

The patterns and prevention of suicidal behavior

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Learning Objectives

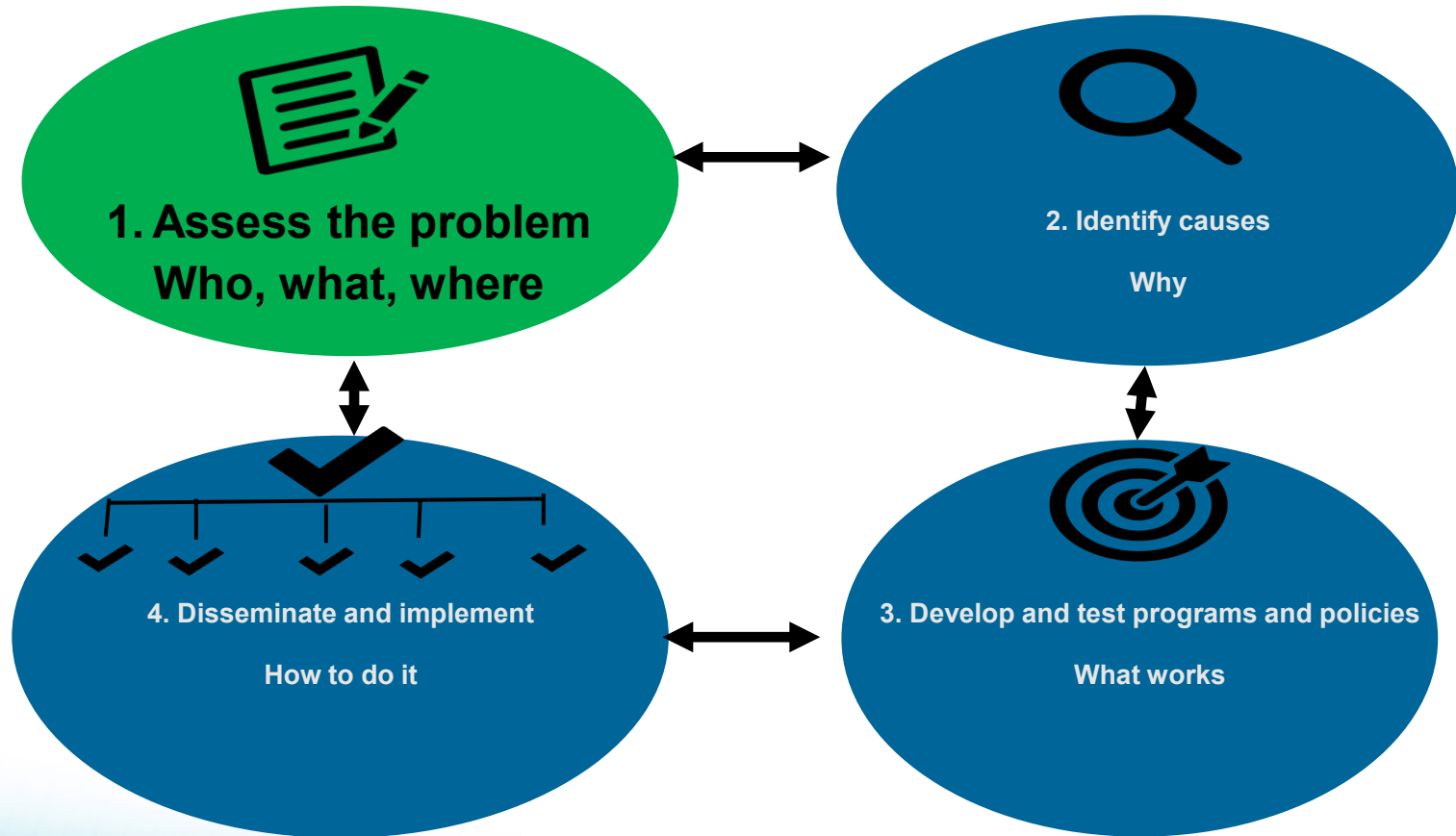
- At the conclusion of the session, participants should be able to:
 - Describe the public health approach
 - Describe the magnitude of suicidal behaviors
 - Identify some risk and protective factors for suicidal behavior
 - Cite examples of useful interventions to prevent suicide

Public Health Approach to Prevention

- The public health approach seeks to answer the foundational questions:
 - What is the problem?
 - How could we prevent it from occurring?
- To answer these questions, public health uses a systematic, scientific method for understanding and preventing suicide.



Public Health Approach to Suicide Prevention



The leading causes of death – United States, 2021

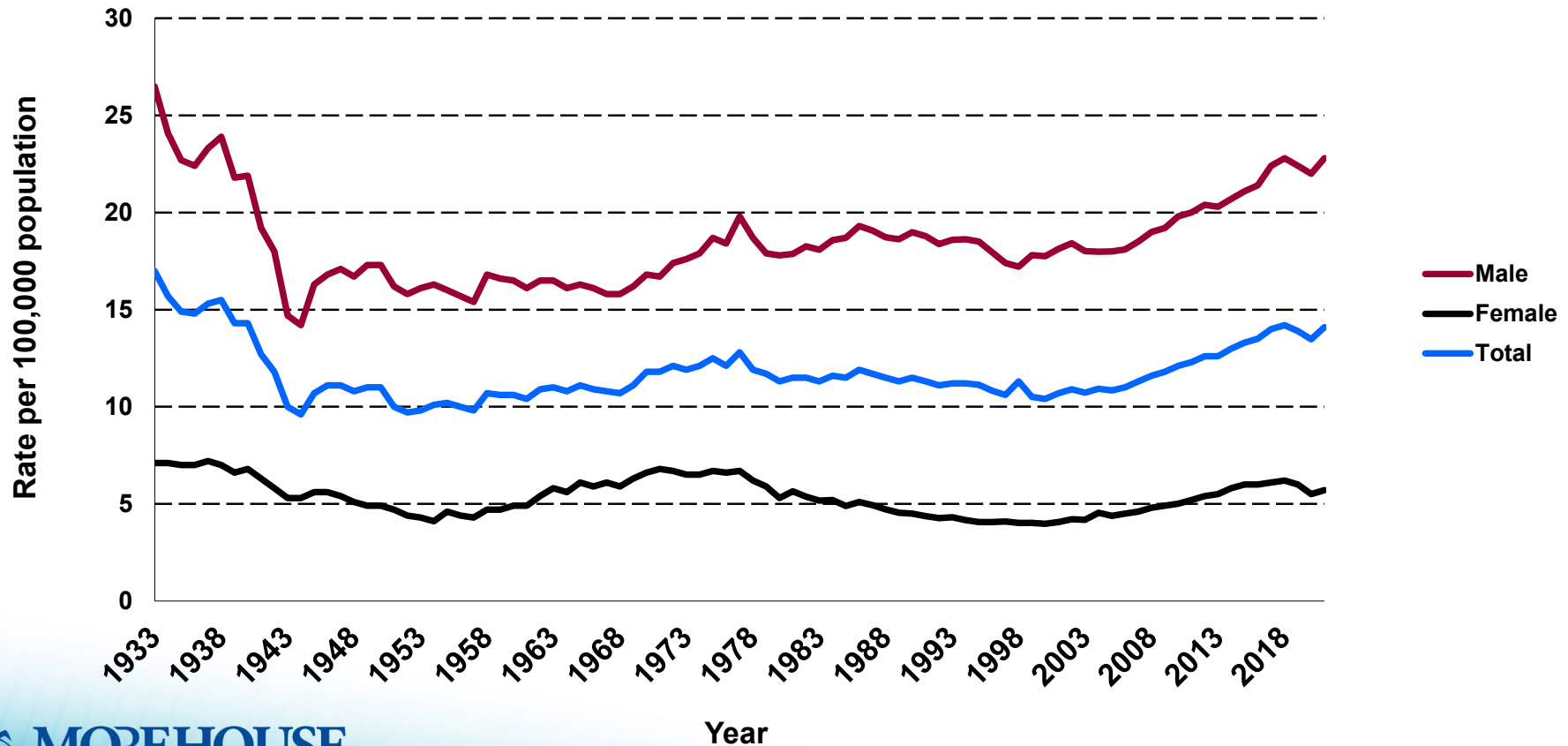
Rank	Cause	Number of deaths
1	Heart Disease	695,547
2	Malignant Neoplasms	605,213
3	COVID-19	416,893
4	Unintentional Injuries	224,935
5	Cerebrovascular Ds	162,890
6	Chronic Lower Respiratory Ds	142,342
7	Alzheimer's Disease	119,399
8	Diabetes mellitus	103,294
9	Chronic Liver Disease	56,538
10	Nephritis	54,358
11	Suicide	48,183

Leading causes of death by age group – United States, 2021

Rank	10-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years
1	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Malignant Neoplasms
2	Suicide	Homicide	Suicide	COVID-19	COVID-19	Heart Disease
3	Malignant Neoplasms	Suicide	Homicide	Suicide	Heart Disease	COVID-19
4	Homicide	Malignant Neoplasms	COVID-19	Heart Disease	Malignant Neoplasms	Unintentional Injuries
5	Congenital Malformations	COVID-19	Heart Disease	Malignant Neoplasms	Liver Disease	Liver Disease
6	Heart Disease	Heart Disease	Malignant Neoplasms	Homicide	Suicide	Diabetes Mellitus
7	COVID-19	Congenital Malformations	Diabetes Mellitus	Liver Disease	Diabetes Mellitus	Cerebro-Vascular
8	Cerebro-Vascular	Diabetes Mellitus	Pregnancy, childbirth and the puerperium	Diabetes Mellitus	Homicide	Chronic Lower Respiratory Ds #9 Suicide

