



# Dissecting Data Elements for a Useful Needs Assessment

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SAMHSA's Center for the Application of Prevention Technologies (CAPT)

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# Roadmap of the Workshop

3



Agenda

# Learning Objectives

4

- Define epidemiology and its role in prevention
- Introduce the six Core Data Elements of Assessment
- Identify data sources for consequences, consumption patterns, intervening variables
- Discuss considerations for identifying and addressing sub-populations and data gaps
- Brainstorm needs assessment tasks, timelines, and stakeholders for each task

# Parking Lot

5

For questions to be addressed *later* in the training

And questions to be addressed *outside* of the training

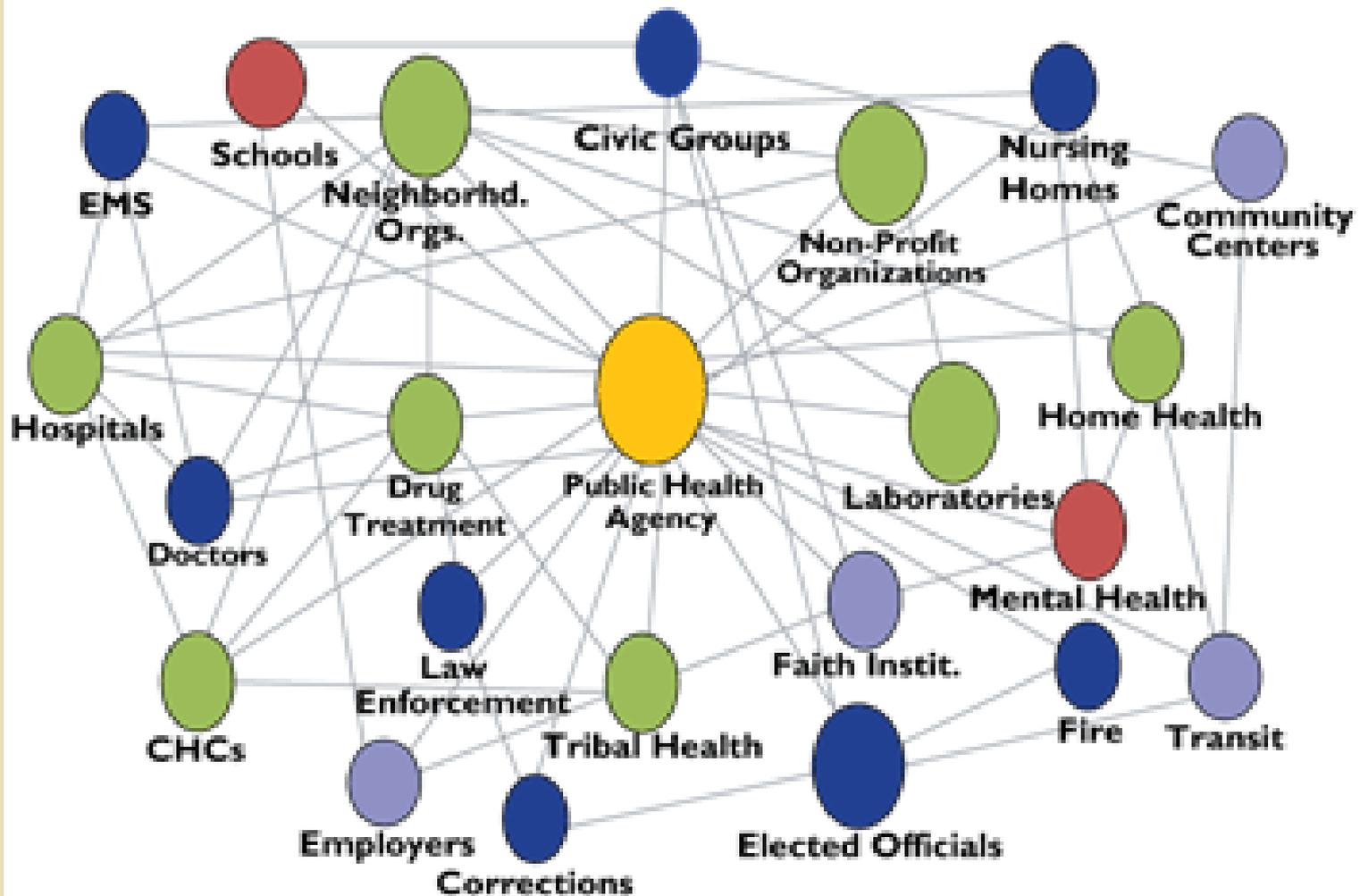
# Public Health is...

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...the science of **protecting and improving the health of communities** through education, promotion of healthy lifestyles, and **research for disease and injury prevention**<sup>1</sup>

