SUICIDE PREVENTION IN TENNESSEE

2023 ANNUAL REPORT

DIVISION OF FAMILY HEALTH AND WELLNESS

July 2024

TN Department of Health

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ACKNOWLEDGEMENTS

The Tennessee Department of Health (TDH) expresses its gratitude to the agencies and individuals who have contributed to this report, including the members of the Tennessee Suicide Prevention Advisory Group.

It is with deepest sympathy and respect that we dedicate this report to the memory of those Tennesseans who have died by suicide, and to their loved ones.

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EXECUTIVE SUMMARY

This report summarizes suicide surveillance and programmatic data collected by the Tennessee Department of Health (TDH). Through a comprehensive review of existing data and resources, along with input from key partners, this report identifies specific, actionable, and equitable strategies and best practices for the prevention of deaths by suicide in Tennessee.

Suicide-related surveillance data is collected on a calendar year. **Reporting reflects January 2022 - December 2022.**

The TDH Suicide Prevention Program operates on the state fiscal year. **Reporting reflects July 2022 - June 2023.**

KEY HIGHLIGHTS

Suicide Surveillance Data

- From 2021 to 2022, the suicide rate in Tennessee **increased from 17.5 to 17.7 per 100,000 population**.
- Although not statistically significant, the suicide rate among residents of rural counties has been on a **downward trend since 2020**.
- In 2021, the rate of hospital visits for **intentional self-injury among women** was more than **1.5 times** the rate for men.
- The rate of hospital visits for **intentional self-injury among NH White Tennesseans decreased from 164.4 per 100,000 population to 136.4 per 100,000 population** between 2017 and 2021.

Programmatic Accomplishments

- More than **500** licensed and pre-licensed behavioral health **providers in Tennessee received training** on best practices for utilizing telehealth.
- **4,000+** individuals received Question, Persuade, Refer (QPR) Gatekeeper Training.
- **200+** individuals received Applied Suicide Intervention Skills Training (ASIST).

Communications Successes

- TDH's public service media campaign promoting Gatekeeper trainings resulted in **7.3 million** impressions among rural Tennesseeans.
- From July 2022 to June 2023, TDH's suicide prevention posts reached **415,991** people on social media (Instagram, Twitter, and Facebook).

2023 RECOMMENDATIONS

Links to all of the Suicide Prevention Program's initiatives, as well as the screening tools and guidelines referenced in the 2023 Recommendations, may be accessed in the **Resources** section of the report, page 20.

HEALTHCARE PROVIDERS AND HEALTHCARE SYSTEMS

- **Implement the Zero Suicide framework** for providing safer suicide care and improving outcomes in health and behavorial health care settings.
- Utilize the Columbia-Suicide Severity Rating Scale (CSSR) and the Ask Suicide Screening Questions (ASQ) to **screen all patients for referral to mental health services**.
- **Include the 988 Suicide & Crisis Lifeline** on email signatures and outgoing voicemail messages.

COMMUNITY FAITH-BASED ORGANIZATIONS AND SCHOOLS

- Provide teachers, youth leaders, and other staff with **training in suicide first-aid using evidence-based courses** such as the Applied Suicide Intervention Skills Training (ASIST) and Question, Persuade, Refer (QPR) Gatekeeper training.
- **Implement rapid response plan(s)** when an ESSENCE* alert is released within local community and/or offer support after a loss.
- **Implement Sources of Strength**, an evidence-based peer-led suicide prevention program designed to enhance protective factors associated with reducing suicide at the community level and provide youth with the resources and skills they need to live healthy and full lives.

*TDH uses the **Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE)** to monitor and disseminate weekly county-level alerts related to trends in suicidal behavior and risk factors based on real-time emergency department data including suicide attempts, intentional self-harm, and reported suicidal ideation.

LOCAL HEALTH COUNCILS

- Apply for available funding to **develop and implement a coordinated, county-wide rapid response plan** when a suicide-related ESSENCE alert is received.
- **Disseminate data to local partners** to support the implementation of evidence-based suicide prevention programs.
- Participate in the **Tennessee Suicide Prevention Advisory Group**.

ALL TENNESSEANS

- Reduce stigma, misinformation, and shame around suicide by learning how to **recognize and respond when someone in your community may be at risk**.
- Further commit to addressing the suicide crisis by **becoming certified in suicide first-aid through evidence-based courses** such as the Applied Suicide Intervention Skills Training (ASIST) and Question, Persuade, Refer (QPR) Gatekeeper training.
- If you or someone you know is struggling with thoughts of suicide, know that help is available. **Call or text 988 then press 0 for 24/7, free, and confidential support**. Visit **www.preventsuicidetn.com** to learn about resources available in your area.

INTRODUCTION

Suicide is a leading cause of death across the United States and continues to be a growing public health problem in Tennessee. In 2021, suicide was the 11th leading cause of death in the United States, and the second leading cause of death among individuals under the age of 45.[1] In Tennessee alone, more than 1,000 lives are lost due to suicide each year.

The impact of suicide isn't measured in deaths alone. People who lose loved ones to suicide face complex trauma, grief, stigma, and shame. Individuals who attempt suicide may bear lifelong mental, physical, and financial costs. Additionally, intentional self-harm is among the top 10 leading causes of nonfatal injury for Americans aged five or older.[1]

With a mortality rate 19% higher than the national rate in 2022, suicide remains a serious concern in Tennessee due to its unique social and cultural context.[2,3] While anyone can struggle with suicidal ideation, state-level data suggests an increased risk among men, non-Hispanic (NH) White individuals, and residents of rural counties. The Tennessee Department of Health is committed to a healthier future for all Tennesseans, including marginalized groups such as veterans and individuals residing in rural communities. Having grown significantly over the past year, the Tennessee Suicide Prevention Advisory Group also plays a crucial role in our efforts to better address the needs of these populations.

The TDH Suicide Prevention Program exists to **enhance**, **support**, and **strengthen** Tennessee's suicide prevention infrastructure through implementation of data-driven approaches including **community-based**, **healthcare-based**, and **upstream interventions**.

