Root Cause Analysis to Help Identify Social Determinants of Substance Use Disorders
What interested you in attending this workshop?
Workshop Goal

This workshop serves as a fundamental introduction to conducting the root cause analysis process, where participants will be able use it to identify the root causes of substance use disorders in Colorado as well as priority areas to address to create sustainable community change.
By the end of this workshop, you will be able to:

- Describe the **process** of conducting a root cause analysis
- Identify **root causes of substance use disorders** in Colorado
- Pinpoint **next steps** to begin addressing identified priorities
Introductions and overview
Revisiting Social Determinants of Health
Root Cause Analysis process
Report Back & Discuss
Prioritization of Root Causes
Next Steps
There are two main clusters of root causes of health inequality

• The intrapersonal, interpersonal, institutional, and systemic mechanisms that organize the distribution of power and resources differentially across lines of race, gender, class, sexual orientation, gender expression, and other dimensions of individual and group identity

• The unequal allocation of power and resources—including goods, services, and societal attention—which manifest in unequal social, economic, and environmental conditions, also called the social determinants of health.
“the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics.”
# Social Determinants of Health

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**Health Outcomes**

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations
Health begins where we live, learn, work, and play

Individual
- Behaviors
- Personal history (e.g., history of abuse, substance use, etc.)
- Biological

Interpersonal
- Relationships (parents, family, intimate partners, peers)

Community
- School
- Workplace
- Neighborhood

Societal
- Systems
- Societal factors (health, economic, educational, and social policies)
Social Determinants of Health

Activity
Determinants of Health Exercise

- **Social/Societal Characteristics**: Discrimination, income, gender
- **Genes & Biology**: Sex, age
- **Health Behaviors**: Substance use, sex without condoms, smoking
- **Health Services**: Access, quality, insurance status
- **Total Ecology**: Physical environment (where a person lives)

Adapted from CDC. http://www.cdc.gov/socialdeterminants/FAQ.html
Data Review
Colorado ranks in the top 20 percent nationally for rates of using cocaine, marijuana, alcohol and opioids.

Colorado is the only state in the heaviest use category for all four substances by residents 12 and older.

Alcohol is the substance most often used by Colorado youth (59% have tried alcohol according to the Healthy Kids Colorado 2015 survey).

Marijuana comes in second at 38 percent.
Substances of Use in CO

- 41,268 treatment admissions for substance use in 2017; that is 3,130 more than 2016
- While alcohol has the highest number of treatment admissions, over 40% of treatment admissions were for Heroin and Methamphetamine in 2017
- Prescription Opioid treatment rates have remained stable, but Heroin treatment admissions have increased by 132% since 2013
Nearly 9 out of 10 pregnancies among women with opioid use disorder (OUD) are unplanned.

Only about 50% of women in treatment for OUD and other substance use disorders (including alcohol) are using contraception. This compares with about 80% of women in the general population who use contraception.

Withdrawal can increase the patient’s risk for a return to substance use, preterm labor and birth, and miscarriages.
In 2016, there were an estimated 41,200 new cases of acute HCV in the U.S. Among case reports that contain information about IDU, 68.6 percent indicated use of injection drugs.

There were approximately 35 new cases of acute HCV (0.6 per 100,000 persons) reported in Colorado in 2016.

**State Prevalence:** In Colorado, there are an estimated 36,800 persons living with Hepatitis C (2013-2016 annual average), a rate of 900 cases per 100,000 persons.

