

Suicide Prevention in Rural Settings

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Garrett Lee Smith Suicide Prevention Grantee Meeting

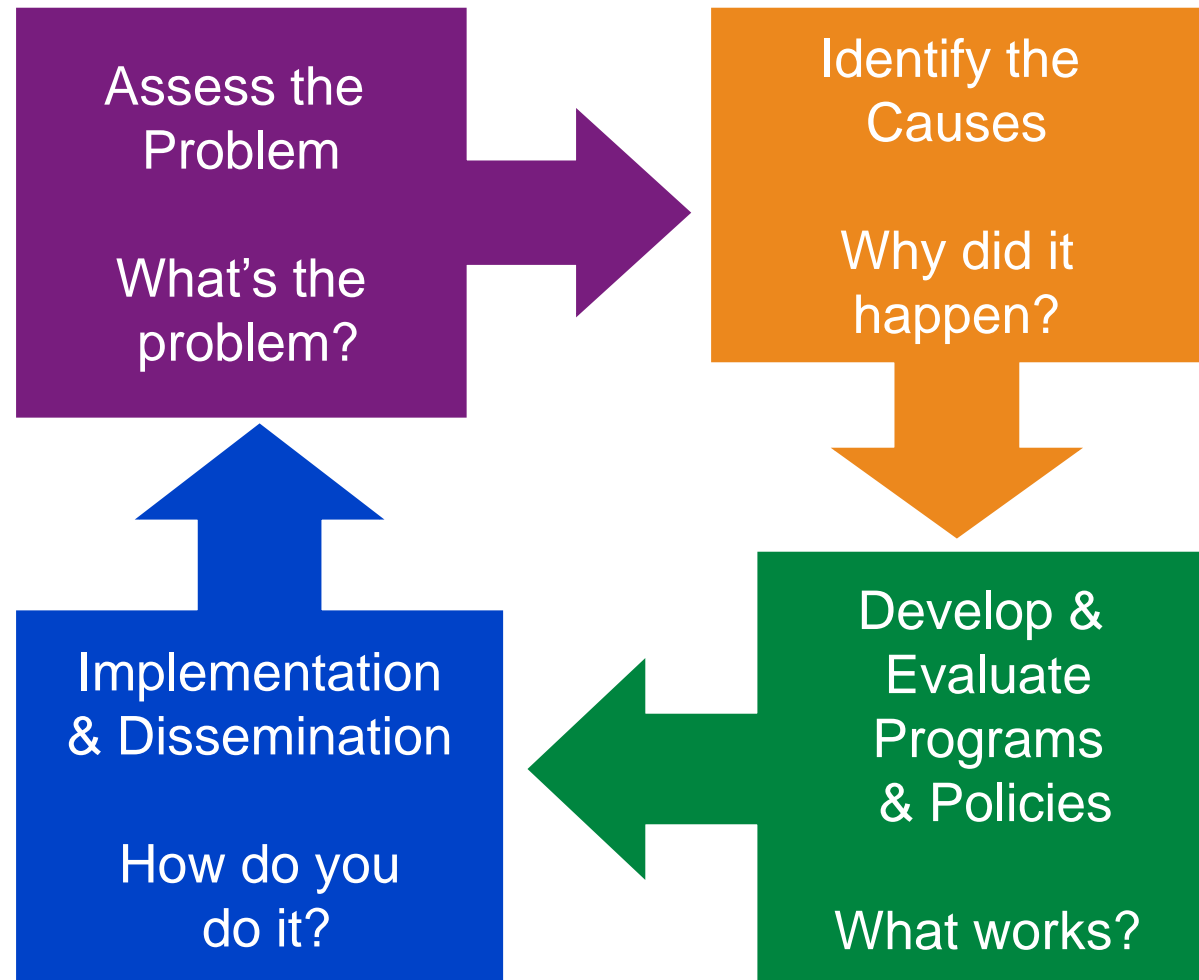
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Background

Why is suicidal behavior a public health issue?

- Morbidity and mortality
 - 10th leading cause of death in 2016 accounted for 44,965 deaths
 - Estimated 505,507 emergency dept visits for self-inflicted injury in 2015 (NEISS-AIP*)
 - Health consequences in many areas
 - Physical, mental, behavioral
- Potential for impact by public health
 - Focus on prevention
 - Science base
 - Stresses multi-disciplinary approach

