

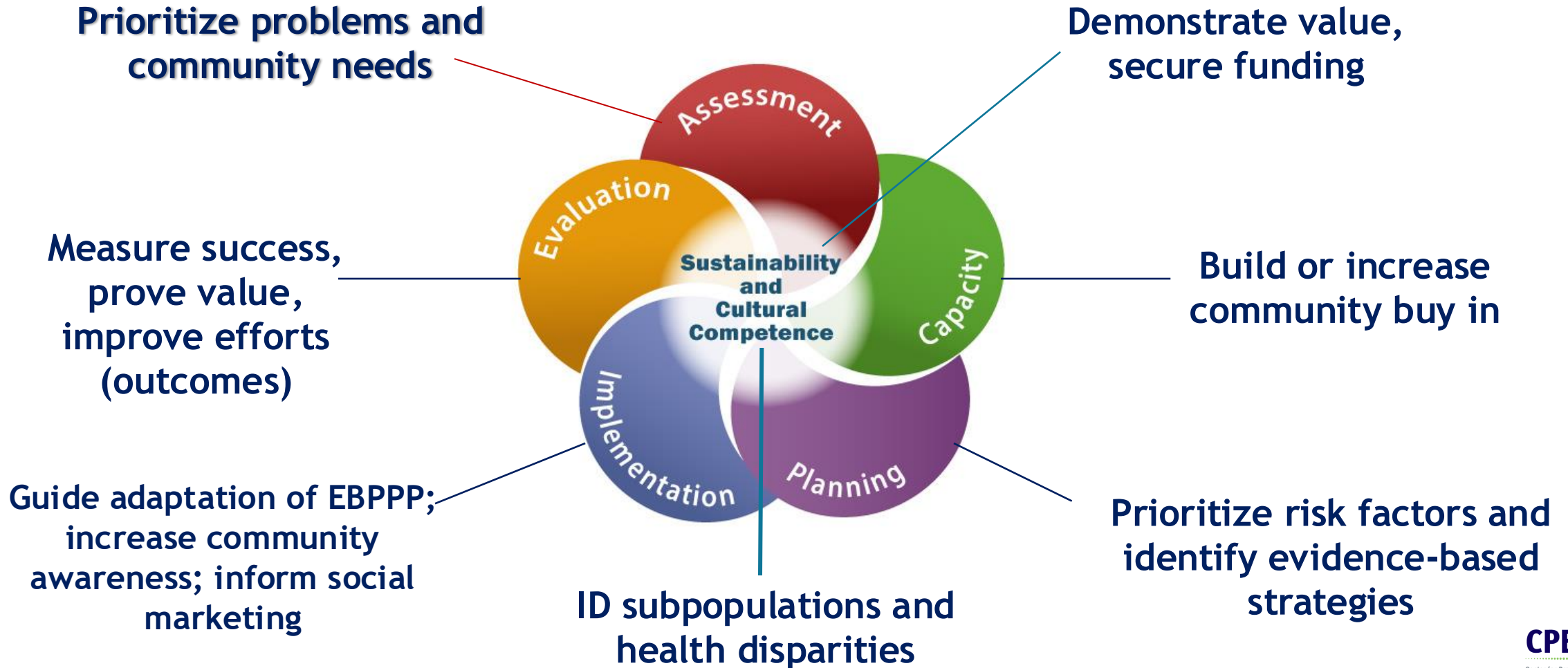
# Data, Prevention and the DMHAS Center for Prevention Evaluation and Statistics (CPES) at UConn Health

Monday, December 2, 2024

Jennifer Sussman  
Coordinator, DMHAS Center for Prevention  
Evaluation and Statistics at UConn Health

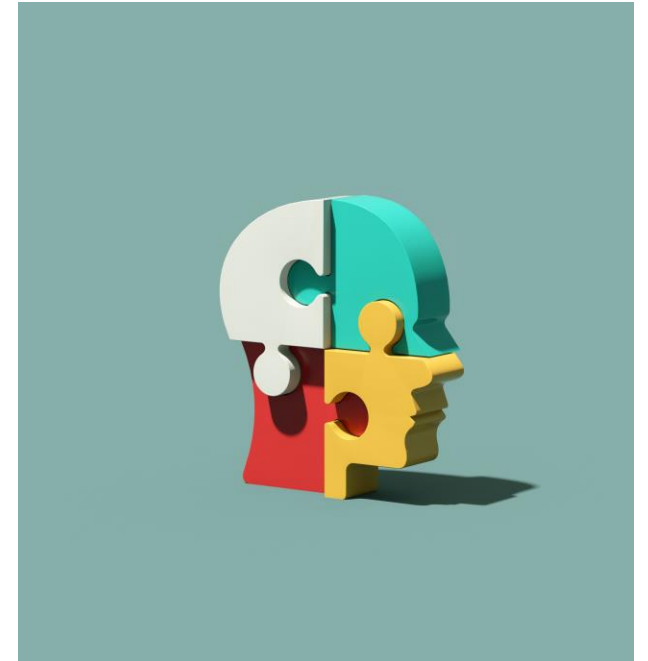


# Uses of Data: The Strategic Prevention Framework



# Prevention and Health Promotion: Data Sources and Types

- Publicly available or locally collected
- Prevalence (surveys, deaths)
- Incidence/consequence (hospital, treatment)
- Risk factors
- Social Determinants of Health (SDOH)
- Systems resources, gaps and needs



