

Epidemiology of Suicide in Central Minnesota

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Agenda

9:05 - 9:10 a.m.	Intro and Learning Objectives
9:10 - 9:15 a.m.	How we look at suicide data
9:15 - 9:20 a.m.	Scope of suicide and long-term trends
9:20 – 9:35 a.m.	Persistent Patterns—statewide and central MN
9:35 – 9:40 a.m.	Gathering your own data
9:40 a.m.	Wrap up

Take Care of Yourself

- We have all been touched by loss at some point in our lives.
- You are not alone.
- If these slides bring up painful emotions, take care of yourself and seek support that would be helpful to you.



**YOU
MATTER.**
TALK TO US.

 *No concern is too small.*
People call to talk about: substance use, economic worries, relationships, mental and physical illness, and more.
Call or text for free and confidential help if you or someone you know is struggling.

 Call or text 988

 Chat 988lifeline.org/chat

You're here to learn!

1. Name three factors you should consider when using data to plan suicide prevention strategies.
2. Name three groups at higher risk of suicide in central Minnesota.
3. Describe one suicide prevention strategy that's supported by the epidemiological data presented today.

If you learn nothing else...

- Your approach should depend on your population: age, sex, race, ethnicity, rural/town/urban
- Males have higher rates of suicide death; females have higher rates of self-harm injuries.
- Suicide deaths are most likely to involve firearms.
- Non-fatal self-harm is most likely to be drug poisoning.
- Rural areas have higher suicide rates than urban areas.



How do we look at suicide data?

Common Groups Used for Suicide Epidemiology



Time

- Years, seasonal, months, etc.
- Trends



Demographics

- Age
- Sex
- Race
- Ethnicity



Geography

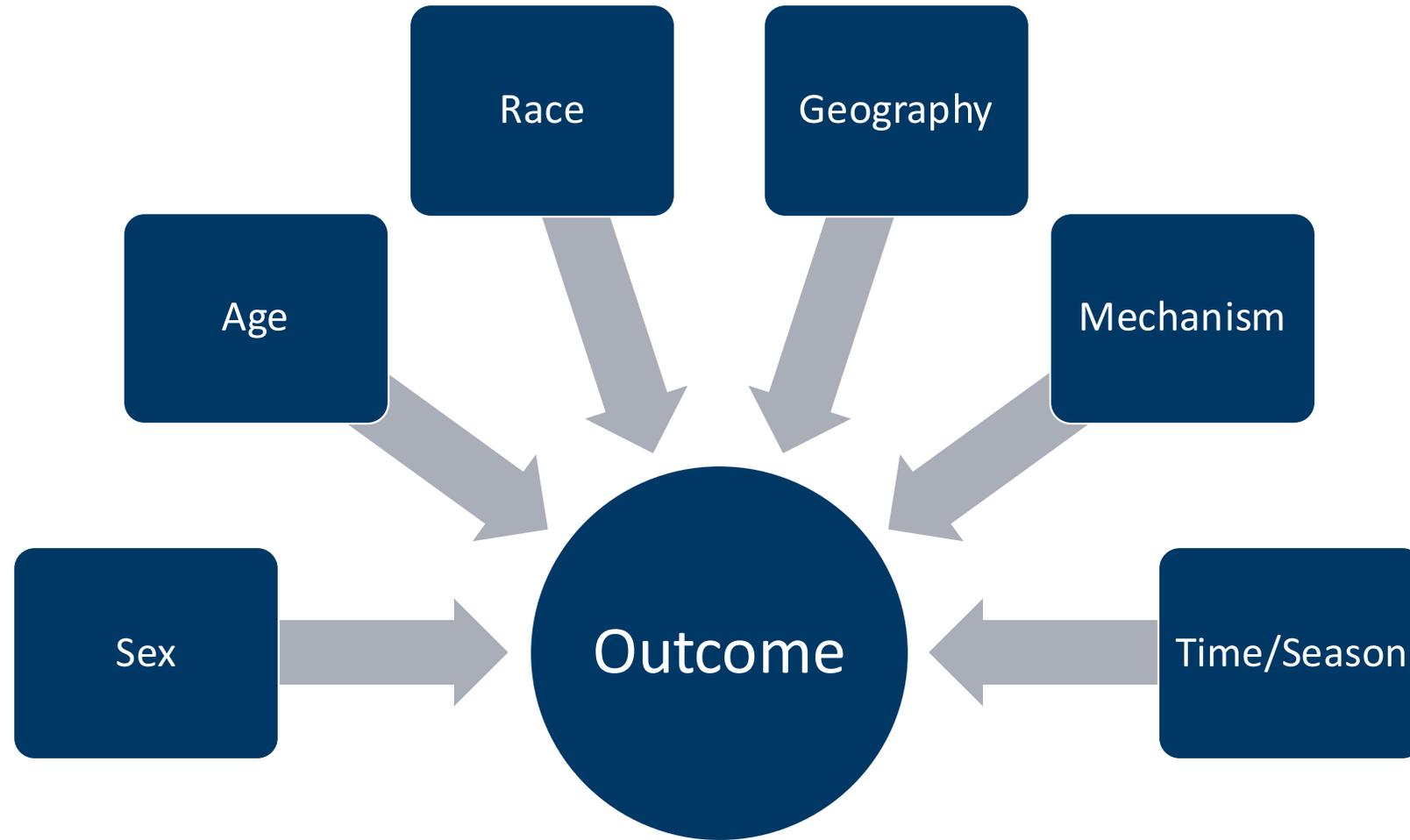
- Urban
- Suburban
- Rural



Injury Mechanism

- How injury occurred
- Firearm, suffocation, poisoning, etc.