CDC's Unique Role in Suicide Prevention



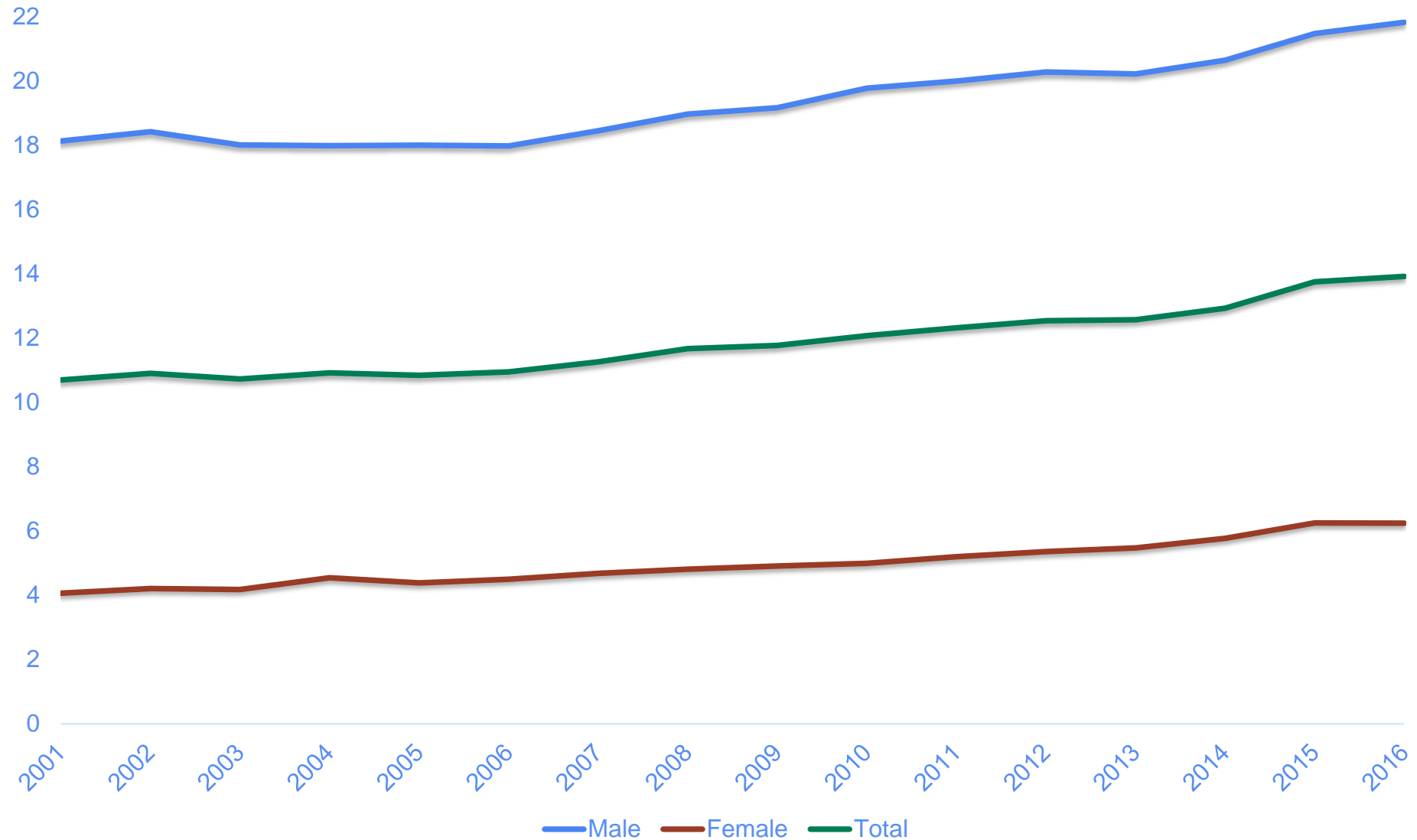
Leading causes of death – United States, 2016

Rank	Cause	Number of deaths
1	Heart Disease	635,260
2	Malignant Neoplasms	598,038
3	Unintentional Injuries	161,374
4	Chronic Lower Respiratory Ds	154,596
5	Cerebrovascular Ds	142,142
6	Alzheimer's Disease	116,103
7	Diabetes mellitus	80,058
8	Influenza and pneumonia	51,537
9	Nephritis	50,046
10	Suicide	44,965

Leading causes of death for selected age groups – United States, 2016

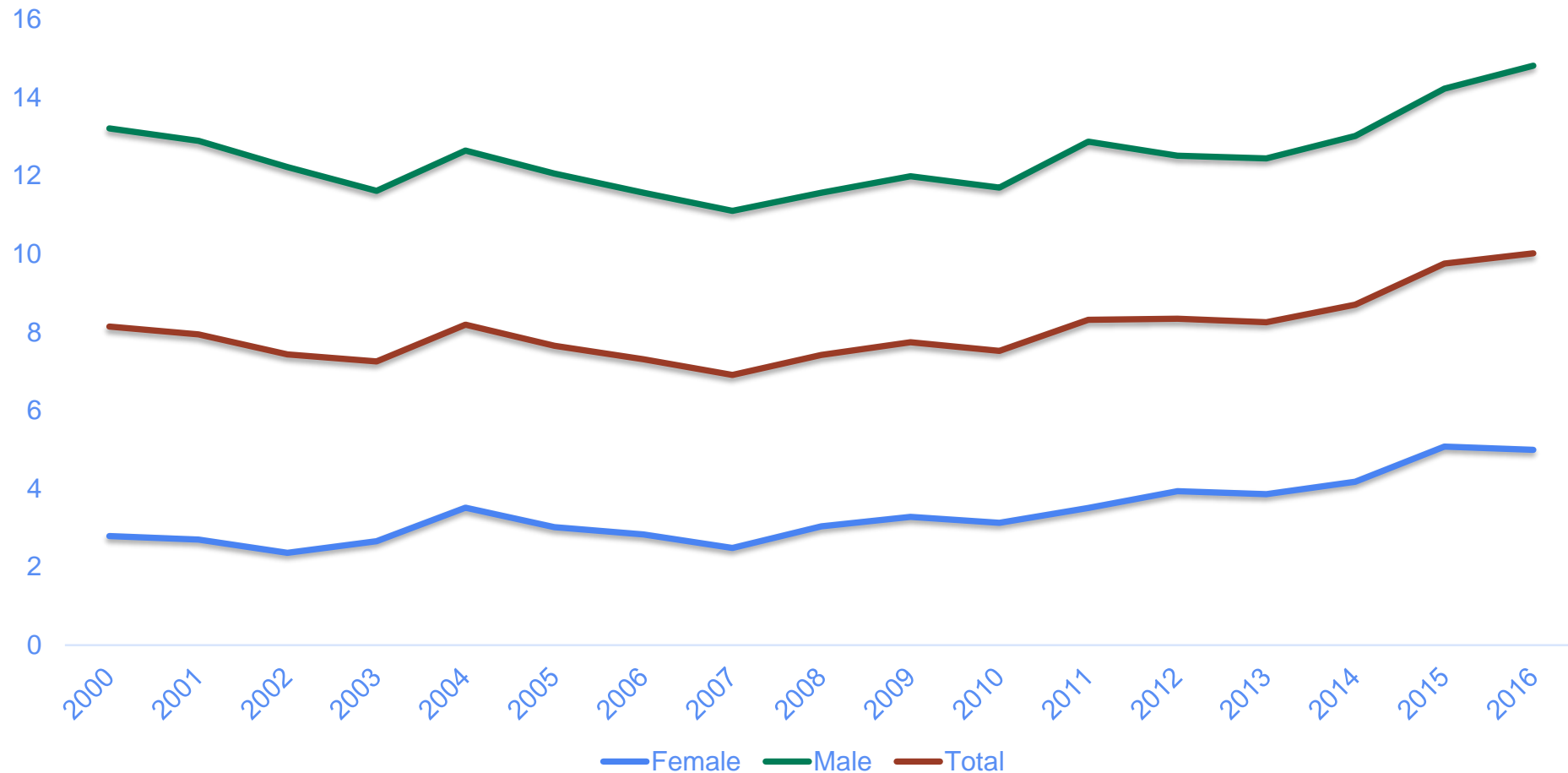
Rank	10-14 years	15-19 years	20-29 years	30-39 years	40-49 years	50-59 years
1	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Unintentional Injuries	Malignant Neoplasms
2	Suicide	Suicide	Suicide	Suicide	Malignant Neoplasms	Heart Disease
3	Malignant Neoplasms	Homicide	Homicide	Malignant Neoplasms	Heart Disease	Unintentional Injuries
4	Homicide	Malignant Neoplasms	Malignant Neoplasms	Heart Disease	Suicide	Liver Disease
5	Congenital Malformations	Heart Disease	Heart Disease	Homicide	Liver Disease	Chronic Lower Respiratory Ds
6	Heart Disease	Congenital Malformations	Diabetes Mellitus	Liver Disease	Diabetes Mellitus	Diabetes Mellitus
7	Chronic Lower Respiratory Ds	Chronic Lower Respiratory Ds	Congenital Malformations	Diabetes Mellitus	Cerebro-Vascular	Suicide
8	Cerebro-Vascular	Cerebro-Vascular	Complicated pregnancy	Cerebro-Vascular	Homicide	Cerebro-Vascular