Suicide-related data must be continually reviewed to fully understand the impact of suicide in Tennessee, improve prevention efforts, and identify the groups of people most at-risk for suicide.

This section includes data on deaths by suicide, analyzed by demographic factors including sex, race/ethnicity, age, and geographic area of residence.

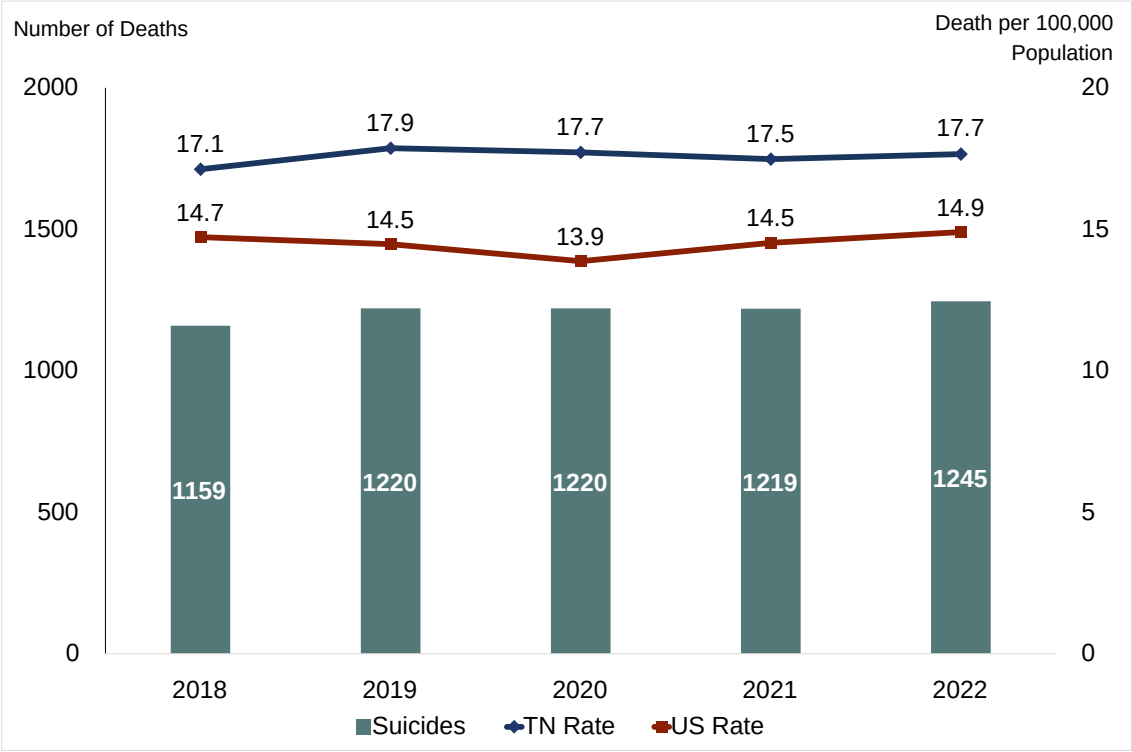
SUICIDE RATES, 2022

Per 100,000 population

The suicide rate in Tennessee is **19% higher** than the national rate.[2,3]

SUICIDE FATALITIES, 2018-2022[2,3]

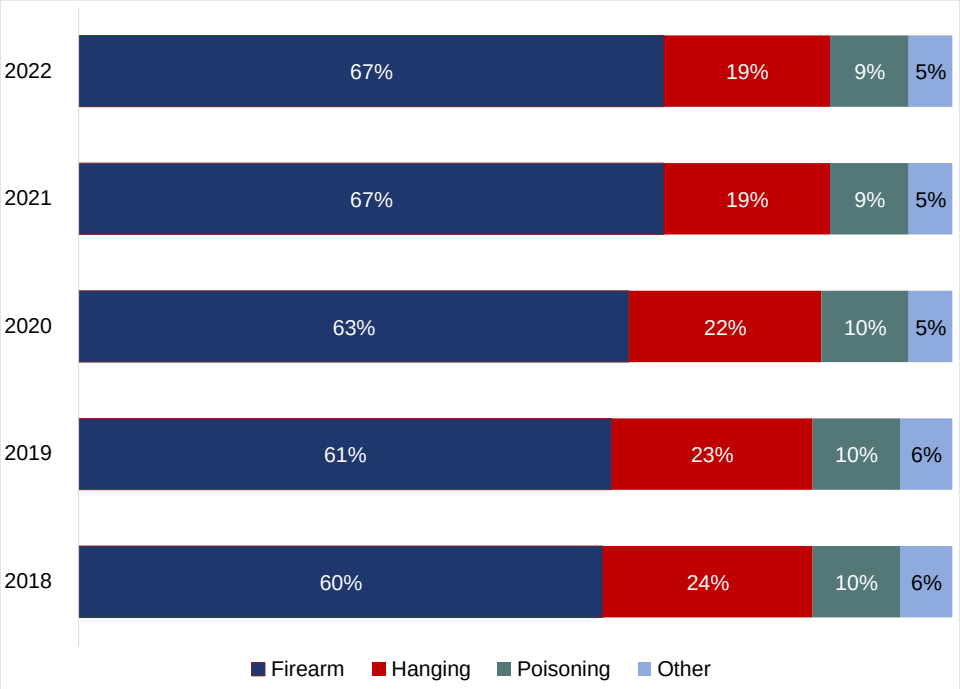
Number and rate of suicide per 100,000 population, Tennessee and United States



- In 2022, **1,245** Tennesseans died by suicide
- From 2021 to 2022, **suicide rates increased in Tennessee and nationally**

SUICIDE BY METHOD, 2018-2022[2]

Percent of suicides in Tennessee by method



In Tennessee, firearms are by far the most prevalent means of suicide, accounting for **more than double** the number of suicides from all other methods combined.

