Colorado Epidemiological Profiles

Culture of Data
May 2019

Introduction

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Session Overview

Process for developing Colorado Epidemiological Profiles (Epi Profiles)
- Data
- Design
- Dissemination

Using Epi Profiles at the local level and implications for equity

Up the equity – takeaways for increasing equity in your work

Session Disclaimers

We are not and do not profess to be equity experts.

The Epi Profiles were not originally intended to address issues related to equity.
An Opening for Equity

Organizationally, The Evaluation Center began a push towards learning about and incorporating practices of equitable evaluation into our work.

This mindset helped us to recognize issues related to equity that emerged throughout the process.

We embraced and welcomed conversations related to equity as they arose and took time to discuss next steps.

Sharing our story – because a project does not have to be an “equity project” for there to be considerations and opportunities related to equity.

What is equity?

**Colorado Department of Public Health & Environment:**

Equity is when everyone, regardless of who they are or where they come from has the opportunity to thrive. This requires eliminating barriers like poverty and repairing injustices in systems such as education, health, criminal justice, and transportation.

Equity is about: environmental justice, creating systems where everyone can thrive, health, transforming the built environment, as well as our institutions and systems.

**Epi Profile Implications:**

Not presenting data in a way that reinforced stigma towards individuals or populations. Removing barriers to accessing and interpreting data.
About the SEOW

The 6 Goals

1. Catalog Existing Prevention Efforts
   - What are your current prevention efforts?
   - What data sources do you use?
   - How can we help?

2. Characterize Substance Abuse Across the State

3. Identify & Address Gaps in Prevention Data
   - What is missing from your prevention data and knowledge?

4. Publish & Distribute Findings
   - Research Briefs
   - Community Profiles
   - Presentations

5. Compile Data on a Publicly Accessible Platform

6. Continue to Inform Prevention Efforts
Colorado Epidemiological Profiles

**Informed by:**
- Review of other states’ efforts to create epi profiles
- Best practices shared by Center for the Application of Prevention Technologies (National TA Provider)
- SEOW Local Public Health Needs Assessment

**Target Audience:** community members
- Not trained in data collection, analysis, and interpretation
- Doing work at the local level that could be informed by data
- Are not already accessing these data

*Folks in this room may not the intended audience of the Epi Profiles!*

Colorado Epidemiological Profiles

- **High-level** summary of relevant data
- Available to a **wide range of audiences**
- **Wide interpretability** across audiences
- **Graphic heavy, less narrative**
- Not confusing
- Short enough to be **usable/useful**
- Able to be used as **standalone** pieces or as a compendium

*Focus on Alcohol, Marijuana, and Opioid use – per funder*
Embarked on our journey....

Opportunities to consider equity emerged in every phase of the project

Data
Design
Dissemination

Data
Data Process

Identified Sources → Collected Data → Identified Variables → Sought Expert Input → Interpreted Data

SEOW support for accessible design

**PER CAPITA CONSUMPTION**  Alcohol

For Coloradans over the age of 14 in 2016, the per capita alcohol consumption was higher than the national average.

- **Colorado**: 612 oz/person/year (16.83 gallons/person/year)
- **United States**: 515 oz/person/year (14.42 gallons/person/year)
- **Bench Mark Target**: 446 oz/person/year (12.5 gallons/person/year)

What is a standard drink?

- **Beer**: 12 oz
- **Wine**: 5 oz
- **Hard Liquor**: 1.5 oz

**SEOW**

Colorado State Department of Public Health and Environment
Incorporating Demographics Section & Additional Context

POPULATIONS AT RISK FOR SUBSTANCE USE

**LGBTQ**

**THE 2016 NEEDS ASSESSMENT BY ONE COLORADO ESTIMATES APPROXIMATELY 4% LGBTQ**

Individuals that identify as lesbian, gay, bisexual, transgendered, or queer (LGBTQ) are at a much higher risk for substance misuse than heterosexual individuals.¹

According to the results of a 2015 national survey, LGBTQ adults were three times more likely than heterosexuals to have engaged in heroin use in the past year, twice as likely to have used prescription painkillers in the past year, and twice as likely to have used marijuana in the past year.²

**VETERANS**

Veterans experience high rates of trauma and stress-related disorders, suicide, and substance misuse disorders. Veterans are more likely to engage in problematic alcohol behaviors or risky prescription drug behavior.

Within the U.S. Department of Veterans Affairs health care system, approximately 13% of veterans entering their first appointment meet the criteria for Substance Use Disorder.³

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Disaggregating by Geography

**YOUTH CURRENT USE**

Two out of three high school age youth in Colorado did not consume alcohol in the past 30 days.

**PERCENTAGE OF STUDENTS WHO HAD ONE OR MORE OF THE PAST 30 DAYS:**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>15.8%</td>
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<td>15.3%</td>
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<td>15.2%</td>
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</tbody>
</table>

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**Alcohol**

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Not Disaggregating by Race/Ethnicity

Careful Language and Context

While use during pregnancy was statistically higher among younger women than those over age 24, this proportion is lower than what is found in the general population for these age groups.
Conversations Around Equity
Stayed at the Forefront

Design
Design Process

- Partnered with Graphic Designer
- Iterative Visualization Editing
- Sought External Input

Accessibility and Interpretability

- Simplicity
- Context
External Review

Utilizing Statements to Increase Interpretability

**YOUTH CURRENT USE**

**Alcohol**

Two out of three high school age youth in Colorado did not consume alcohol in the past 30 days.