Outcomes Vary by Each Combination of Categories





Scope and Long-Term Trends

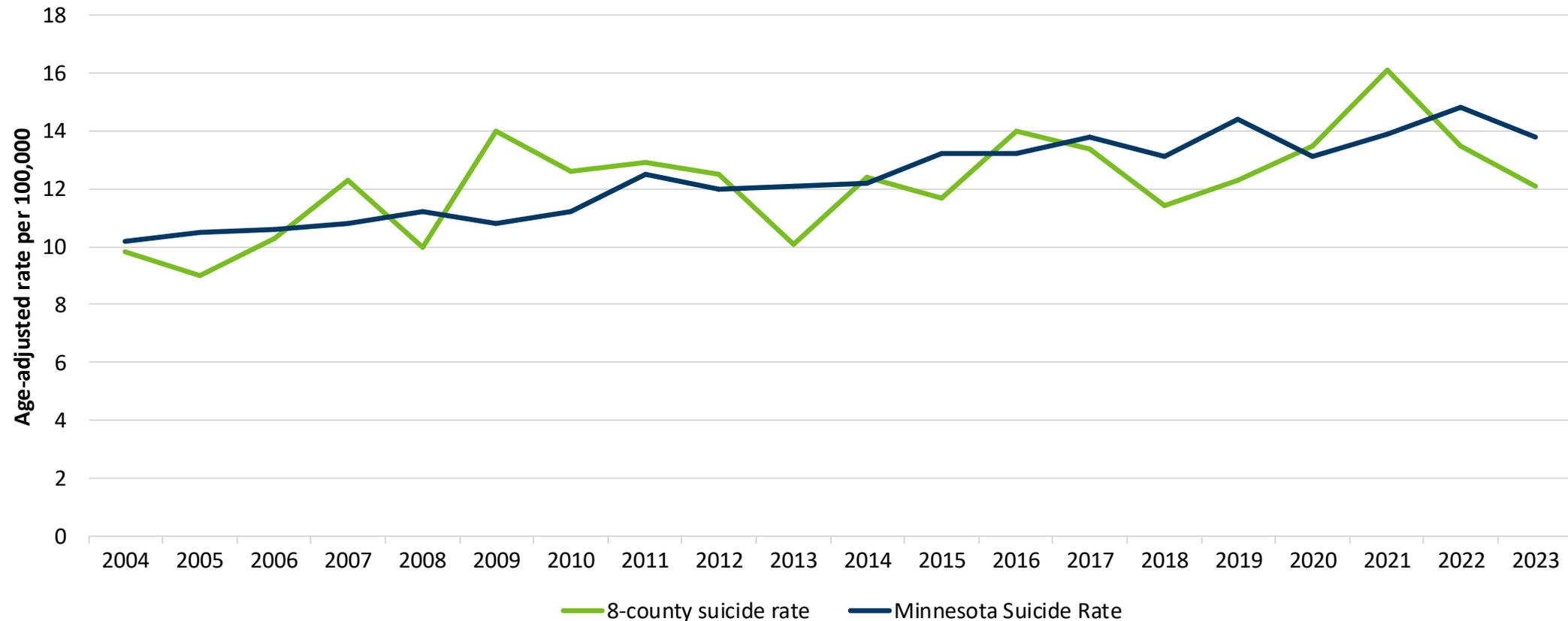


800 deaths.
10,000+ hospital visits.
90,000 contacts at 988.

Each year. This is a partial picture of the suicidality in Minnesota.

20-year trend: 8-county* area similar to statewide

Suicide Rates in Minnesota and 8-County Region

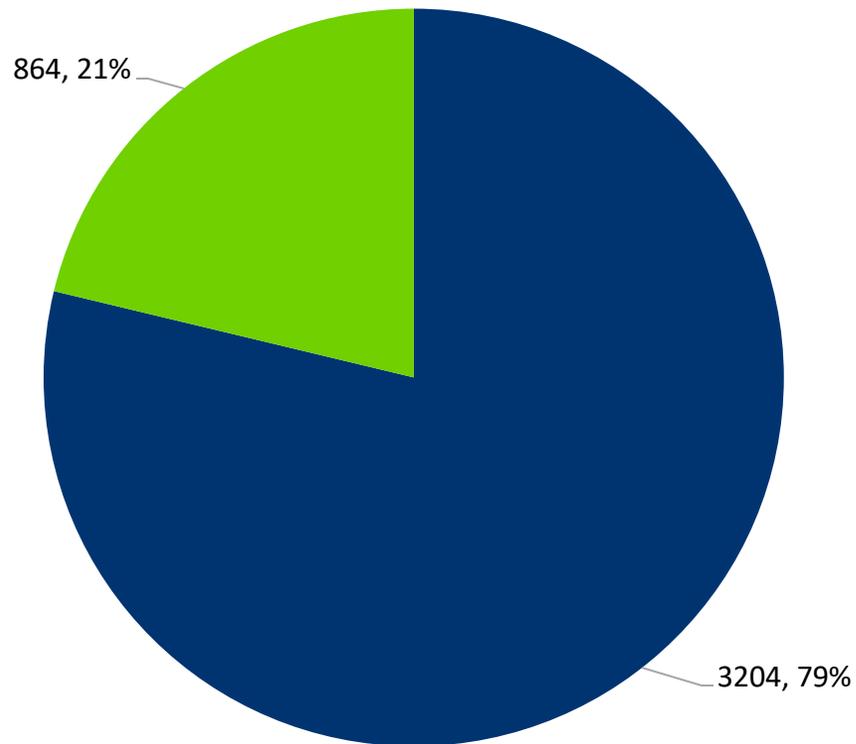




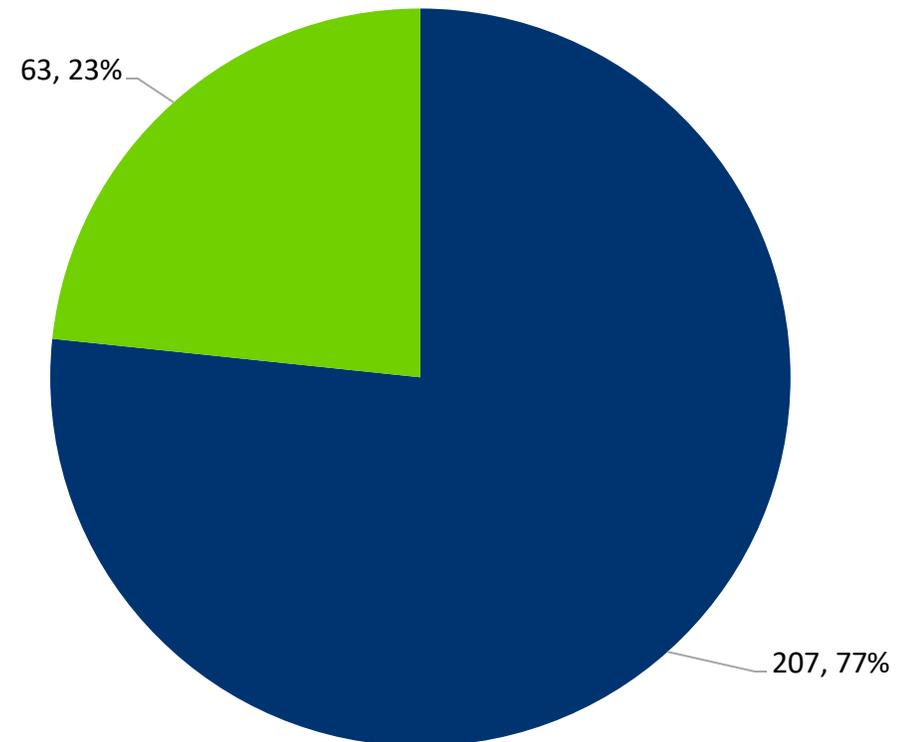
Persistent Patterns in Suicide Epidemiology