DISTRIBUTION OF METHODS USED, 2022[2]

833 suicides by firearm

238 suicides by hanging

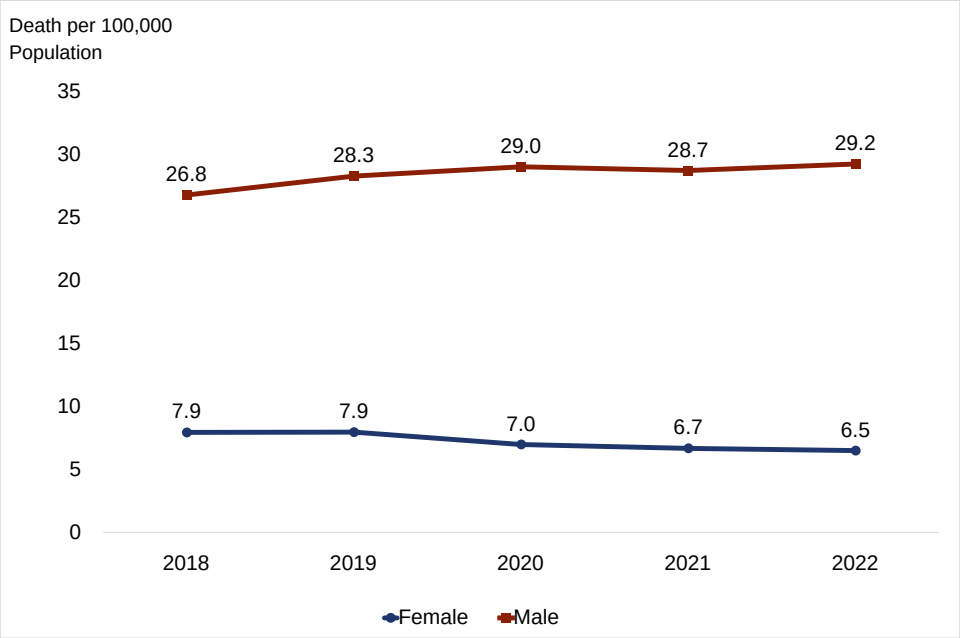
111 suicides by poisoning

63 suicides by other methods*

*Other methods include: Jumping from a height, drowning, and unspecified means

SUICIDE BY SEX, 2018-2022[2]

Rates of suicide per 100,000 population in Tennessee



In 2022, the suicide rate among men in Tennessee was 29.2 per 100,000 population, while the suicide rate for women was 6.5 per 100,000 population. Between 2018 and 2022, **the suicide rate among men in Tennessee increased by 9%**, while **the suicide rate among women decreased by 17%**.

DISTRIBUTION OF METHODS BY SEX, 2022[2]

Suicide by firearm is the most common method among both men and women in Tennessee. In 2022, **71% of suicides among men** and **49% of suicides among women** involved a firearm.

6.3 times more men than women died by **firearm**.

4.4 times more men than women died by **hanging**.

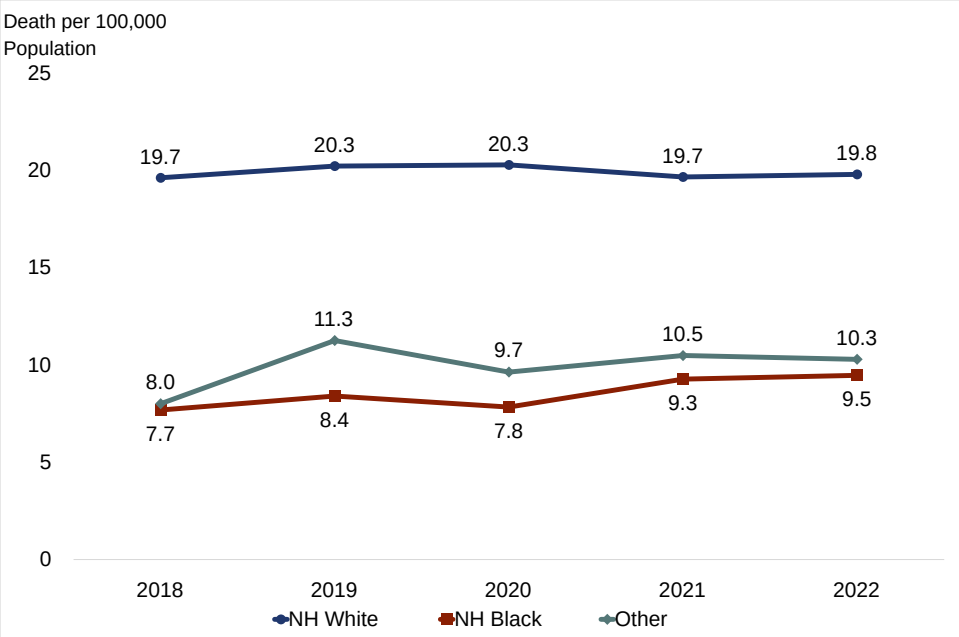
1.1 times more women than men died by **poisoning**.

2.9 times more men than women died by **other methods**.

SUICIDE BY RACE/ETHNICITY, 2018-2022[2]

