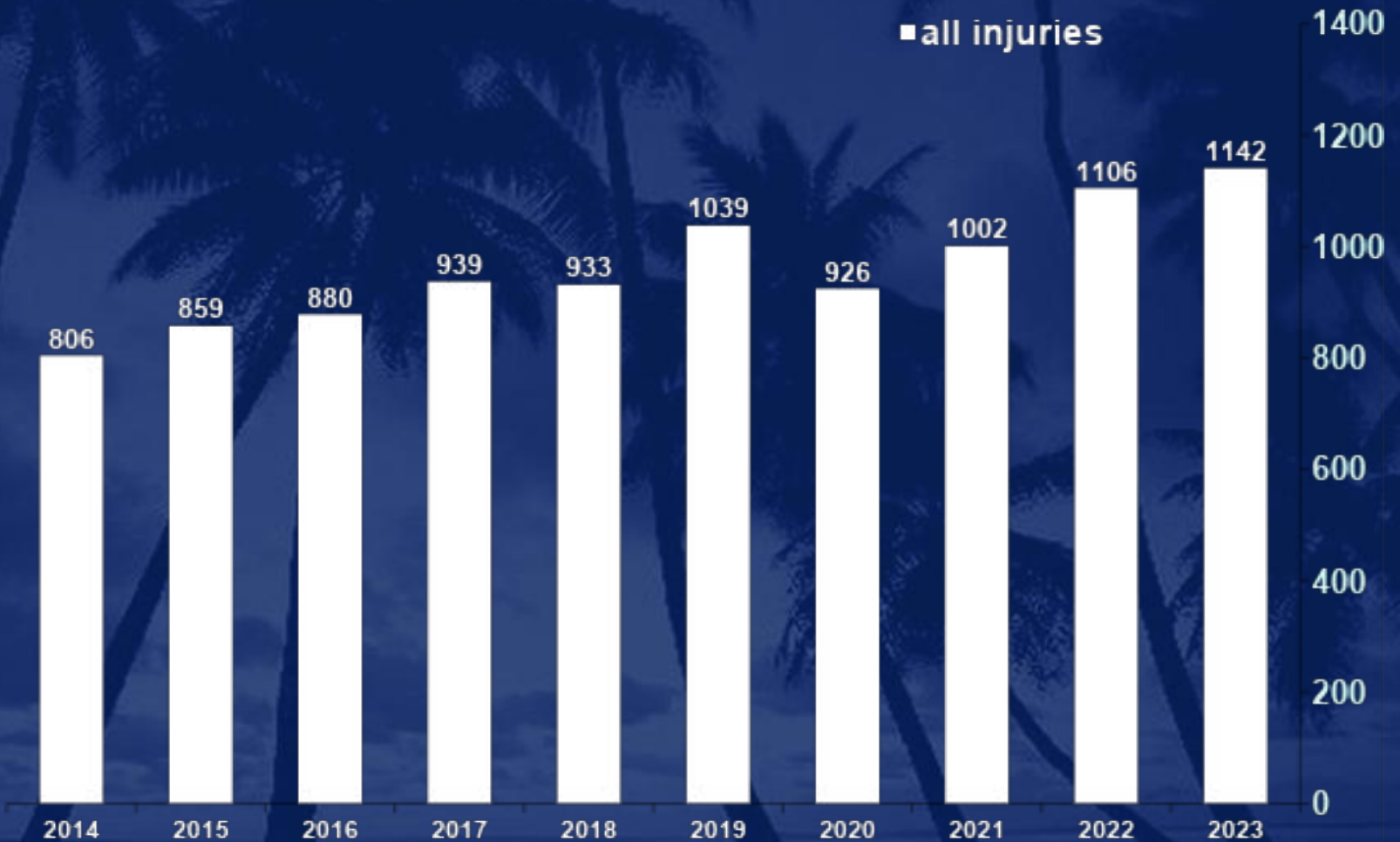
The background of the slide features a monochromatic blue color scheme. It depicts a tropical beach scene with several palm trees of varying heights and lean angles. The trees are silhouetted against a lighter blue sky and a darker blue ocean. The overall mood is serene yet somber due to the color palette.

# Fatal drug overdoses in Hawaii

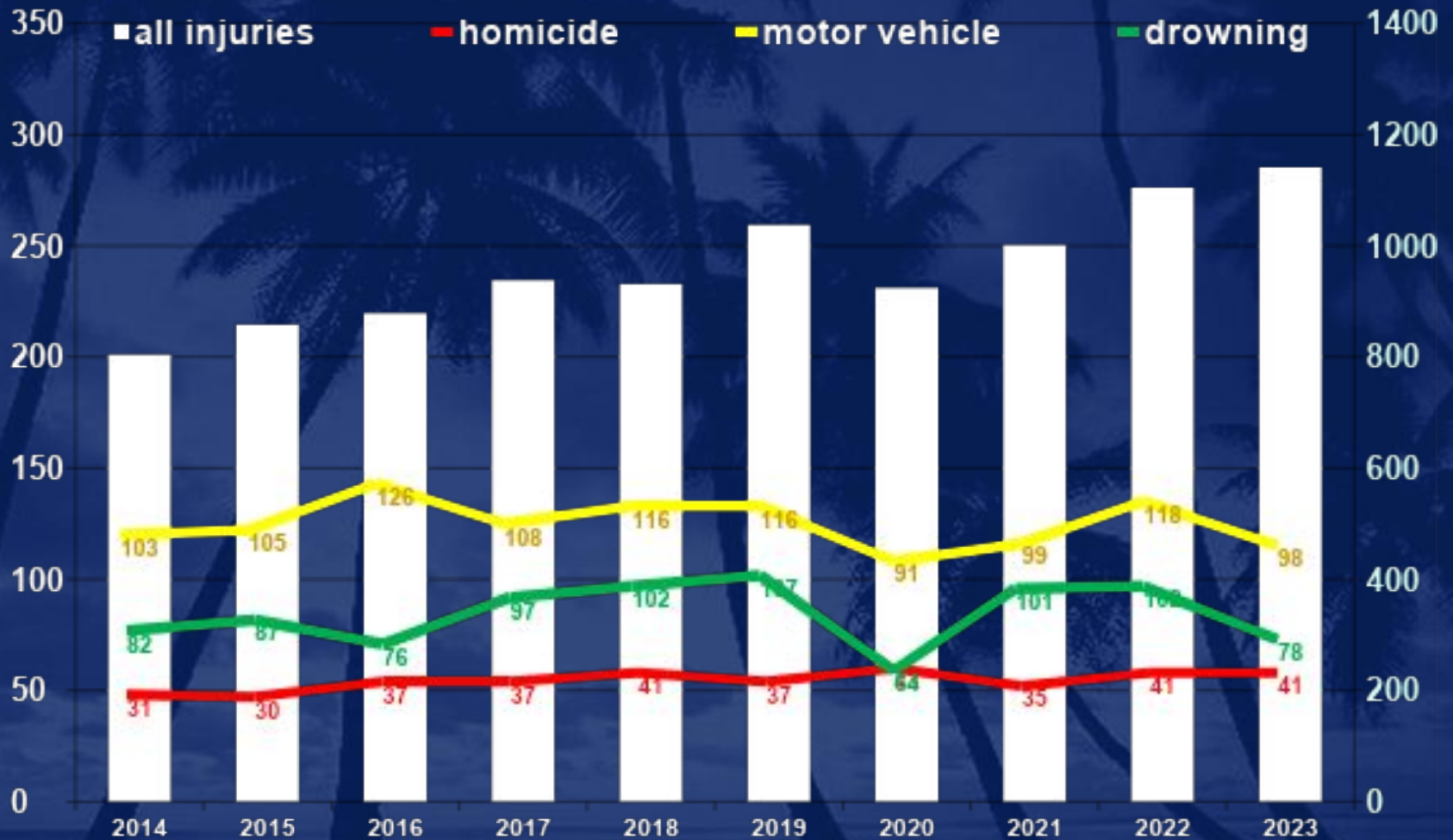
# Summary of data sources on drug overdoses in Hawaii