# Prevention and Health Promotion: Types of Data



## Raw Data

Individual/item-level data, presented as collected, often uncleaned and uncoded

## Summary Data

Aggregate (vs. individual cases), often sample based and sometimes weighted

## Surveillance Data

Real-time data used for monitoring and addressing public health concerns; often alert-based, hospital data, and algorithm-driven.

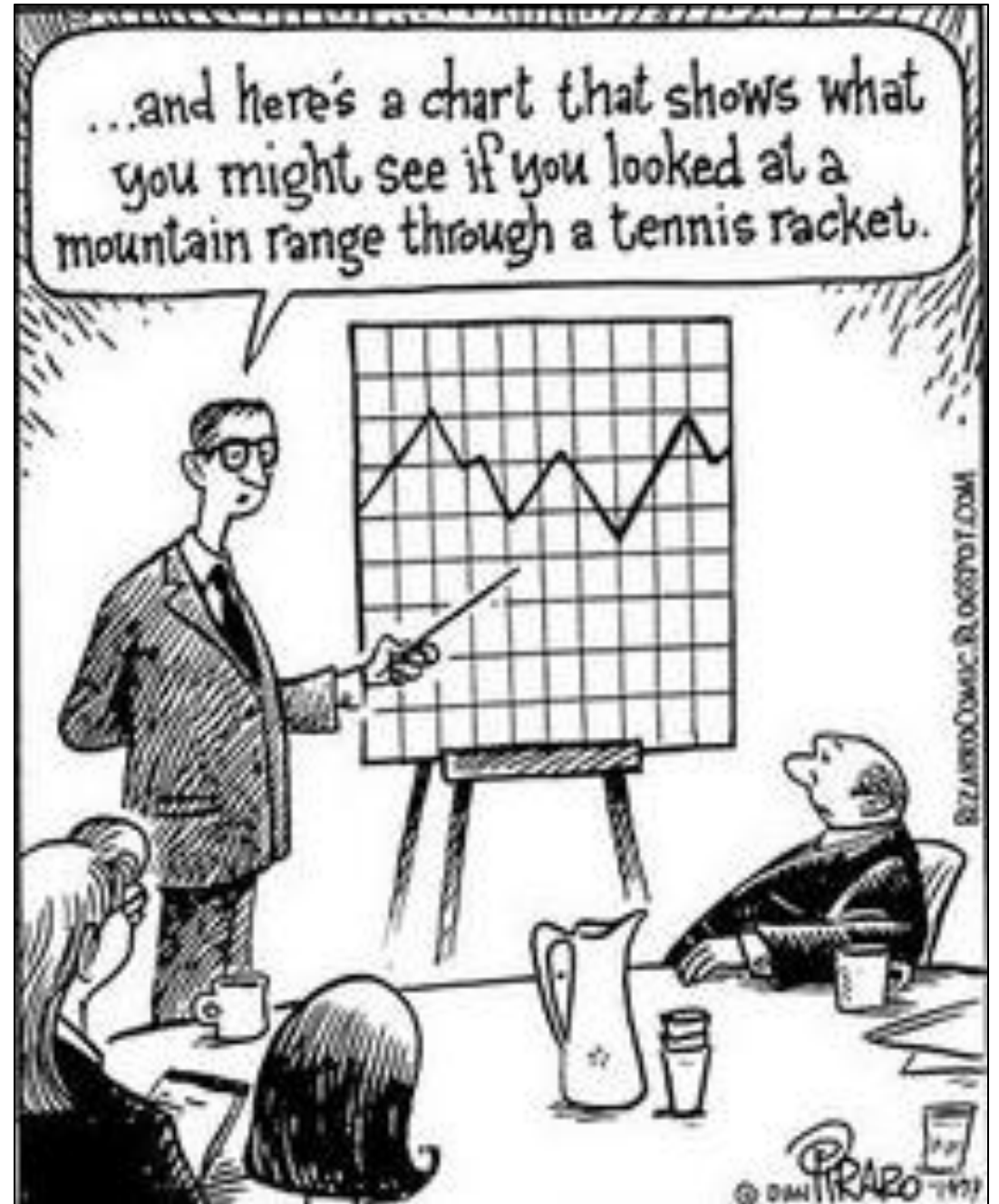
Car ID	Date Purchased	Location	Manufacture Date	Make	Model	Variant	Transmission	Colour	Economy	Has the car been leased?	
2612		UK		VW	Golf	Diesel	Auto	Black	60mpg	No	
2613		Germany		VW	Golf	Petrol	Manual	Red	40mpg	Yes	
2614		Spain		Seat	Leon	Diesel	Auto	Green	30mpg	Yes	
2615		Italy		Fiat		500	Petrol	Auto	White	60mpg	Yes
2616		France		Renault	Clio	Petrol	Auto	Blue	40mpg	Yes	
2617		UK		Vauxhall	Corsa	Petrol	Auto	White	30mpg	Yes	
2618		UK		Vauxhall	Ampera	Petrol	Auto	Black	60mpg	Yes	
2619		UK		Vauxhall	Corsa	Diesel	Auto	Red	40mpg	Yes	
2620		Germany		Audi	A2	Petrol	Auto	Red	30mpg	Yes	
2621		Germany		VW	Golf	Petrol	Manual	Red	30mpg	Yes	
2622		Germany		Audi	A1	Petrol	Manual	White	60mpg	Yes	
2623		Germany		Audi	A3	Petrol	Manual	White	40mpg	No	
2624		Germany		Audi	A3	Petrol	Manual	Blue	30mpg	No	
2625		Germany		Audi	A3	Petrol	Manual	Green	60mpg	No	
2626		Germany		VW	A7	Petrol	Manual	Blue	40mpg	No	
2627		Germany		VW	Q7	Diesel	Manual	Black	30mpg	No	
2628		Germany		VW	Q5	Diesel	Manual	White	30mpg	No	
2629		Germany		VW	Polo	Petrol	Auto	White	60mpg	No	
2630		Germany		Audi	A5	Petrol	Auto	White	40mpg	No	
2631		UK		Audi	A8	Diesel	Auto	White	30mpg	Yes	
2632		UK		VW	Passat	Petrol	Auto	Red	60mpg	Yes	
2633		UK		Vauxhall	Vectra	Petrol	Manual	Blue	40mpg	Yes	
2634		UK		Vauxhall	Astra	Diesel	Auto	Black	30mpg	Yes	