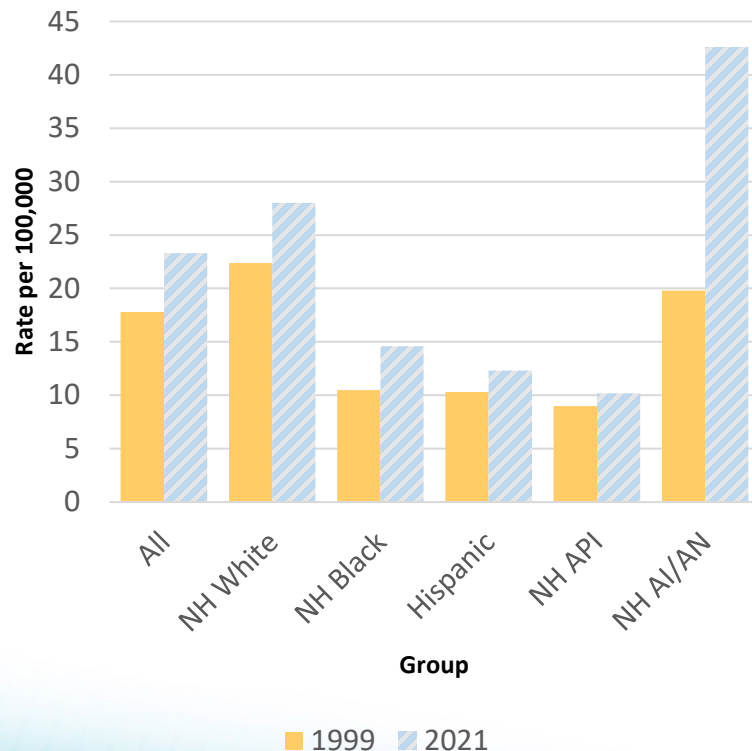


Age-adjusted suicide among all persons by sex -- United States, 1933-2021

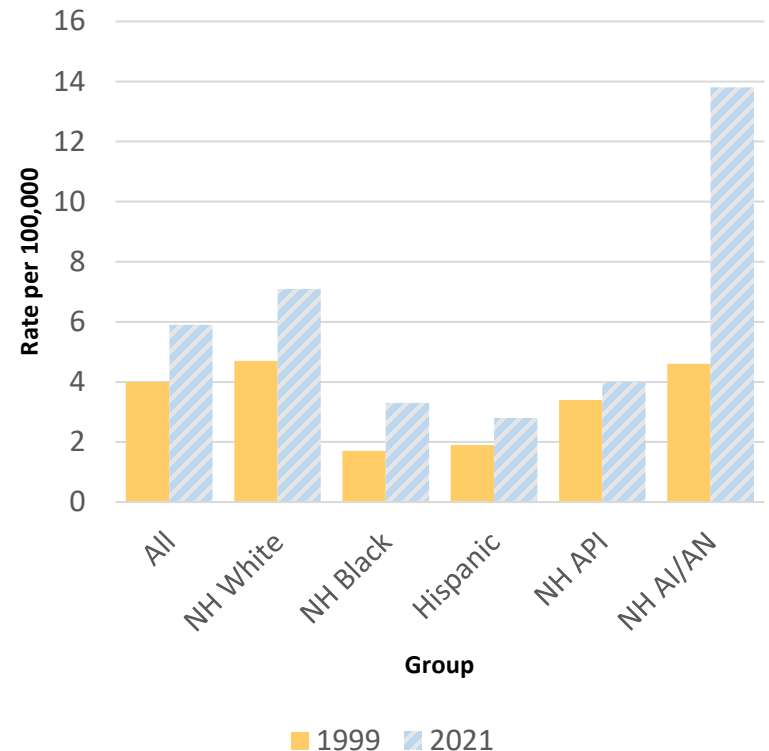


Suicidal rates among by race/ethnicity and sex -- United States, 1999 and 2021

Males

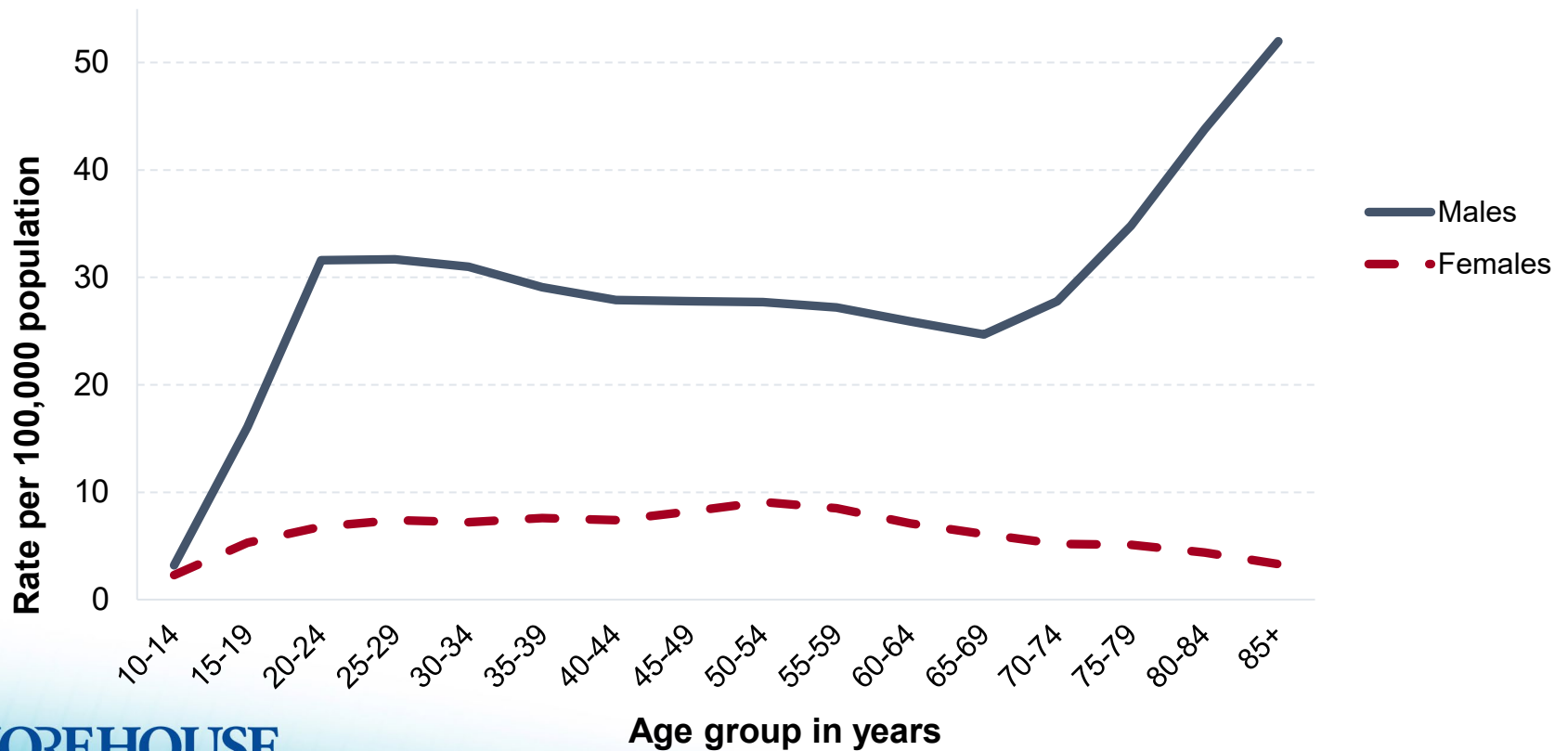


Females

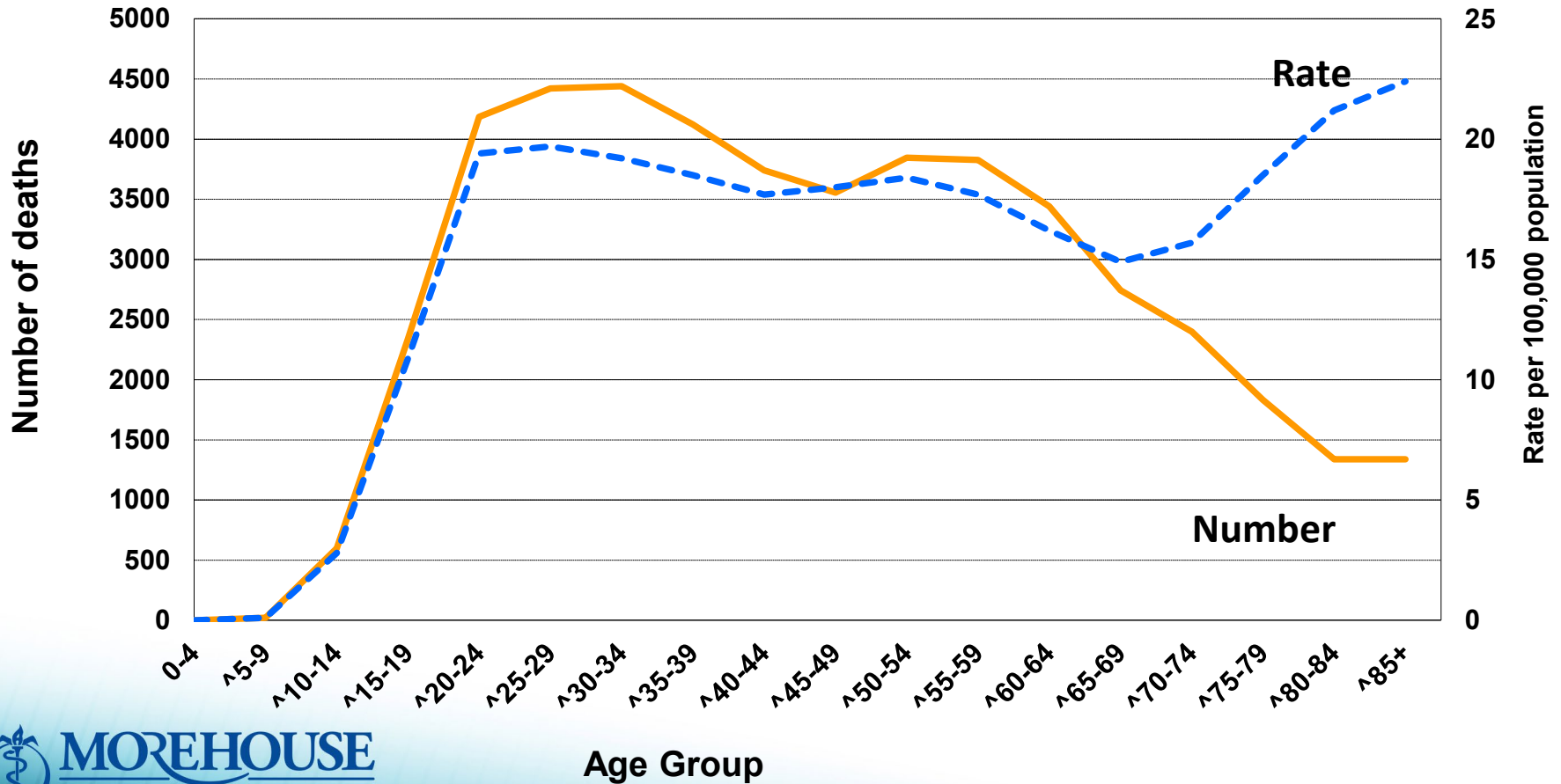


* NH = Non-Hispanic; AI/AN = American Indian/Alaska Native