Source: [https://www.drugabuse.gov/node/pdf/21949/colorado-opioid-summary](https://www.drugabuse.gov/node/pdf/21949/colorado-opioid-summary)
SUD and HIV Infections

*Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.
SUD and Deaths by Suicide

- A record 1,175 people in Colorado died by suicide in 2017
- Suicide is most common in the 45- to 64-year-old age group, and more common for men
- Suicide is the leading cause of death in the 10- to 24-year-old group
- 152 (13%) of the suicides in 2017 were a result of drug use
Deaths by Substance Use

- Colorado recorded 912 drug overdose deaths in 2016, more than in any previous year. And new data, while not final, suggest the deaths increased to 959 in 2017.
- That translates to a rate of 16.1 drug overdose deaths for each 100,000 residents, up 83 percent from a rate of 8.8 in 2001.
- Huerfano County, with about 6,600 residents, had six overdose deaths in 2016. That’s a rate of 152.6 per 100,000, the highest in the state. In fact, nine of the 10 counties with the highest overdose death rates have populations of less than 50,000.
There are wide variations across Colorado’s counties. El Paso County led the state with 141 fatal drug overdoses in 2016, followed by Denver County at 138. Colorado’s populous counties, most located along the Front Range, generally have the highest numbers of overdose deaths, reflecting their larger populations.
Opioid-Involved Overdose Deaths

![Graph showing the number of overdose deaths involving opioids from 1999 to 2017. The graph displays data for total overdoses, Rx opioids, heroin, and synthetic opioids. A significant increase is observed from 1999 to 2017, with the highest number of deaths in 2017 at 578.](image-url)
Substance Use Factors

Risk Factors

- Sensation seeking/impulsiveness
- Low academic achievement
- Family conflict
- Perceived availability of drugs

Protective Factors

- Social skills
- Opportunities for prosocial school involvement
- Attachment and bonding to family
- Opportunities for prosocial community involvement
From the Data…

- What is one thing that surprised you?
- What data do you think might be missing or should be included?
- What questions did the data raise for you?
Socio-economic deprivation

Homelessness

Unemployment, poor working conditions and job insecurity

Men are more likely to use illegal drugs

Poor mental health is linked to drug misuse and vice versa

There are strong links between health inequalities and drug use but the picture is complex

Family history of addiction
A root cause analysis is used to help identify **what, how, and why** something happened and ways for preventing it from recurring.

Addressing the root cause(s) of an issue is **more effective and efficient than addressing a symptom** of the cause.
Root Cause Analysis

Leaves
Twigs
Branches
Trunk
Roots

First Why?
Second Why?
Third Why?
Fourth Why?
Fifth why?
Root Cause Analysis

To identify the root cause of single issue within a problem:

Problem: Our client is refusing to pay for leaflets we printed for him.

1. The delivery was late, so the leaflets couldn’t be used
2. The job took longer than we expected
3. We ran out of printer ink
4. The ink was all used on a large, last-minute order
5. We didn’t have enough ink in stock, and couldn’t order new supplies in time

Counter-measure: Find an ink supplier who can deliver at short notice, so that we can continue to minimize inventory, reduce waste, and respond to customer demand.

To identify the root cause of multiple issues within a problem:

Problem: Our client is refusing to pay for leaflets we printed for him.

1. The delivery was late, so the leaflets couldn’t be used
   - Why?
   - Reason 2
   - Reason 1
2. The job took longer than we expected
   - Why?
   - Reason 2
   - Reason 1
3. We ran out of printer ink
   - Why?
   - Reason 2
   - Reason 1
4. The ink was all used on a large, last-minute order
   - Why?
   - Reason 1
   - Reason 2
5. We didn’t have enough ink in stock, and couldn’t order new supplies in time
   - Why?
   - Reason 1
   - Reason 2

Counter-measure: Find an ink supplier who can deliver at short notice, so that we can continue to minimize inventory, reduce waste, and respond to customer demand.
Root Cause Analysis

Activity
Root Cause Analysis

Reflect on what you’ve learned today & ask:

Why has substance use increased/decreased in Colorado?

*One root cause per post-it, including protective factors and risk factors. At least 4 root causes per group and at least 2 levels of the Social Ecological Model.
What are the next steps?
Now What?

- Develop a list of potential ways to address the needs
- Identify potential partners with similar interests in addressing the SUD needs of the community you serve
- Strengthen your partnerships through the co-development of action plans
- Address the social determinants of health at the Individual, Interpersonal, Community, and Societal
- Build/strengthen your capacity through additional training and TA
What questions do you have?