Rates of suicide per 100,000 population in Tennessee

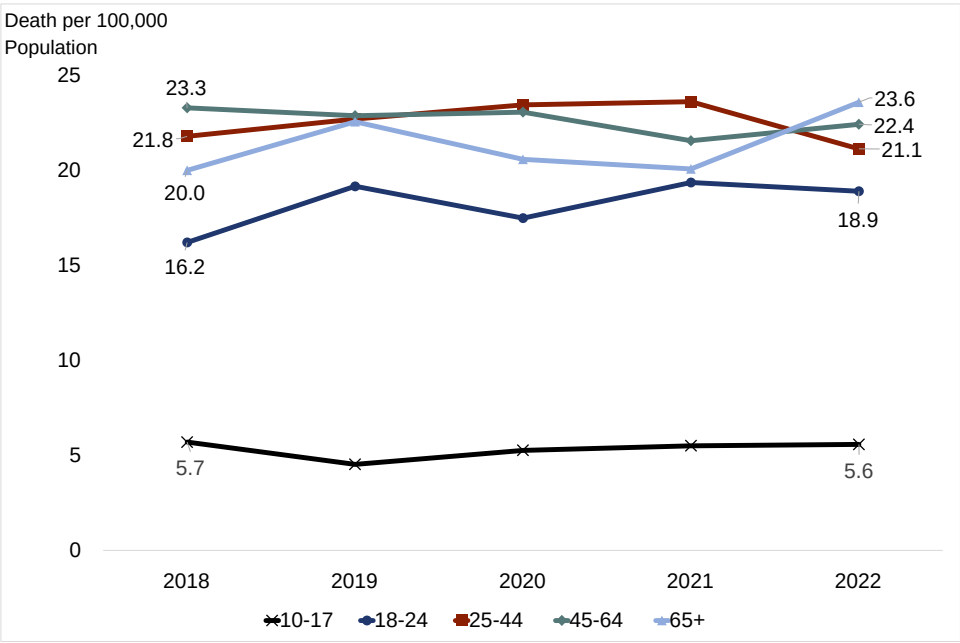
TDH's comprehensive approach to suicide prevention is both **data-driven** and **equity-focused**, taking into account the **unique risk factors** faced by different racial/ethnic groups.



NH White Tennesseans die by suicide at a rate **more than 4.5 times** that of NH Black Tennesseans.

SUICIDE BY AGE, 2018-2022[2]

Rates of suicide per 100,000 population in Tennessee



Between 2018 and 2022, suicide rates **remained stable** among all age groups with no significant changes.

SUICIDE BY GEOGRAPHY, 2022[2]

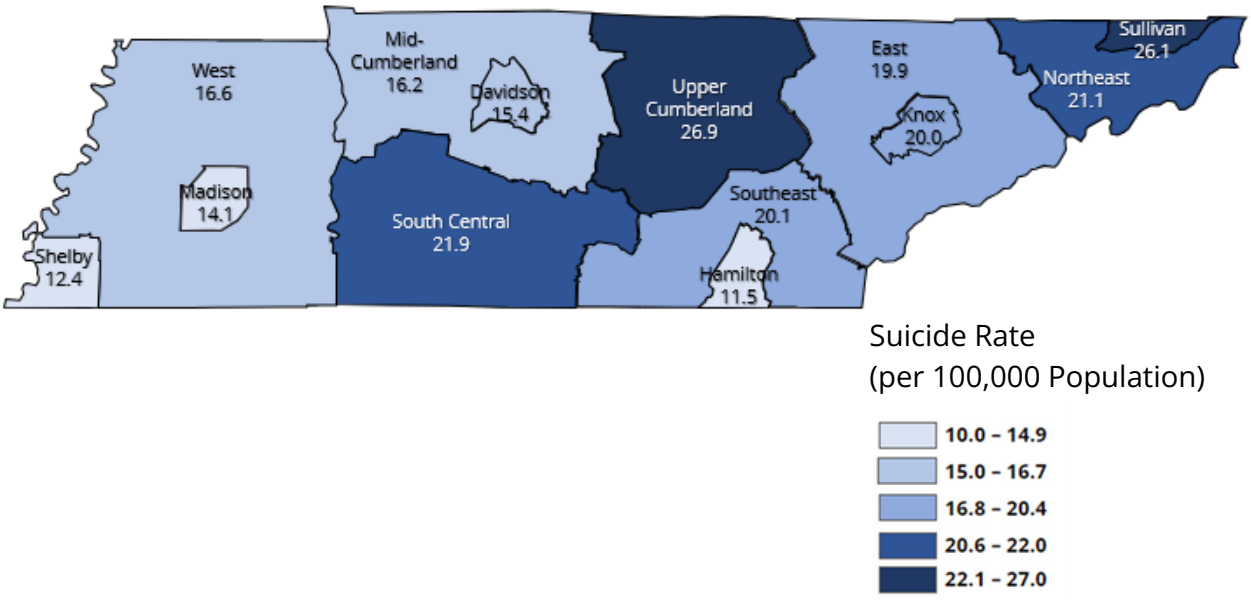
Rates of suicide per 100,000 population in Tennessee

The Tennessee Department of Health divides the State into 13 Health Regions. Of these 13 regions, 7 are considered rural regions and Tennessee's 6 larger urban counties are referred to as metros.[4] TDH data analysis shows that individuals living in rural regions die by suicide at a rate 1.5 times higher than those living in metros. There are several factors which contribute to disparities in health outcomes by region, including **limited access to medical and behavioral healthcare services** in underserved rural communities.[5]

In 2022, the **Upper Cumberland Region** had the highest suicide rate, with 26.9 suicides per 100,000 population. Upper Cumberland is also the rural health region that experienced the highest five-year rate change, as it increased by 6.4 suicides per 100,000 population between 2018 and 2022.

Tennessee's **Southeast Region**, which was the region with the highest suicide rate in 2018, has experienced the largest five-year decrease, from 23.2 suicides per 100,000 population in 2018 to 20.1 suicides per 100,000 population in 2022.

Notably, suicide rates in metros have increased by 9.3% between 2018 and 2022. **Sullivan County**, the metro with the highest suicide rate, experienced a five-year rate increase of 7.7 suicides per 100,000 population.