Males: 3-4x more suicide deaths than females

Minnesota

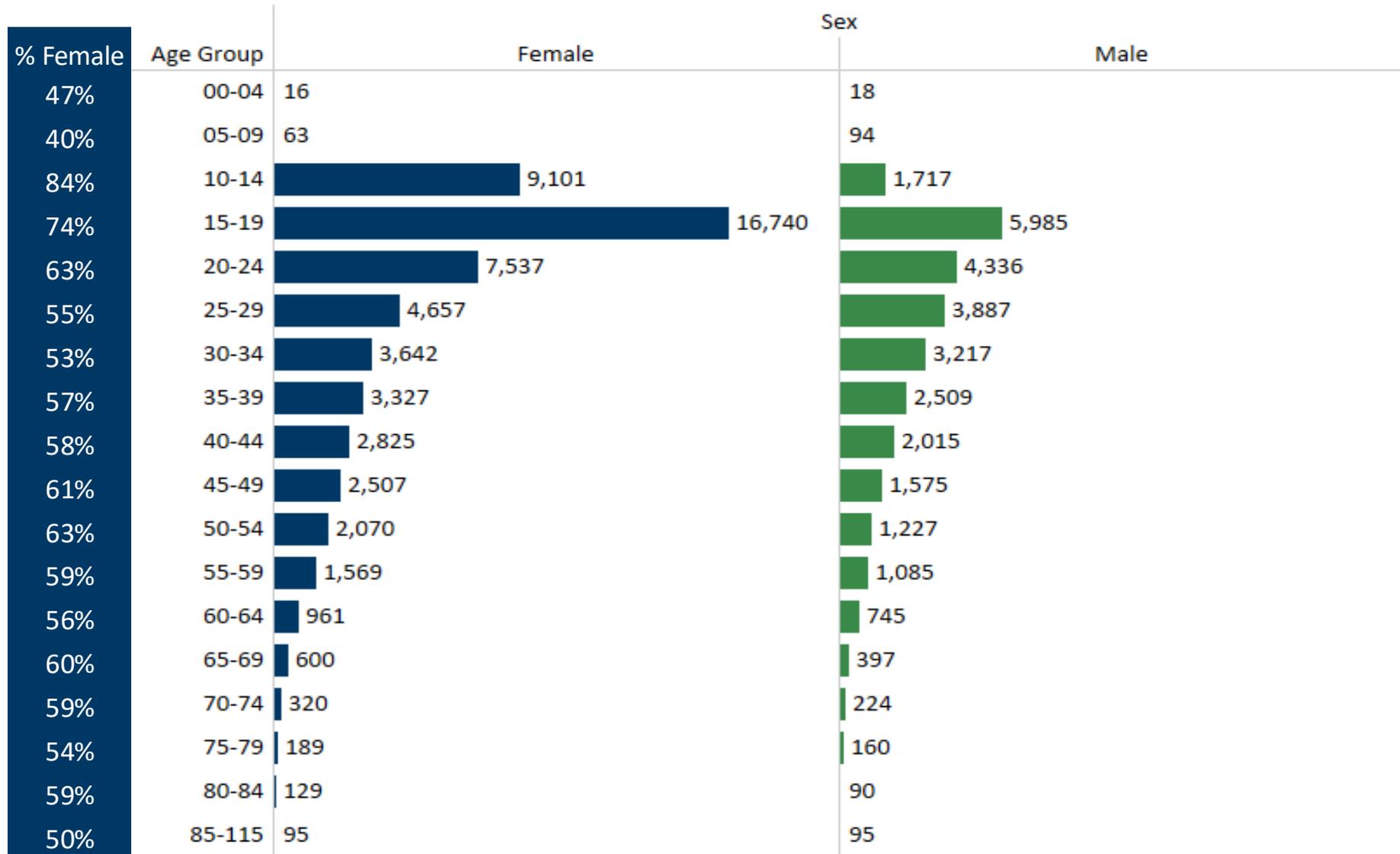


8-County Region



■ Males
■ Females

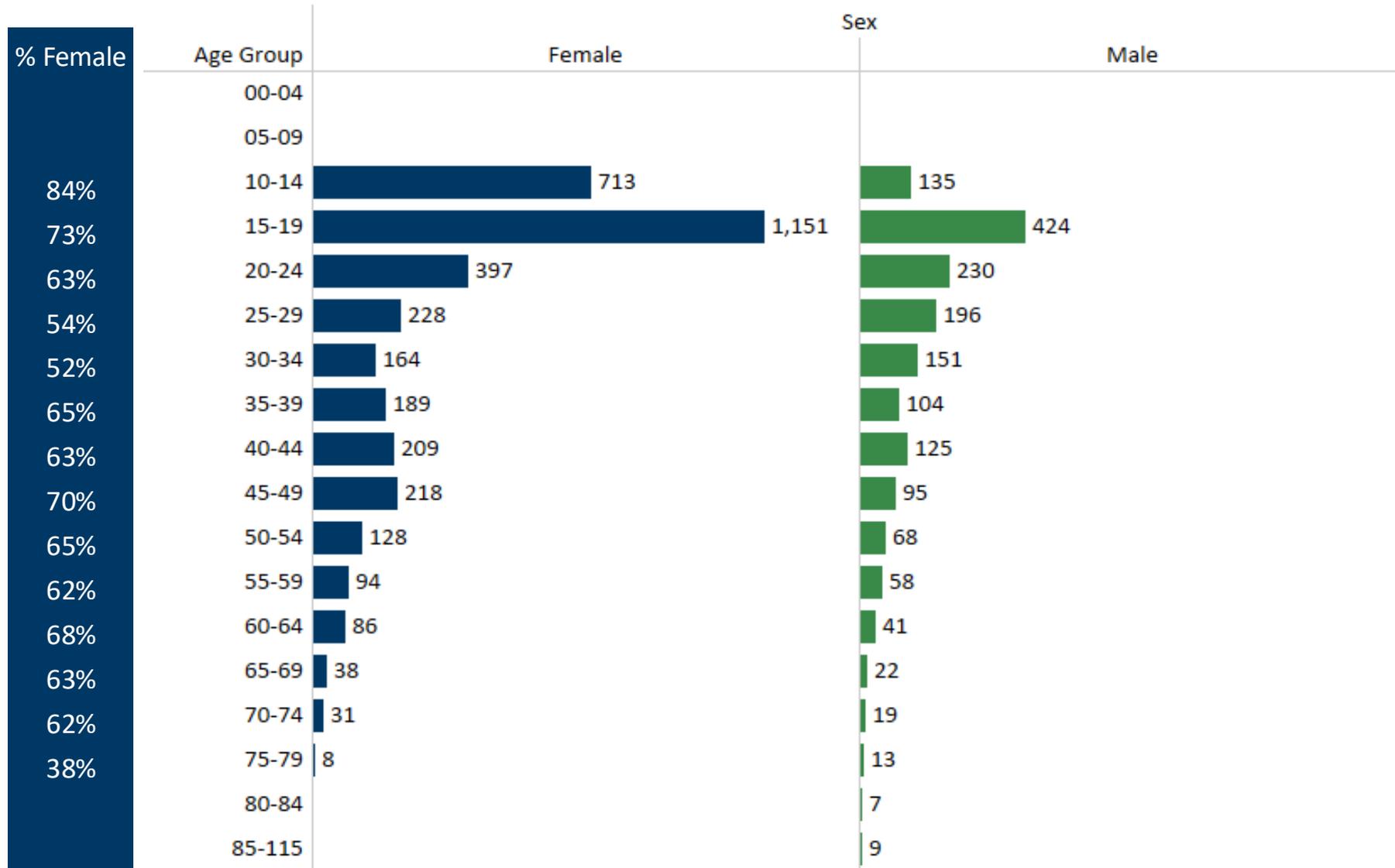
Self-harm injuries more common in females, young adults