Nationally Notifiable Infectious Diseases and Conditions, United States: Weekly Tables  
(Weekly data are available from Week 01, 1996 through Week 31, 2023)  
See Notice to Data Users

Prev	Tables available for Week 31, 2023	Change Year/Week
	Weekly reported cases of notifiable diseases, by geography - United States and Territories	
	Anthrax	(Export Data) (PDF)
	Arboviral diseases	
	Chikungunya virus disease	(Export Data) (PDF)
	Eastern equine encephalitis virus disease	(Export Data) (PDF)
	Jamestown Canyon virus disease	(Export Data) (PDF)
	La Crosse virus disease	(Export Data) (PDF)
	Powassan virus disease	(Export Data) (PDF)
	St. Louis encephalitis virus disease	(Export Data) (PDF)
	West Nile virus disease	(Export Data) (PDF)
	Western equine encephalitis virus disease	(Export Data) (PDF)
	Babesiosis	
	Botulism	
	Foodborne	(Export Data) (PDF)
	Infant	(Export Data) (PDF)
	Other (wound & unspecified)	(Export Data) (PDF)
	Brucellosis	(Export Data) (PDF)
	Campylobacteriosis	(Export Data) (PDF)
	Candida auris	

**Interpretation is  
necessary  
to make  
sense of data**





# The DMHAS Center for Prevention Evaluation and Statistics (CPES) at UConn Health

A DMHAS funded Resource Link, coordinated and staffed by UConn Health to:

- **Identify, collect, analyze, interpret and disseminate data** relevant to substance use prevention and mental health promotion;
- **Track behavioral health indicators;**
- **Develop and maintain an interactive data portal** for use by DMHAS, its partners, and stakeholders;
- **Share findings** via data-driven products, reports, epidemiological profiles, and presentations;
- **Provide research and statistical expertise and support;**
- **Provide training, capacity building, and technical assistance** on evaluation and use of data.



# Meet the team



## Megan O'Grady

### Director

- Assistant Professor, DPHS
- PhD Social Psychology
- Health services researcher



# Meet the team



## Jennifer Sussman

### Coordinator

- Research Associate, DPHS
- Master of Fine Arts (Writing)
- BA Sociology
- Data capacity building, management





# Meet the team



## Marsha Murray

### Management Team

Research Associate, DPHS

- MS, Research, Statistics and Measurement
- Evaluation, data product development, branding, and management processes



# Meet the team



## Shayna Cunningham

### Associated Faculty

- Assistant Professor, DPHS
- PhD Public Health
- Community-based research

# Meet the team



## Mayte Restrepo Ruiz

### Associated Faculty

- Assistant Professor, DPHS
- PhD Public Health
- Masters in International Studies
- Women's rights, trauma/ACES research