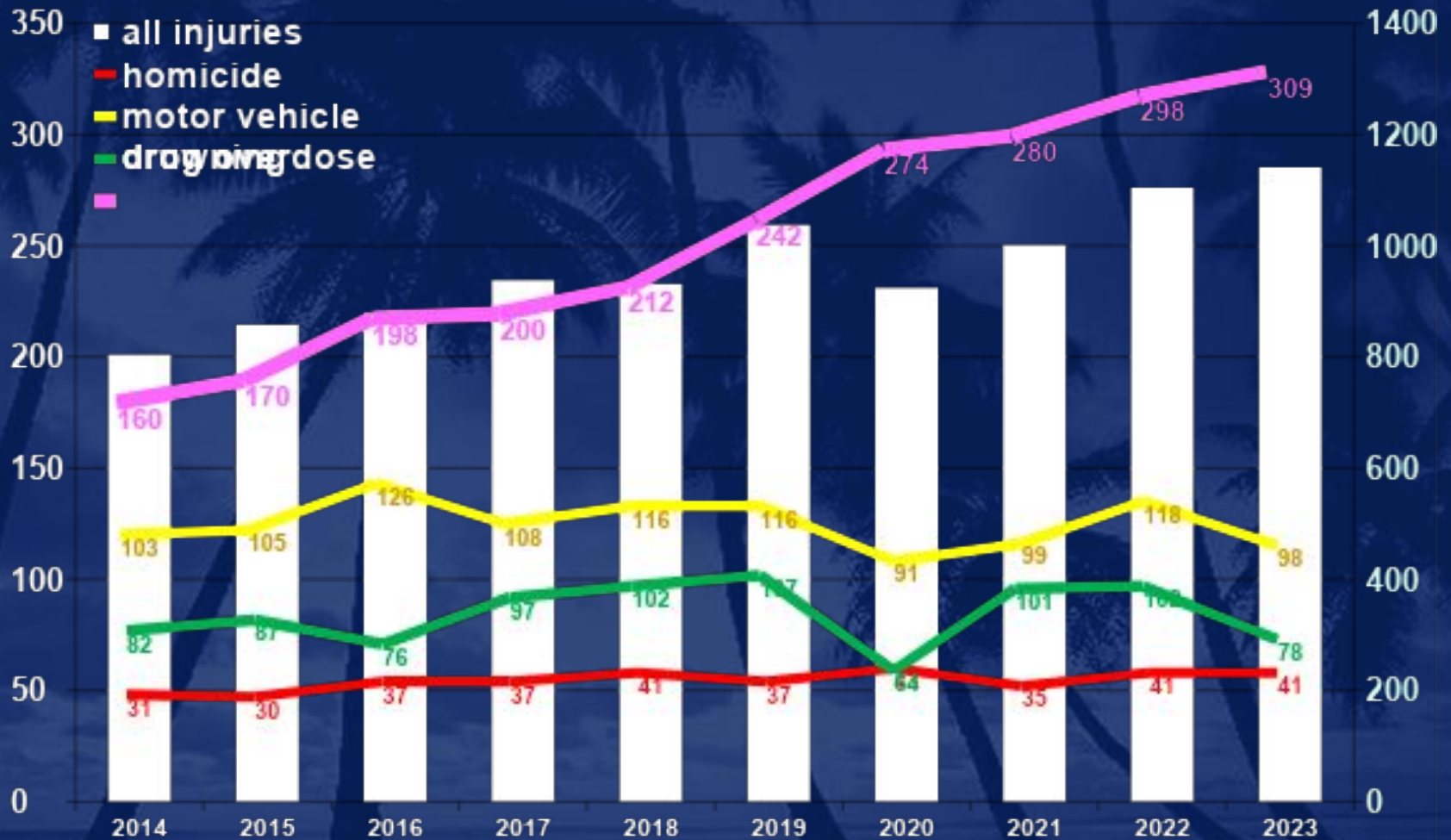
# Annual number of fatal injuries in Hawaii, by cause, 2014-2023



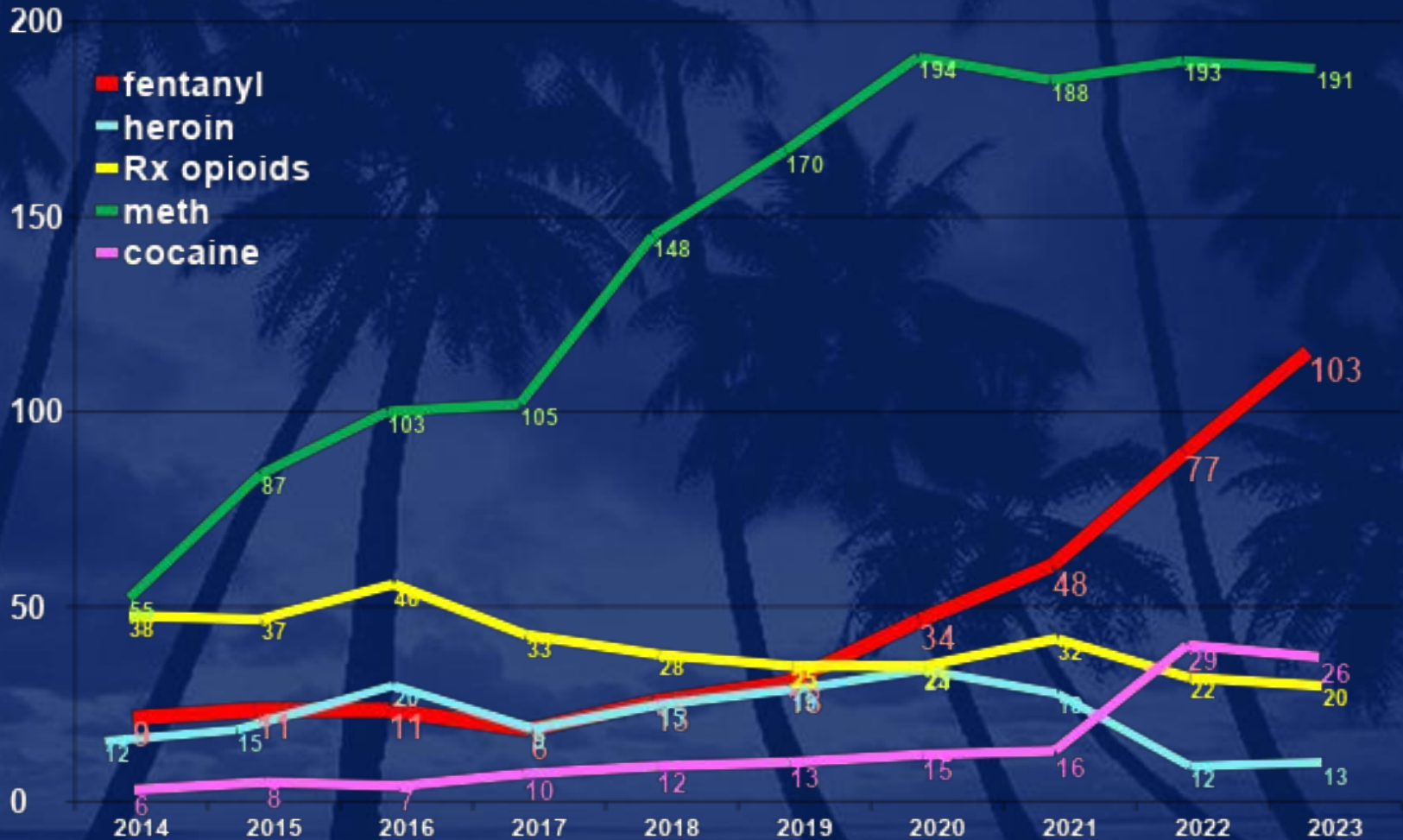
# Annual number of fatal injuries in Hawaii, by cause, 2014-2023