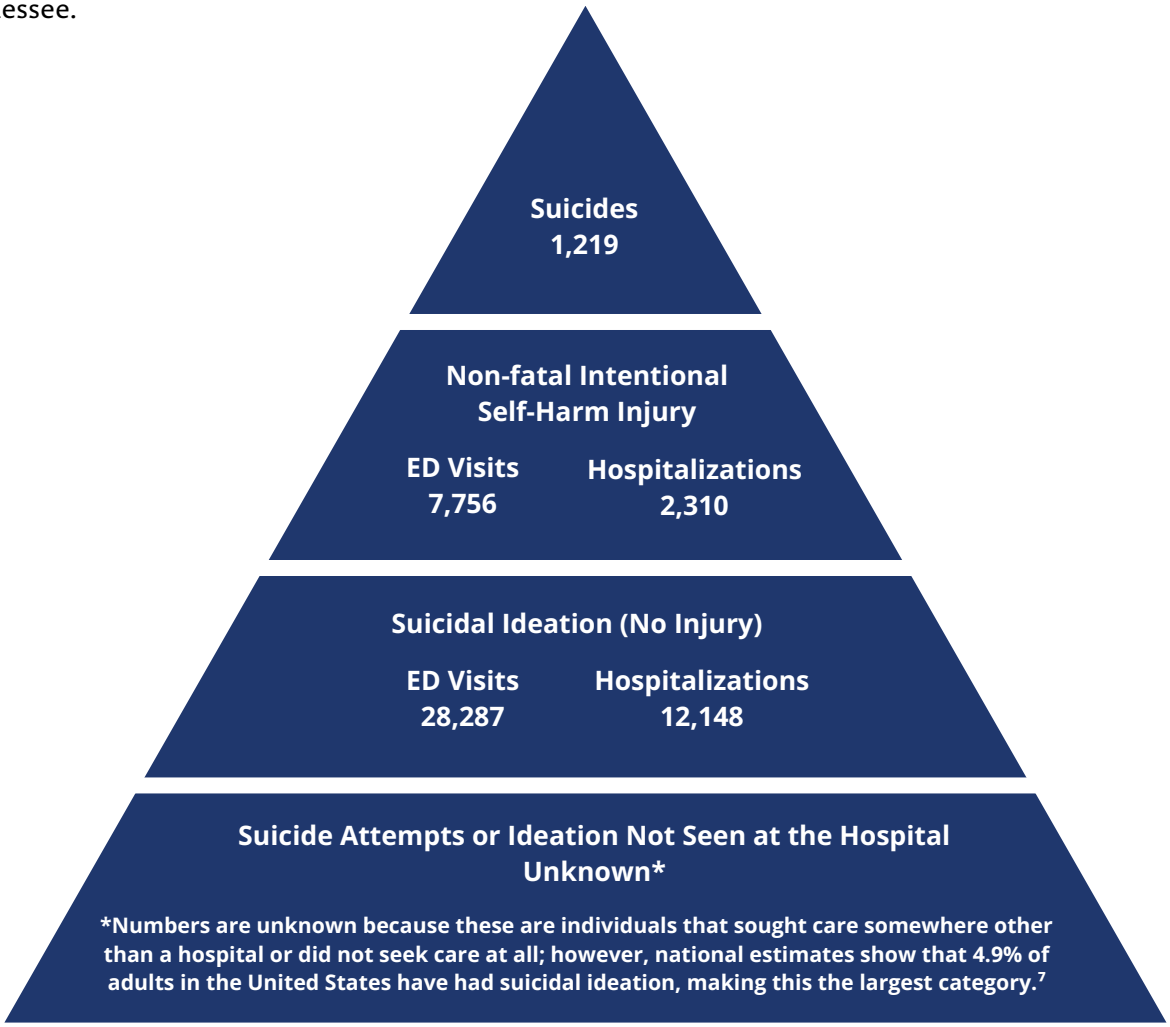
THE SPECTRUM OF SUICIDAL BEHAVIOR

Suicide prevention efforts often focus on data related to deaths by suicide. However, those deaths represent only a small part of the spectrum of suicidality. The Tennessee Department of Health employs an upstream, primary prevention approach to suicide prevention by broadening our scope to include the promotion of healthy coping and problem-solving skills, the early identification of suicide risk, and improved access and delivery of suicide care.

Note: All non-fatal injury data included in this report are sourced from TDH's Hospital Data Discharge System, and reflects 2021 data as these data take longer to process than fatality data. As of the time of this report, 2022 non-fatal injury data has not been finalized.

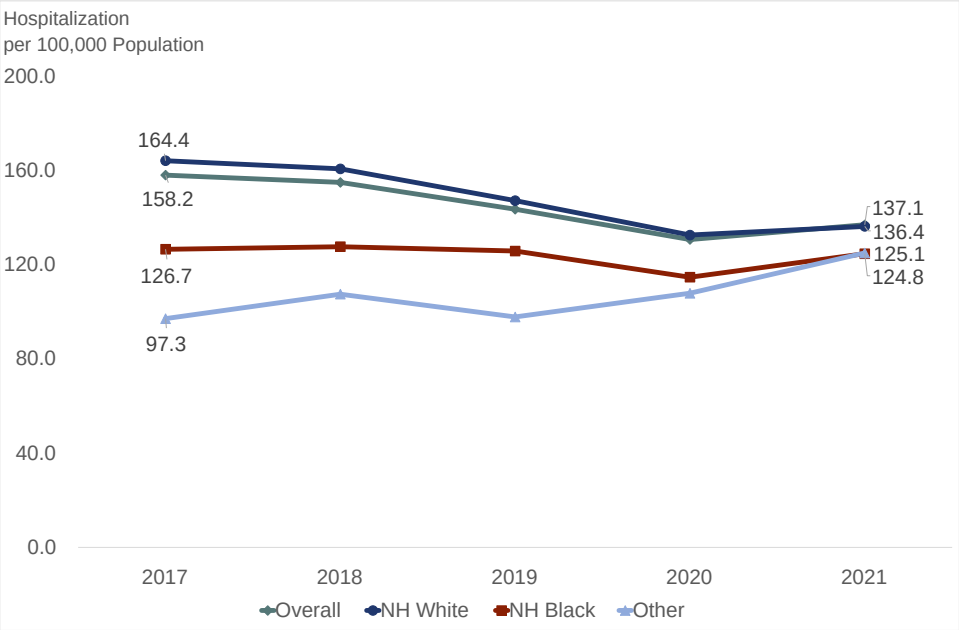
SUICIDALITY, 2021[2,6]

Hospitalization and emergency department data is collected from all acute care hospitals in Tennessee.