# Meet the team

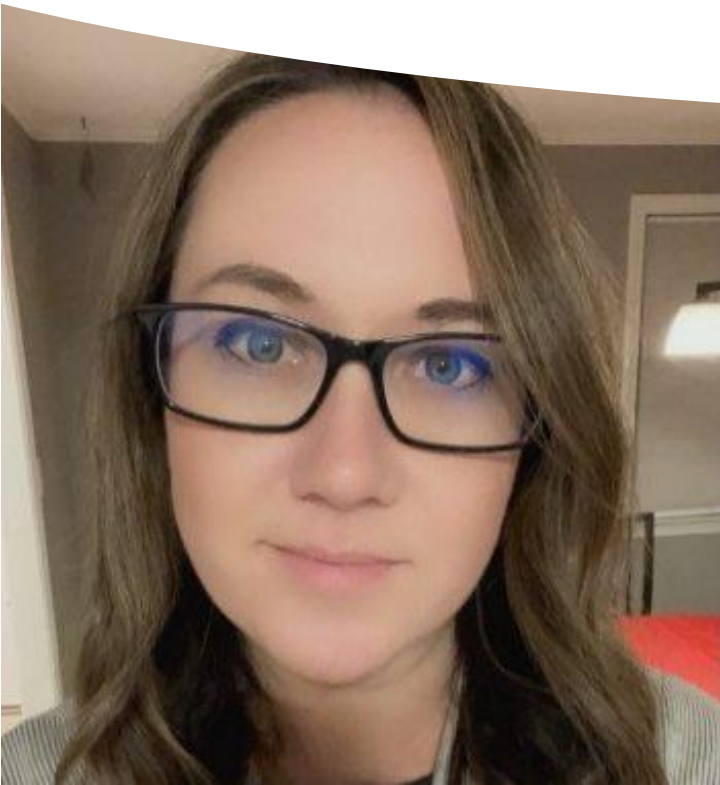


## Janice Vendetti

### Data Analyst

- Master of Public Health (MPH)
- BA Psychology
- Health services researcher (SU, MH)

# Meet the team



## **Alison Wisner**

### **Clinical Research Assistant**

- Master of Social Work (MSW)
- BA Sociology
- Substance use prevention and recovery



# Meet the team



## Alversia Wade

### Clinical Research Assistant

- Master of Public Health (MPH)
- BA Psychology
- Minority/Community Health Rese

# Meet the team



## **Christine Guerette**

### **Clinical Research Assistant**

- Masters in Biostatistics
- BA in Mathematics and Psychology
- Data analysis, interpretation, statistical software use

# Meet the team



## **Sydney Tabor**

### **Clinical Research Assistant**

- MPH, Boston University
- BS Biology and Health Sciences
- Outreach, data collection, evaluation



## Meet the team



### **Adekemi (Kemi) Suleiman**

#### **Graduate Assistant**

- PhD Student, Public Health
- Master of Public Health (MPH)
- Bachelor of Medicine, Bachelor of Surgery (MBBS)
- Evaluation support



# Meet the team



## Yang Liu

### Graduate Assistant

- PhD Student, Public Health
- Master in Public Health (MPH)
- BS, Allied Health
- Mental health, data support

# CPES Core Functions



Data Curation

Evaluation

Capacity Building

# Data Curation



SEOW Prevention Data Portal



Social Media



Data Products

- Epi profiles
- Info briefs
- Slide decks
- Presentations
- Dashboards



## Data Core Team



Analysis and Visualization Team



Product Development Team

# Evaluation



Develop plans and instruments to assess progress, outcomes, and impact of DMHAS-funded prevention initiatives



Collect and compile data



Share results and recommendations

## Project Evaluation Teams



- Partnerships for Success (PFS)
- Preventing Drug Overdose (PDO)
- State Opioid Response (SOR 2, 3, 4)

# Capacity Building

Increase the capacity of prevention partners to utilize data for needs assessment, strategic planning and evaluation through:



Guidance documents, templates, worksheets



Trainings, presentations, workshops



TA consultation



Instrument development



## Implementation Support Team



- Regional Priority Report process
- PFS, PCC initiatives
- Local Evaluation Workgroup

# Connecticut SEOW Prevention Data Portal

Bringing together Connecticut's epidemiological data in support of a comprehensive public health approach to substance abuse prevention and health promotion.



# Portal Primary Objectives

**Centralize state prevention data** related to substance use and mental health to ensure consistency and reliability.

**Equip prevention professionals and collaborators** with accurate and comprehensive data to guide the development of regional planning process, evidence-based programs, practices, and policies.

**Facilitate informed decision-making and strategic planning** for positive health promotion initiatives with the utilization of the portal's products.

**Enhance the ability to monitor trends, identify emerging issues, and measure the impact** of prevention efforts across Connecticut through time.