Hospital
Discharge Data,
State of MN,
2016-2023

9/26/2025

Self-harm injuries more common in females, young adults

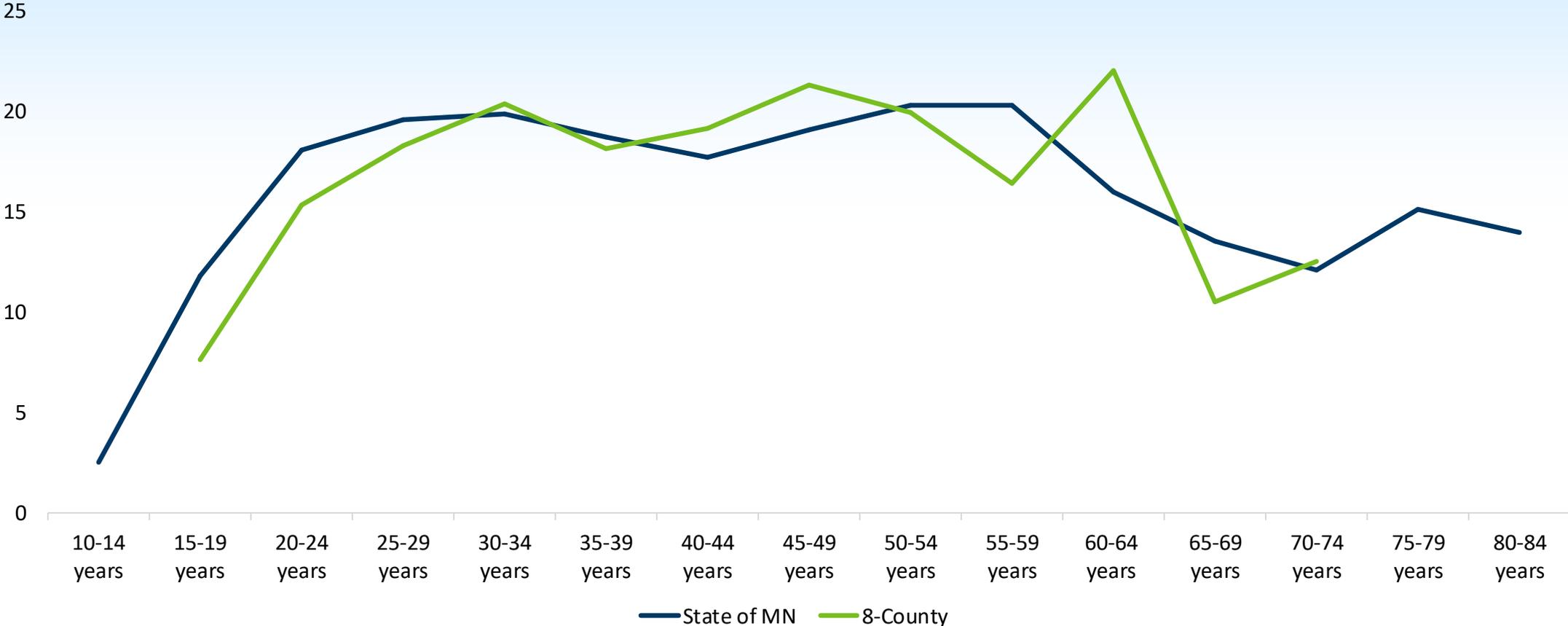


Hospital Discharge Data, 8-County Region, 2016-2023

9/26/2025

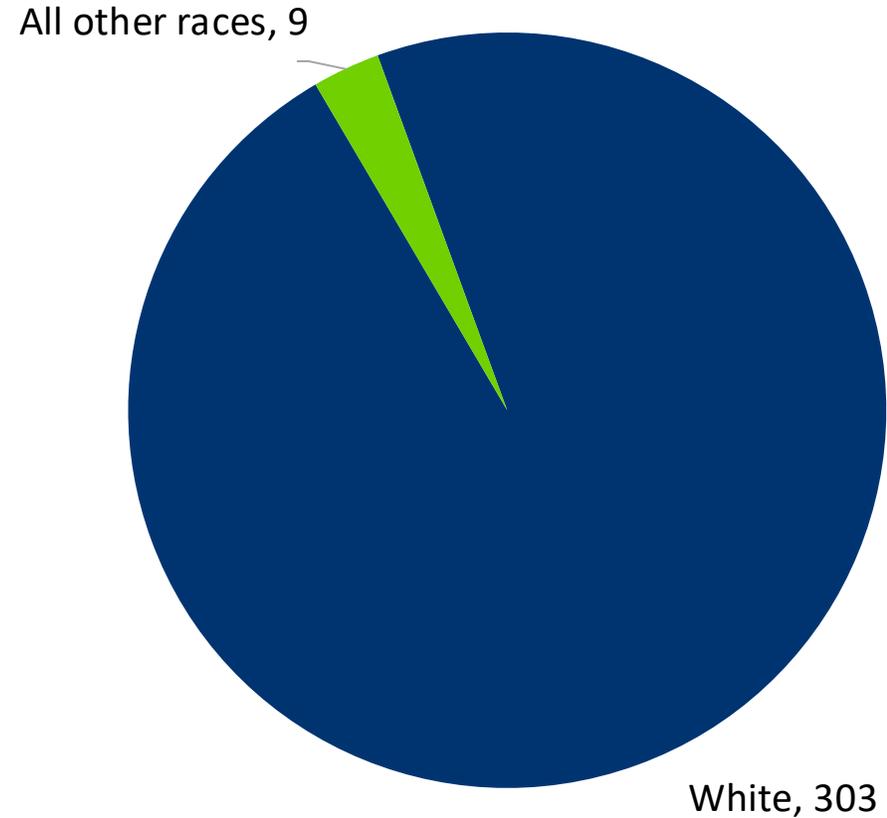
Suicide rates are similarly high from age 25 through 64