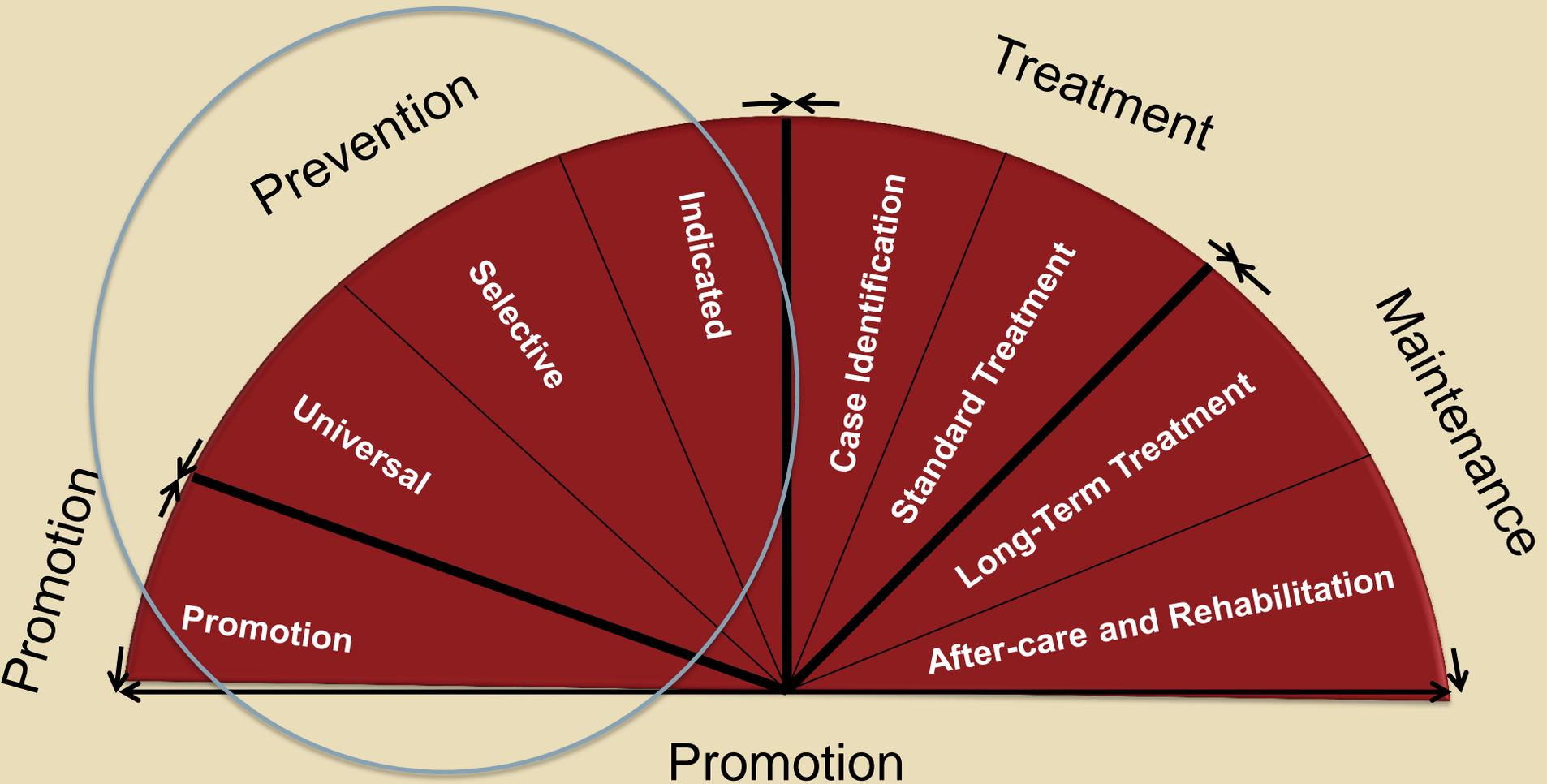
# The Public Health System<sup>2</sup>

7



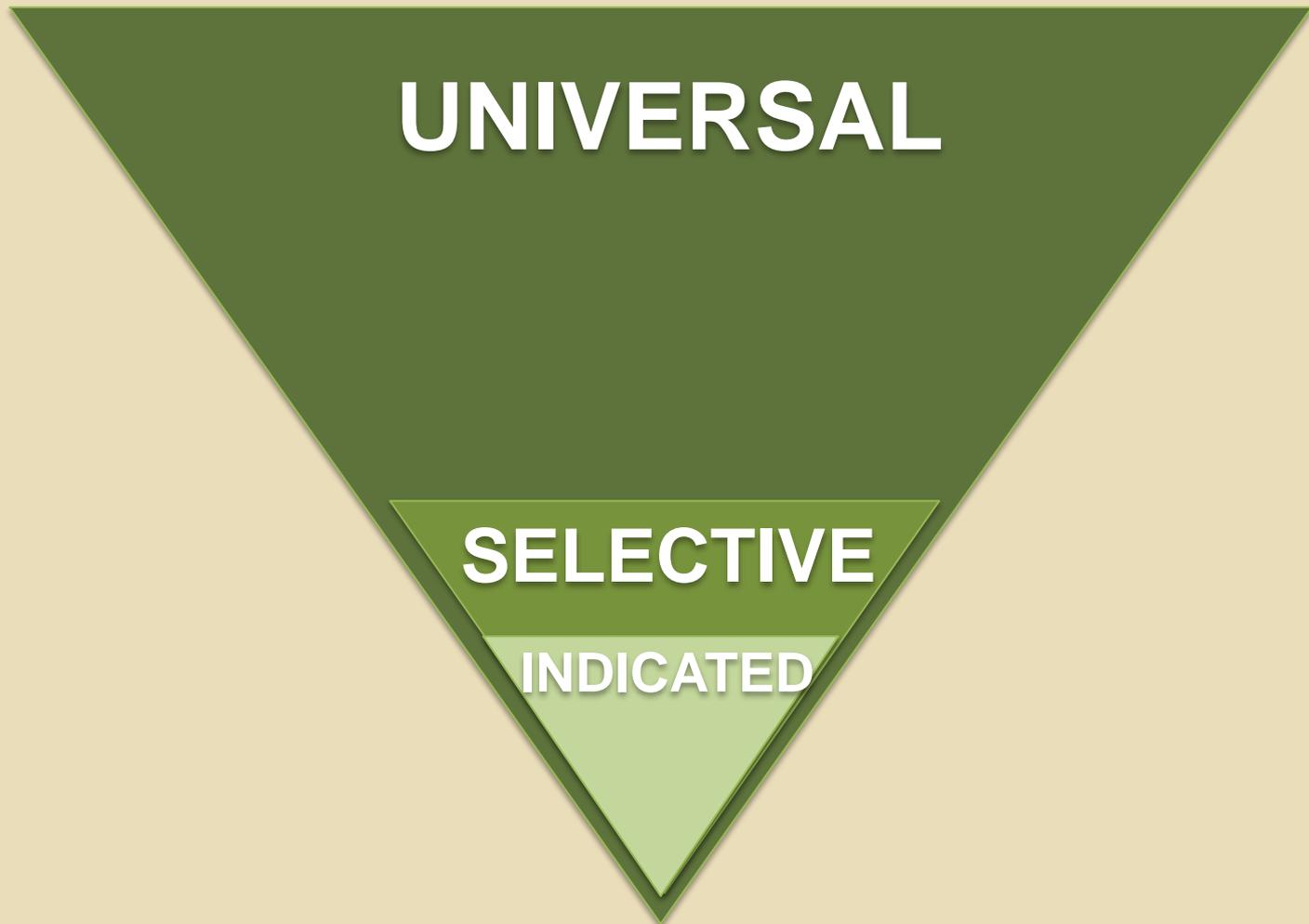
# Continuum of Care

8



# Population-Based Approach

9



# When I Think of Epidemiology...

10

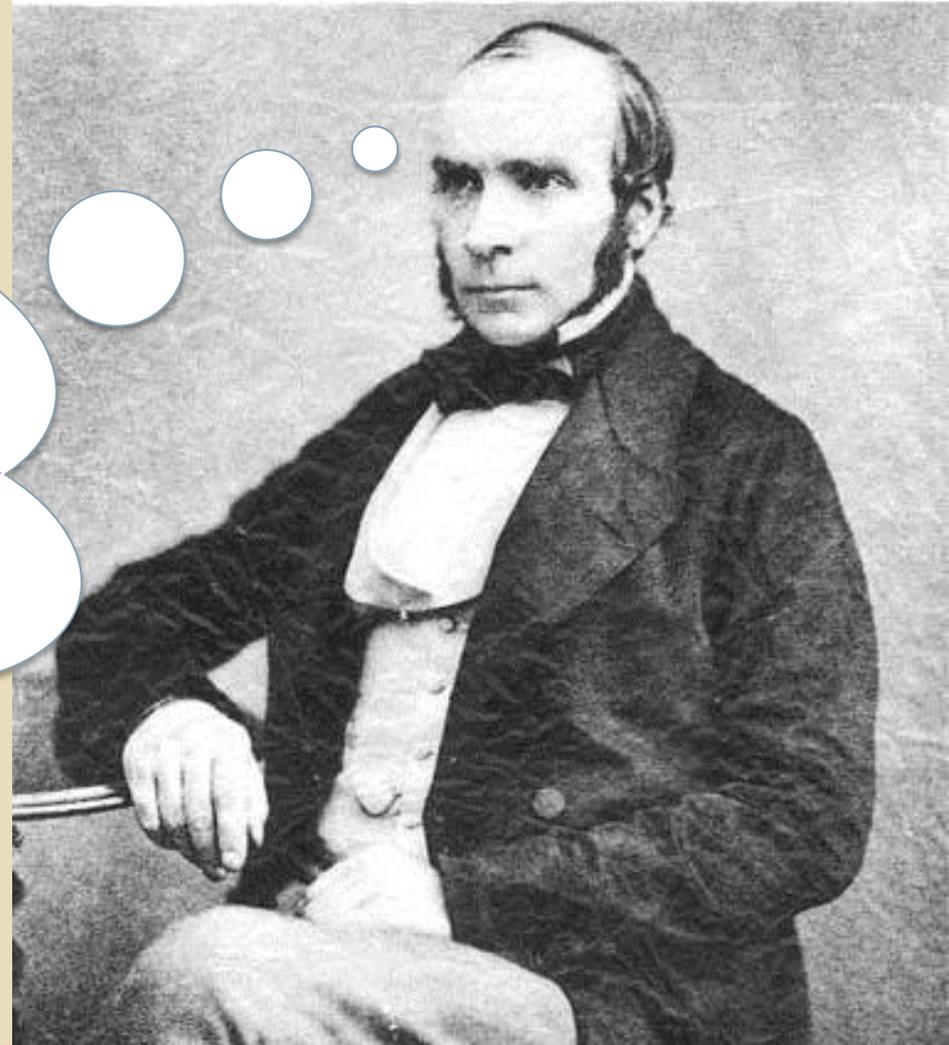


**...I think of...**

# Epidemiological Thinking

11

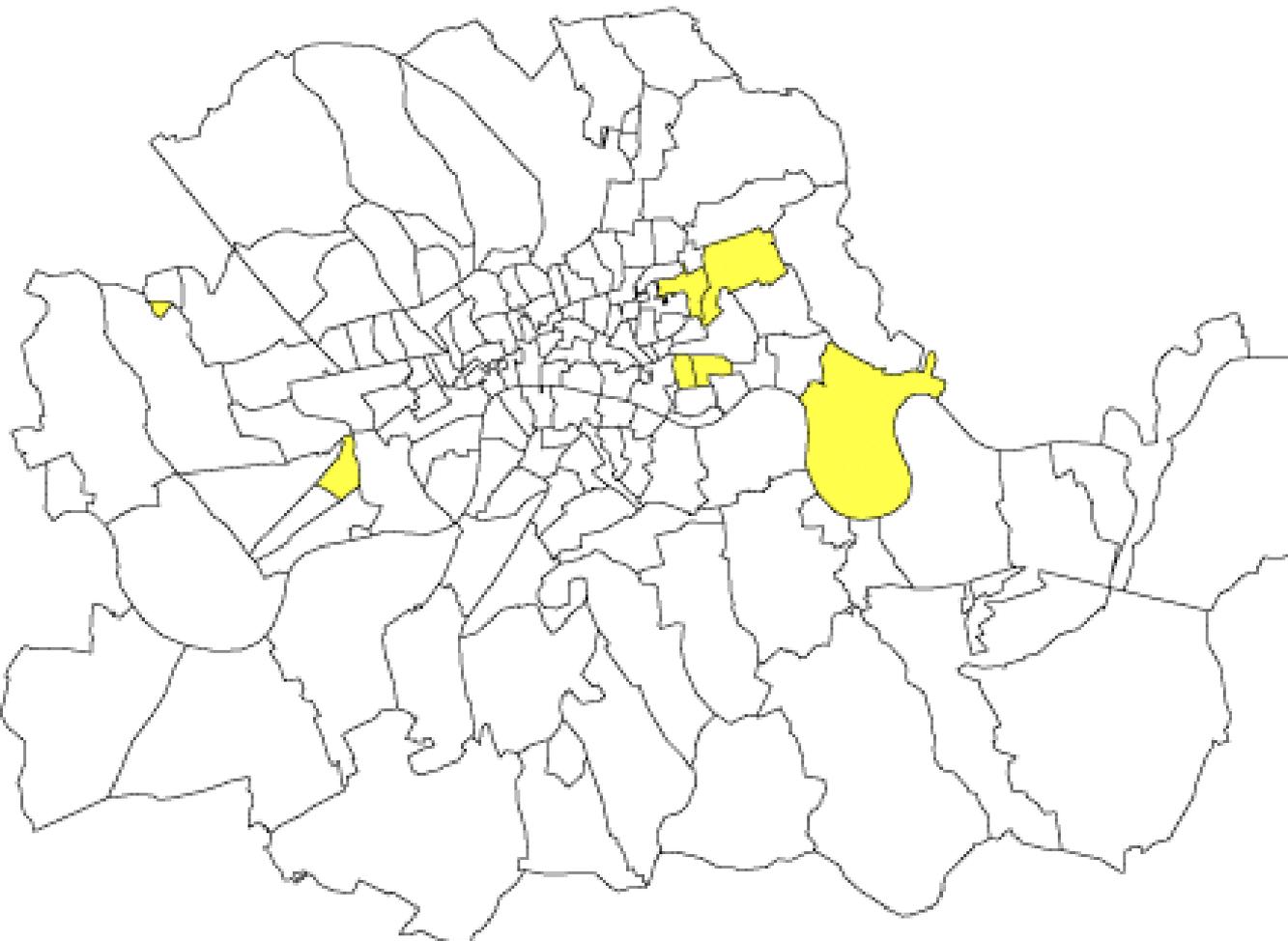
What are the patterns, causes, and effects of health and disease conditions in defined populations?



# Numbers Tell A Story

12

19/7 to 26/7



# Epidemiology

```
graph TD; A[Epidemiology] --> B[Determinants]; A --> C[Distribution]; B --> D[Risk Factors]; B --> E[Protective Factors]; C --> F[Pattern]; C --> G[Frequency];
```