# Indicators

Connecticut SEOW Prevention Data Portal

A searchable library matrix with **over 265 indicators** across **28 sources**, and multiple domains

- National, state and town-level data
- Searchable by priority problem/substance, data level, year, source, domain, and key words

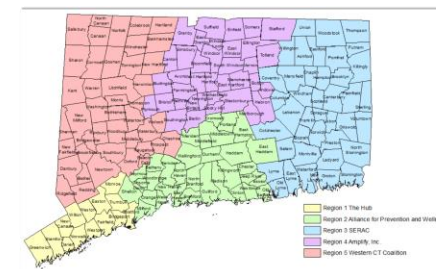
Indicator	Data Format	Source	Geography Level	Latest Year Available	Dimensions	Age/Grade Available	Priority Issue	Keywords
2-1-1 Requests	Dashboard	2-1-1 Courts, Holder Health Communication Research Laboratory at Washington University	Zip Code	2021			substance misuse, mental health, problem gambling	service utilization
4-year cohort high school graduation rate	Data Repository, CTDData	EDSight Portal, Holder, Connecticut State Department of Education (CSDE)	School District, State	2019-2020	Grade, Race/Ethnicity	Grade 9-12	education	risk factor

<https://preventionportal.ctdata.org/indicators.html>

# Data Stories

Connecticut SEOW Prevention Data Portal

Interactive data visualizations, using cross-sector data, that describe behavioral health characteristics of the five DMHAS regions.



# Epidemiological Profiles

Connecticut SEOW Prevention Data Portal

- Epidemiological profile fact sheets are data products of the SEOW
- Utilize epidemiological data pertaining to prevalence, risk factors, consequences, impact, and populations at risk for existing and emerging issues.
- Updated biennially with the most up to date data available.

<https://preventionportal.ctdata.org/profiles.html>

## 2022 Connecticut Epidemiological Profile: Alcohol



A product of the State Epidemiological Outcomes Workgroup (SEOW)

### Prevalence

Alcohol continues to be the most commonly used substance nationally and in Connecticut. Alcohol use prevalence in CT has in fact remained higher than the nation since 2010, and CT has been among the 10 states with highest prevalence most/all of these years.<sup>1</sup>

Overall, NSDUH shows that the prevalence of alcohol use in Connecticut among the general population has remained relatively stable; the prevalence of past 30 day alcohol use in individuals 12 and older was 59.32% in 2008-2009 and 60.03% in 2018-2019. The prevalence of heavy episodic drinking in Connecticut also remained relatively stable since 2010, and it has remained consistently higher than the national average. Adults in Connecticut ages 26 and older have the highest reported prevalence of past 30 day alcohol use (61.4%).<sup>2</sup> Young adults 18-25 have the highest prevalence of binge alcohol use (29.3%).<sup>2</sup>

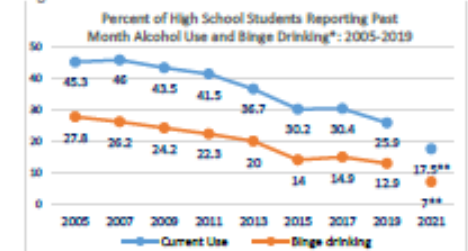
Even though the NSDUH shows that alcohol use in the general population of CT has remained consistent, underage drinking in Connecticut among 12 to 17-year-olds decreased significantly, from 18.56% in 2008-2009 to 11.24% in 2018-2019.

The 2021 Connecticut School Health Survey (CSHS) also reported lower prevalence of past 30 day alcohol use in Connecticut's high school students compared to their national counterparts (18% vs 23%).<sup>3</sup>

The Connecticut School Health Survey (CSHS), CT's Youth Risk Behavior Survey, also shows that the reported prevalence of past month alcohol use and binge drinking among Connecticut high school students has steadily declined since 2005 (Figure 1).

In the 2021 CSHS, 17.5% of high school students reported using alcohol in the past month. Of these students, 7.0% of them reported binge drinking<sup>4</sup> in the past month.<sup>3</sup> However, caution should be taken when comparing the 2021 data to that of previous years because the 2021 CSHS was collected during a different semester than in previous years (Fall vs Spring).

Figure 1.



\* The definition for binge drinking was 5 or more drinks in a row, until 2017 when it became 5 or more for males or 4 or more for females  
\*\*Caution should be taken when comparing 2021 data to that of previous years due to differences in methodology in survey collection.