Suicide rate by age group, Minnesota and 8-County Region



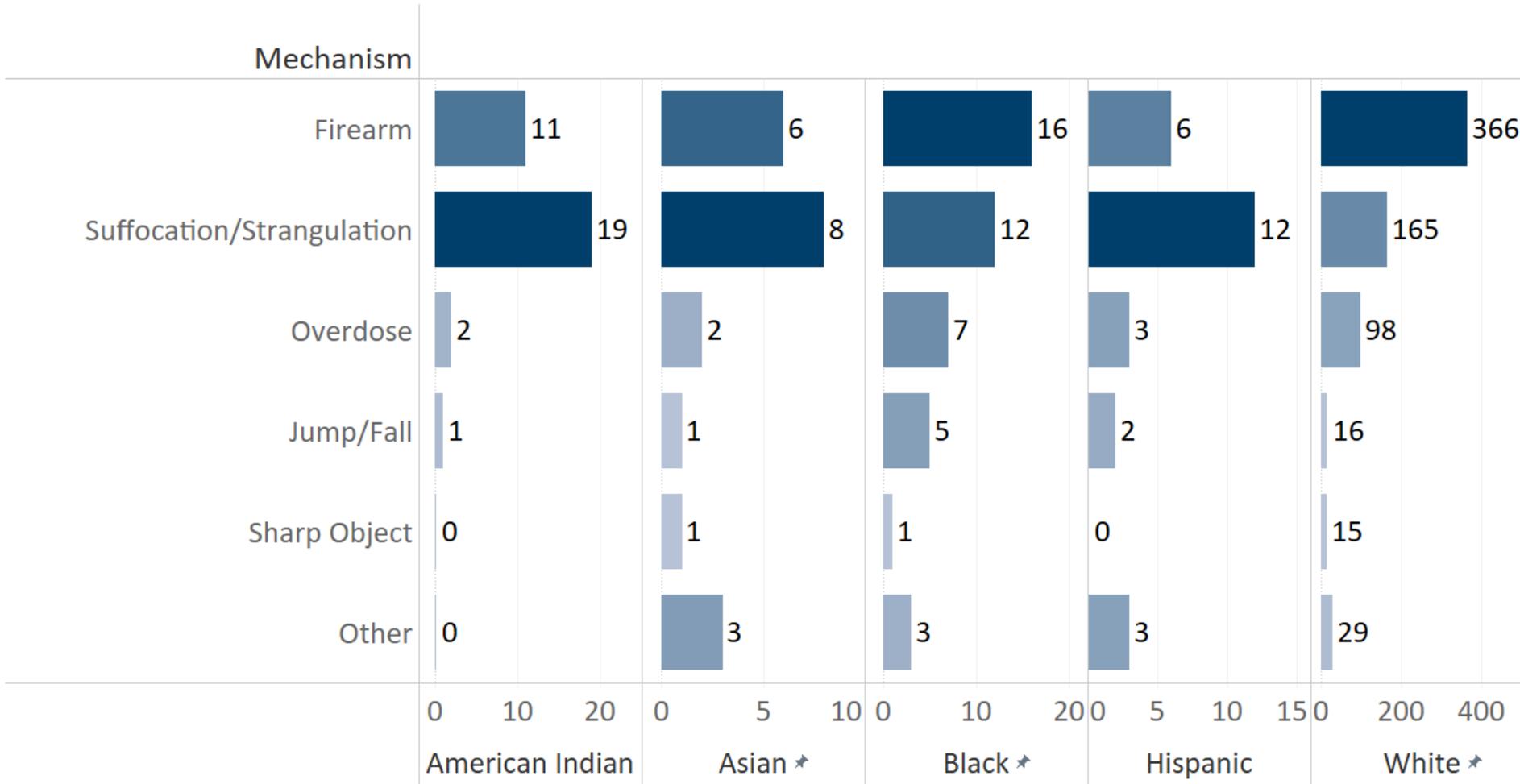
Unable to
separate 8-
County data
by race

Number of Suicide Deaths in 8-County Region, 2018-2023



Injury Mechanism Varies by Race

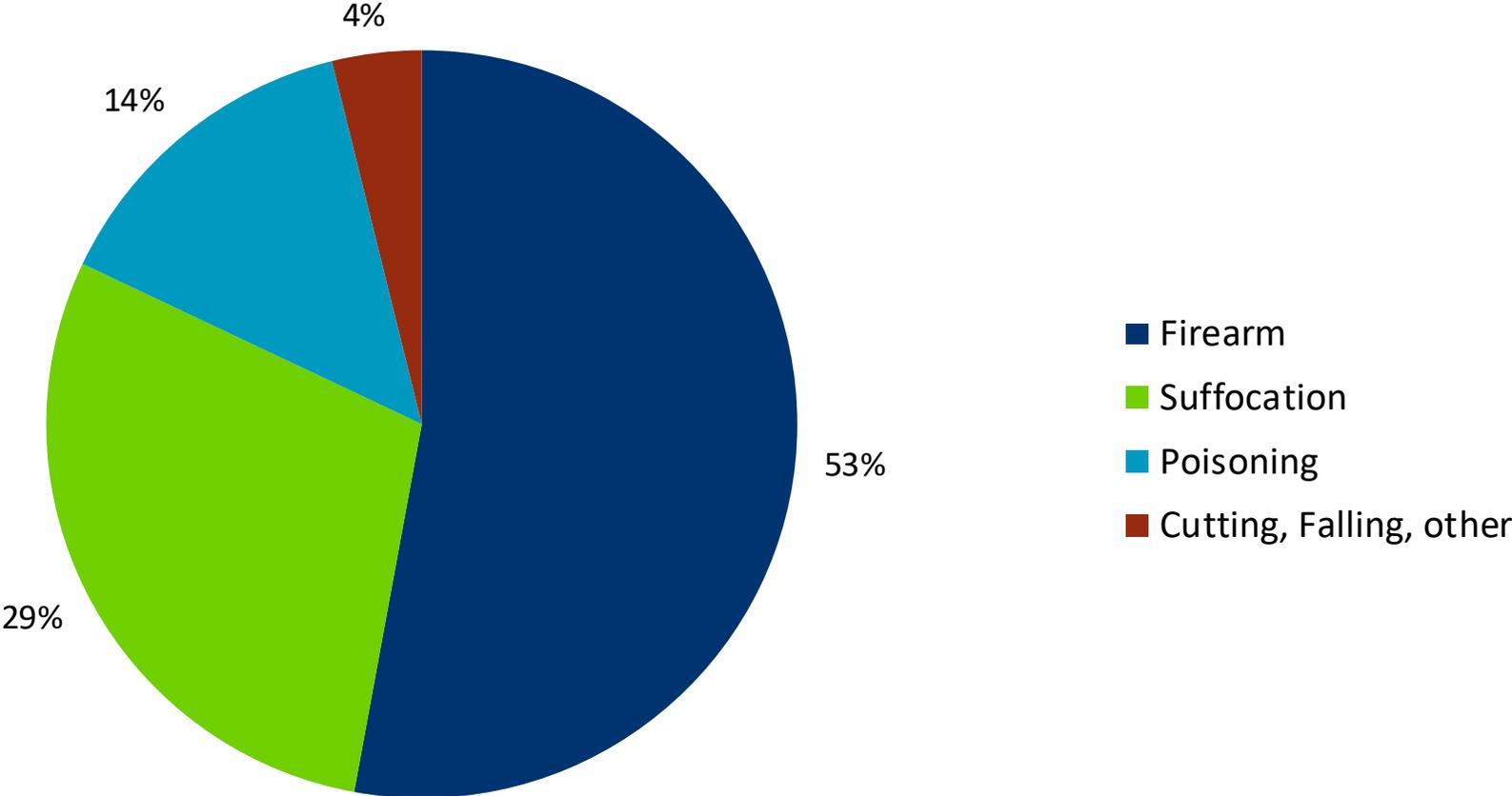
2024 Preliminary Suicide Count by Race and Injury Mechanism*