NON-FATAL INTENTIONAL SELF INJURY, 2017-2021[6]

Rates of inpatient and outpatient (emergency department) hospitalizations per 100,000 population in Tennessee



While all suicides are acts of self-directed violence, it is important to note that not all acts of self-directed violence are suicide attempts.

From 2017 to 2021, the rate of hospital visits for intentional self-injury among **NH White Tennesseans decreased from 164.4 per 100,000 population to 136.4 per 100,000 population**, while the rate among Tennesseans of other* races increased from 97.3 per 100,000 population to 125.1 per 100,000 population.

Between 2017 and 2021, the rate of hospital visits for intentional self-injury among **children under 10 years old increased from 5.3 per 100,000 population to 7.1 per 100,000 population**.

While more men die by suicide annually, the rate of 2021 hospital visits for **intentional self-injury among women** was more than **1.5 times** the rate for men.

*Other may include: All other race/ethnicities except NH White and NH Black

SUICIDAL IDEATION, 2017-2021[6]

Inpatient and Outpatient

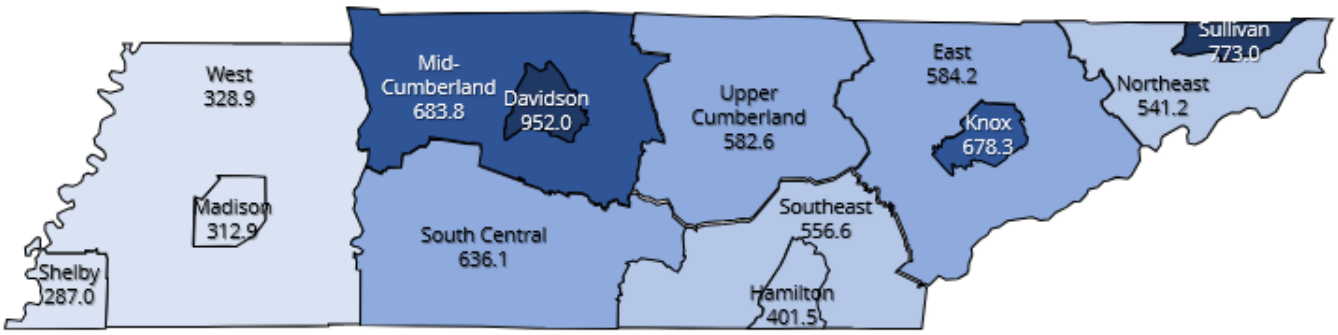
This report defines suicidal ideation **as serious suicidal thoughts, plans, or wishes** that result in hospitalization or an emergency department visit without an instance of intentional self-injury.

Suicidal ideation among Tennesseans between the ages of **10 and 17 increased from 718 per 100,000 population to 1,150 per 100,000 population**.

From 2017 to 2021, the rate of reported suicidal ideation among **NH Black Tennesseans increased from 508.5 per 100,000 population to 596.5 per 100,000 population**, surpassing that of NH White Tennesseans.

SUICIDAL IDEATION BY GEOGRAPHY, 2021[6]

Inpatient and Outpatient



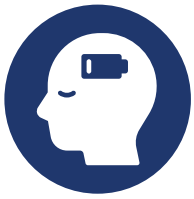
Rate of Hospital Visits for Suicidal Ideation (per 100,000 population)

- 287.0 – 328.9
- 329.0 – 556.6
- 556.7 – 636.1
- 636.2 - 683.8
- 683.9 – 952.0

MULTI-SECTORAL PARTNERSHIPS

Suicide is a complex and preventable multi-factor, multi-level health outcome. Therefore, strong leadership and multi-sectoral partnerships are key to an effective and comprehensive suicide prevention approach. Between July 2022 and June 2023, the TDH Suicide Prevention Program, in partnership with **Centerstone of Tennessee**, **Centerstone's Research Institute for Clinical Excellence and Innovation**, the **Tennessee Suicide Prevention Network**, and the **Tennessee Suicide Prevention Advisory Group**, accomplished the following:

- More than **500** licensed and pre-licensed behavioral health **providers in Tennessee received training** on best practices for utilizing telehealth. The most popular training topics included:



Addressing burnout and staff resiliency

Recognizing and talking about suicide risk

Suicide prevention: Working with youth and families

- **50+** partners across multiple sectors participated in the TDH annual **Suicide Prevention Needs Assessment**, helping identify opportunities for increased support and collaboration to prevent suicide across Tennessee.
- **4,000+** individuals received Question, Persuade, Refer (QPR) Gatekeeper Training.
- **200+** individuals received Applied Suicide Intervention Skills Training (ASIST).
- **100%** of non-federal hospitals in Tennessee with emergency departments reported into TDH's Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE).
- Tennessee Suicide Prevention Advisory Group membership **increased from 60 to 99**.