Suicide rates among all persons by sex – United States, 2000-2016



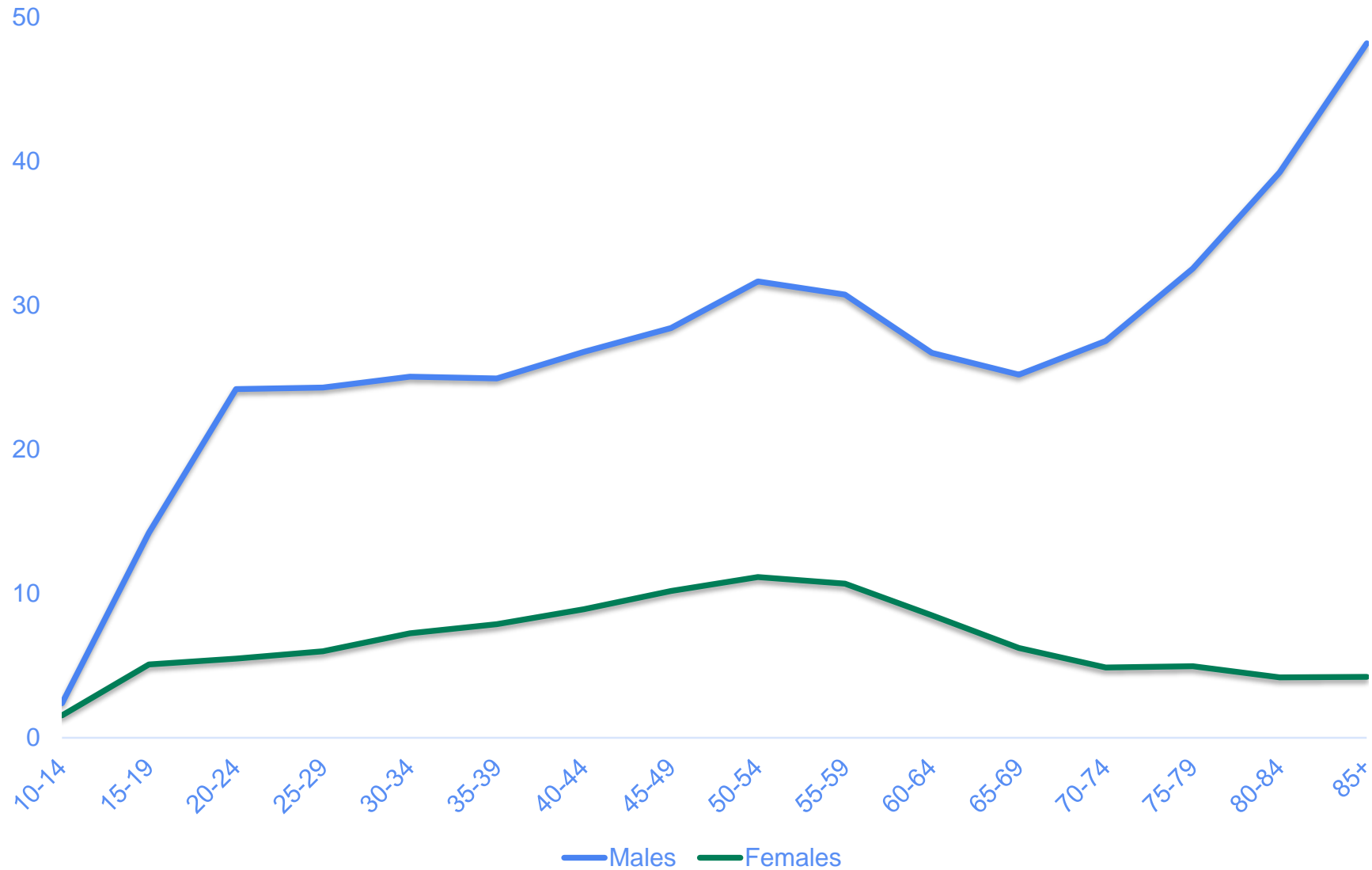
Source: CDC vital statistics

Suicide rates among persons aged 15-19 years by sex– United States, 2000-2016



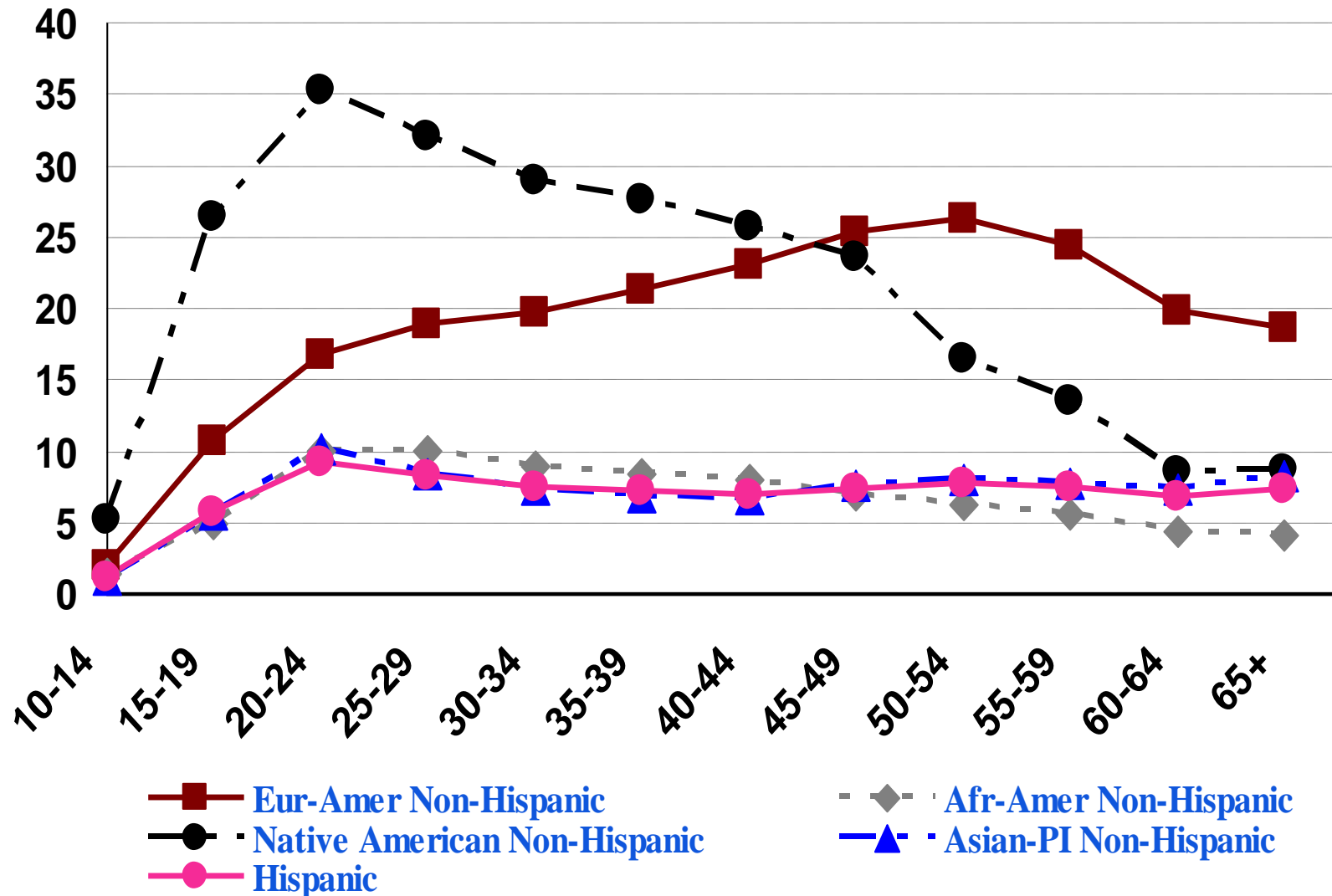
Source: CDC vital statistics

Suicide rates among all persons by age group and sex- United States, 2016



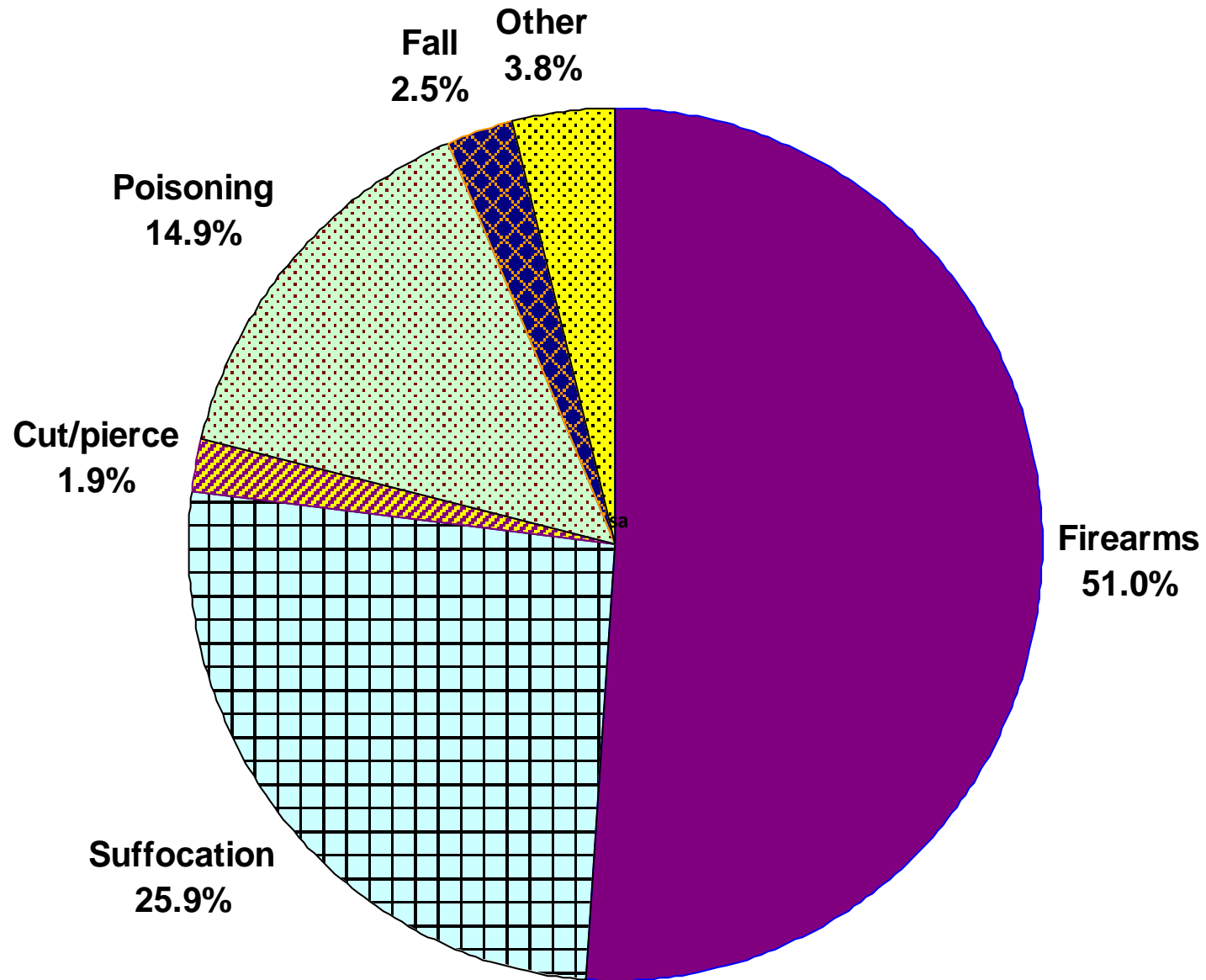
Source: CDC vital statistics

Suicide rates by age group and race/ethnicity – United States, 2012-2016



Source: CDC vital statistics

Suicide by Method – United States, 2016