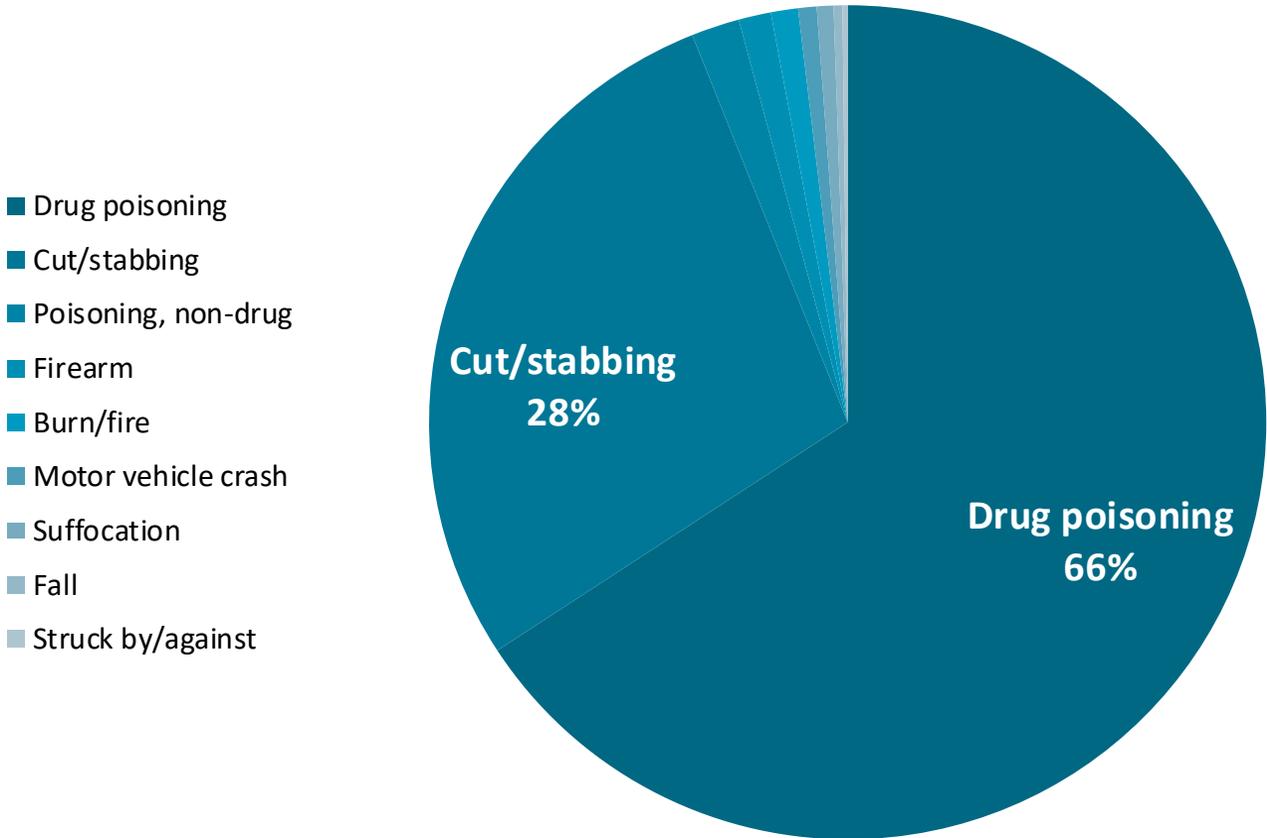
*Note: These counts are not mutually exclusive across groups. Each group shown here includes anyone who was identified as part of that group on their death certificate, including individuals of multiple racial backgrounds.

Firearm suicide more common in 8-County region

8-County Region, 2018-2023



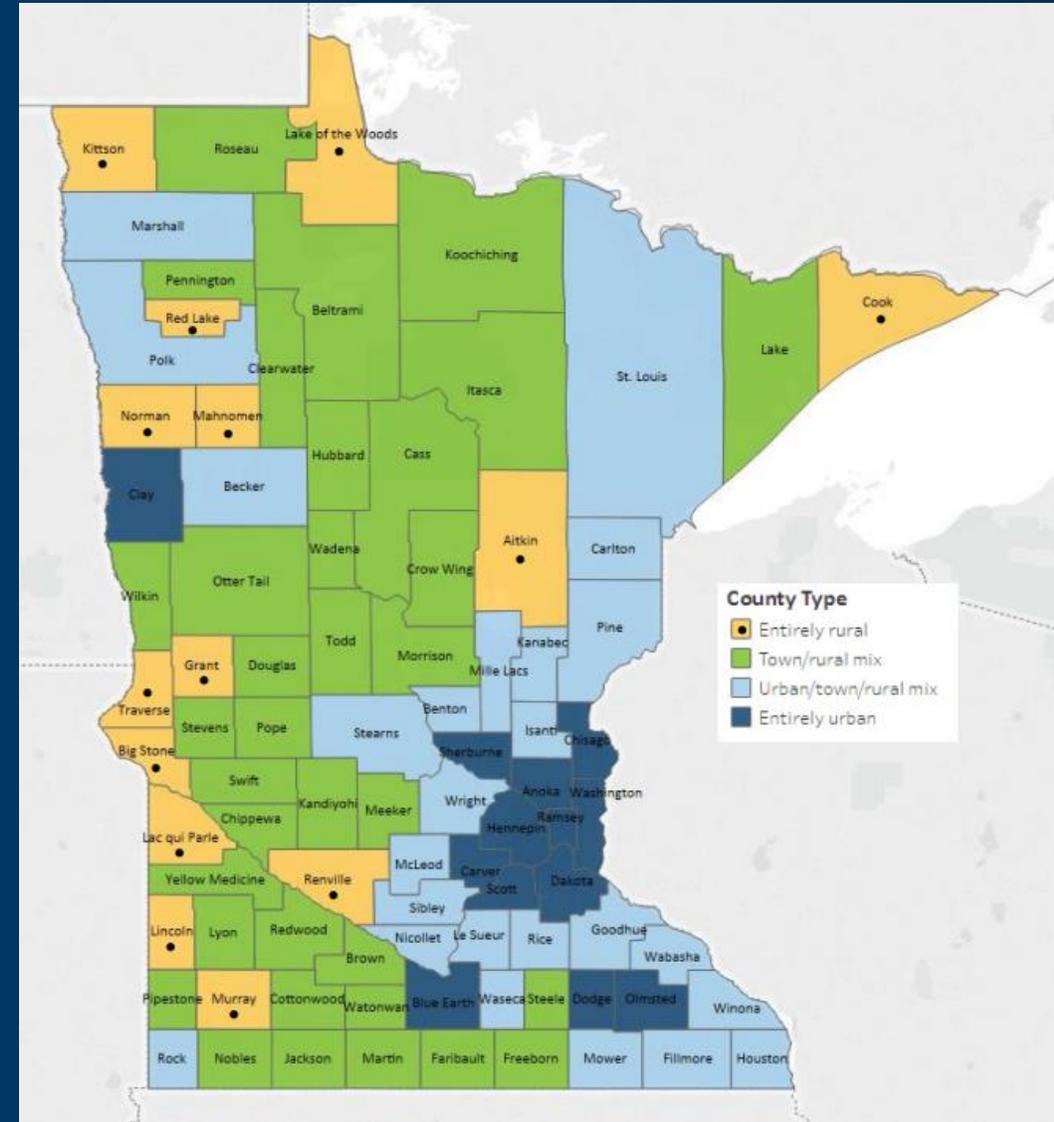
Drug poisoning most common non-fatal self-harm