## Determinants

Risk  
Factors

Protective  
Factors

## Distribution

Pattern

Frequency

# Epidemiology Allows Us to Answer...

14

**What?** Substance use and other behavioral health problems

**Who?** Population that is the focus of the intervention(s)

**When?** Developmental stage of the focus population

**Where (and How Often)?** Contexts that influence health

**Why?** Risk factors present, protective factors lacking

**How?** *Strategic Prevention Framework*

# Strategic Prevention Framework

15



# Why We Start With Assessment

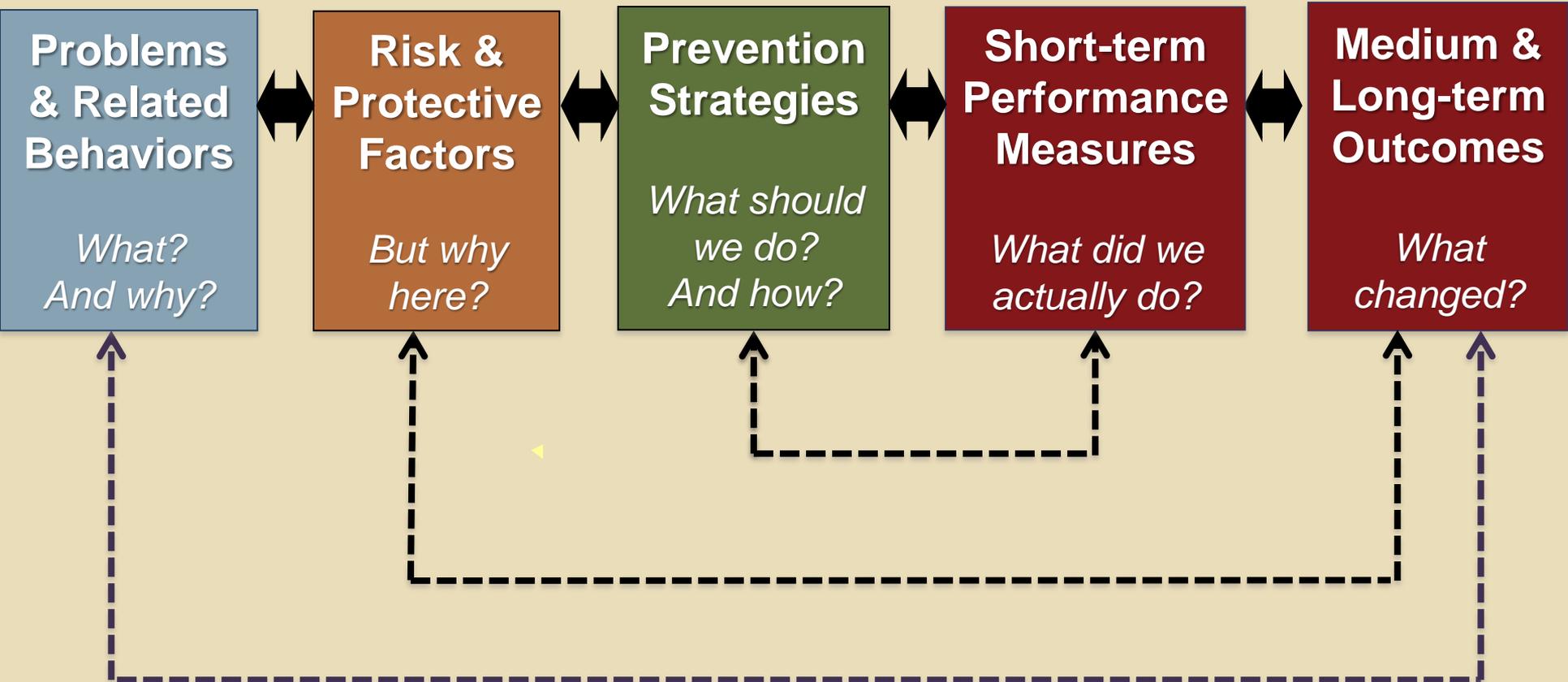
16

To profile a community's needs, resources, readiness, and gaps in order to address a substance abuse problem



# A Logical Logic Model

17



# Our Logic Model

18

**Substance Abuse Problem:** \_\_\_\_\_

Substance Use Behavior Identified	Intervening Variables (why?)	Prevention Strategies	Outcomes		
			Short-Term Performance Measures	Medium-Term Outcome Measures	Long-Term Impact

# What to Assess

19

The nature and extent of substance use problems and related behaviors



The risk and protective factors that influence these problems and behaviors



The existing resources and readiness of the community to address its problems

# The Core Data Elements (CDE) of Assessment<sup>3</sup>

20



# CDE #1 – Consequences

21



# Activity: Identify Consequence Data Sources

22

In your groups, answer the following questions (and be prepared to share):

1. What is your best *go-to* information source on consequence data? Locally?
2. What is your most *creative* information source on consequence data? Locally?
3. Identify who else (individual, group, agency) could be helpful in finding sources for these data



Epidemiology

```
graph TD; A[Epidemiology] --> B[Determinants]; A --> C[Distribution]; B --> D[Risk Factors]; B --> E[Protective Factors]; C --> F[Pattern]; C --> G[Frequency];
```

Determinants

Risk  
Factors

Protective  
Factors

Distribution

Pattern

Frequency

# CDE #2 – Consumption Patterns

24



- Population characteristics
- Environment and settings
- Actual use patterns
- Differentiation between type of substances

# Incidence and Prevalence

25

Rain – *incidence*

Puddle – *prevalence*



# Calculating Rates<sup>4</sup>

26

$$\text{Incidence Rate} = \left( \frac{\text{new cases in a given time period}}{\text{population at-risk in same time period}} \right) \times 10^n$$

$$\text{Prevalence Rate} = \left( \frac{\text{all cases in a given time period}}{\text{population at-risk in same time period}} \right) \times 10^n$$

# Prevalence of Past 30-day NMUPD among Oklahoma Youth<sup>5</sup>

27

	<b>2010</b>	<b>2012</b>	<b>2014</b>
<b>Grade 6</b>	7.1%	6.7%	6.0%
<b>Grade 8</b>	14.6%	13.1%	10.4%
<b>Grade 10</b>	21.2%	16.9%	17.4%
<b>Grade 12</b>	24.8%	19.9%	18.1%

# Activity: Identify Consumption Data Sources

28

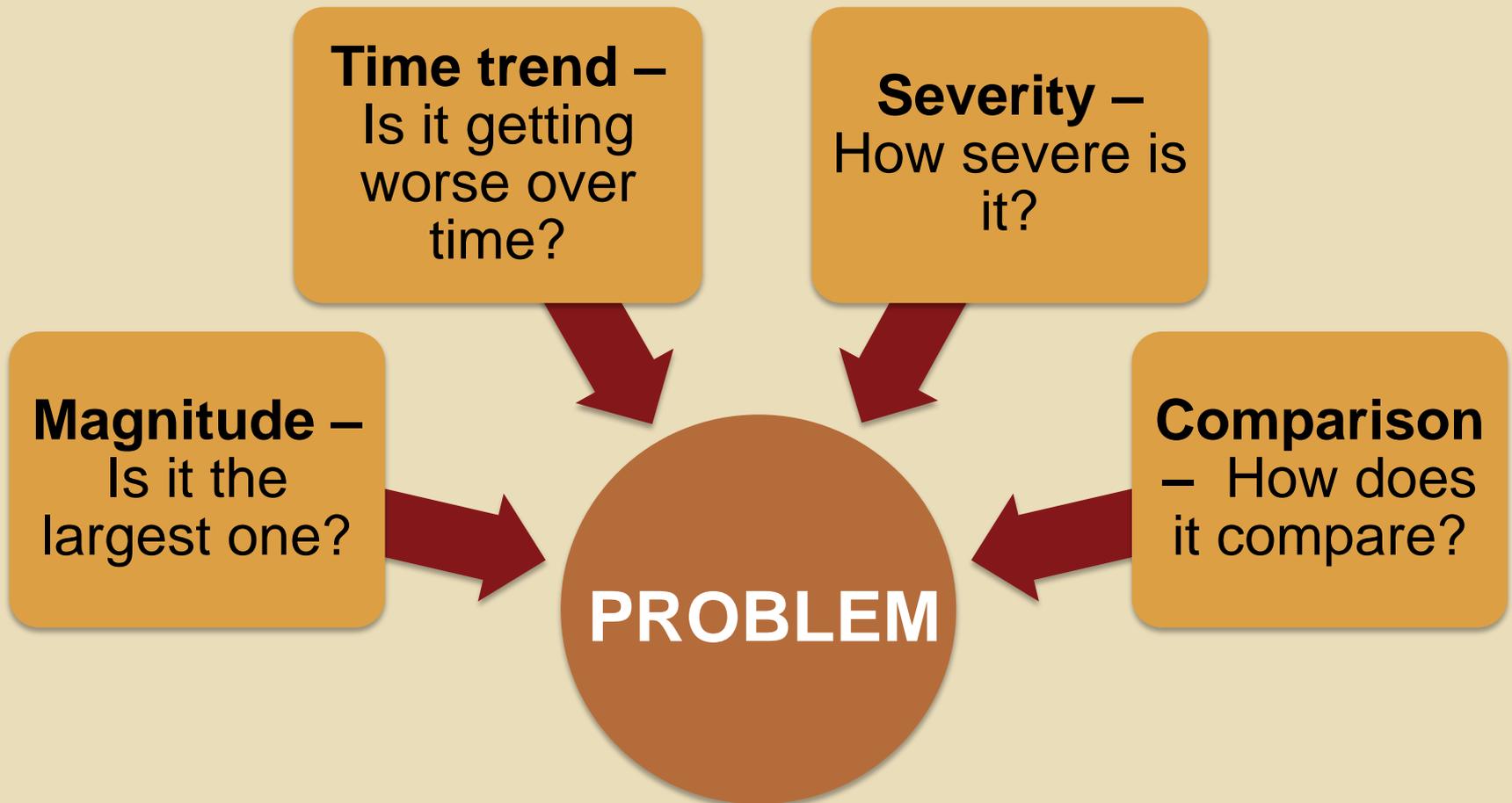
In your groups, answer the following questions (and be prepared to share):

1. What is your best *go-to* information source on consumption data? Locally?
2. What is your most *creative* information source on consumption data? Locally?
3. Identify who else (individual, group, agency) could be helpful in finding sources for these data