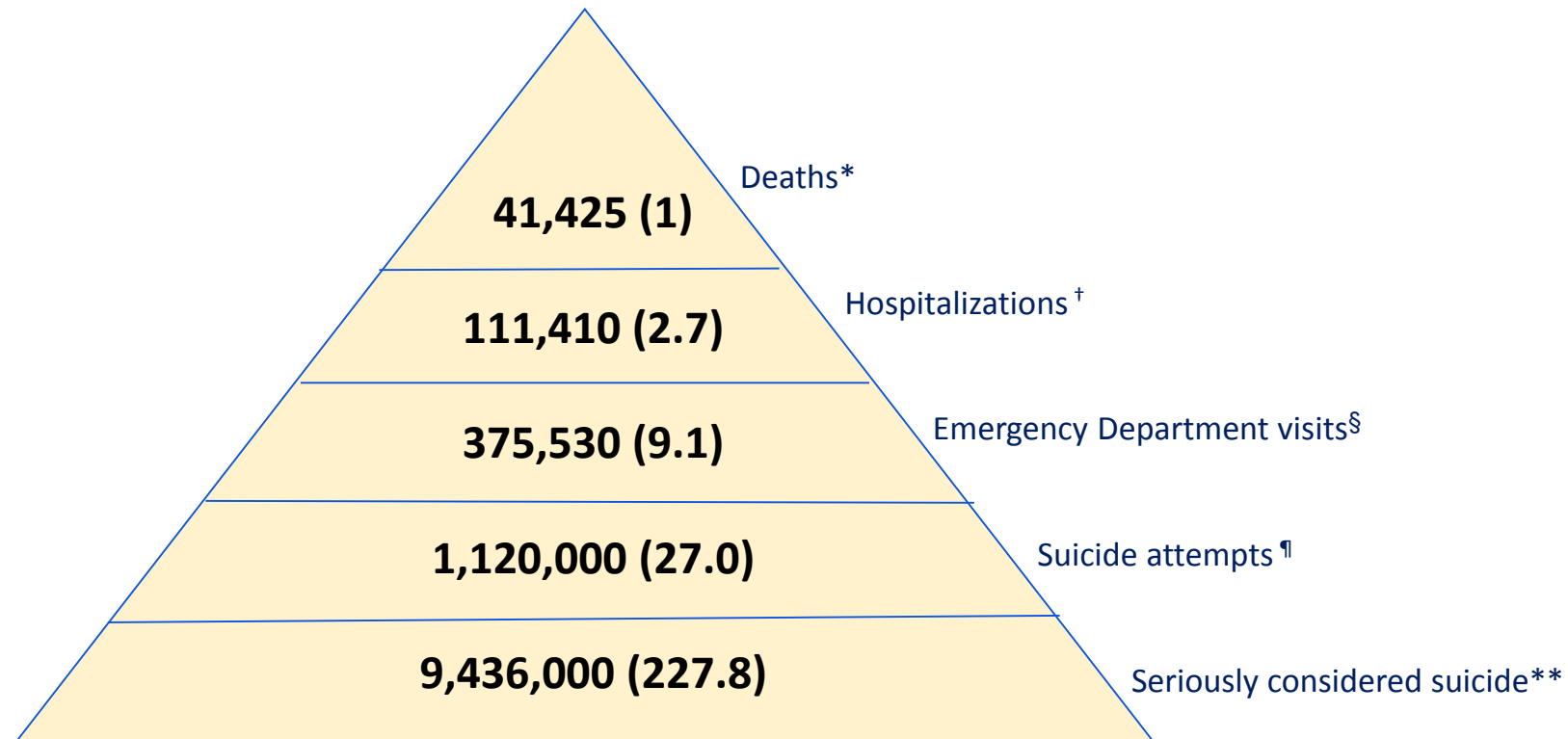


Source: CDC vital statistics

Burden of Injury



Number and ratio of persons affected by suicidal thoughts and behavior among adults aged ≥18 years — United States, 2014



*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)

[§] 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

Highlighted Risk and Protective Factors

- Risk: Isolation, a feeling of being cut off from other people
 - Rurality
 - Physical isolation
 - Barriers to accessing mental health treatment
 - Uninsured
 - Unemployment
 - Agricultural challenges
 - Stigma