The 2021 CSHS also shows that high school females were more likely than males to report past month drinking (29.2% and 14.2%, respectively) and binge drinking (8.5% vs 3.6%). Non-Hispanic whites had the highest prevalence of past month drinking (22.4%) and binge drinking (10.3%). Hispanic and Black students' reported prevalence of past month (13.7% and 12.1% respectively) and binge drinking (4.0% and 3.3%, respectively) were similar between the two groups.<sup>3</sup>

### At-Risk Populations

Among individuals 12 years and older, those reporting alcohol use disorder (AUD) in the past year was relatively stable from 2016 to 2019, at about 6%. However, the 2021 NSDUH data indicates an increase in reported AUD for this age group (10.3%).<sup>2</sup>

<sup>1</sup> NSDUH 2018-2019  
<sup>2</sup> NSDUH 2021

<sup>3</sup> CSHS 2021

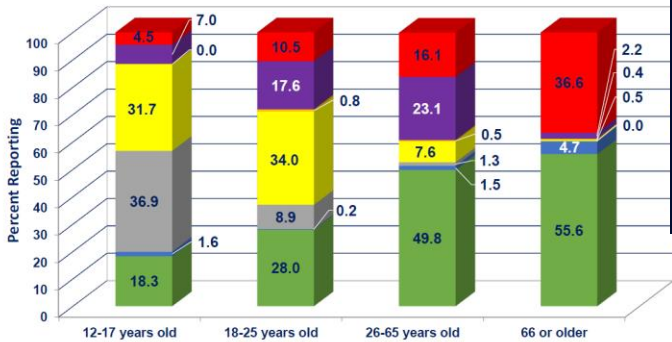
# Products

Connecticut SEOW Prevention Data Portal

## Annotated data visualizations

- Graphs
- Charts
- Maps

Problem Substances of Greatest Concern for Age Groups, According to Key Informants: Connecticut CRS, 2022



**Motivations for Substance Use**

Youth are using substances because they are influenced by social norms, use them as a coping mechanism, and are motivated by additional external and internal factors.

- Social Norms:** Social pressure, To "look cool", Their role models use substances, To make socializing easier.
- Coping Mechanism:** Coping with mental illness, Stress relief from academia/school, Family issues.
- External Factors:** Substance use promotion on social media, Family norms, Misinformation about substance use.
- Internal Factors:** Curiosity about substances, Experimentation, Boredom.

**COVID-19 Impacts on Substance Use**

Youth cited different reasons for substance use and its relation to the Impacts of COVID-19:

- Easier access to parents' substances
- Boredom due to Lockdown
- Easier socializing with friends post-lockdown

*"I guess I feel like a lot of the motivators have stayed the same except for [alcohol at parties] helps you talk to other people and like open up more, which I think may have been difficult during COVID 'cause we weren't talking to each other."*

**Mental Health Issues & Stressors**

Anxiety, stress and depression are the biggest mental health-related issues among youth. Stressors contributing to these issues include...

- Standards set by social media, society, friends, and parents.
- School/academic performance and the transition from middle school, high school, and high school to college.
- Aptitude, or the ability to acquire certain skills and knowledge and living up to a "standard".
- The future in terms of career decisions, college preparation, or uncertainty about the future.

**COVID-19 Impacts on Mental Health**

The COVID-19 pandemic made these stressors worse and added others, such as:

- Transitioning between in-person and online learning;
- Social isolation;
- Loss of social skills.

Some youth reported improvements in mental health due to spending more time with family during the pandemic and improved social interaction upon returning to in-person learning.

*"I feel more anxiety and depression... Just 'cause I feel like nowadays a lot of people feel they have to live up to a standard. Whether that standard is from their parents or on the internet, they just feel like there's a standard that they need to live up to."*

## Data-driven products:

- Presentations
- Info Briefs
- Reports
- Guidance documents

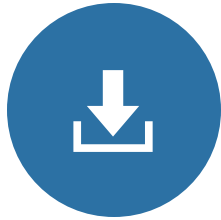
Regionalization Results: Substance Use

Region	Region 1	Region 2	Region 3	Region 4	Region 5
Region 1	ENDS	Heroin/ Fentanyl	Heroin/ Fentanyl	Heroin/ Fentanyl	Alcohol
Region 2	Heroin/ Fentanyl	Prescription Drug Misuse	Alcohol	Alcohol	ENDS
Region 3	Alcohol	ENDS	Prescription Drug Misuse	ENDS	Heroin/Fentanyl
Region 4	Tobacco	Marijuana	ENDS	Marijuana	Marijuana
Region 5	Marijuana	Alcohol	Marijuana	Prescription Drug Misuse	Prescription Drug Misuse
Region 6	Prescription Drug Misuse	Cocaine	Cocaine	Cocaine	Tobacco
Region 7	Cocaine	Tobacco	Tobacco	Tobacco	Cocaine

# Proposed Portal Improvements



SIMPLIFIED  
LANDING  
PAGE



STEPWISE  
DRILL DOWN  
TO  
DOWNLOAD-  
ABLE DATA BY  
KEY ISSUE



ADDITION OF  
INFOGRAPHIC  
INFO BRIEFS BY  
SUBSTANCE/  
ISSUE

## Portal Drilldown Structure

Topic Tile (Cannabis)