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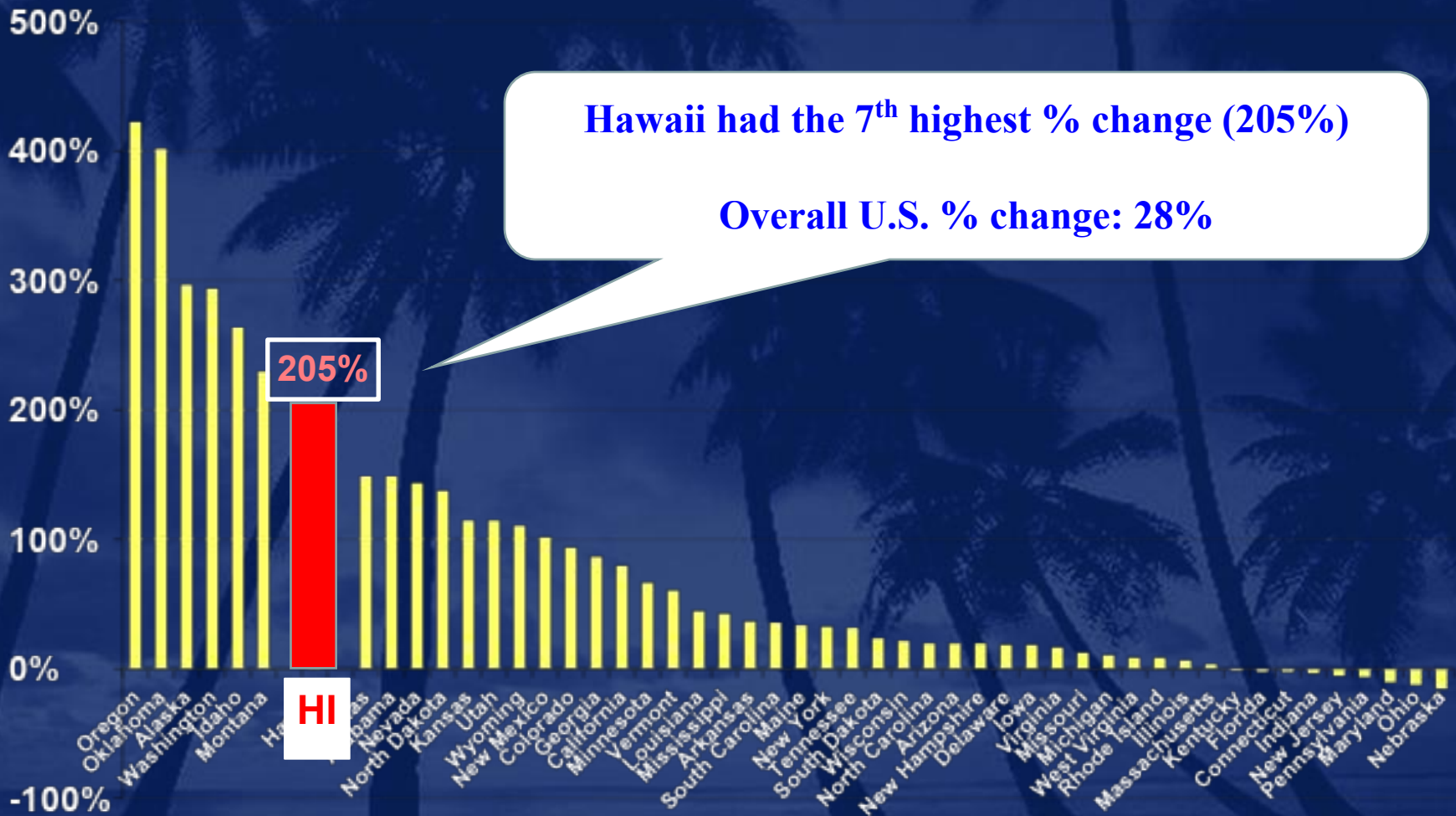
# Annual number of fatal drug overdoses in Hawaii, by contributing substance(s), 2014-2023



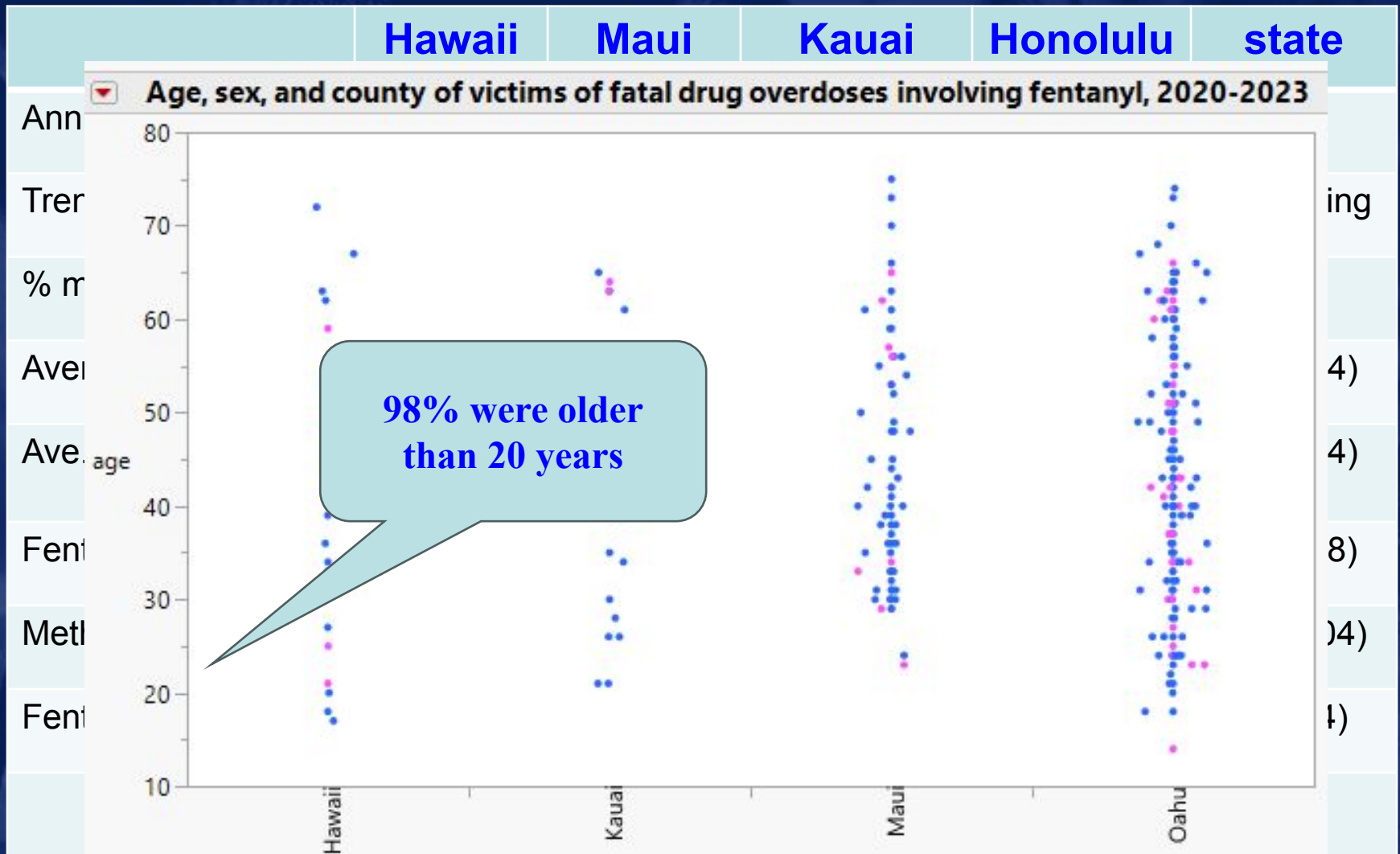
Data from death certificates. Decedents with more than one substance can be counted multiple times



