

Preteen Suicide and Suicidal Behavior: Assessment and Prevention



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Disclosures

- I receive research grant funding from the National Institute of Mental Health (NIMH) and the American Foundation for Suicide Prevention (AFSP)
- I have no financial relationships or Conflicts of Interest (COIs) to disclose



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Numbers to Call/Text

- **National Suicide Prevention Lifeline:**
1-800-273-TALK (8255)

- **Crisis Text Line:** 741-741 & text “HELLO”



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Objectives

- Epidemiology of preteen youth suicide and suicidal behavior; discuss racial disparities

- Options for assessment of suicidal ideation and attempts for preteen youth

- Suggest prevention/interventions for preteen suicide and suicidal behavior



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Definitions

Suicidal Behaviors

- **Suicide** - death caused by injuring oneself with an explicit or inferred intent to die.
- **Suicidal Ideation** - having thoughts, ideas, or plans to end one's life.
- **Suicide Attempt** - non-fatal self-injurious behavior with stated or inferred intent to die.
- **Self-Harm** - purposeful acts of physical harm to the self performed *without* the intent to die.

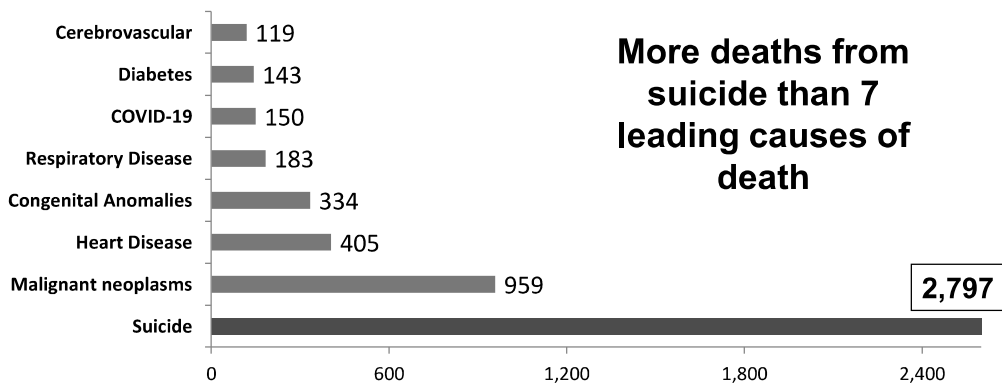
Source: O'Carroll, P. W., Berman, A. L., Maris, R., Mesnicki, E., Tanney, B., & Silverman, M. (1996). Beyond the Tower of Babel - A nomenclature for suicidology. *Suicide Prevention*, 23-39.



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The Problem of Youth Suicide

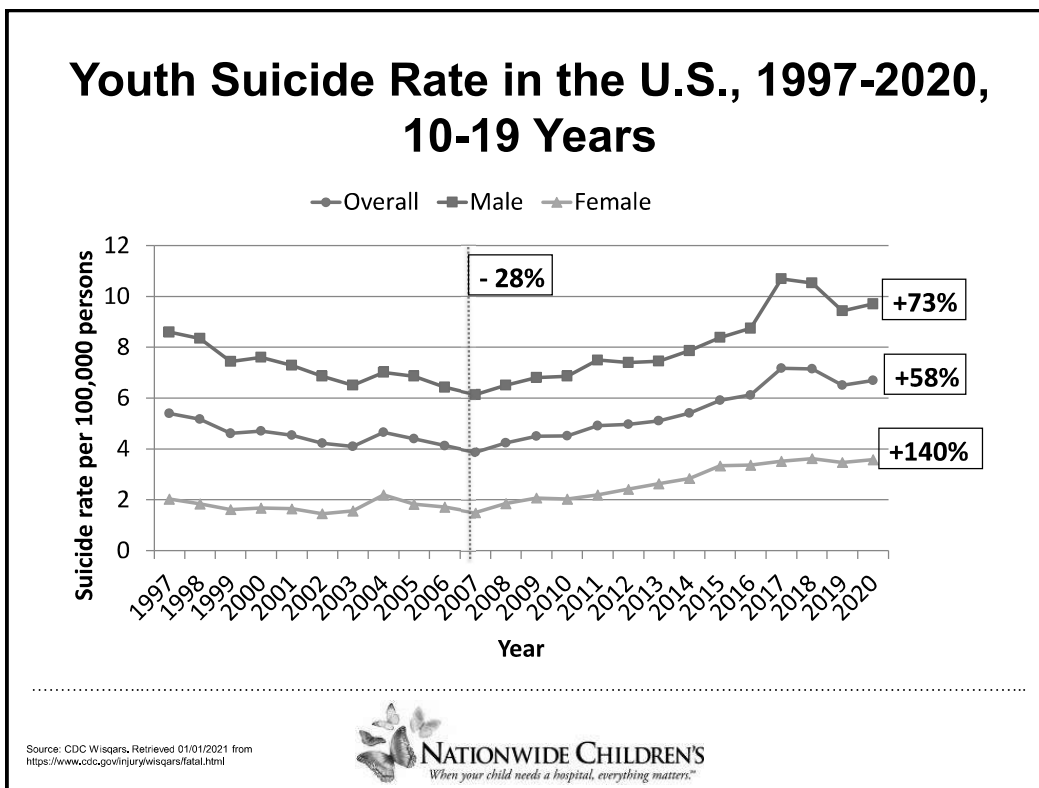
- In 2020, suicide was the 10th leading cause of death for all ages but the **3rd leading cause of death** for youth aged 10-19 years in the United States