Summary Infographic  
with link to epi profile

Selected visualized  
data elements

Downloadable data  
elements



## Featured Products

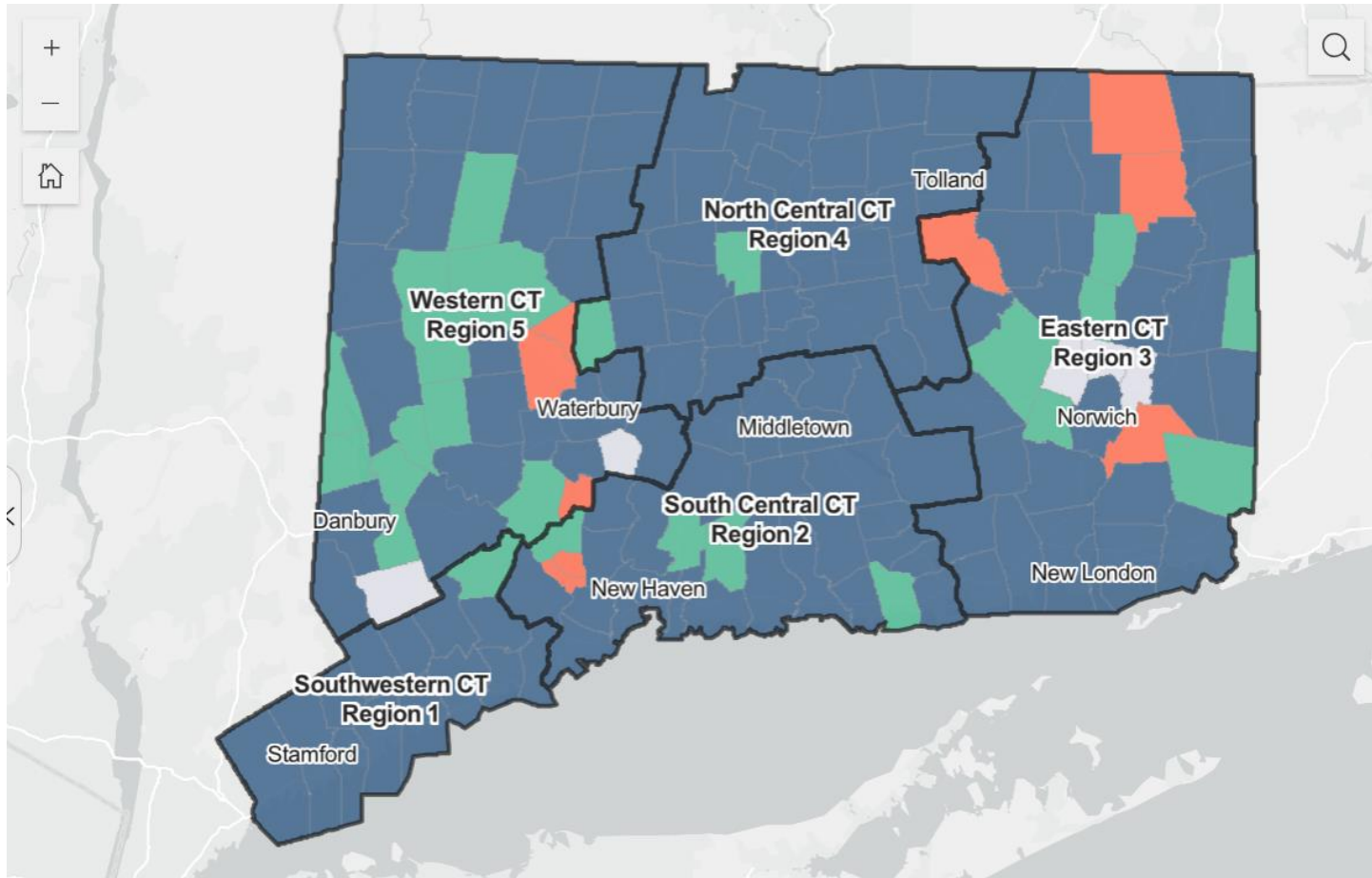
- ❖ Epidemiological profiles
- ❖ Information Briefs
- ❖ DMHAS Regional Data Stories
- ❖ Reports
- ❖ Presentations
- ❖ Data library/Indicator Matrix



## Enhanced Epidemiological Profiles

- ❖ Data visualizations
- ❖ Headlines to guide the reader
- ❖ Comparative regional data
- ❖ Optional region-specific sections for priority report and local data
- ❖ Infographic summarizing key points

# Connecticut Substance Use Primary Prevention: An Interactive Map



**Use map filters to explore:**

- **Funding type**
- **Prevention strategies**
- **Overlay community type**

**Hover over towns to see town-level contact, funding, and strategy information**



What  
can  
we  
do  
for  
you?