	Injury count
Drug poisoning	1,944
Cut/stabbing	832
Poisoning, non-drug	55
Firearm	37
Burn/fire	31
Motor vehicle crash	21
Suffocation	19
Fall	10
Struck by/against	6

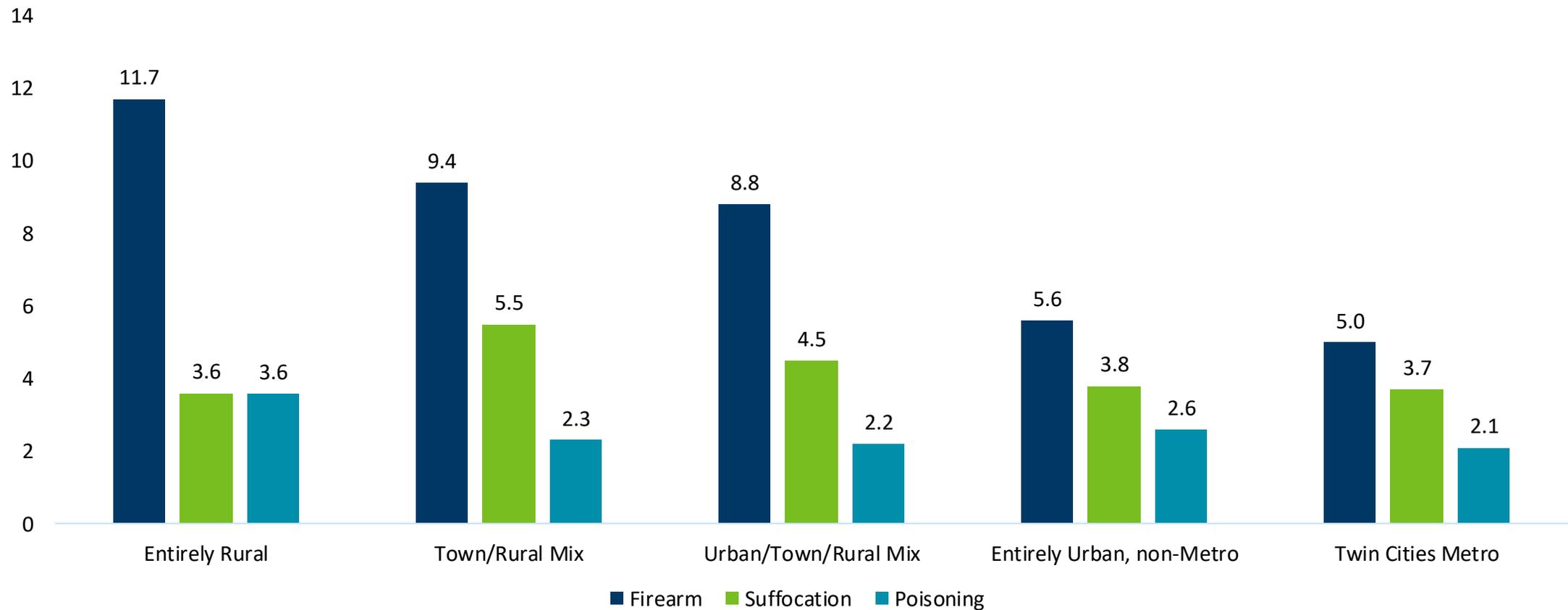
New way to identify urbanicity

- Based on Minnesota State Demographic Center report
- Uses Rural Urban Commuting Areas (RUCAs)
- RUCAs classify census tracts: population density and daily commuting
- Five categories
 - Entirely rural
 - Town/Rural Mix
 - Urban/Town/Rural Mix
 - Entirely urban
 - Twin Cities counties



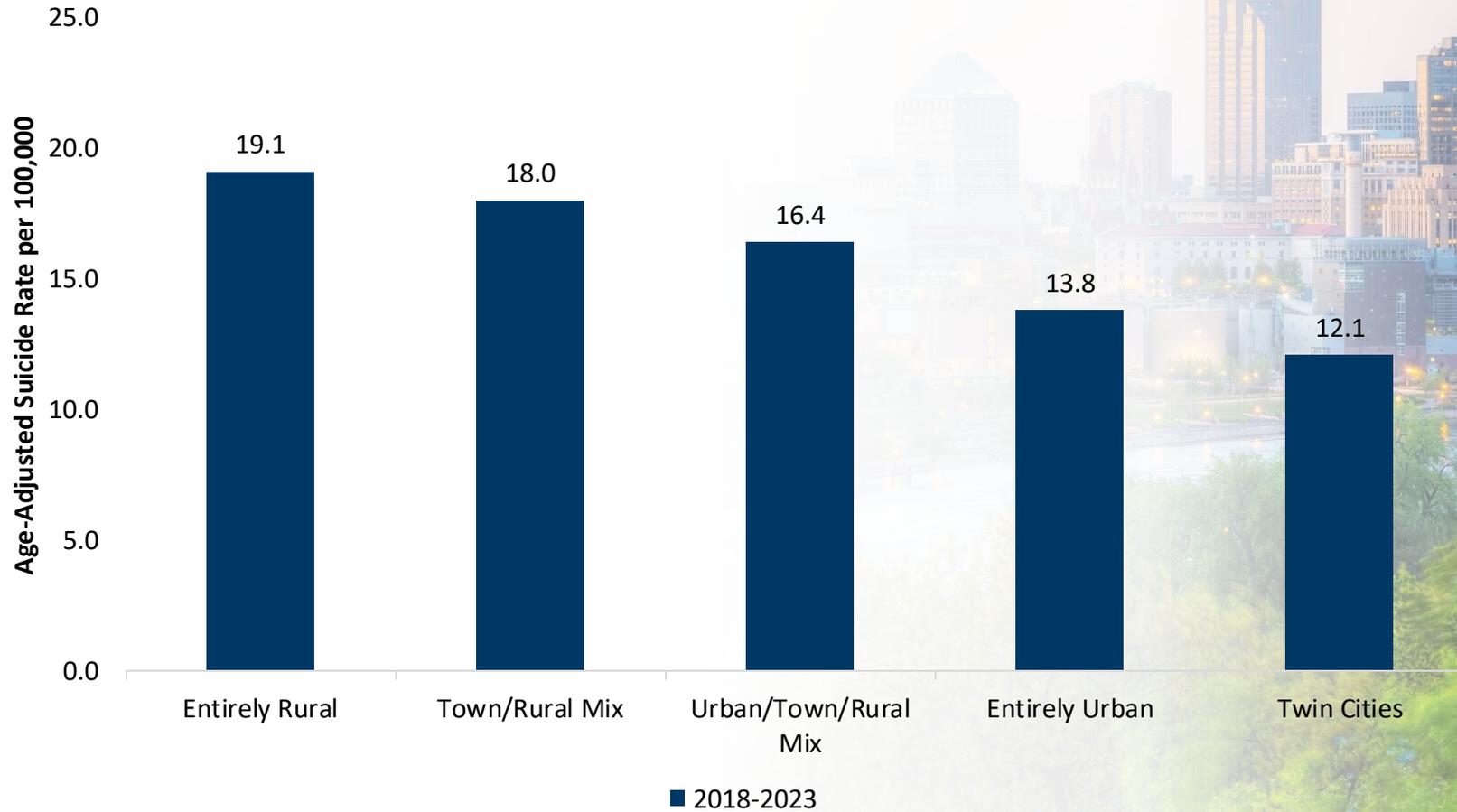
More-rural areas have higher firearm suicide rates