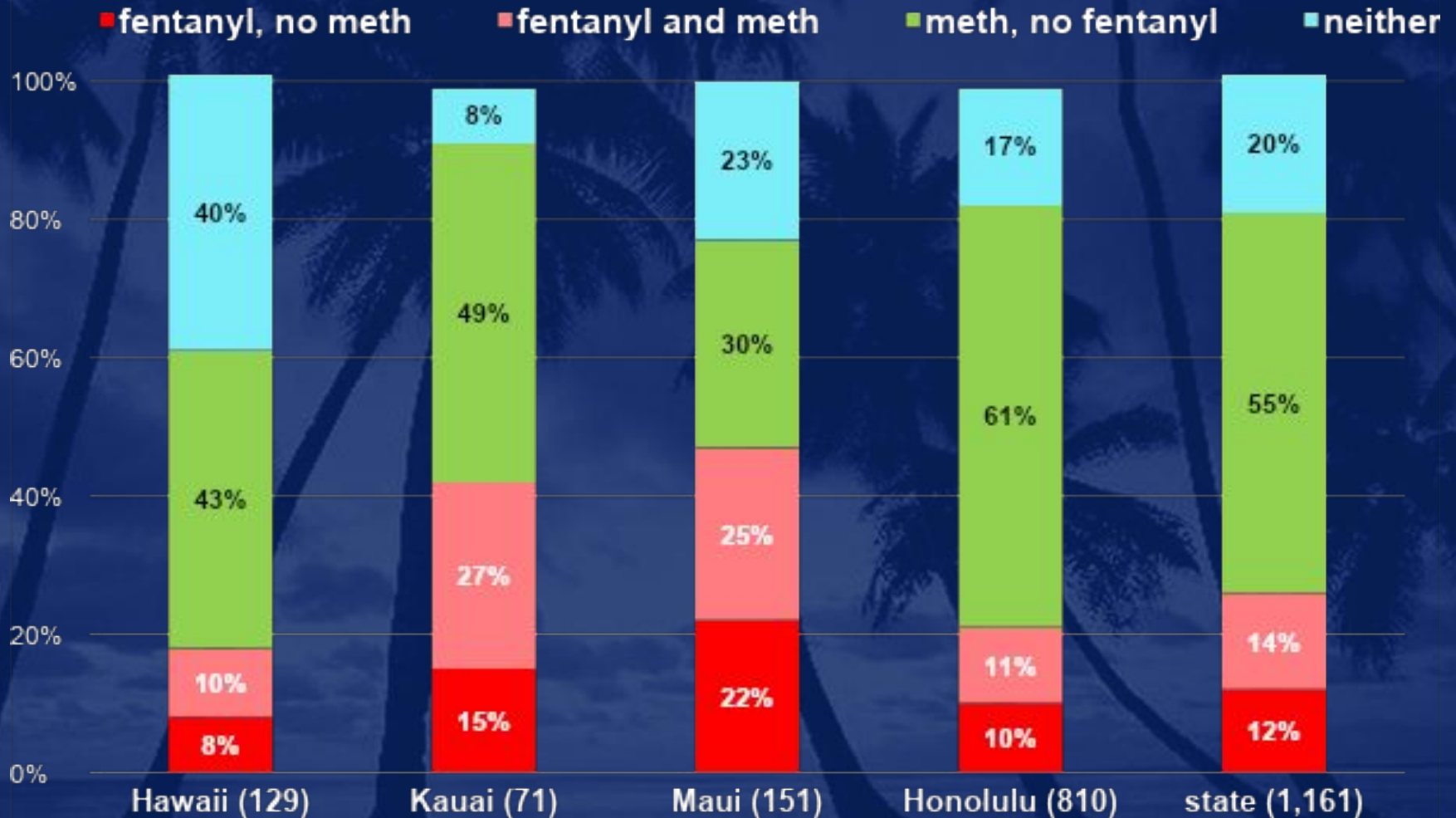
# Percent change in number of fatal overdoses related to synthetic opioids, by victim state of residence, 2023 vs. 2020



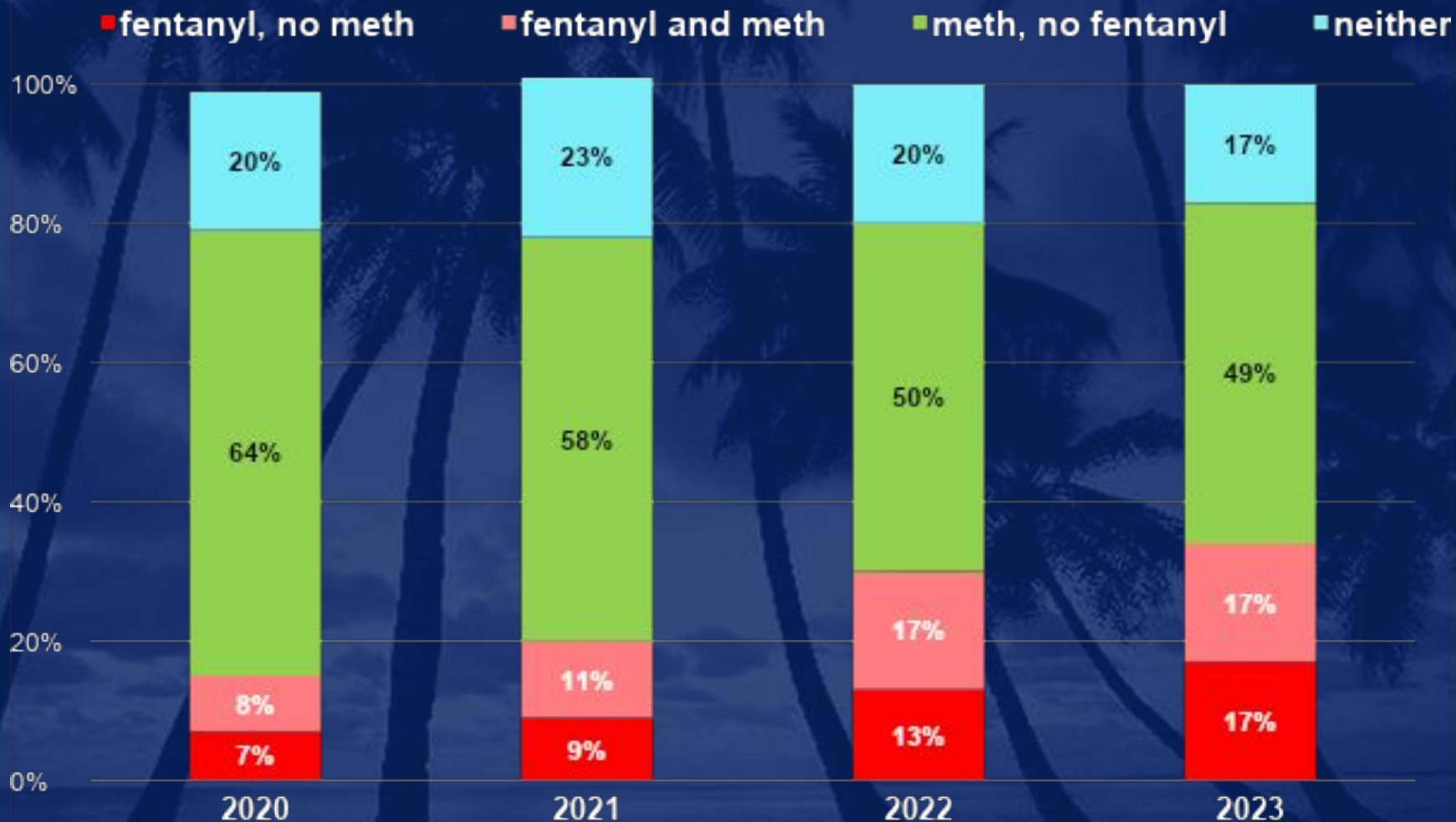
# Fatal drug overdoses in Hawaii, by county, 2020-2023