# Choosing the Problem to Address

29



# Our Logic Model

30

**Problem:** \_\_\_\_\_

Substance Use Behavior Identified	Intervening Variables (why?)	Prevention Strategies	Outcomes		
			Short-Term Performance Measures	Medium-Term Outcome Measures	Long-Term Impact



**You are here**

Epidemiology

```
graph TD; A[Epidemiology] --> B[Intervening Variables]; A --> C[Distribution]; B --> D[Risk Factors]; B --> E[Protective Factors]; C --> F[Pattern]; C --> G[Frequency];
```

Intervening  
Variables

Risk  
Factors

Protective  
Factors

Distribution

Pattern

Frequency

# CDE #3 – Intervening Variables

32

***Intervening variables*** (AKA *risk and protective factors*) include biological, physical, geographical, social, and economic factors that contribute to the positive or negative health of a population.<sup>6</sup>

# Our Logic Model

33

**Problem:** \_\_\_\_\_

Substance Use Behavior Identified	Intervening Variables (why?)	Prevention Strategies	Outcomes		
			Short-Term Performance Measures	Medium-Term Outcome Measures	Long-Term Impact



You are here

# A Social Ecological Approach

34



# NMUPD Risk and Protective Factors

35



## *Individual-Level Examples*

### Risk Factors

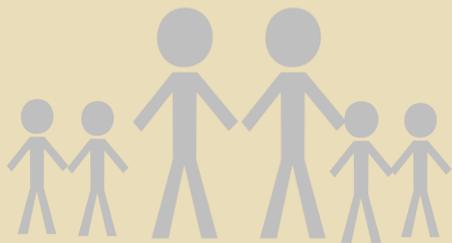
- Sensation-seeking<sup>8</sup>
- Alcohol, tobacco, other drug (ATOD) use<sup>7,9,10</sup>
- Poly-substance use<sup>9,11,12</sup>
- History of delinquent activities<sup>7</sup>
- Positive attitudes toward use<sup>9</sup>

### Protective Factors

- Perceived risk of harm of use<sup>13,14</sup>
- Disapproval of use<sup>7</sup>
- Attitudes about peer use<sup>7</sup>

# NMUPD Risk and Protective Factors

36



## *Relationship-Level Examples*

### Risk Factors

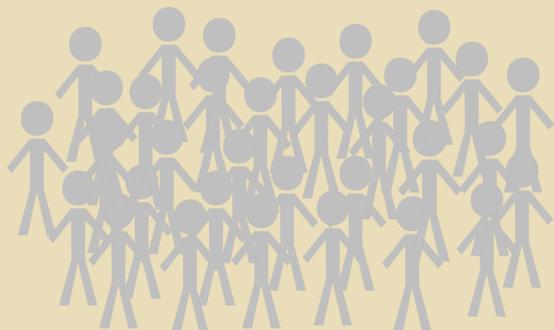
- Family history of ATOD use disorders<sup>15</sup>
- Conflict with parents<sup>7</sup>
- Peer use<sup>7,9,14</sup>
- Close friends' attitudes<sup>10</sup>
- Friends' use<sup>13</sup>

### Protective Factors

- Parents' disapproval of use<sup>7,10,13</sup>
- Family bonding<sup>10</sup>
- Parental Involvement<sup>7</sup>

# NMUPD Risk and Protective Factors

37



## *Community-Level Examples*

### Risk Factors

- Low school performance<sup>14</sup>
- Member of a social fraternity or sorority<sup>16</sup>
- Perceived availability of prescription drugs<sup>13</sup>
- Access/Availability<sup>17</sup>

### Protective Factors

- School commitment<sup>13</sup>
- School bonding<sup>10</sup>
- Community norms against youth NMUPD<sup>9,13</sup>

# Activity: Your Data Sources for NMUPD Intervening Variables

38

In your groups, answer the following questions (and be prepared to share):

1. What is your best *go-to* information source on intervening variables? Locally?
2. What is your most *creative* information source on intervening variables? Locally?
3. Identify who else (individual, group, agency) could be helpful in finding sources for these data



# Our Logic Model

39

**Problem:** \_\_\_\_\_

Substance Use Behavior Identified	Intervening Variables (why?)	Prevention Strategies	Outcomes		
			Short-Term Performance Measures	Medium-Term Outcome Measures	Long-Term Impact



You are here



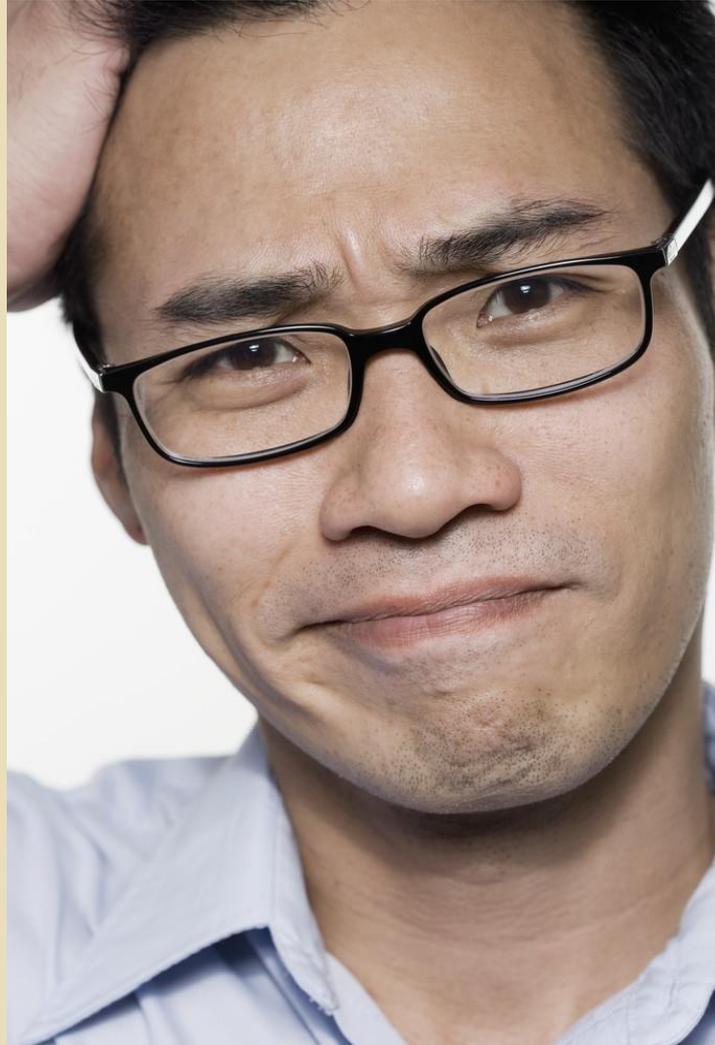
# Day 1 Wrap-up

41



# Questions?

42



# Day 2

43



Agenda

# Re-cap: Why We Start With Assessment

44

To profile a community's needs, resources, readiness, and gaps in order to address a substance abuse problem



# The Core Data Elements (CDE) of Assessment<sup>3</sup>

45



# CDE #4 – Target Populations

46



# Epidemiology

```
graph TD; A[Epidemiology] --> B[Determinants]; A --> C[Distribution]; B --> D[Risk Factors]; B --> E[Protective Factors]; C --> F[Pattern]; C --> G[Frequency];
```

Determinants

Risk  
Factors

Protective  
Factors

Distribution

Pattern

Frequency

# Unequal Distribution

48

## When Health Disparities Arise

Difference in health

Adverse impact on groups of people

Social, economic, environmental disadvantages

# Targeting Sub-populations

49

- What really makes a group “high need”?
  - Elevated risk
  - Lower readiness
  - Fewer resources
- Be aware of your own personal biases and how they may influence assumptions, conclusions, and decisions you make