Suicide Rates by Urbanization and Mechanism, Minnesota, 2019-2023



Suicide rates are higher in more-rural areas

Suicide Rate for Urban/Rural Designations, Minnesota





Gathering your own data

Steps for gathering relevant data

Preparation

Define what you want to know and how data aligns with your values

Community Conversations

Host conversations to understand community concerns, opportunities, and existing data

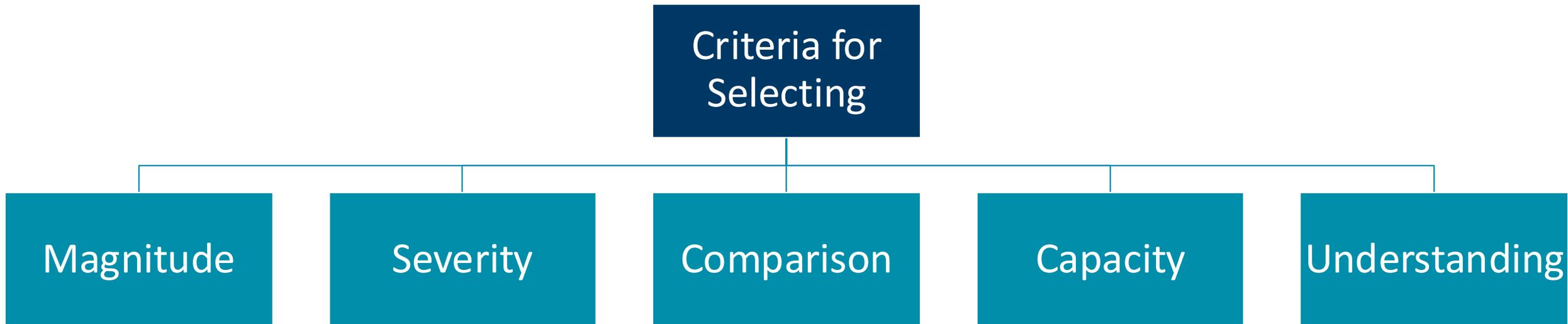
Review available quantitative data

Gather and review existing data

Synthesize & Share

Look for key themes; communicate back to community; do you need more data?

Choosing Long Term Goals

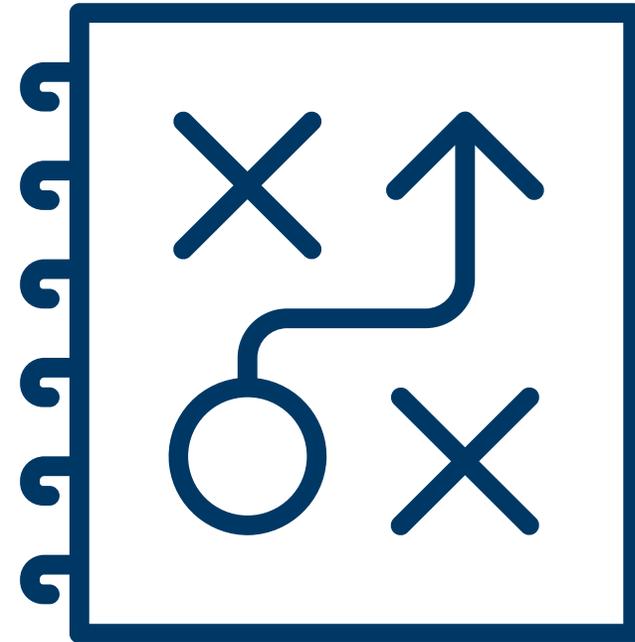


Prioritizing Risk and Protective Factors

Importance	Changeability
How much does this factor impact the issue?	Do we have the readiness and resources to address it?
Does it influence multiple behavior health issues?	Are there evidence-based strategies available?
Is it critical for specific age group?	Can we reasonably create change in the short-to mid-term.

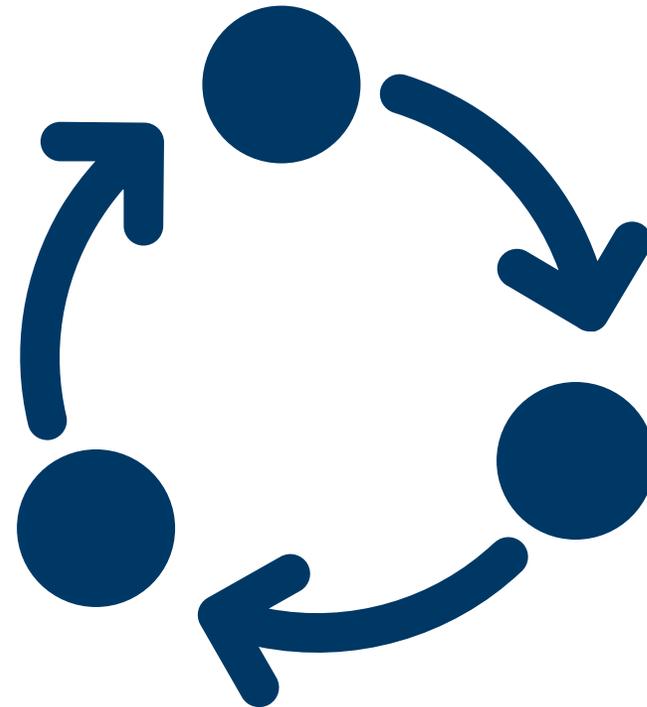
Strategy Selection – Determining Fit

- Evidence of Effectiveness
- Conceptual Fit
- Practical Fit



Monitoring and Evaluating Progress

- Track progress
- Set metrics
- Regular check-ins
- Adjust the plan



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Thank You!

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