# Distribution of fentanyl and/or methamphetamine among victims of fatal drug overdoses in Hawaii, by county 2020-2023



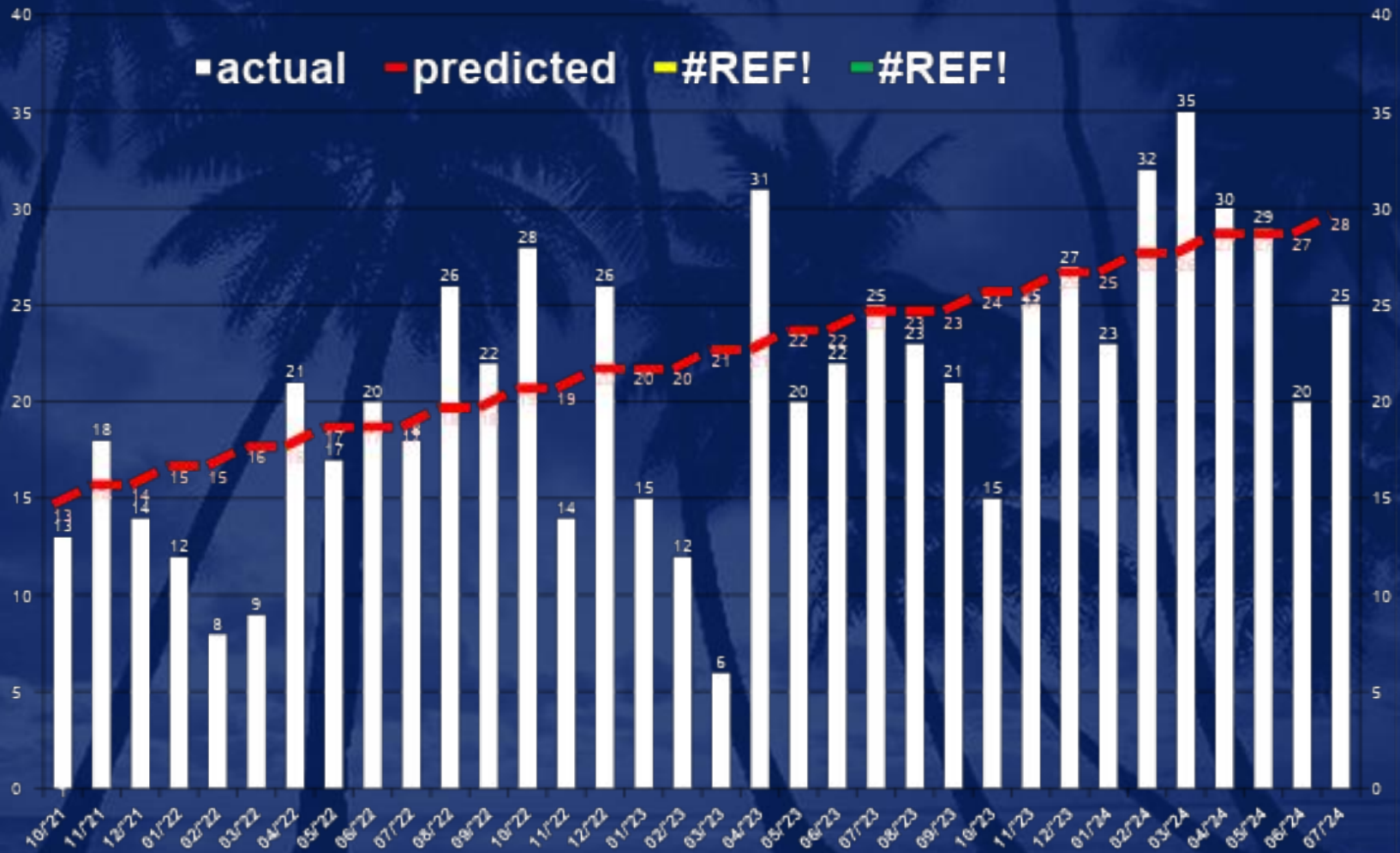
# Distribution of fentanyl and/or methamphetamine among victims of fatal drug overdoses in Hawaii, 2020-2023





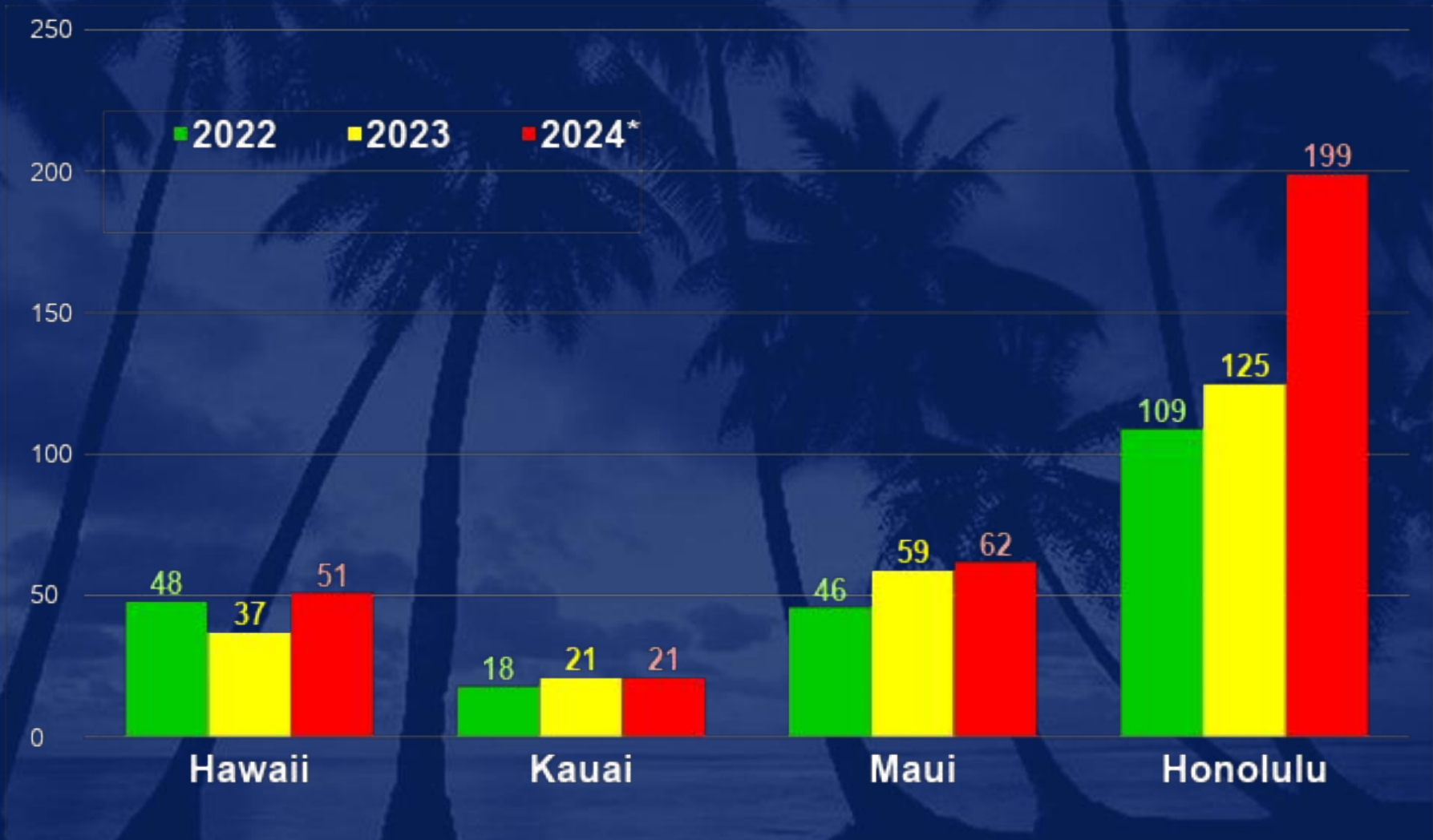
# **EMS-attended fentanyl drug overdoses in Hawaii**