 Source: CDC Vital Statistics WISQARS and Curtin SC, Hedegaard H. Suicide rates for females and males by race and ethnicity: United States, 1999 and 2017. NCHS Health E-Stat. 2019

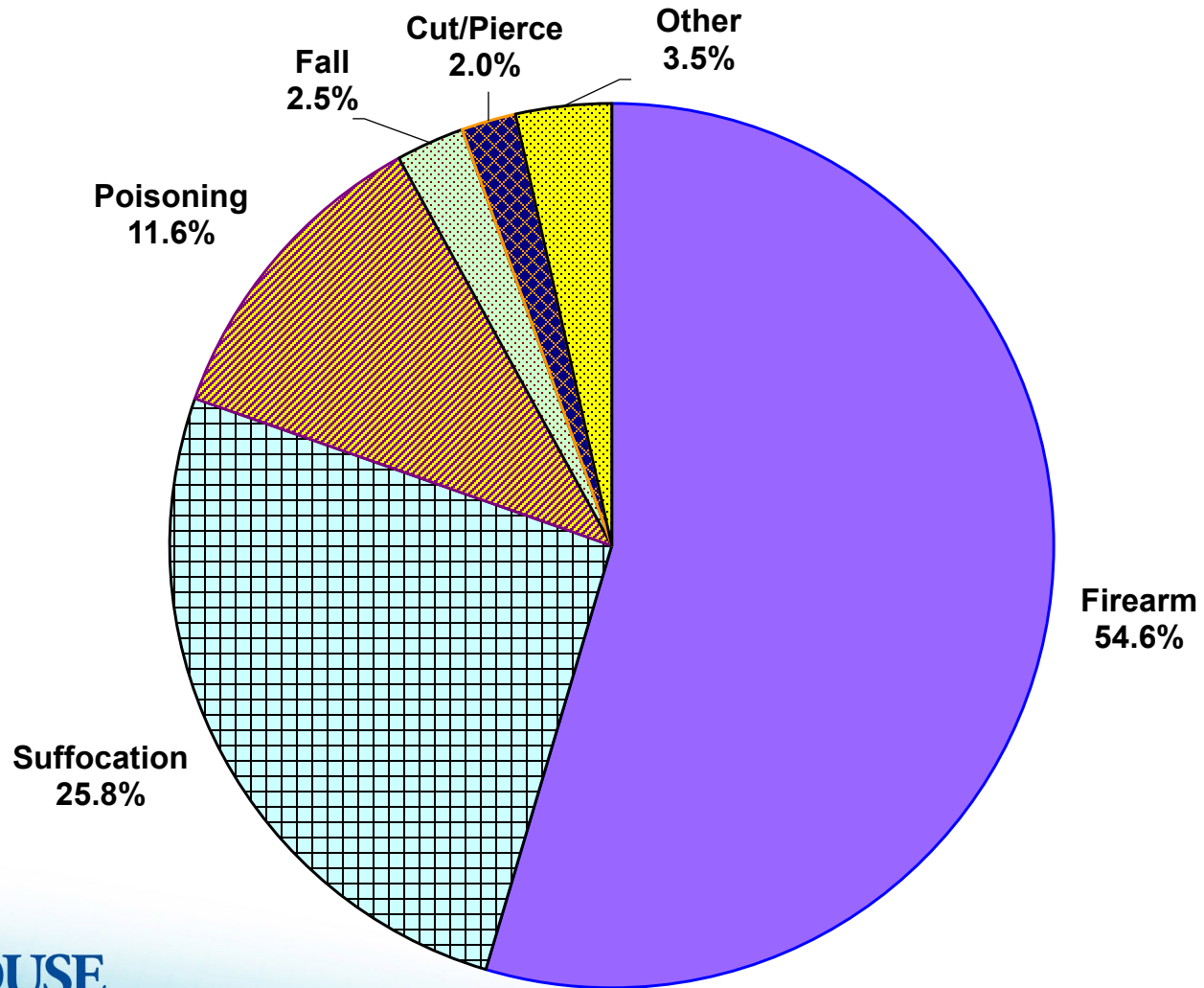
Suicide rates among all persons by age and sex--United States, 2021



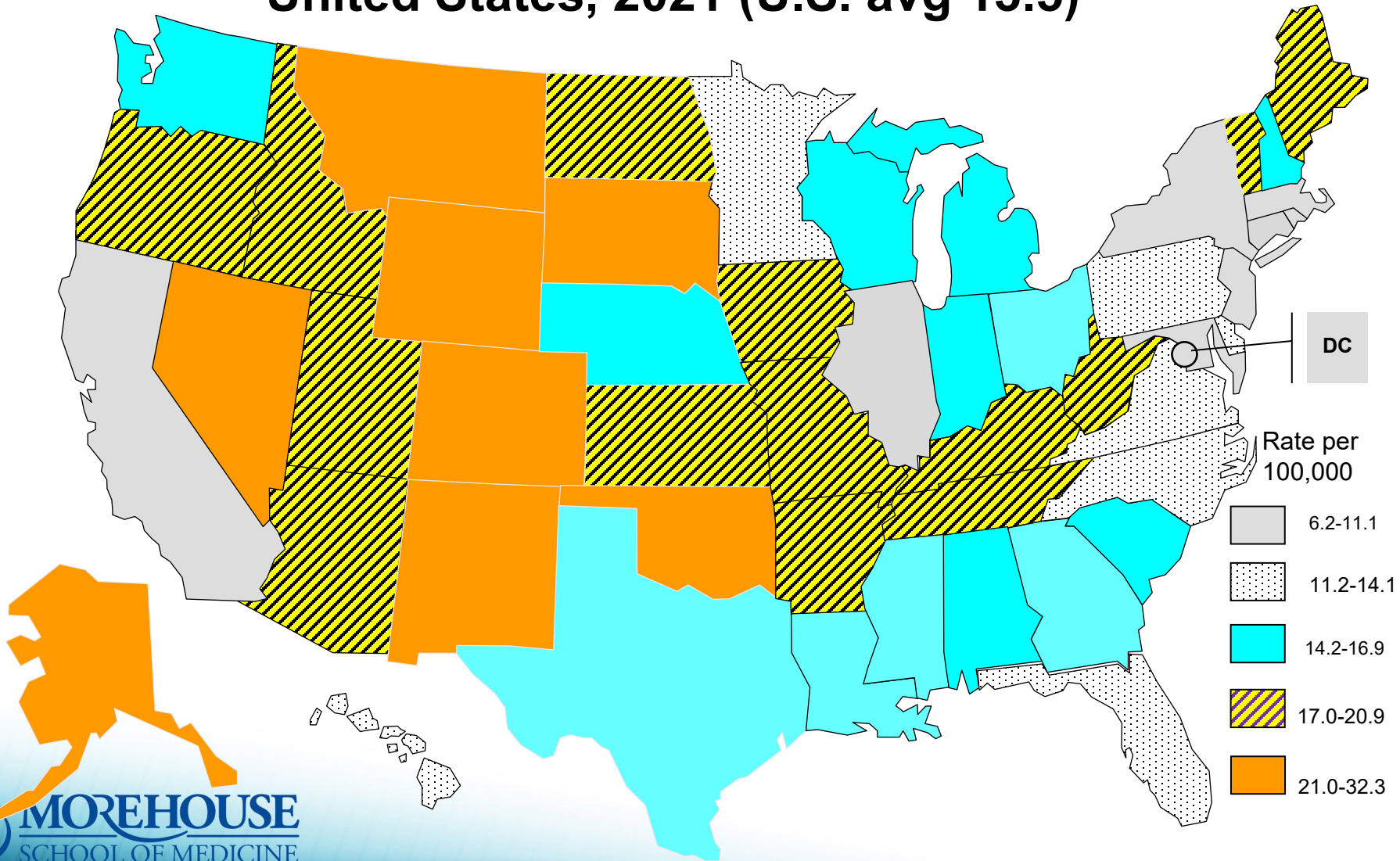
Suicides and suicide rates among all persons by age group -- United States, 2021