- Protective: Family and community support (Connectedness)
 - Connectedness in rural areas
 - Telemental health

Source: Hirsch, J. K. & Cukrowicz, K. C. (2014). Suicide in rural areas: An updated review of the literature. Journal of Rural Mental Health, 38, 65-78.

Study Method and Findings

Suicide Trends Among and Within Urbanization Levels by Sex, Race/Ethnicity, Age Group, and Mechanism of Death — United States, 2001–2015

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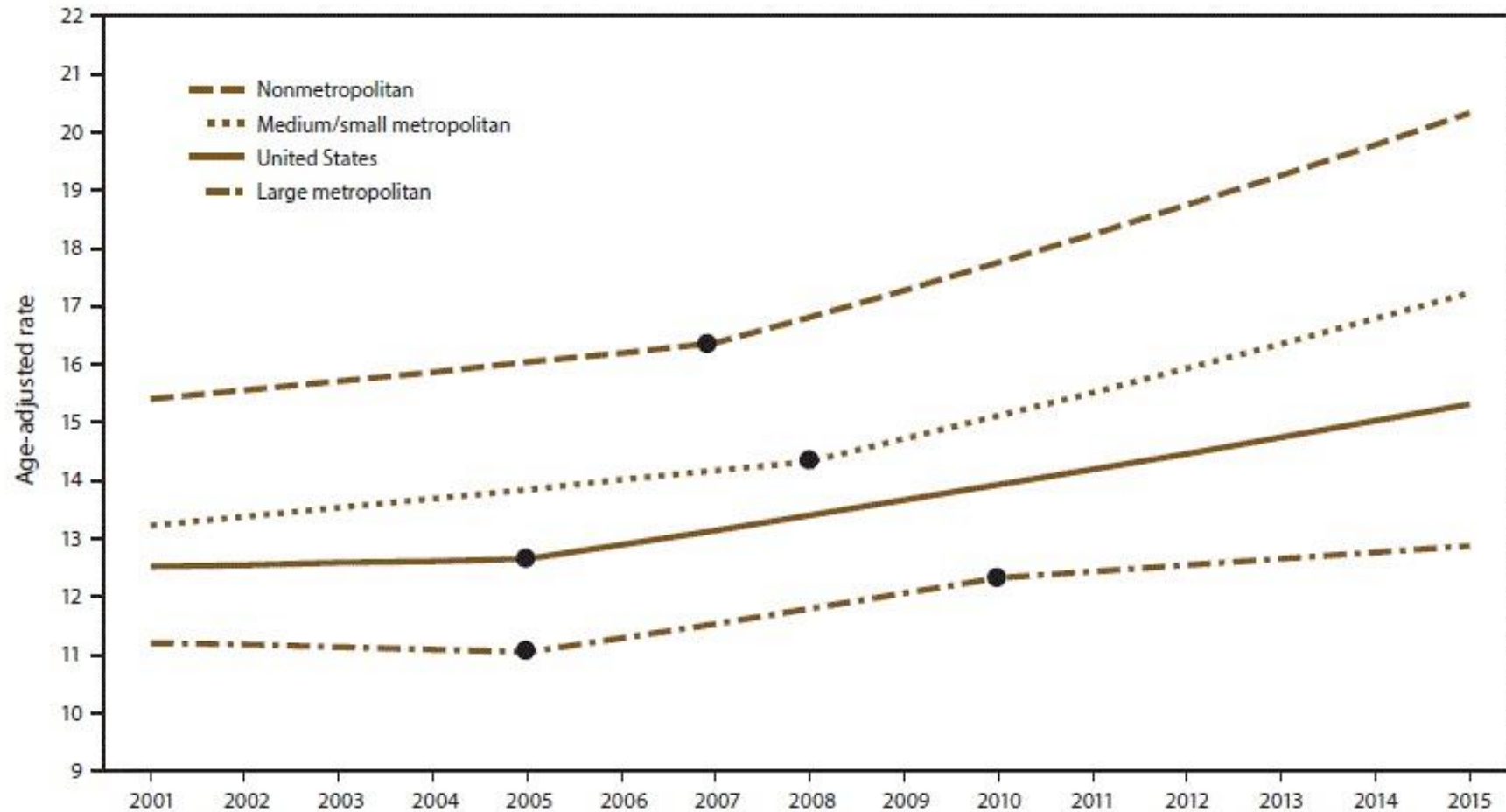
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Suicide – Key Findings