# Monthly number of Hawaii EMS patients treated for possible fentanyl overdose, 10/2021 – 7/2024

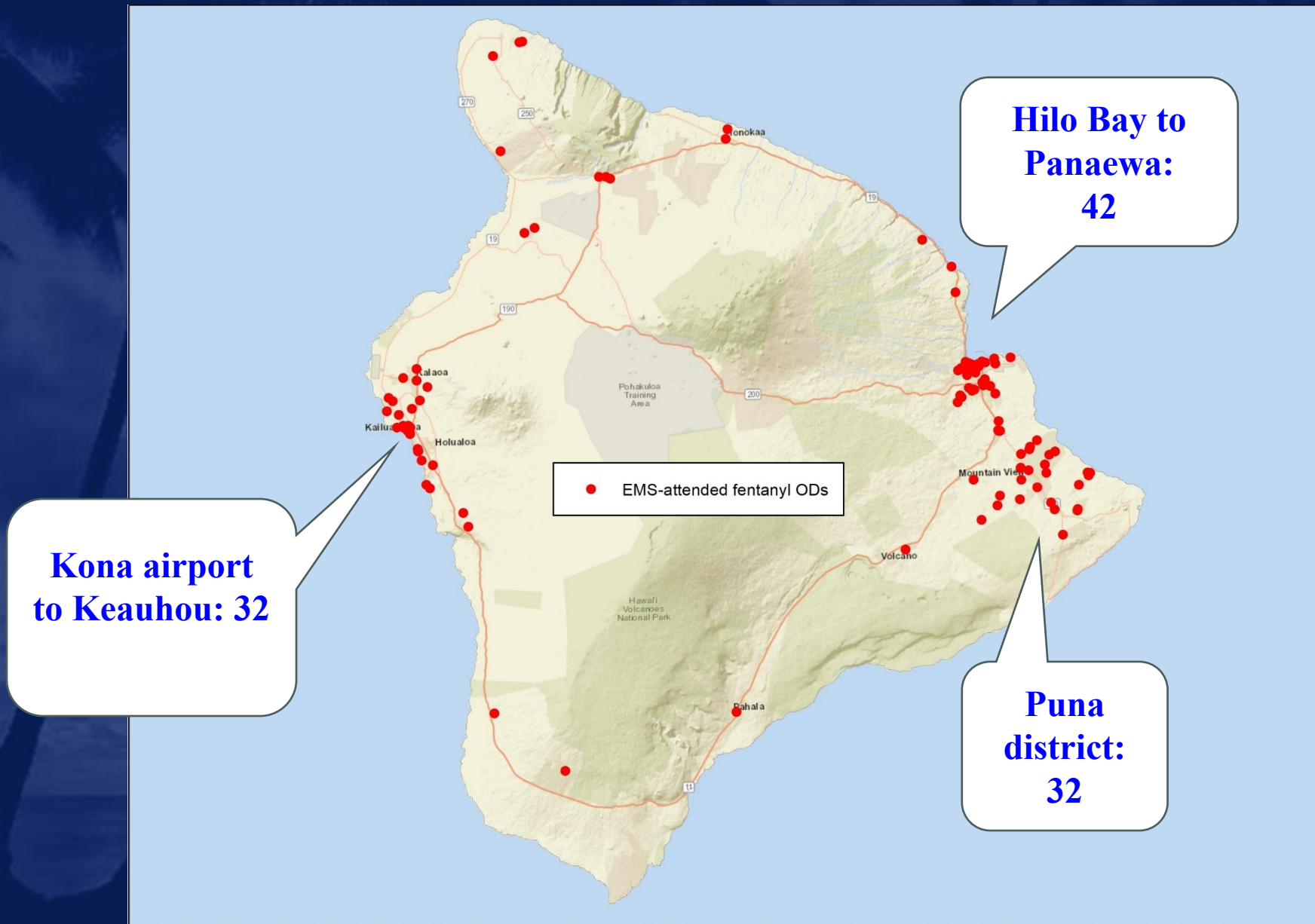


# Annual number of EMS-attended fentanyl overdoses, by county, 2022-2024\*

(\*Totals for 2024 projected from data through 7/31/2024)



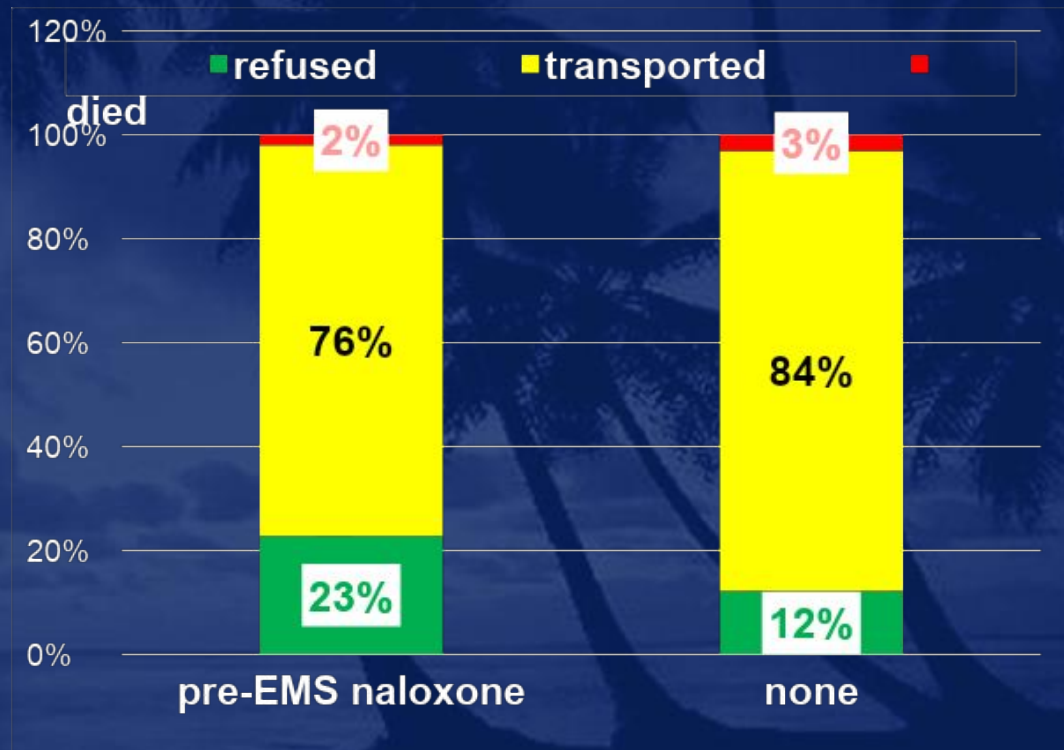
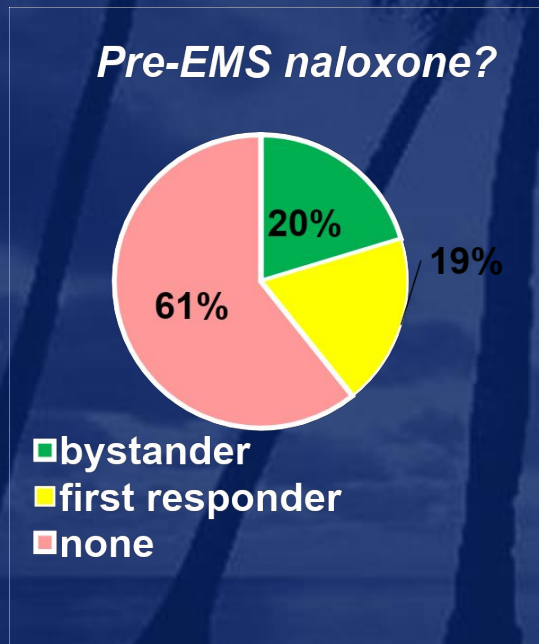
# Approximate locations of EMS-attended fentanyl overdoses in Hawaii County, 10/2021 through 7/2024 (total=127)