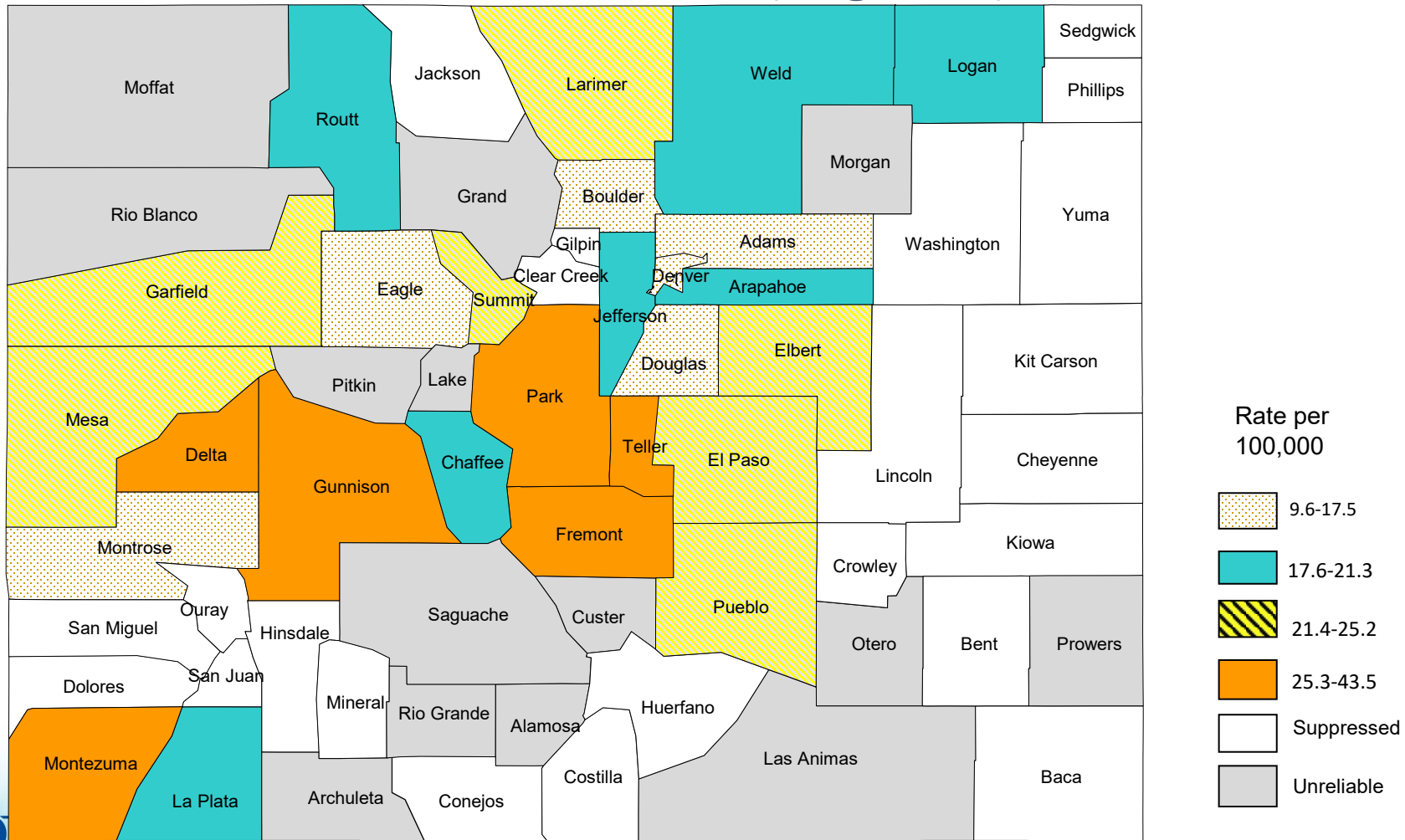
Suicide by method – United States, 2021



Age-adjusted suicide rates among all persons by state -- United States, 2021 (U.S. avg 13.5)

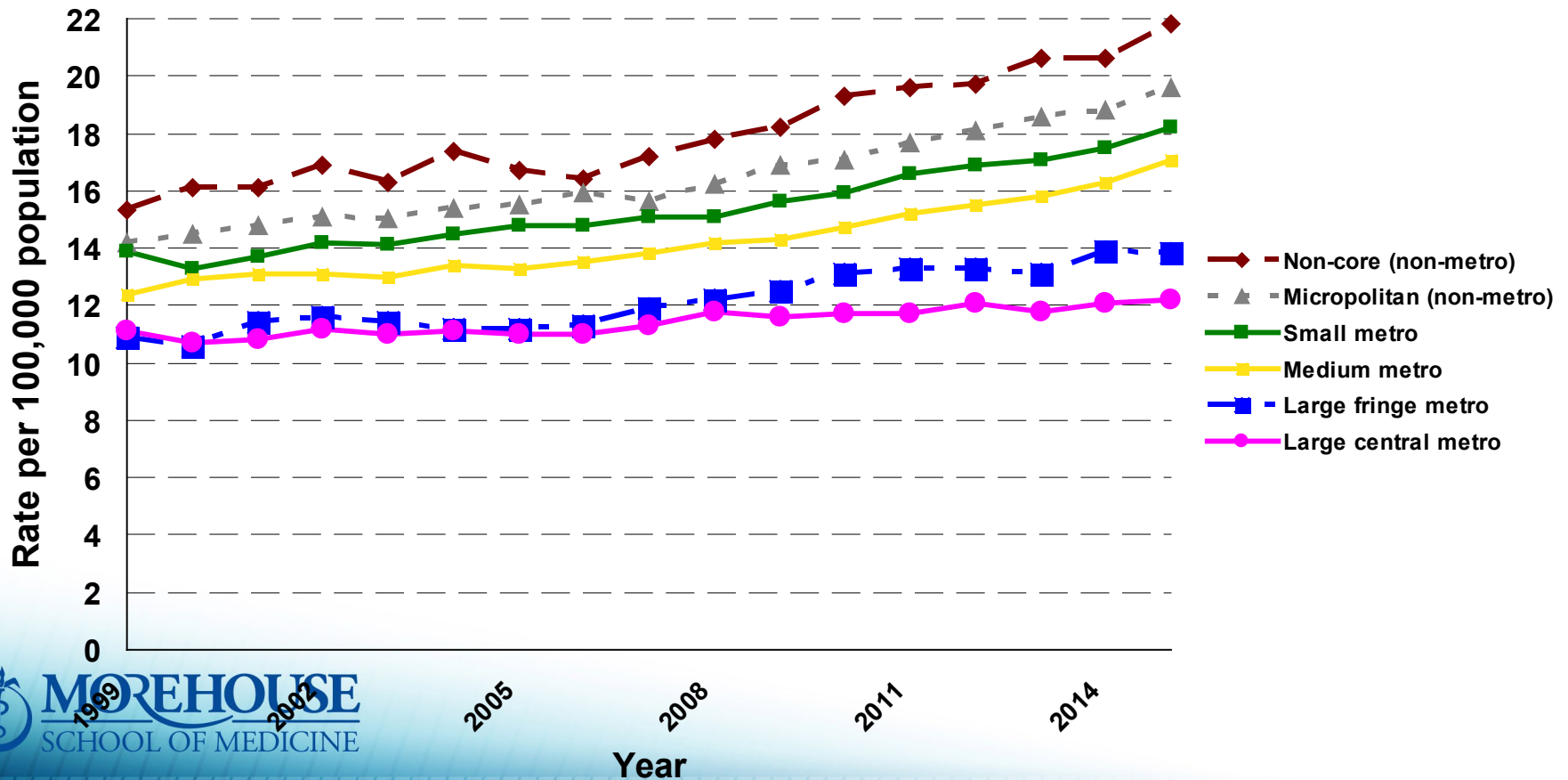


Age-adjusted suicide rates among all persons by county -- Colorado, 2013-2016 (Avg 19.6)