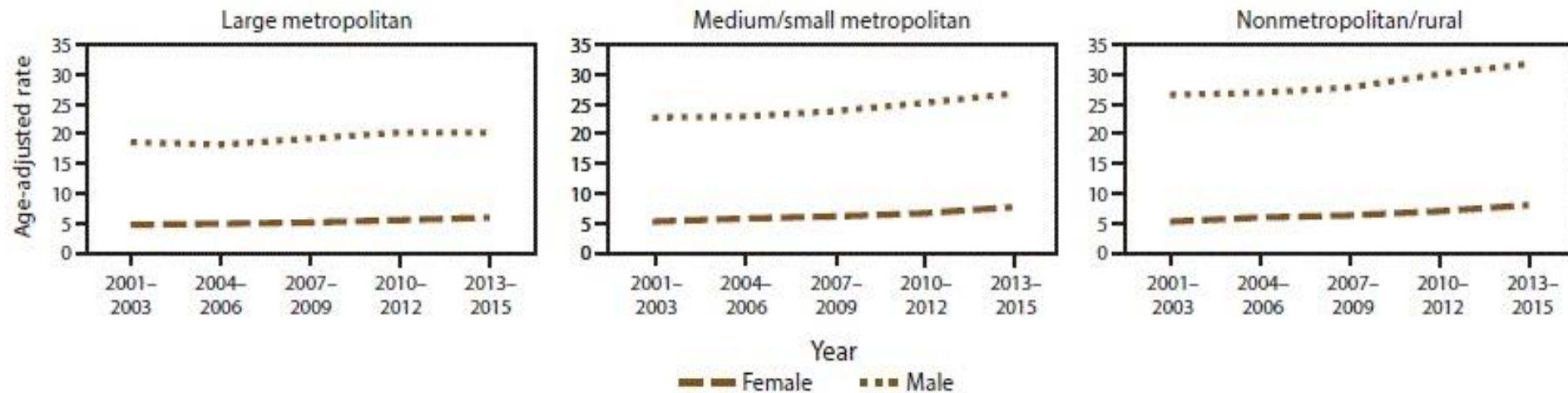
- Suicide rates were consistently higher in rural areas than in metropolitan areas

FIGURE 1. Suicide rates* among persons aged ≥ 10 years, by county urbanization level† – United States, 2001–2015[§]



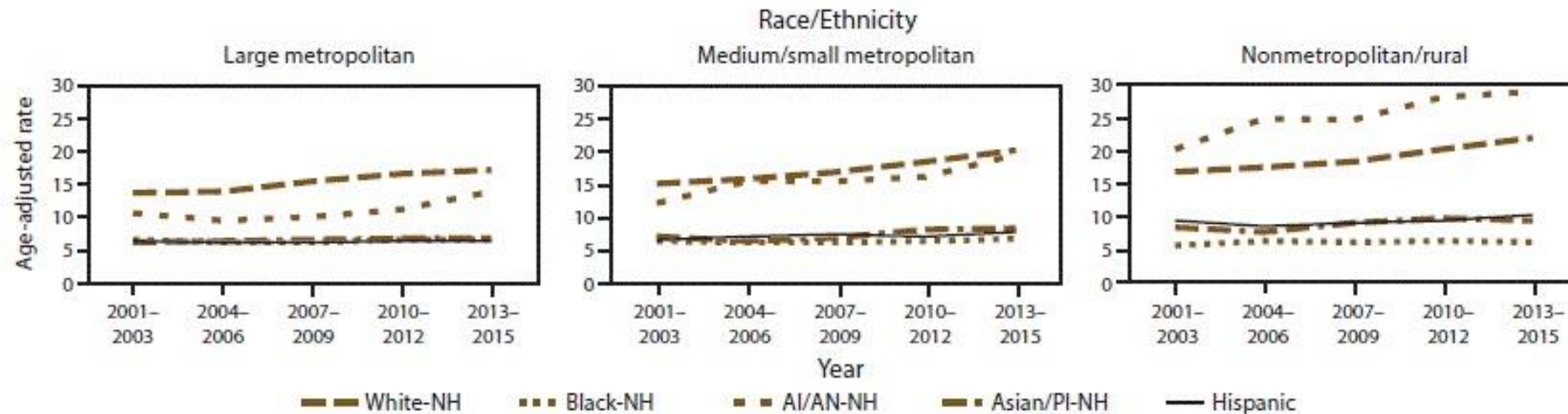
Suicide – Key Findings

- Across all urbanization levels, suicide rates for males were 4 to 5 times higher than females with all rates highest in rural areas