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5/16/19
Use of Icons Instead of Photos

From 2014 to 2016 in Colorado, alcohol use during the last 3 months of pregnancy had a significant increase.

Use of Glossary to Increase Interpretability

GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Aggregate</td>
<td>A mathematical computation using a set of values rather than a single value.</td>
</tr>
<tr>
<td>Average</td>
<td>A calculated central value of a set of numbers.</td>
</tr>
<tr>
<td>Health Statistics Region</td>
<td>A geographic grouping based on demographics, profiles, and statistical criteria. Colorado has 21 Health Statistics Regions which correspond with existing county boundaries.</td>
</tr>
<tr>
<td>Opioids</td>
<td>Drugs naturally derived from the flowering opium poppy plant, which include heroin, meperidine, and oxycodone.</td>
</tr>
<tr>
<td>Opium</td>
<td>Synthetic or semi-synthetic drugs that act like opiates, and include heroin, oxycodone (OxyContin), and hydrocodone (Victodrin). Opioids are commonly used as analgesics or for both naturally-derived opiates and synthetic opioids.</td>
</tr>
<tr>
<td>Per capita</td>
<td>Per person.</td>
</tr>
<tr>
<td>Prevalence</td>
<td>The proportion of a population who have specific characteristics in a given time period. Prevalence may be reported as a percentage (e.g., 1 in 1000) or as the number of cases per 10,000 or 100,000 people.</td>
</tr>
<tr>
<td>Proportion</td>
<td>Two ratios that have been set equal to each other.</td>
</tr>
<tr>
<td>Quartile</td>
<td>A group that contains 25% of the data set.</td>
</tr>
<tr>
<td>Ranking</td>
<td>Relative position.</td>
</tr>
<tr>
<td>Ratio</td>
<td>The rate between two related quantities.</td>
</tr>
<tr>
<td>Risk factors</td>
<td>Characteristics within the individual or condition that increase the likelihood of the outcome occurring.</td>
</tr>
<tr>
<td>Significance</td>
<td>The probability is less than 0.5 that the difference or relationship happened by chance.</td>
</tr>
<tr>
<td>Protective factors</td>
<td>Characteristics within the individual or condition in the family, school, or community that help someone cope successfully with the challenges.</td>
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</tbody>
</table>
Design Considerations for Audiences with Visual Impairments

**ADULT BINGE DRINKING**

**Alcohol**

Binge drinking occurs the most in Denver County (HSR 20).¹

Denver county's lead in binge drinking is followed by Eagle, Garfield, Grand, Pitkin, Summit, Weld and Jefferson counties.

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**Dissemination**
Easy to Share Format

- Posted to the SEOW website
- Shared with relevant listservs, community organizations, networks
- Available as PDFs
- No special software required to open or view
- Less technical skills required to open, view, interpret
- Able to be printed and shared physically

Lots of Room for Improvement!

- Make profiles available in other languages
- Make profiles available through multiple formats
- Pilot profiles with additional audiences
- Share profiles more intentionally with relevant audiences
Acknowledging Limitations

Activity: Icons
Activity: Icon Review

Rates of Alcohol Relapse

Participatory Design
Using Epi Profiles in Communities

Epi Profiles as Tools for Equity

The Epi profiles are one of many quantitative tools:
- Local public health reports
- State demographer data
- Colorado Health Access Survey
- And many more...
Epi Profiles as Tools for Equity

Qualitative tools should be considered as well:

- Policies
- Social/Cultural norms
- Systemic factors/system interactions

There is inherent power in the ability to be able to create, interpret, and make sense of data

- Acknowledge power
- Be aware of the dynamic
- Support the power of others
Activity: Using Profiles and Equity in Your Work

How could your organization, stakeholders, or community utilize the Colorado Epidemiological Profiles?

How does or can your work intersect with issues of equity or power?

What data do you use that have equitable implications or considerations?

What steps do you or could you take to “up the equity” and address issues of power with your data collection, analysis, or dissemination?
Up the Equity in Your Work

Projects do not have to be “equity projects” for there to be implications and opportunities related to equity.

You do not have to be an “equity expert” to begin to address equity in your work.

Work with experts and community members.

It is hard to address equity perfectly or completely, but that should not be an excuse to avoid addressing it at all.

Create a space where these conversations can happen.
Up the Equity

Resources:

• Sweet Tools to Advance Equity  https://www.colorado.gov/pacific/cdphe/suite-of-tools
  (This includes a paper on Framing Data to Advance Equity)

• Race Equity and Inclusion Action Guide  https://www.aecf.org/resources/race-equity-and-
  inclusion-action-guide/

• How Do We Know It When We See It? by Sally Leiderman.  
  we-know-it-when-we-see-it/

• Heather Krause’s blog-  https://idatassist.com/datablog/

• Equitable Evaluation Initiative:  https://www.equitableeval.org/

Session Review

Process for developing Colorado Epidemiological Profiles (Epi Profiles)

Data  

Design  

Dissemination  

Using Epi Profiles at the local level and implications for equity

Up the equity – takeaways for increasing equity in your work
Access Epi Profiles

SEOW Website:  

Or

Search for “Colorado SEOW” – profiles are on main page

Questions?

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