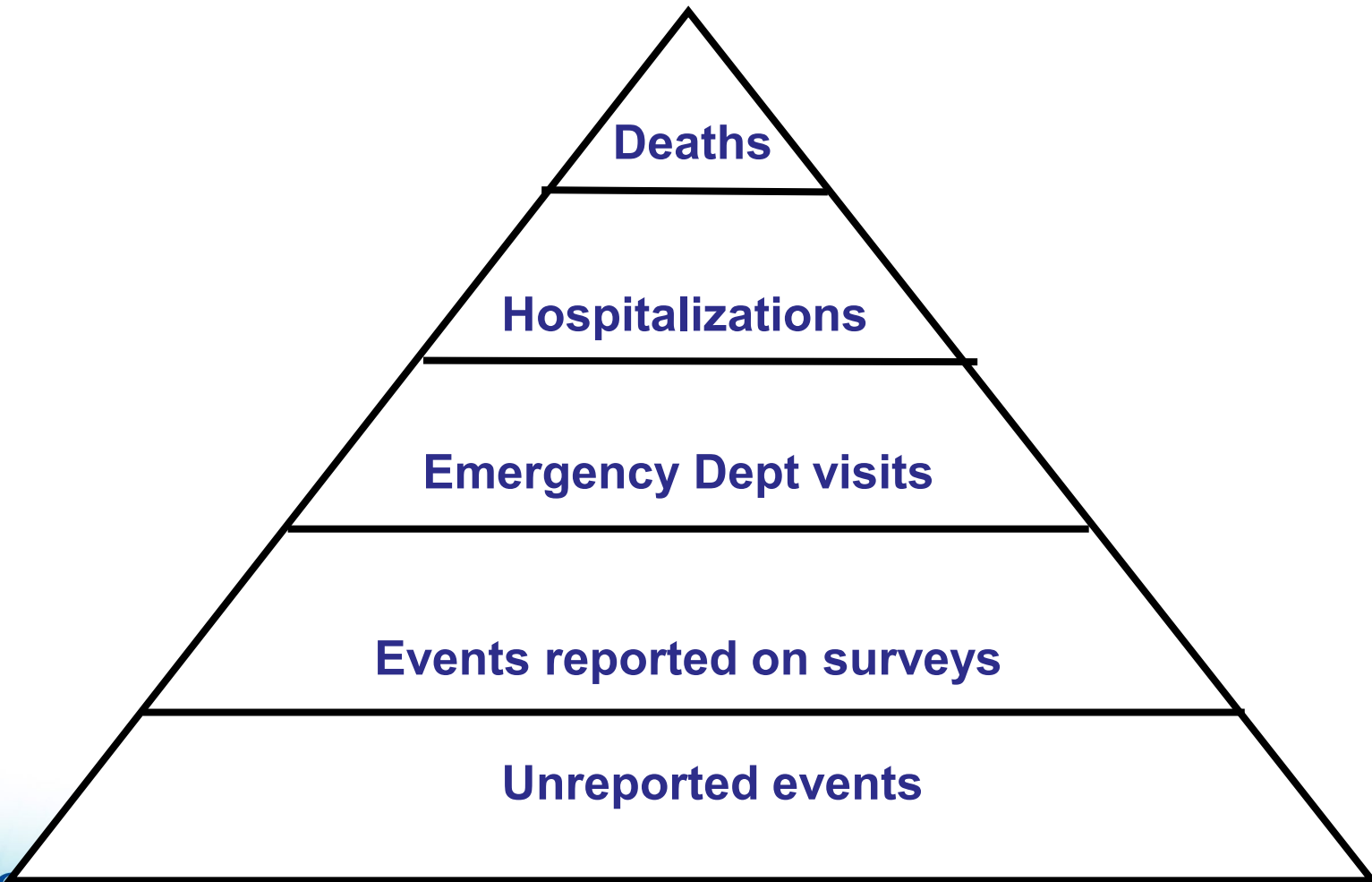


Source: Colo Violent Death Reporting System (VDRS) -
<https://www.colorado.gov/pacific/cdphe/colorado-violent-death-reporting-system>

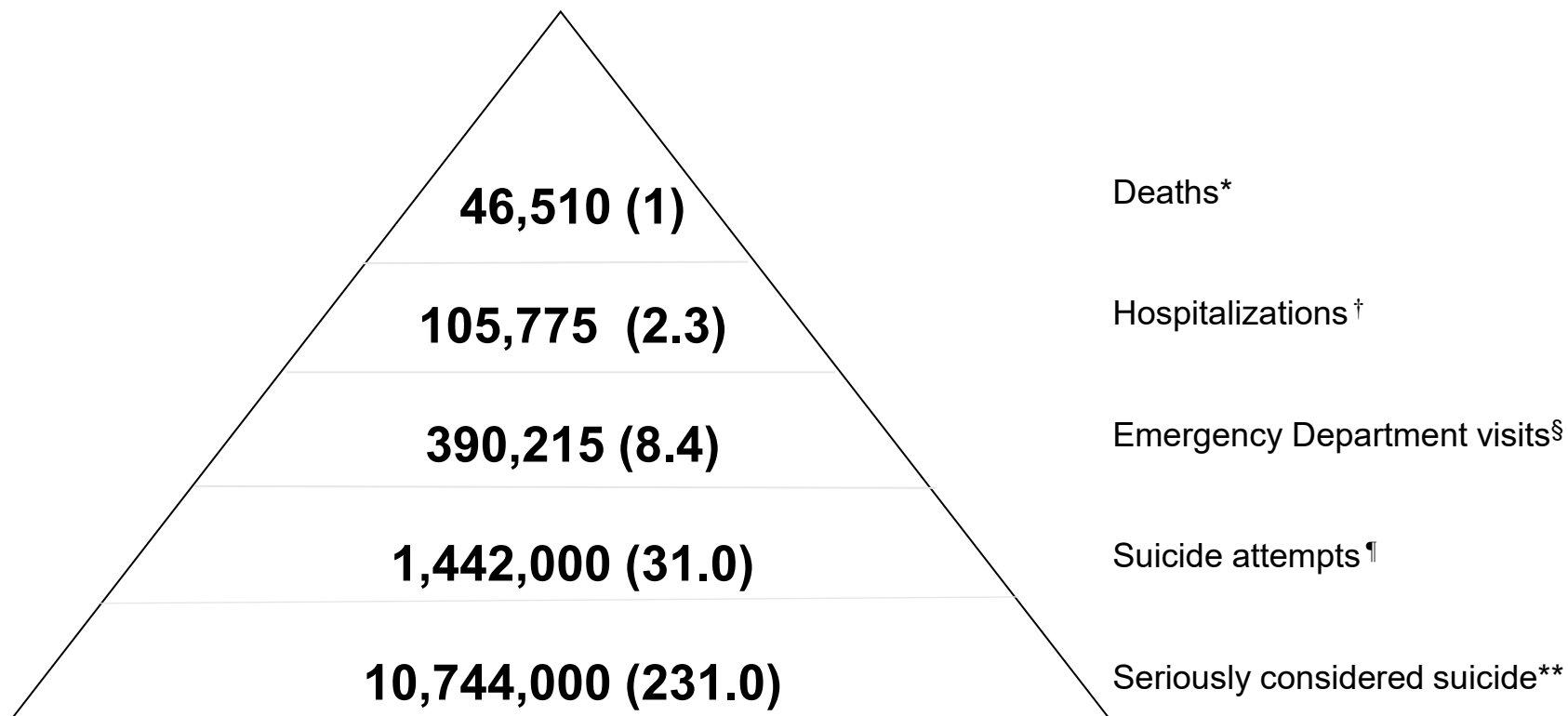
Suicide rates by level of county urbanization among persons aged ≥ 10 years – U.S., 1999-2015



Burden of injury



Number and ratio of persons affected by suicidal thoughts and behavior among adults aged ≥18 years — United States, 2018



Source: CDC's National Vital Statistics System,

*Source: Agency for Healthcare Research and Quality's Healthcare Cost and Utilization Project - Nationwide Inpatient Sample (HCUP-NIS) only 1st diagnosis

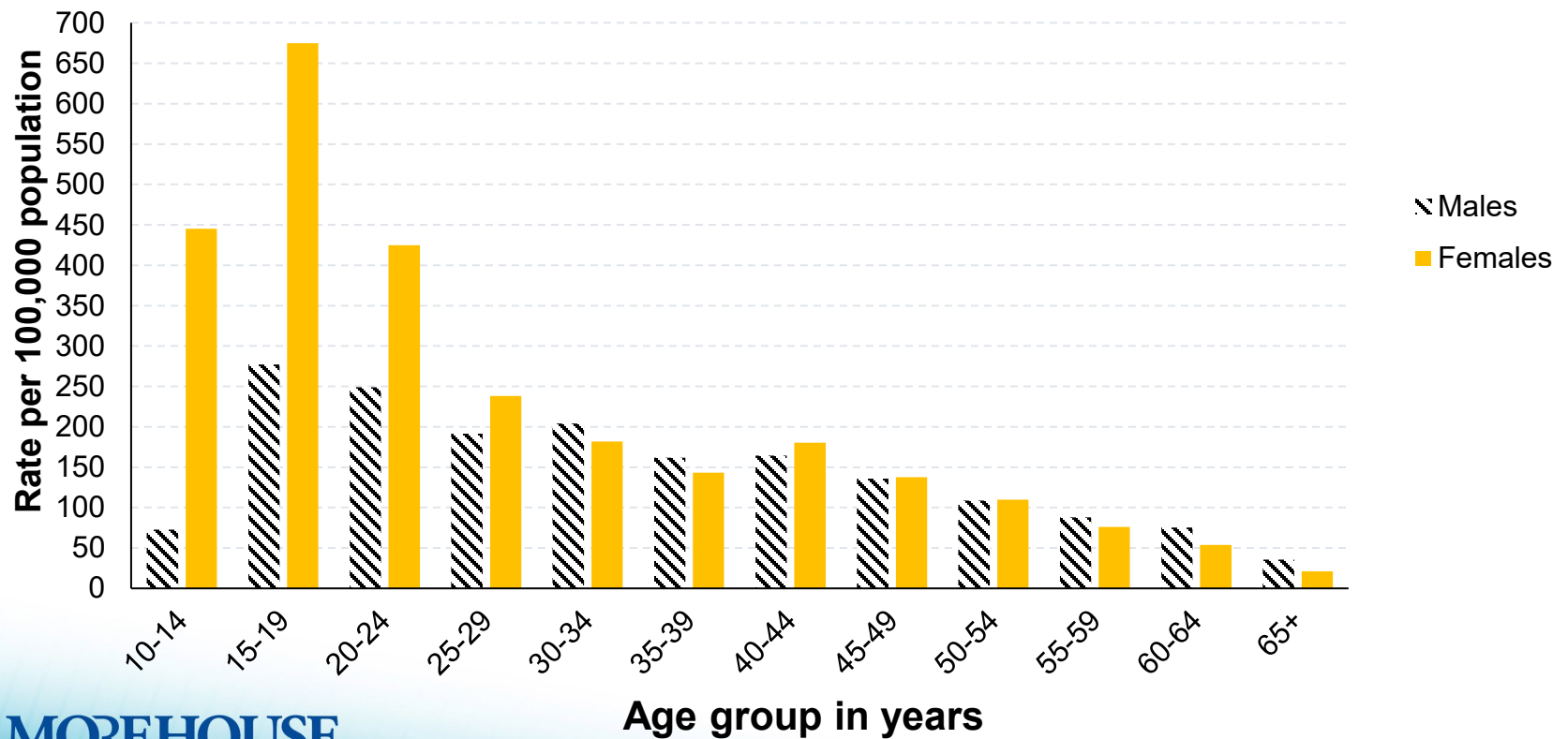
§ Source: Source: CDC's National Electronic Injury Surveillance System-All Injury Program