IMPACTING DISPROPORTIONATELY AFFECTED POPULATIONS

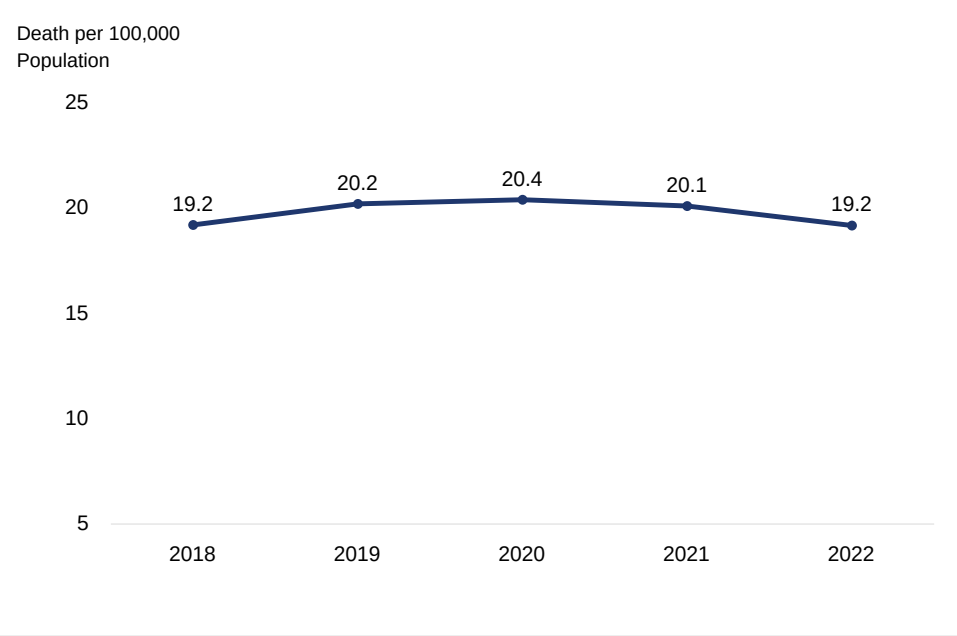
In 2020, TDH was awarded a multi-year Comprehensive Suicide Prevention Grant from the Centers for Disease Control and Prevention (CDC). The TDH Suicide Prevention Program utilizes grant funding to implement and evaluate a comprehensive public health approach to suicide prevention, with a focus on three populations that are disproportionately affected by suicide in Tennessee:

1. Residents of rural counties
2. Men in rural counties
3. Individuals aged 15-64 in rural counties

Since 2020, **a statistically non-significant decrease in suicide morbidity and mortality has occurred across all three disproportionately affected populations**.

SUICIDE AMONG RESIDENTS OF RURAL COUNTIES, 2018-2022[2]

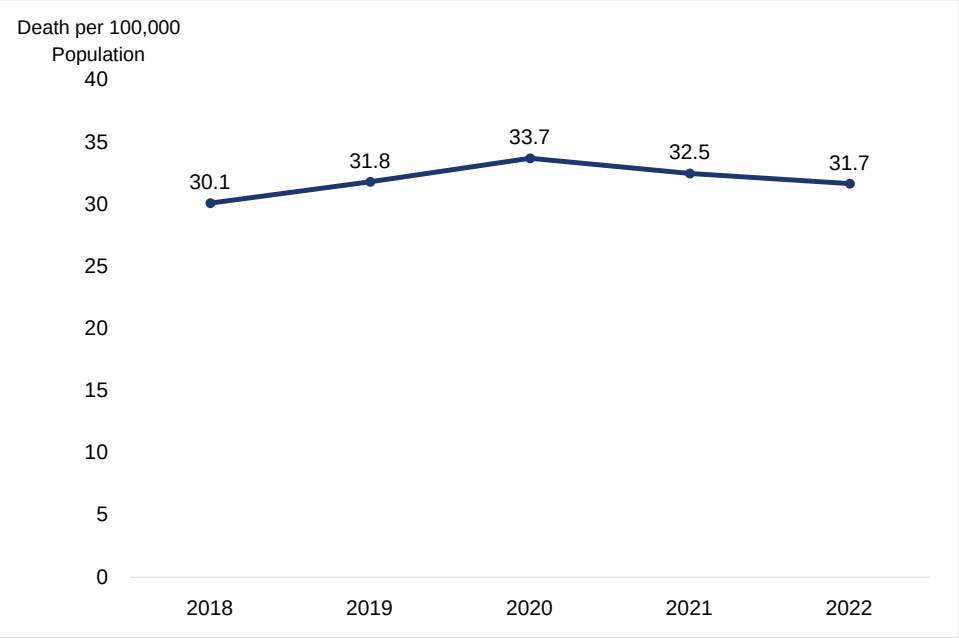
Rates of suicide per 100,000 population in Tennessee



From 2020 to 2022, the suicide rate among residents of rural counties (**mortality**) **decreased by 6.1%** and the rate of suicide attempts (**morbidity**) **decreased by 3.5%**.

SUICIDE AMONG MEN IN RURAL COUNTIES, 2018-2022[2]

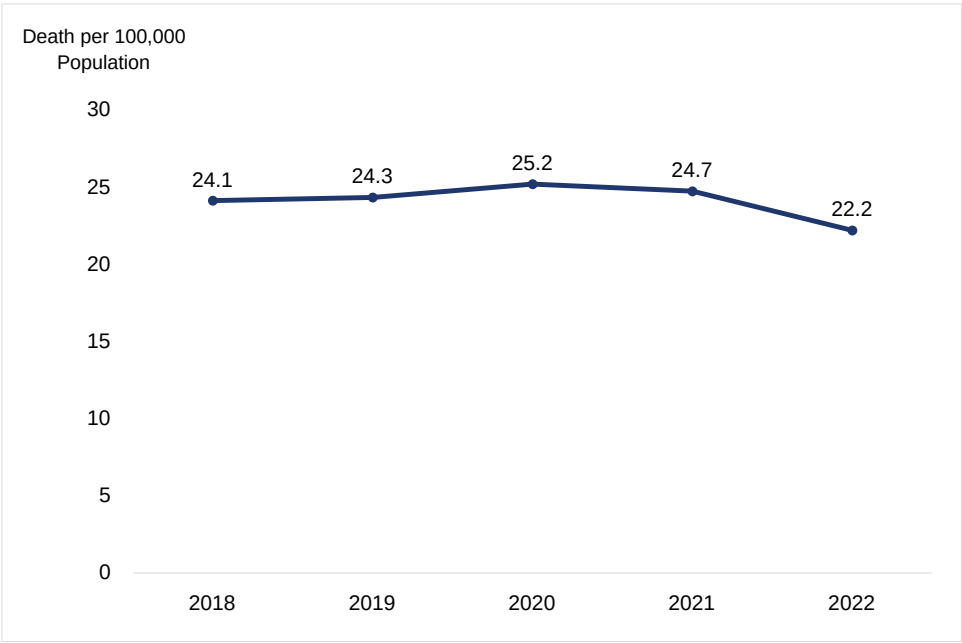
Rates of suicide per 100,000 population in Tennessee



From 2020 to 2022, suicide **mortality** among men in rural counties **decreased by 6.1%** and suicide **morbidity decreased by 9.5%**.