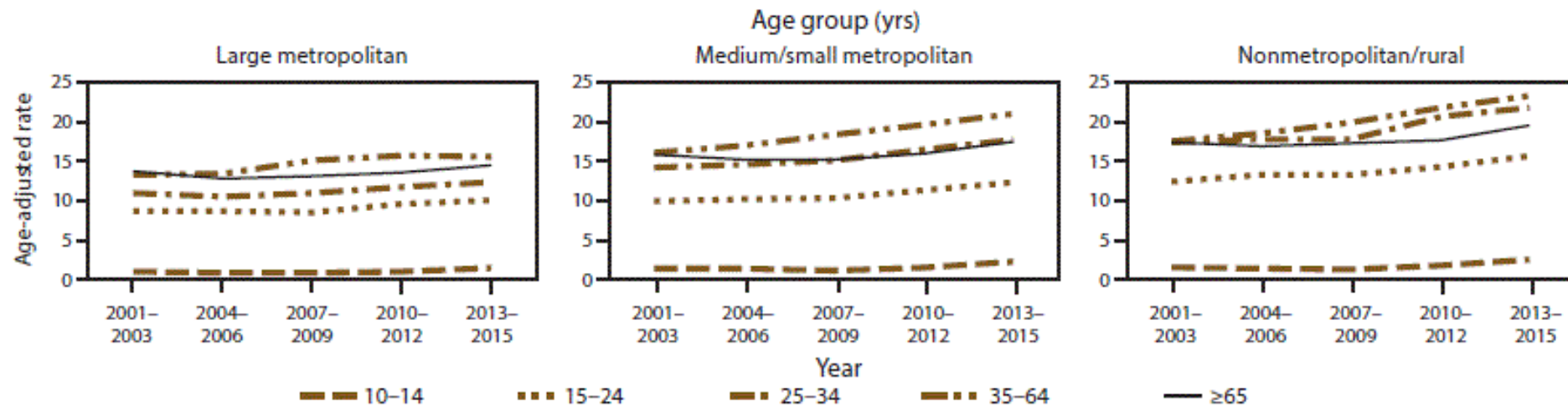
Suicide – Key Findings

- Rates for all racial/ethnic groups typically increased in all areas
 - Non-Hispanic American Indian/Alaska Natives had the highest rates in rural counties
 - Non-Hispanic whites had the highest rates in metropolitan counties
 - Non-Hispanic blacks had the lowest rates in rural counties



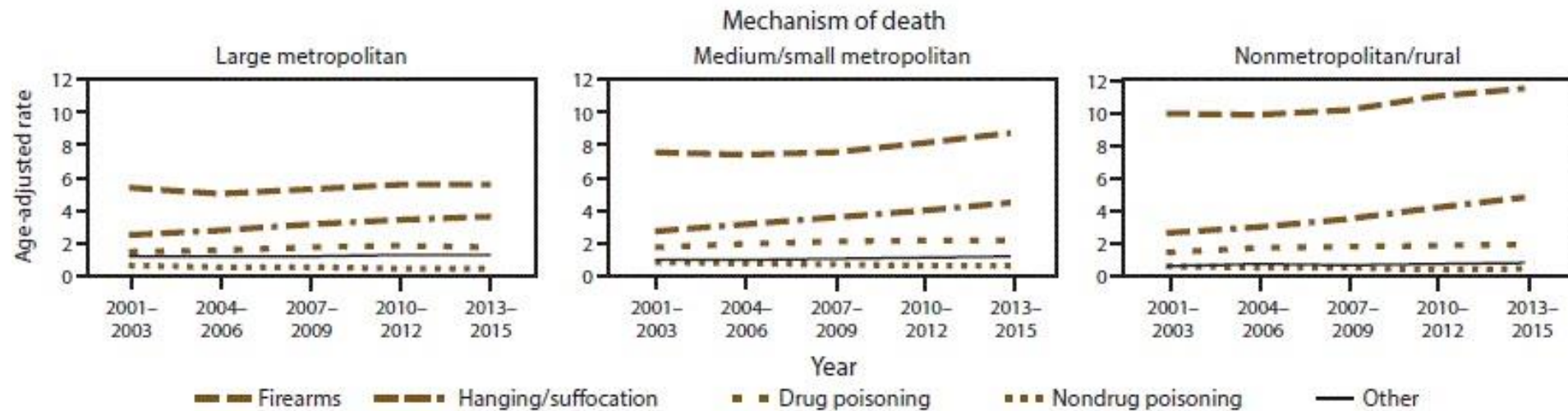
Suicide – Key Findings

- Rates increased for all age groups across all counties, with the highest rates among those aged 35-64 years



Suicide – Key Findings

- Suicide rates by firearm in rural areas were almost double the rates in metropolitan areas




Conclusion

Suicide – Conclusion


- Prevention efforts are needed for suicides occurring in rural areas
- Comprehensive suicide prevention efforts might include
 - Leveraging protective factors
 - Providing innovative prevention strategies that increase access to health care and mental health care in rural communities
- Distribution of socioeconomic factors varies in different communities and needs to be better understood in the context of suicide prevention

Resources




Preventing Suicide: A Technical Package of Policy, Programs, and Practices

National Center for Injury Prevention and Control
Division of Violence Prevention



Suicide Prevention Technical Package

 Preventing Suicide	
Strategy	Approach
Strengthen economic supports	<ul style="list-style-type: none"> • Strengthen household financial security • Housing stabilization policies
Strengthen 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
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
Promote connectedness	<ul style="list-style-type: none"> • Peer norm programs • Community engagement activities
Teach coping and problem-solving skills	<ul style="list-style-type: none"> • Social-emotional learning programs • Parenting skill and family relationship programs
Identify and support people at risk	<ul style="list-style-type: none"> • Gatekeeper training • Crisis intervention • Treatment for people at risk of suicide • Treatment to prevent re-attempts
Lessen harms and prevent future risk	<ul style="list-style-type: none"> • Postvention • Safe reporting and messaging about suicide

<https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf>

Thank You

Email Asha Ivey-Stephenson at iym9@cdc.gov for additional information

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov



The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