¶ Source: SAMHSA's National Survey on Drug Use and Health

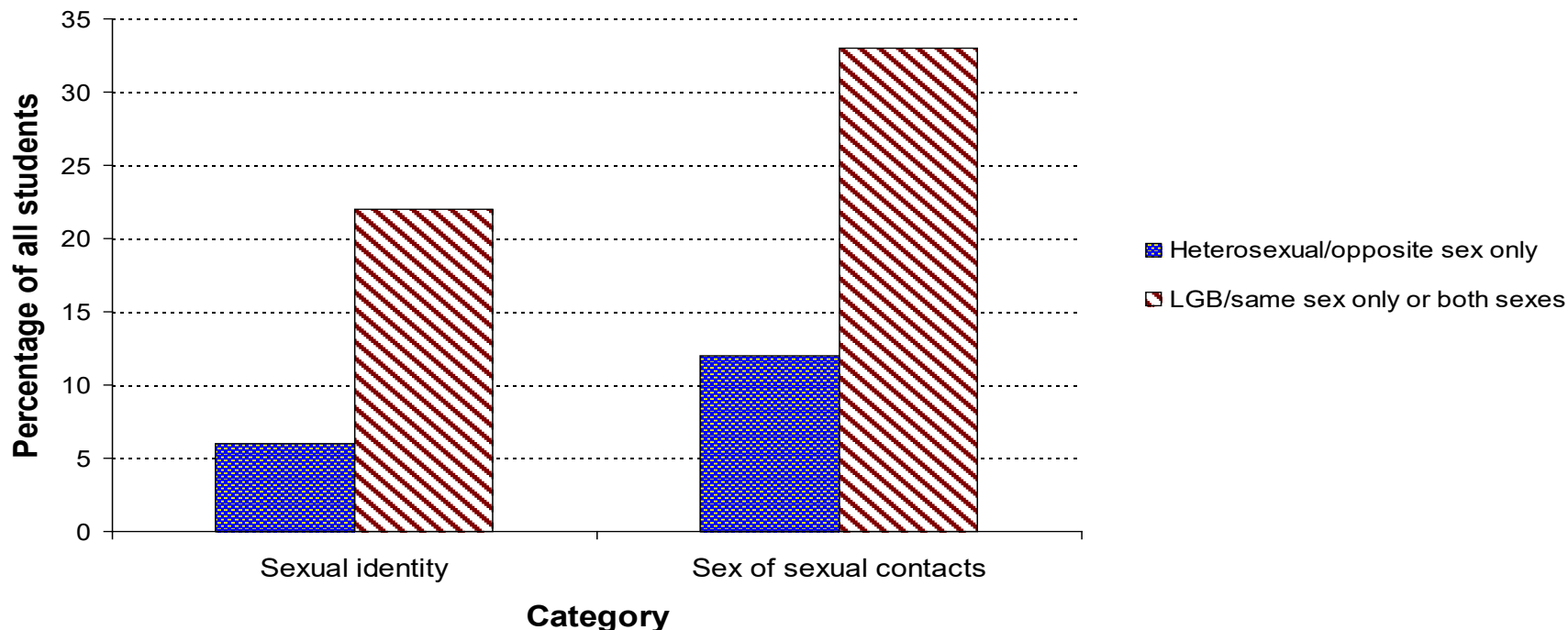
** Source: SAMHSA's National Survey on Drug Use and Health

Number in parentheses represent the ratio of deaths to other categories

Self-inflicted injury among all persons by age and sex--United States, 2020



Suicidal behavior*^ among high school students by sexual identity# and sexual contact – U.S., 2021



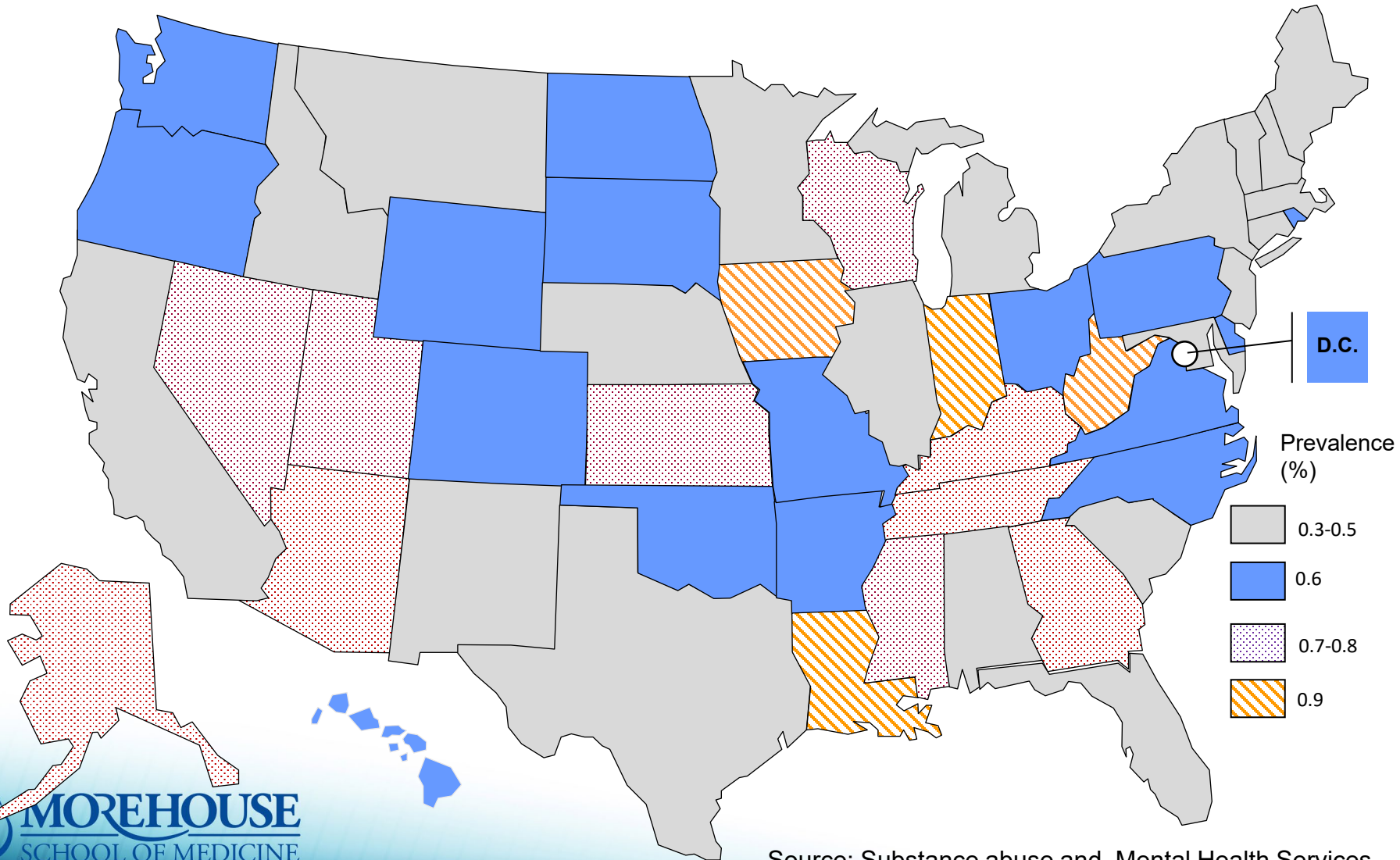
* During the 12 months before the survey.

^ One or more times.