**ANSWER  
QUESTIONS**



**CONDUCT  
TRAINING**



**DIRECT YOU  
TO DATA**



**PROVIDE  
GUIDANCE**



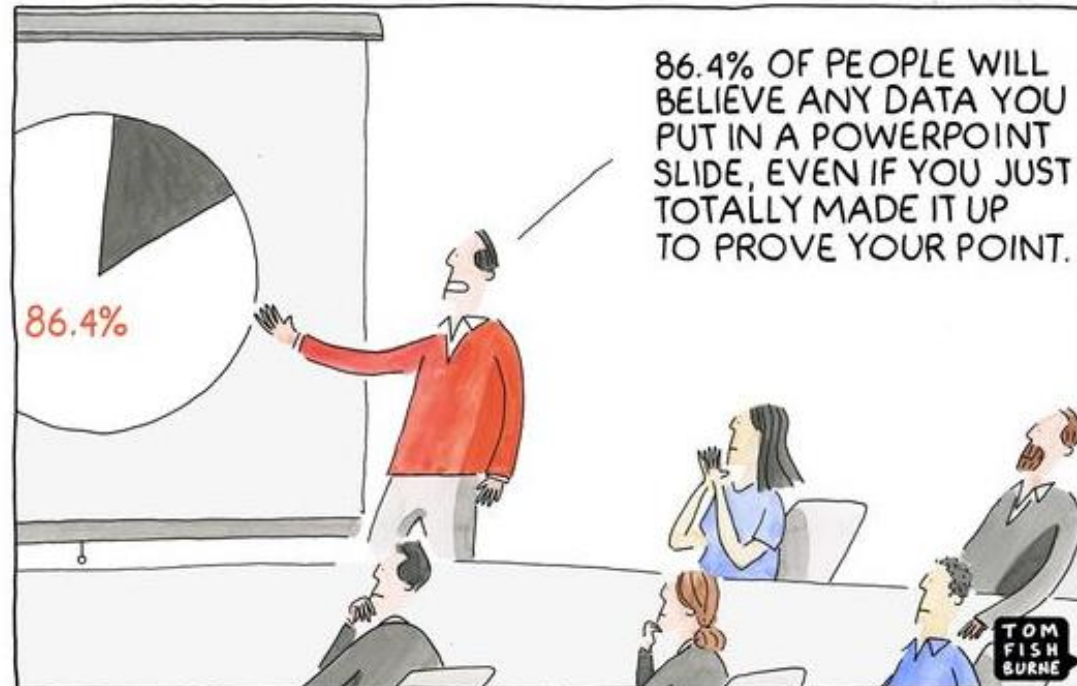
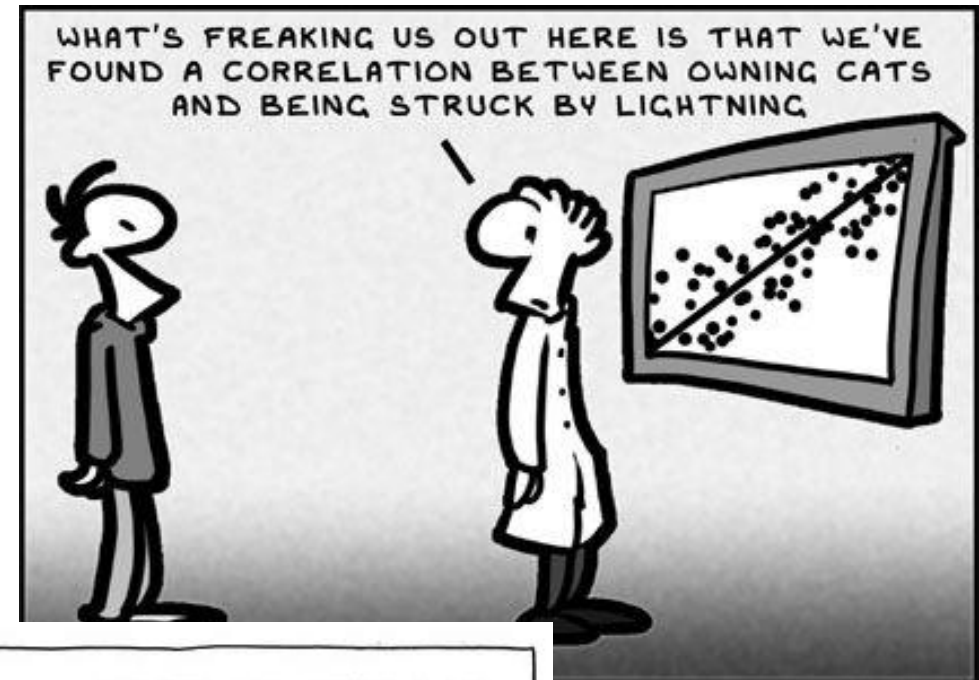
**SHARE INFORMATION,  
TOOLS, AND PRODUCTS**





Excellent health statistics - smokers are less likely to die of age related illnesses.'

Data isn't the story.  
You use data to help tell the story.  
-Brian Fanzo



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# Be in touch!



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