# *Activity:* Considerations for Data Sources with Sub-populations

50

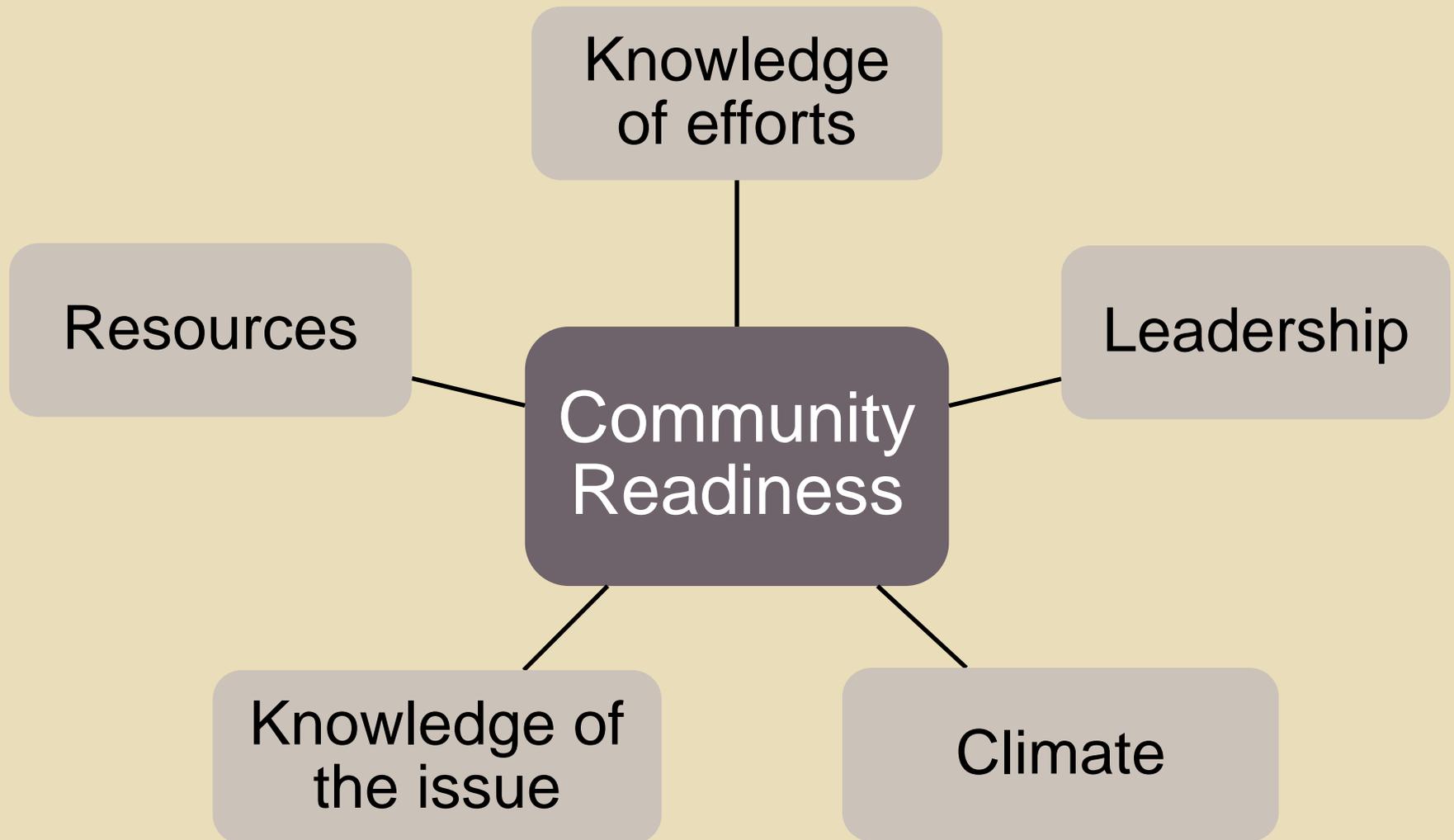
In your groups...

1. Review your running list of data sources and consider the variety of sectors and cultural groups within your community
2. Discuss if these sources do/can break the data down for specific sub-populations
3. Discuss how the gathering of data might be affected



# CDE #5 – Community Readiness

51



# *Activity:* How Ready is Your Community to Use Data?

52



**Readiness to Use Data**

# CDE #6 Resources and Infrastructure

53

**I am Latino  
and know my  
community  
well.**

**We can  
give  
money.**

**Our mission is  
about health  
and well-being.**

**We have  
expertise  
in  
evaluation.**

**I've been working  
in the community  
on prevention for  
over 20 years.**

# Identifying Resources

54

- 
- A close-up photograph of a hand placing a puzzle piece onto a wooden surface. The puzzle piece is light blue and has a complex, irregular shape. The hand is positioned in the upper right, with fingers gently holding the piece. The wooden surface is a warm, natural wood color. In the background, other puzzle pieces are scattered, some in focus and some blurred, suggesting a larger assembly project. The lighting is soft and even, highlighting the texture of the wood and the smooth surface of the puzzle pieces.
- Personnel and training
  - Existing prevention networks/programs
  - State and federal policy and funding
  - Access to available data systems

# *Activity:* Your Data Gaps

55

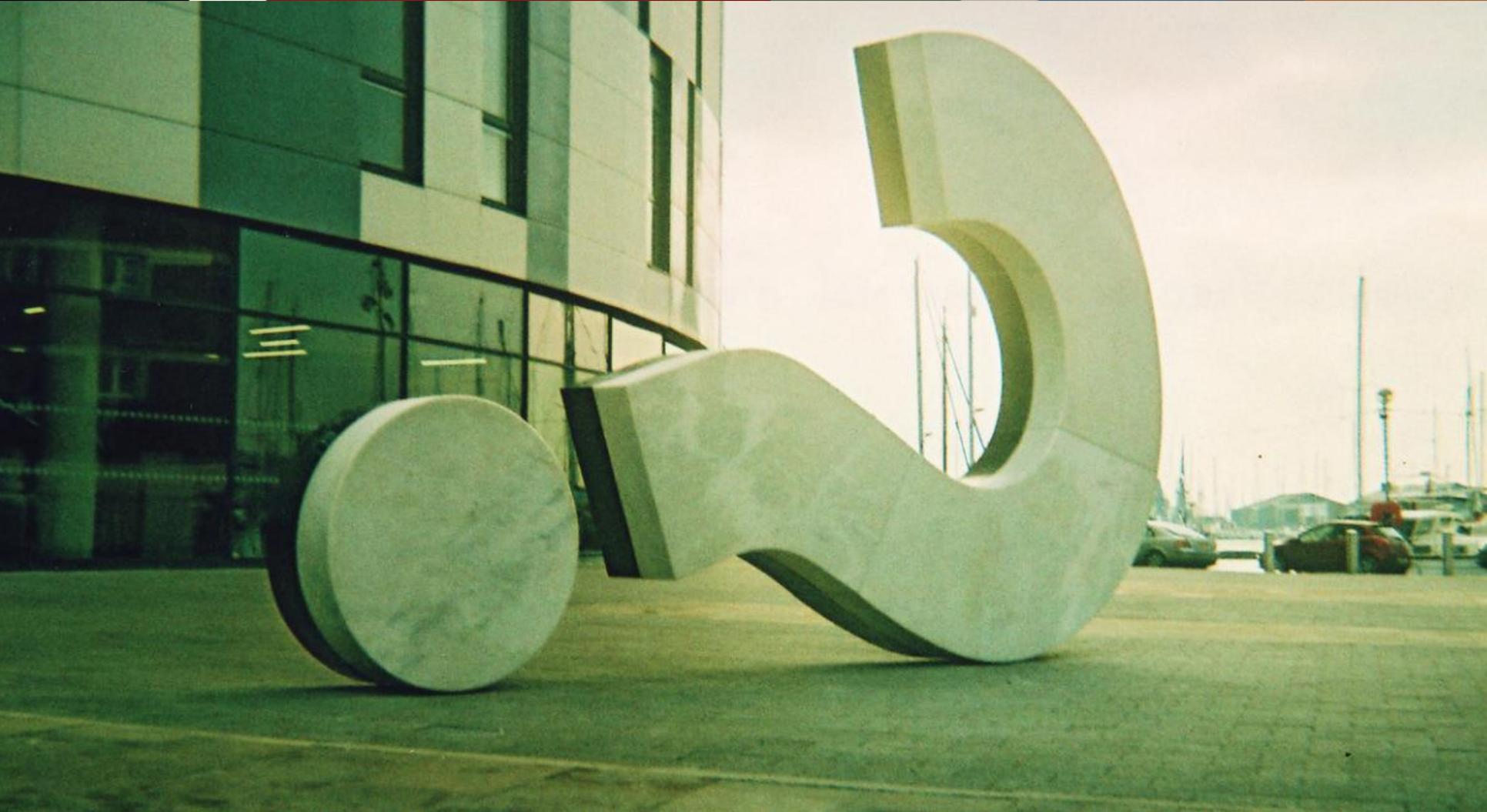
In your groups...