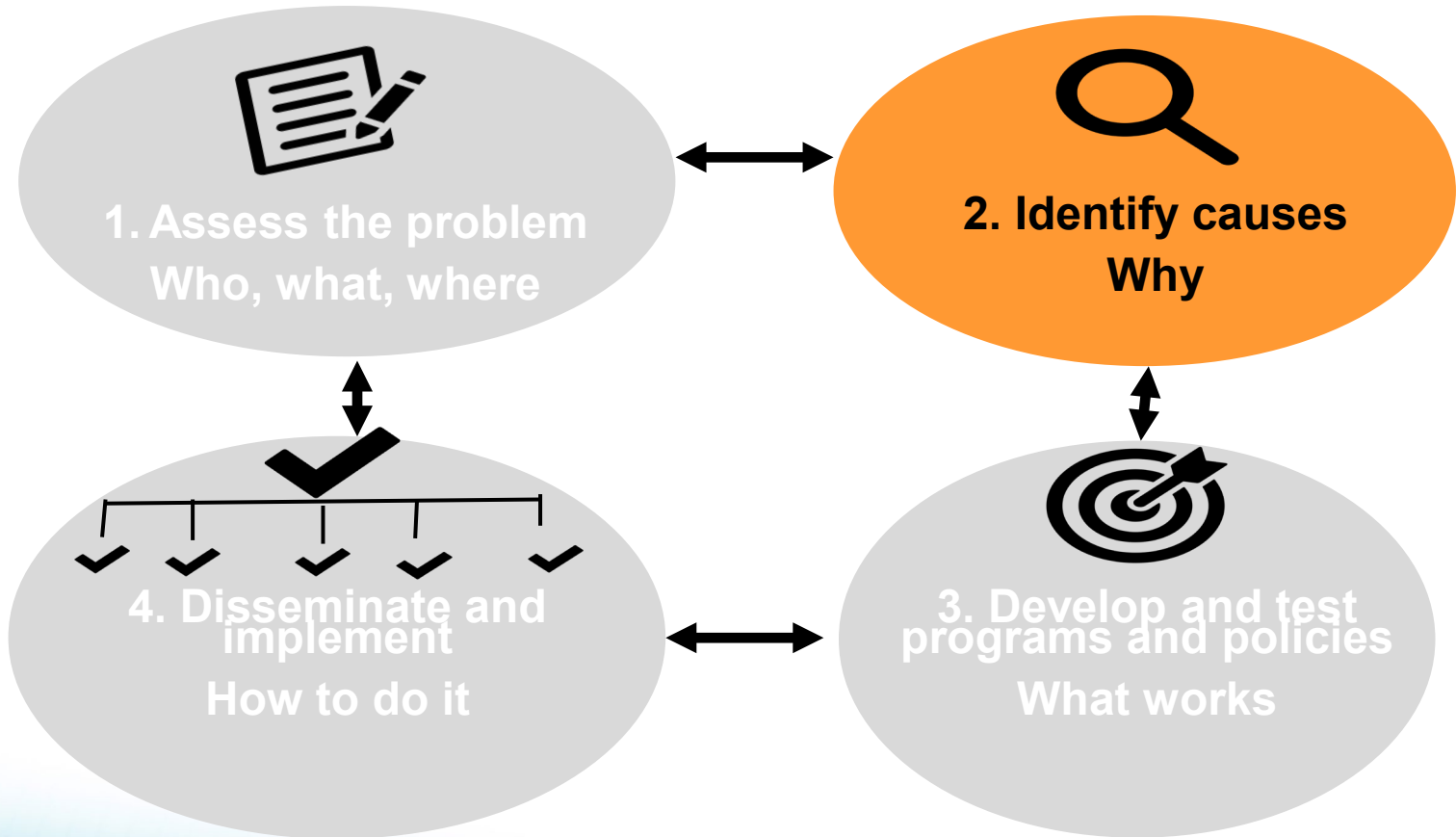
Among students who ever had sexual contact

Source: Gaylor EM, Krause KH, Welder LE, et al. Suicidal Thoughts and Behaviors Among High School Students — Youth Risk Behavior Survey, United States, 2021. MMWR Suppl 2023;72(Suppl-1):45–54. DOI: <http://dx.doi.org/10.15585/mmwr>.

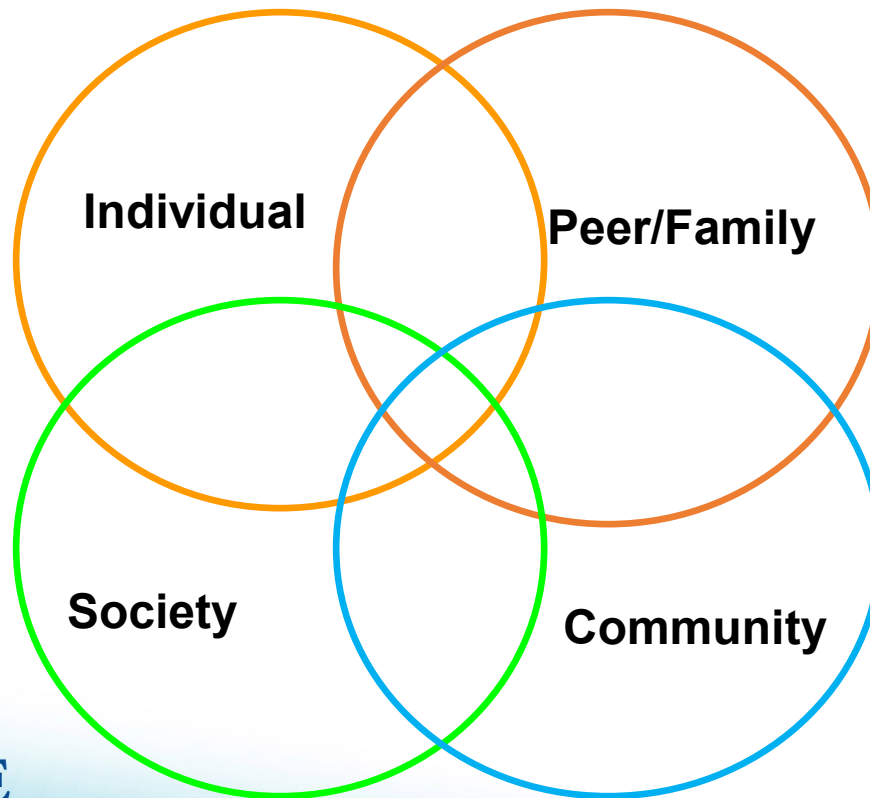
Average annual prevalence of suicide attempts* among adults by state -- United States, 2015-2019 (U.S. avg 0.6%)



Public Health Approach to Suicide Prevention



Overlap of spheres of influence for suicidal behavior



- Age
- Sex
- Mental illness
- Substance misuse
- Stressful life events

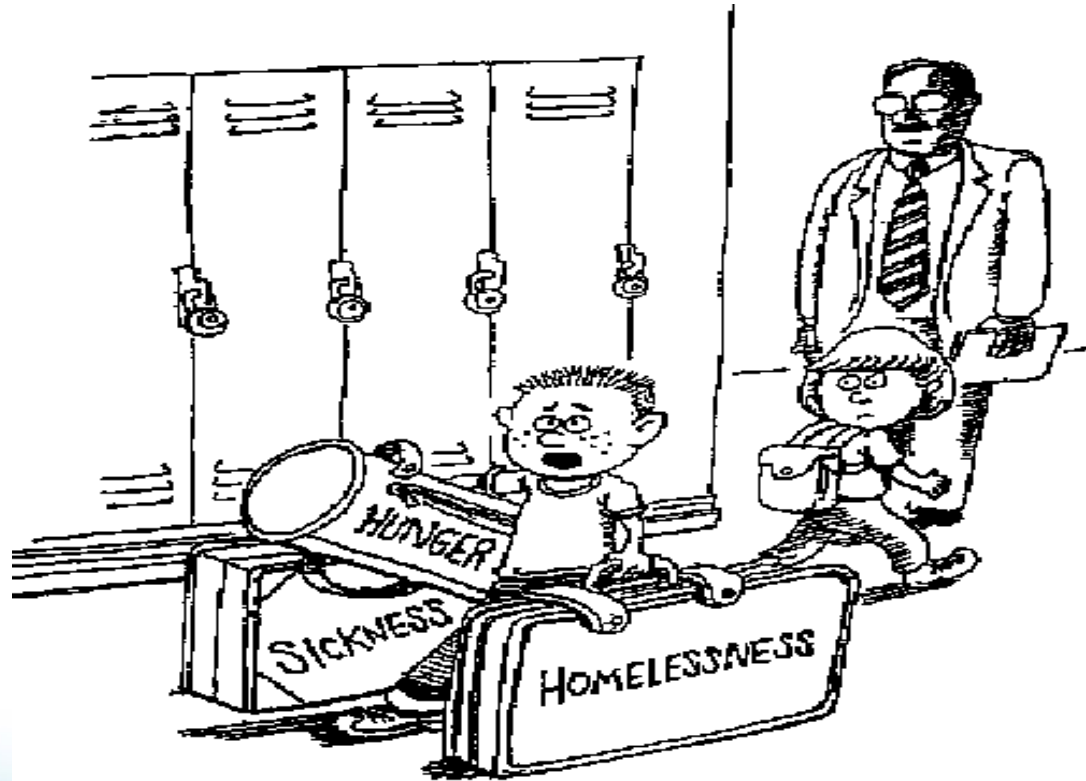
- Inappropriate access to lethal means
- Geography
- Economy
- Cultural values

- Family history of interpersonal or self-directed violence
- Exposure to violence