SUICIDE AMONG INDIVIDUALS AGED 15-64 IN RURAL COUNTIES, 2018-2022[2]

Rates of suicide per 100,000 population in Tennessee



From 2020 to 2022, suicide **mortality** among individuals aged 15-64 in rural counties **decreased by 11.8%** and suicide **morbidity decreased by 5.5%**.

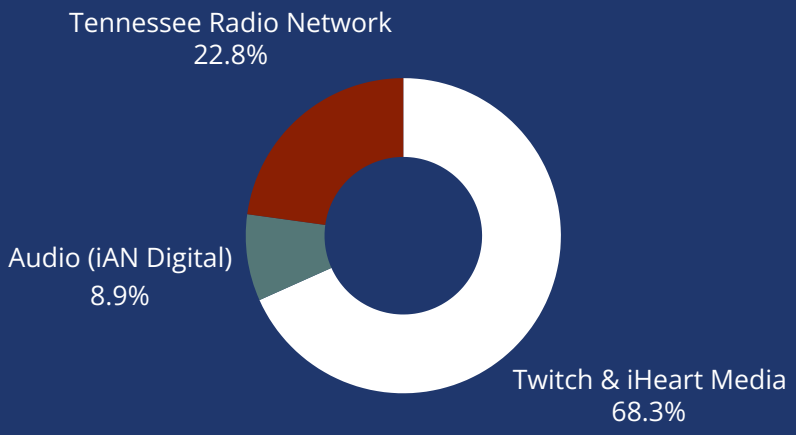
PUBLIC SERVICE CAMPAIGN

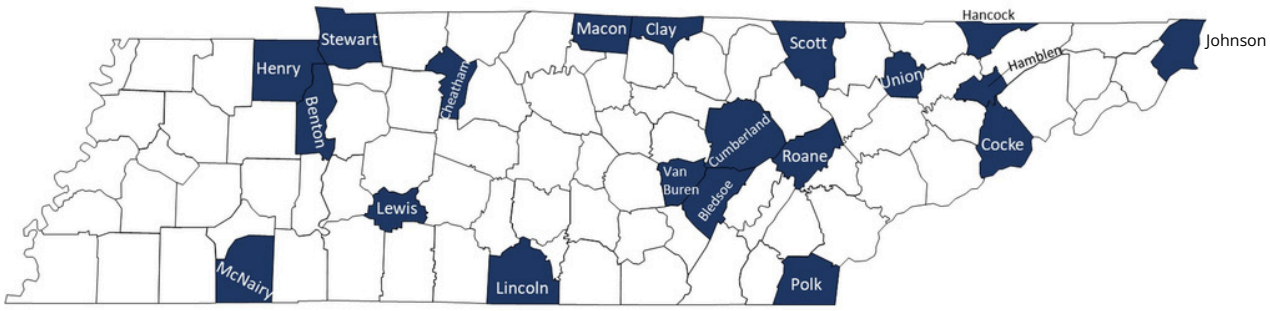
The TDH Suicide Prevention Program conducted a statewide public service media campaign from May through August of 2022. The campaign utilized 30-second radio and TV ads to encourage viewers to learn how to recognize and respond to signs of suicide risk by signing up for free Gatekeeper trainings.

The campaign focused on reaching rural Tennesseans and men aged 15-64 with a primary focus on the 20 rural counties with the highest suicide rates.[8] Media platforms used for the campaign included **iHeart Media** (streaming services), **Twitch** (an interactive livestreaming service for content spanning gaming, entertainment, sports, and music), the **Tennessee Radio Network** (90 mostly rural radio stations), and the **iHeart Radio Network** (iAN Digital). The campaign resulted in 7.3 million media impressions among rural Tennesseans.

2022 Campaign Recap

7.3 Million
Media Impressions Delivered





***Targeted counties[8]**

TDH SUICIDE PREVENTION INITIATIVES

- Learn more about the **Zero Suicide framework for health and behavioral healthcare agencies** by visiting https://zerosuicide.edc.org/toolkit.
- To sign up for a **Gatekeeper training**, visit https://tspn.org/events-training.
  - **ASIST** training overview: https://livingworks.net/training/livingworks-asist/
  - **QPR** training overview: https://qprinstitute.com/about-qpr
- To learn more about **ESSENCE Rapid Response Plans**, visit https://tspn.org/essence.
- To learn how to get involved in Tennessee's **Sources of Strength** Initiative, visit https://www.tspn.org/sources-of-strength.
- Learn more about the **Tennessee Suicide Prevention Advisory Group** at https://www.tn.gov/health/health-programareas/fhw/for-adults/suicide-prevention/suicideprevention-task-force.html.
- To subscribe to **weekly ESSENCE Alerts**, visit https://tspn.org/essence-sign-up-forms.
- TDH's **2022 Suicide Prevention PSA Campaign** content can be viewed at https://www.youtube.com/watch?v=eTyT8lCmP-Q.

SUICIDE SCREENING TOOLS AND GUIDELINES

- The American Academy of Pediatrics recommends universal screening for suicide risk for all youth ages 12 and above.[9] A combined PHQ-A and ASQ tool can be accessed at https://www.nimh.nih.gov/sites/default/files/documents/PHQ-A_with_depression_questions_and_ASQ_PDF.pdf.
- To learn more about clinical best practices and and download evidence-based clinical screening tools for adults, visit https://www.ruralhealthinfo.org/toolkits/suicide/2/screening-tools.

If you or someone you know is struggling with thoughts of suicide, know that help is available.
Call or text 988 then press 0 for 24/7, free, and confidential support.

https://988lifeline.org/

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