1. Review your list of data points and data sources for your community
2. Identify data gaps and the barriers contributing to them from a community readiness context
3. Brainstorm how to address these gaps and barriers within the context of the community readiness model



# How Do We Ask for Data?

56



# Activity: Practicing Your Ask

57

1. Choose a data source to represent
2. Pair-up with someone at a different table
3. Develop and deliver a 30-second “ask” to request data from the source your partner represents; consider...
  - What is it you are assessing?
  - Why is it important?
  - Why should that particular source care?
  - What will you do with the data?

# You Need to Know Needs Before You Can Address Them

58



# Your Needs Assessment

59

“What does the problem look like and what resources do we have/need in order to solve it?”

# Activity: Your Needs Assessment Tasks

60

In your groups...

1. Brainstorm all of the tasks that your program needs to accomplish in order to complete a needs assessment
2. Consider your funder's templates
3. Be prepared to report-out

# Activity: Your Timelines and Stakeholders

61

Using the tasks generated by the group...

1. Arrange by first to last, according to what makes the most sense for your community
2. List which stakeholders and staff members should be involved with each task and what their responsibilities will be
3. Plan out key dates for the tasks you have identified



Timeline Worksheet

# Sharing and Re-planning

62

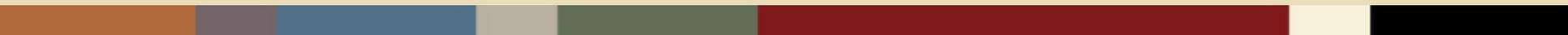
## Sharing questions:

1. What were the easiest parts of this exercise?
2. What barriers / challenges arose?
3. What are your concerns about accomplishing this plan?
4. What benefits do you see in completing this plan?



# *Poll:* What Do You Do with Needs Assessment Findings?

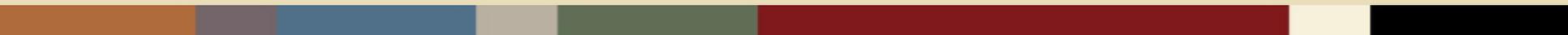


- A) Create a lengthy, data-filled report that is later used as a door stop.
  - B) Read the Executive Summary and quickly forget what you read.
  - C) Understand the findings and integrate them into your work to create better programs.
  - D) Publicize successes in a way that a broad audience can understand them.
- 

# Why Do the Findings Matter?



## Disseminating findings...

- Can bring positive attention to your organization, program, or cause
  - Builds support and commitment among community members and/or clients
  - Aids in fundraising
  - Demonstrates transparency and accountability
- 

# Tailored Data Products

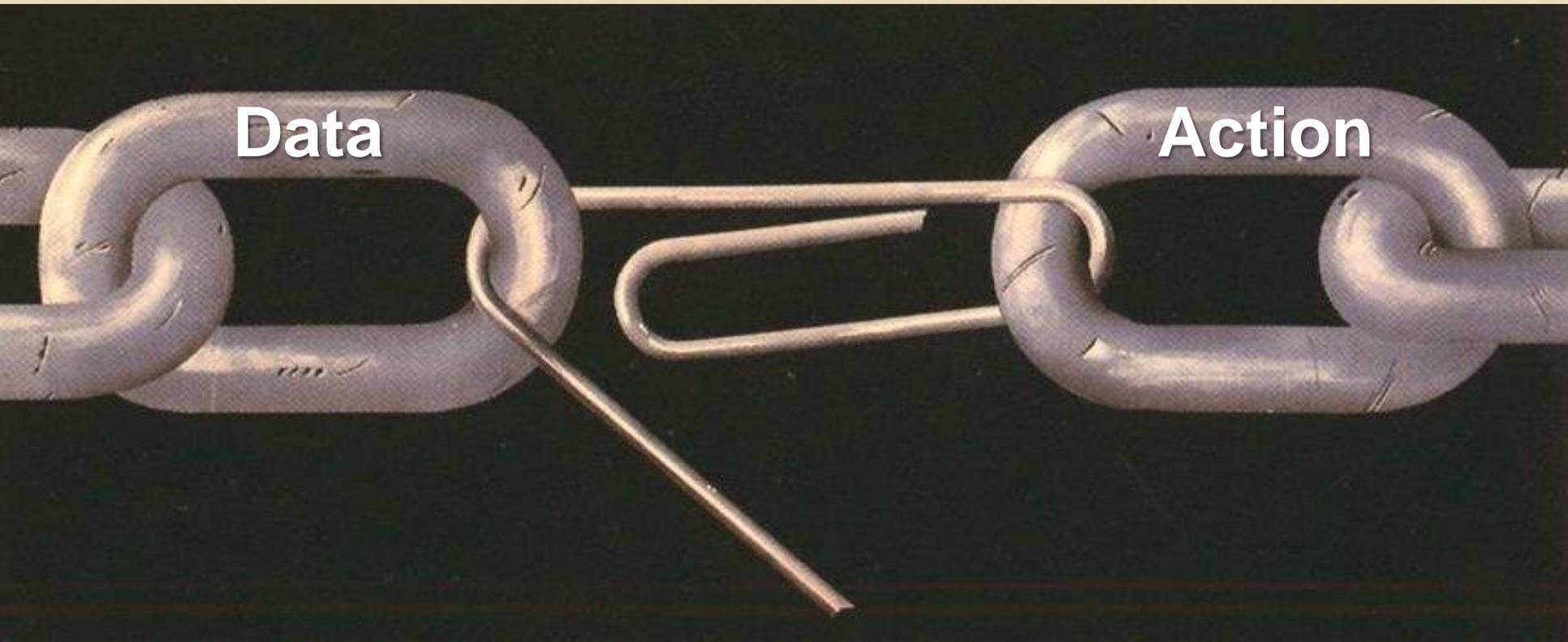
65

- Reports
- Press releases
- Presentations
- Social media posts
- Traditional media
- Newsletters
- Infographics