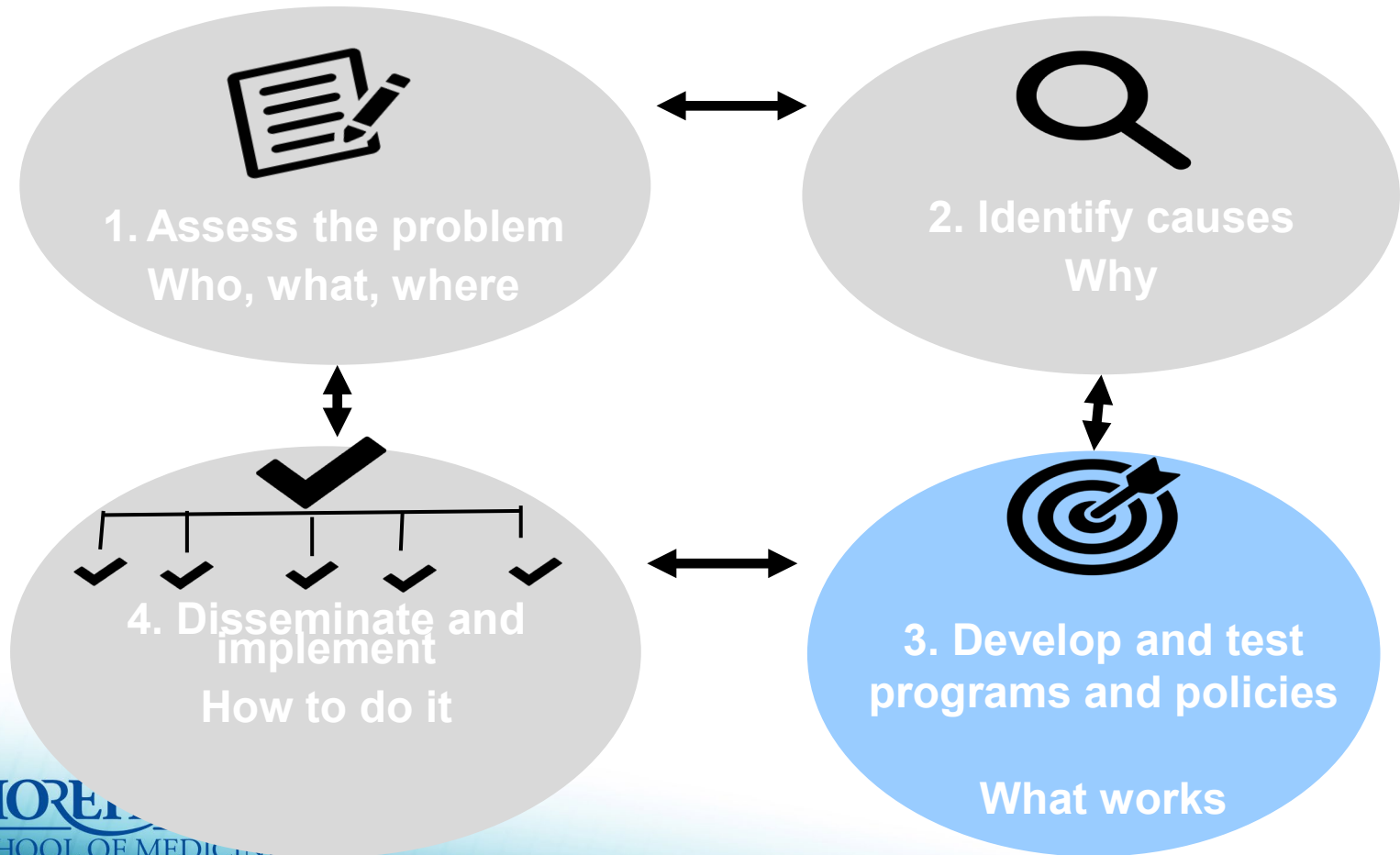
- Spirituality
- Incarceration
- Social isolation vs support

Can somebody help me with these?

Overlapping factors



Public Health Approach to Suicide Prevention



CDC's Resource for Action (formerly Technical Packages)

- Child Abuse and Neglect
- Sexual Violence
- Youth Violence
- Intimate Partner Violence
- Suicide Prevention
- Adverse Childhood Experiences



Suicide
Prevention
RESOURCE FOR ACTION



<https://www.cdc.gov/suicide/resources/prevention.html>

Source: CDC. (2022). Suicide Prevention Resource for Action: A Compilation of the Best Available Evidence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Preventing Suicidal behavior - Resource for Action

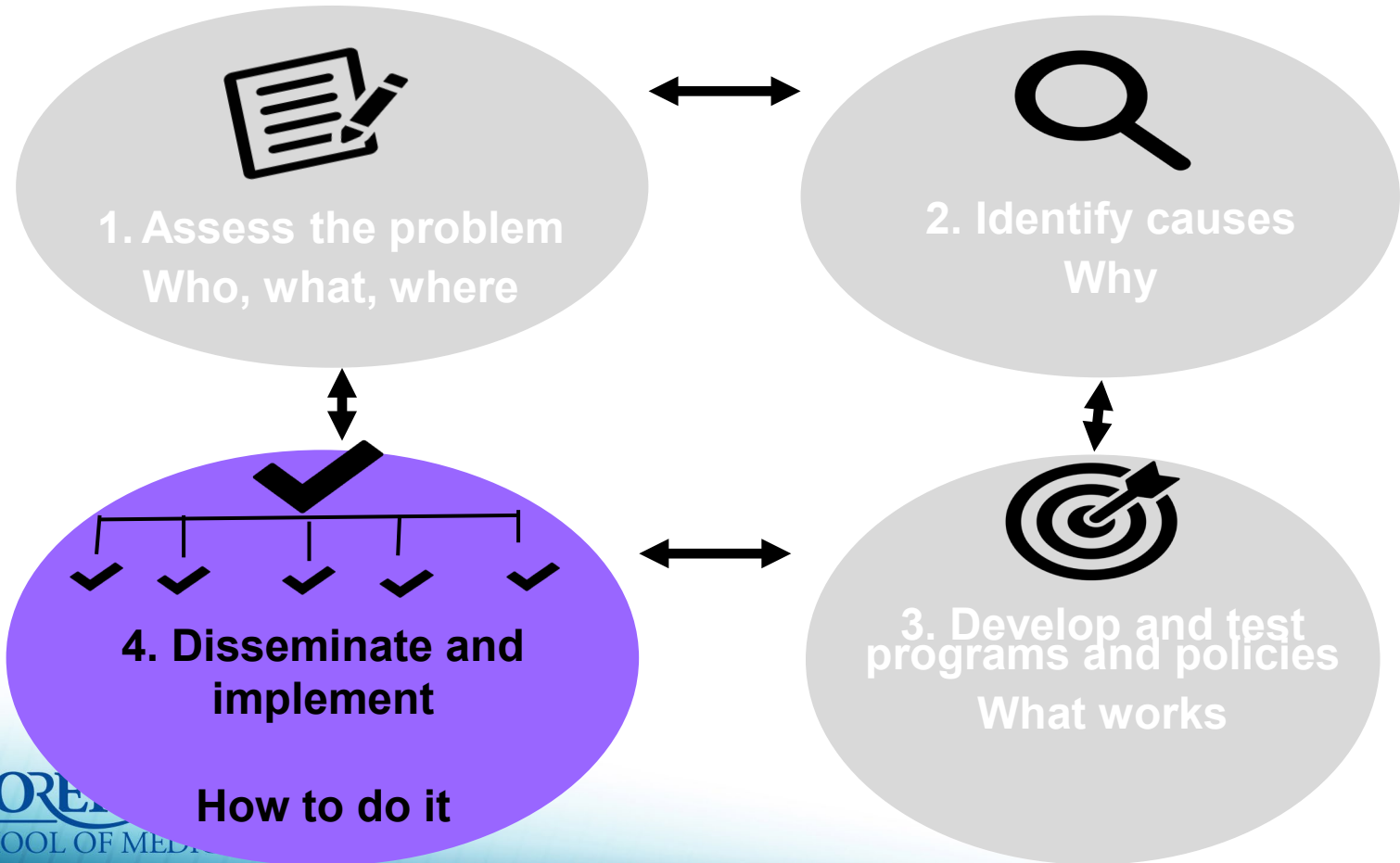
Strategy	Approach
1. Strengthen economic supports	<ul style="list-style-type: none">• Strengthen household financial security• Stabilize housing
2. Improve access and delivery of suicide care	<ul style="list-style-type: none">• Coverage of mental health conditions in health insurance policies• Reduce provider shortages in underserved areas• Safer suicide care through systems change
3. Create protective environments	<ul style="list-style-type: none">• Reduce access to lethal means among persons at-risk of suicide• Organizational policies and culture• Community-based policies to reduce excessive alcohol use

Preventing Suicidal behavior - Resource for Action

Strategy	Approach
4. Promote healthy connections	<ul style="list-style-type: none">• Promote healthy peer norms• Engage community members in shared activities
5. Teach coping and problem-solving skills	<ul style="list-style-type: none">• Support social-emotional learning programs• Teach parenting skills to improve family relationships• Support resilience through education programs
6. Identify and support people at risk	<ul style="list-style-type: none">• Train gatekeepers• Respond to crises• Plan for safety and follow-up after an attempt• Provide therapeutic approaches
7. Lessen harms and prevent future risk	<ul style="list-style-type: none">• Intervene after a suicide (postvention)• Safe reporting and messaging about suicide

Source: CDC. (2022). Suicide Prevention Resource for Action: A Compilation of the Best Available Evidence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Public Health Approach to Suicide Prevention



National Strategy for Suicide Prevention (NSSP)

- 4 strategic directions; 13 goals; 60 objectives
- Strategic Directions
 1. Healthy and Empowered Individuals, Families, and Communities
 2. Clinical and Community Preventive Services
 3. Treatment and Support Services
 4. Surveillance, Research, and Evaluation



**2012 National Strategy for Suicide Prevention:
GOALS AND OBJECTIVES FOR ACTION**

A report of the U.S. Surgeon General
and of the National Action Alliance for Suicide Prevention

Source: U.S. Department of Health and Human Services (HHS) Office of the Surgeon General and National Action Alliance for Suicide Prevention. 2012 National Strategy for Suicide Prevention: Goals and Objectives for Action. Washington, DC: HHS, September 2012

Violence Prevention in **PRACTICE**



7 phases in *comprehensive*
violence prevention



Conclusion

- Suicide is a significant public health problem
- Results from an interaction of factors
 - Never a single item that causes a suicide
 - Multiple opportunities for action
- Research has shown much of suicidal behavior can be prevented
- Broad responsibility for addressing the issue
 - Communities must work together
 - No one person or group can do it alone

Questions and Comments