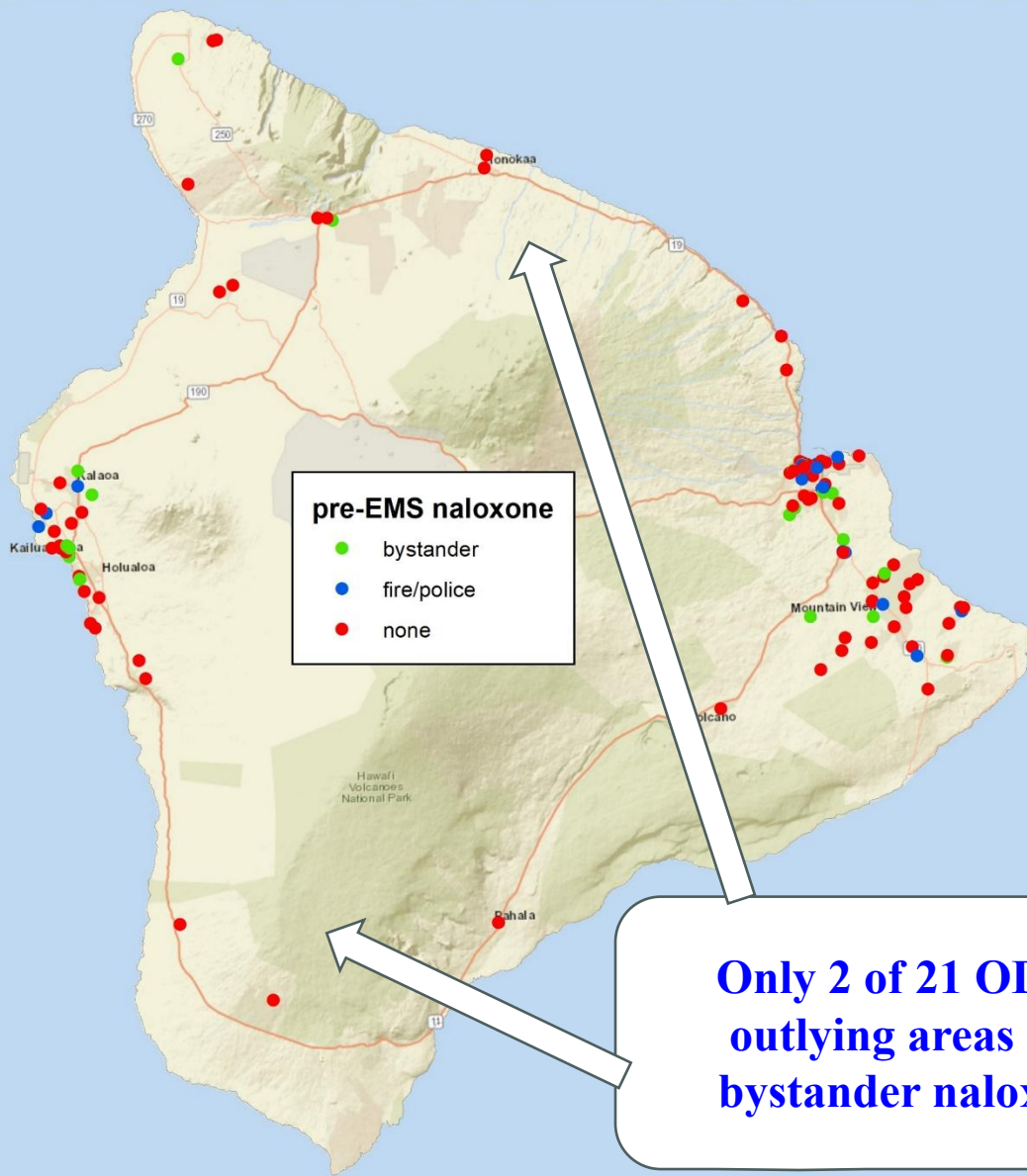


## Discharge disposition for EMS patients with fentanyl overdoses, by pre-EMS naloxone status, 10/2021 – 17/2024 (n=446)

- Status missing for 36% of cases, mostly years 2023-2024
- Pre-EMS naloxone generally increasing over time
- Patients with pre-EMS naloxone 88% more likely ( $p=0.0166$ ) to refuse transport, after statistical adjustment for age, sex and EMS response times to the scene



# Approximate locations of EMS-attended fentanyl overdoses in Hawaii County, 10/2021 through 7/2024 (total=127)



**Only 2 of 21 ODs in outlying areas had bystander naloxone**

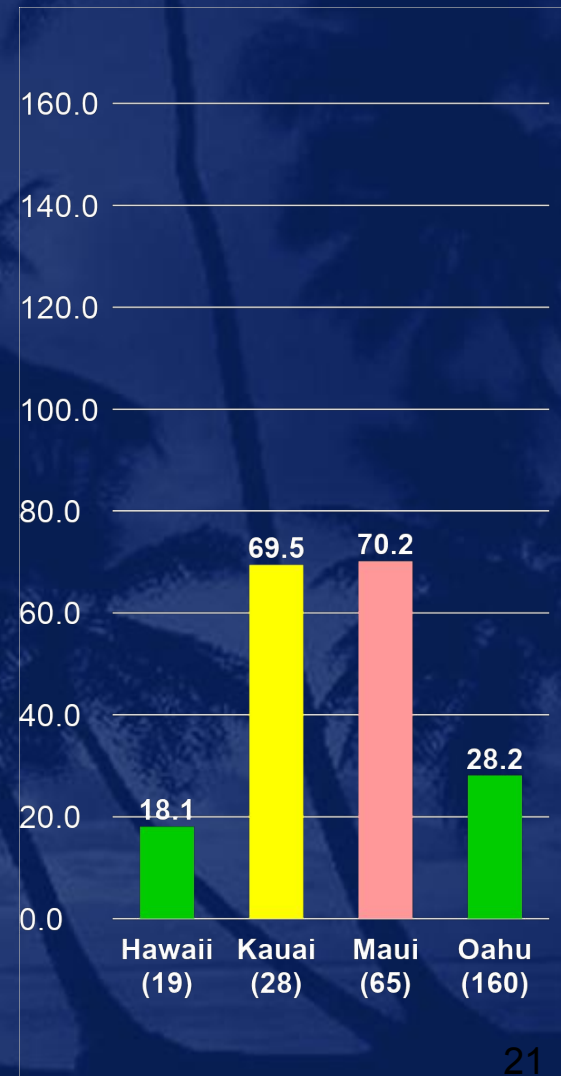
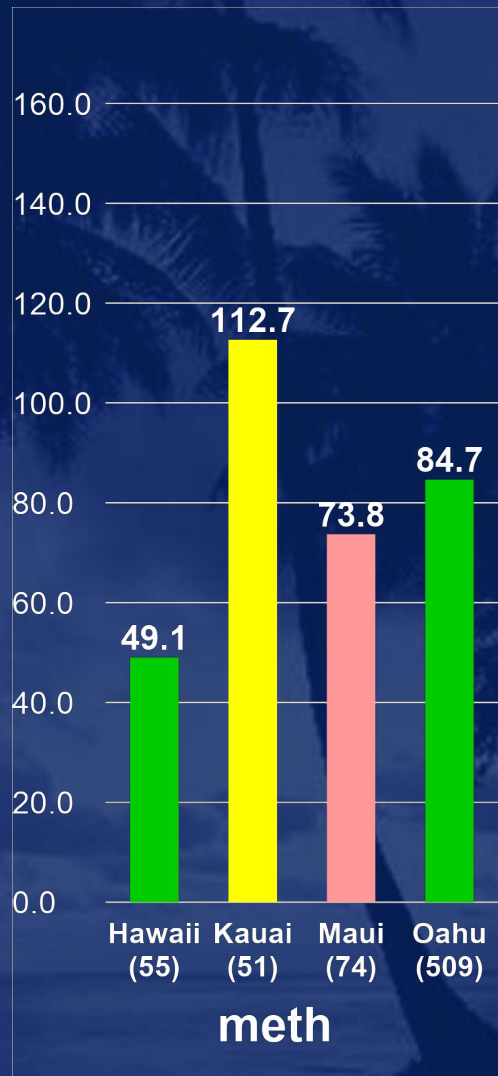
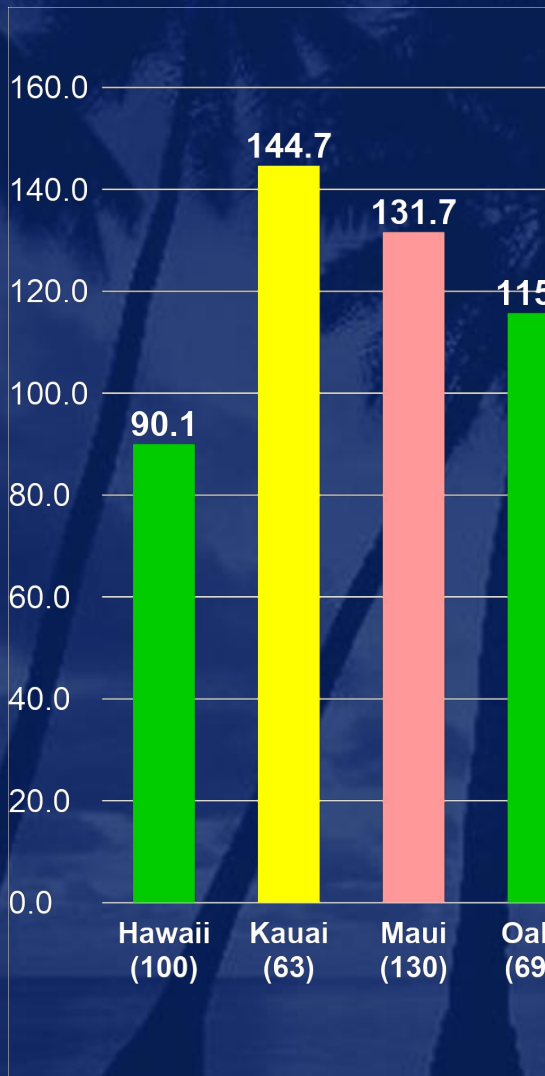
# Summary

- **Fatal drug overdoses are steadily increasing in Hawaii**
  - *Meth-related >> fentanyl-related*
    - *Fentanyl-related deaths are increasing (meth-related plateaued?)*
  - *Polysubstance: roughly equal amounts of fentanyl with and without meth*
  - *Mostly male victims, with a wide age range*
  
- **EMS encountering an increasing number of patients overdosed on fentanyl**
  - *~2-fold increase in less than 3 years*
    - *Biggest trends in Maui and Honolulu counties*
  - *Increasingly frequent bystander/first responder use of naloxone before EMS is at scene*
    - *Significant associations with better pre-hospital outcomes*