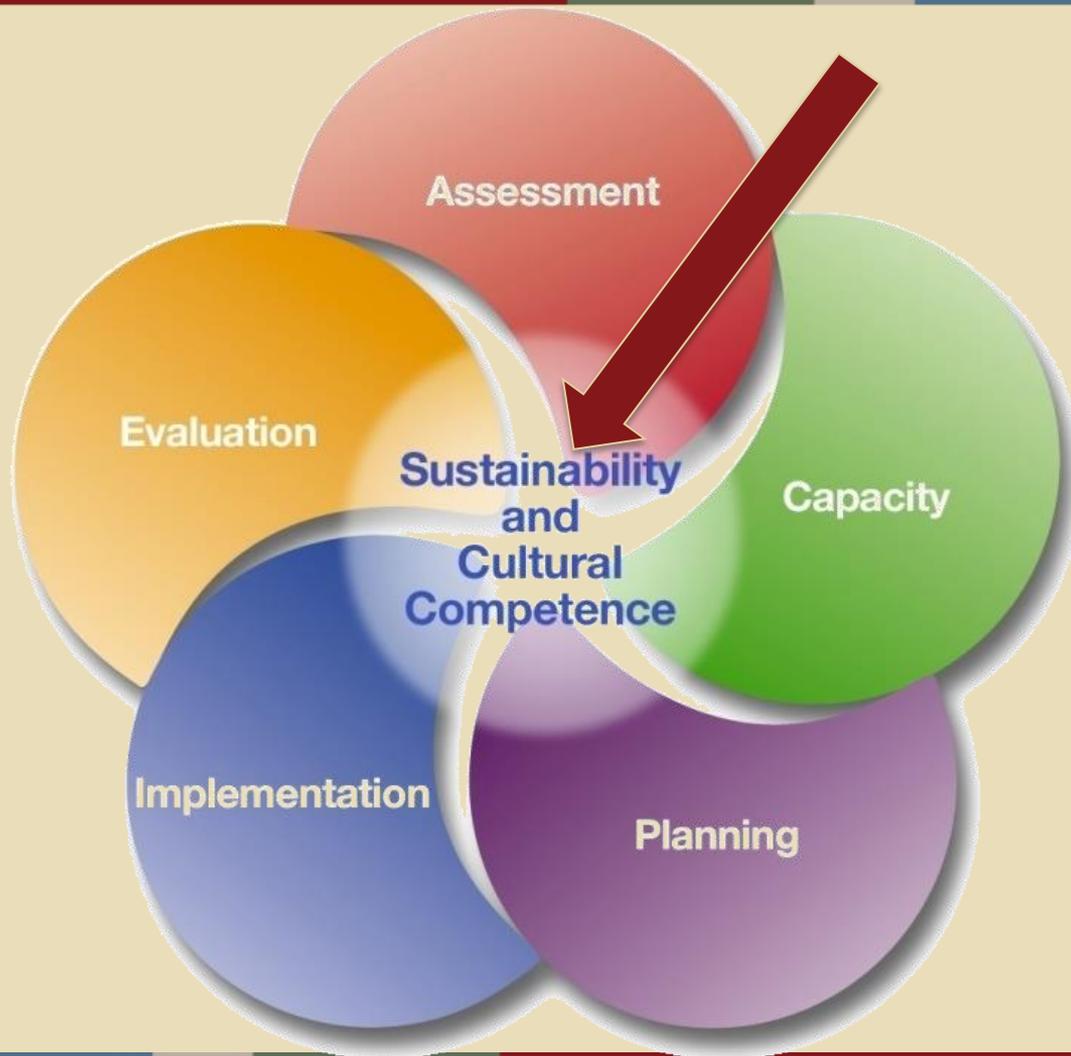
# Strengthening the Link

66



# *Discussion:* How Do These Efforts Contribute to Sustainability?

67



# Effective Sustainability Planning Begins with Data

68

- Capturing the current picture
  - What aspects, tasks, and processes need to be sustained from the Assessment phase?
  - How well are these documented?
  - What is missing?
- Effective elevator speeches
- Leveraging partner support
  - Who are your data partners? Who's missing?
  - What will it take to continue or obtain that support?

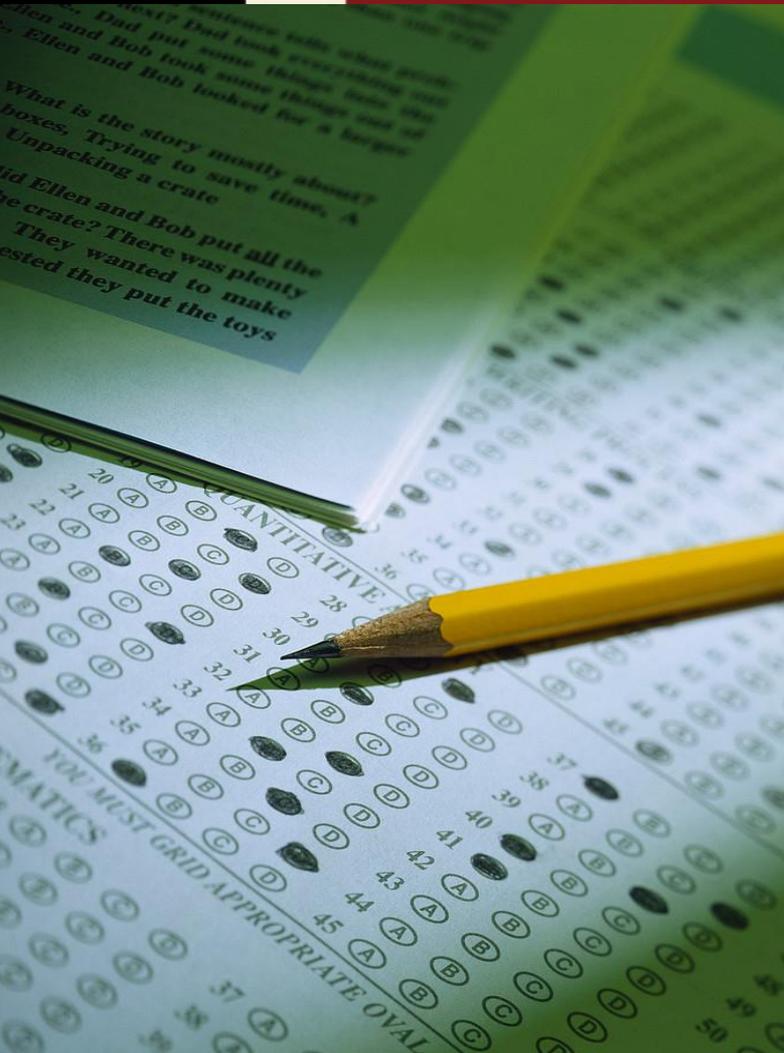
# Questions?

69



# Your Feedback

70



Please take a moment to complete a brief feedback form.

Your input is appreciated!

# Thank You!

71

If you have questions or comments, please do not hesitate to contact the CAPT liaison to Oklahoma:

Nicole Luciani  
T/TA Specialist  
nluciani@ou.edu

# References

72

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4. Last, John M., ed. (2001). *A Dictionary of Epidemiology* 4 ed.. New York, NY: Oxford University Press.
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# References Continued

73

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# References Continued

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14. Lord, S., Brevard, J., & Budman, S. (2011). Connecting to young adults: An online social network survey of beliefs and attitudes associated with prescription opioid misuse among college students. *Substance Use and Misuse*, 46(1):66-76.
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17. McCabe, S., Cranford, J., Boyd, C., & Teter, C. (2007). Motives, diversion and routes of administration associated with nonmedical use of prescription opioids. *Addictive Behaviors*, 32(3):562–575.