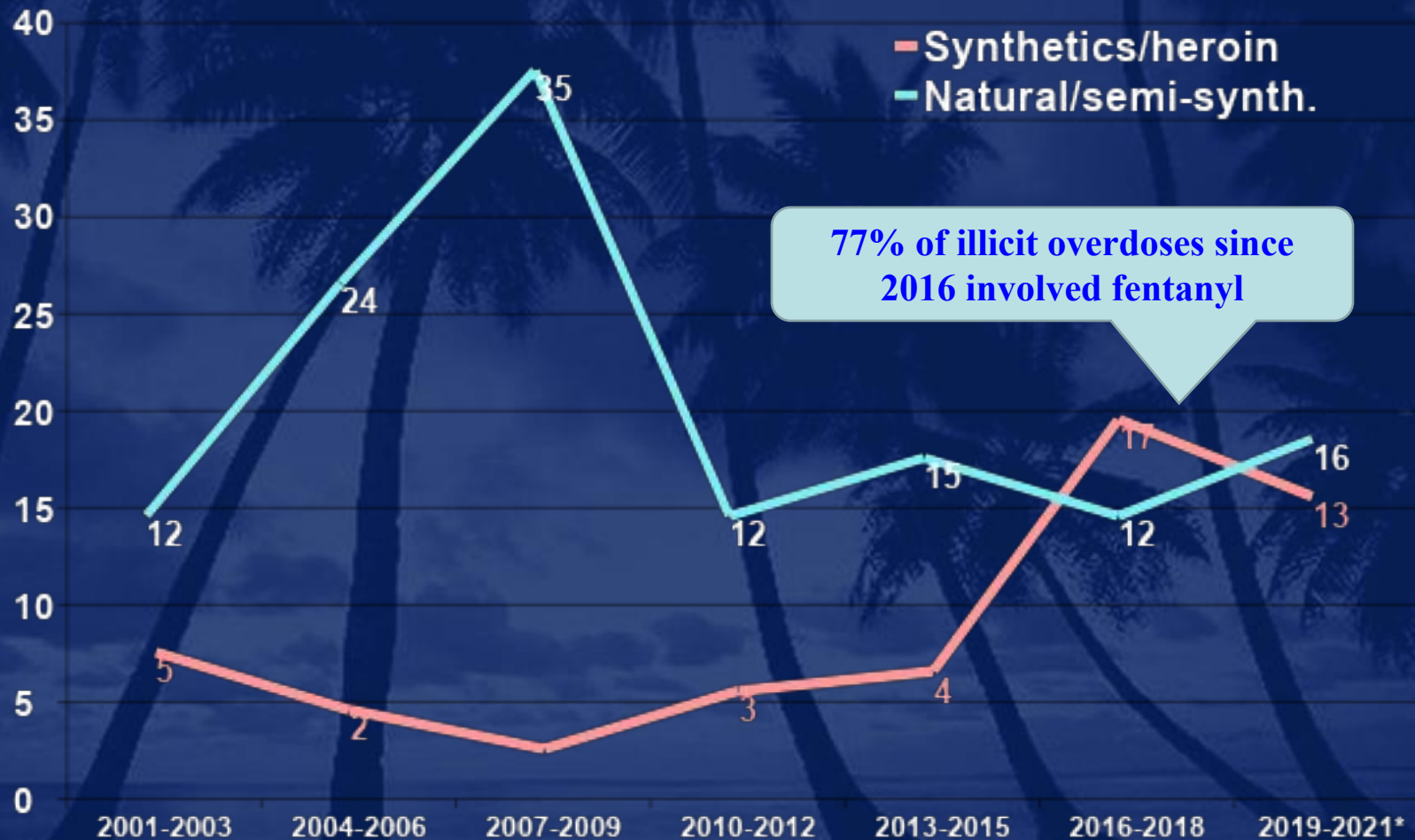
# Standardized 4-year drug overdose mortality rates\*, by substance and county, 2020-2023

(Per 100,000 residents, 20 to 64 years of age)

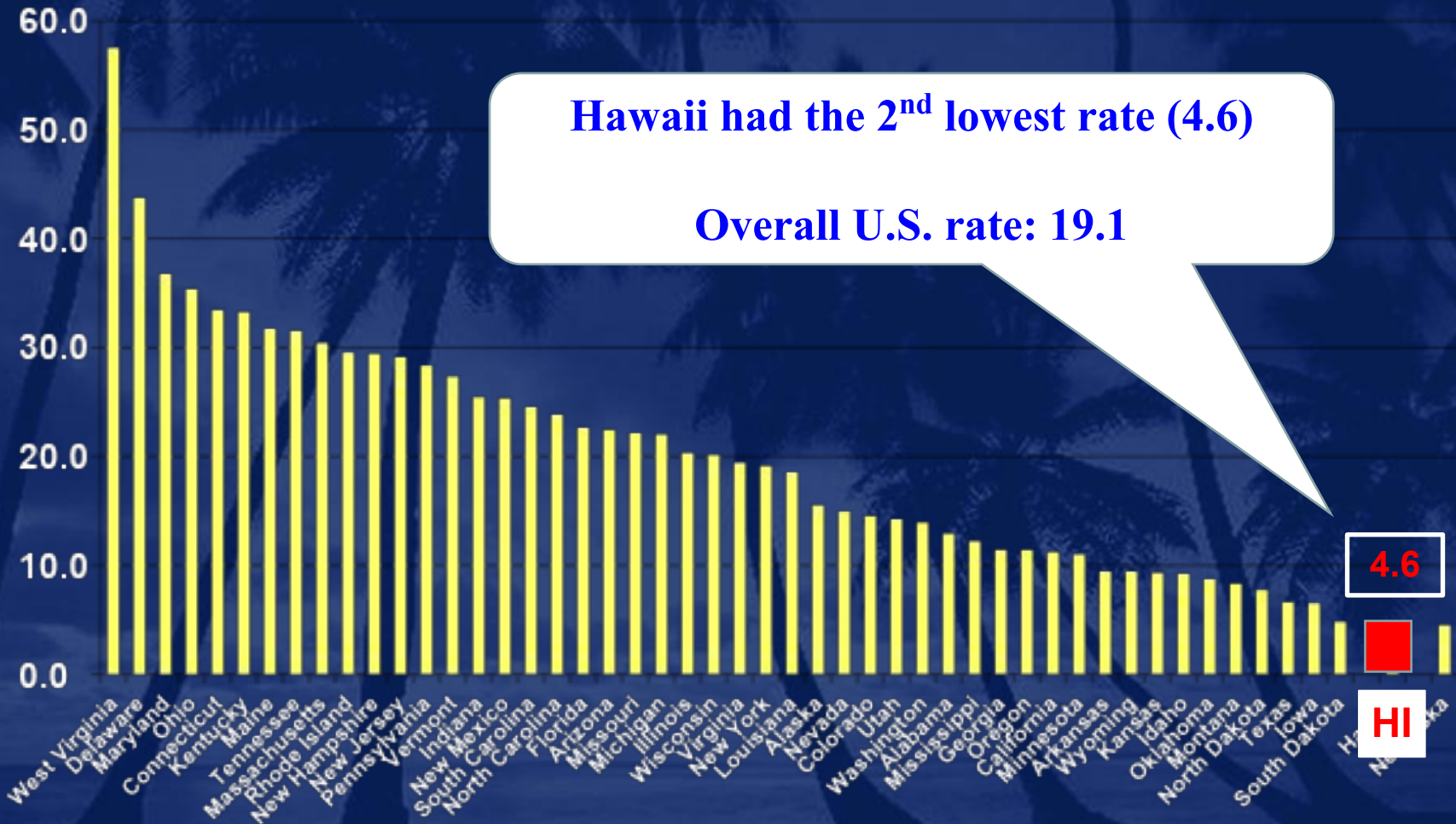


# Three-year number of fatal opioid poisonings among Hawaii County residents, by type of opioid, 2001-2021\*

(\*Data for 2021 is preliminary and most likely an under-count of deaths.)



**Average adjusted opioid poisoning fatality rates (/100,000), by state, 2018-2021\***  
(\*Data for 2021 is provisional.)



# Adjusted opioid poisoning fatality rates (/100,000), Hawaii vs. U.S., 2000-2021