Source: CDC WISQARS, Retrieved 01/01/2021 from <https://www.cdc.gov/injury/wisqars/fatal.html>




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Preteen Youth Epidemiology


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Leading Causes of Death, Age 5-12 years

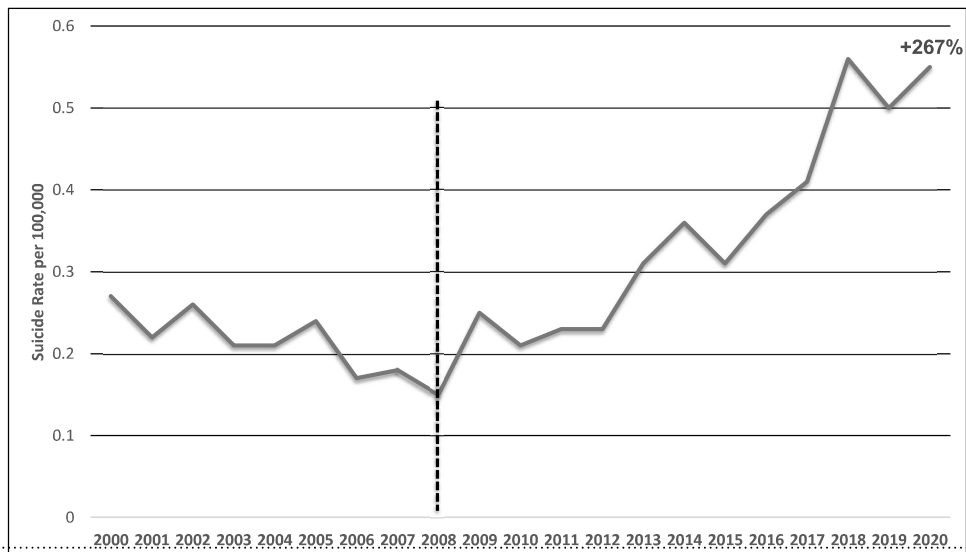
2009		2014		2019		2020	
Rank	Age Groups	Rank	Age Groups	Rank	Age Groups	Rank	Age Groups
1	Unintentional Injury 1,233	1	Unintentional Injury 1,099	1	Unintentional Injury 1,115	1	Unintentional Injury 1,102
2	Malignant Neoplasms 713	2	Malignant Neoplasms 662	2	Malignant Neoplasms 611	2	Malignant Neoplasms 612
3	Congenital Anomalies 285	3	Congenital Anomalies 266	3	Congenital Anomalies 309	3	Homicide 209
4	Homicide 197	4	Homicide 189	4	Homicide 212	4	Congenital Anomalies 216
5	Influenza & Pneumonia 172	5	Heart Disease 172	5	Suicide 164	5	Suicide 180
6	Heart Disease 152	6	Suicide 117	6	Heart Disease 135	6	Heart Disease 109
7	Chronic Low Respiratory Disease 113	7	Respiratory Disease 113	7	Chronic Low Respiratory Disease 122	7	Chronic Low Respiratory Disease 107
8	Suicide 82	8	Influenza & Pneumonia 78	8	Influenza & Pneumonia 96	8	Influenza & Pneumonia 84
9	Neoplasms 69	9	Cerebrovascular 66	9	Cerebrovascular 62	9	Cerebrovascular 55
10	Septicemia 60	10	Benign Neoplasms 58	10	Benign Neoplasms 52	10	Benign Neoplasms 41

Source: CDC Wisqars, Retrieved 01/01/2021 from <https://www.cdc.gov/injury/wisqars/fatal.html>



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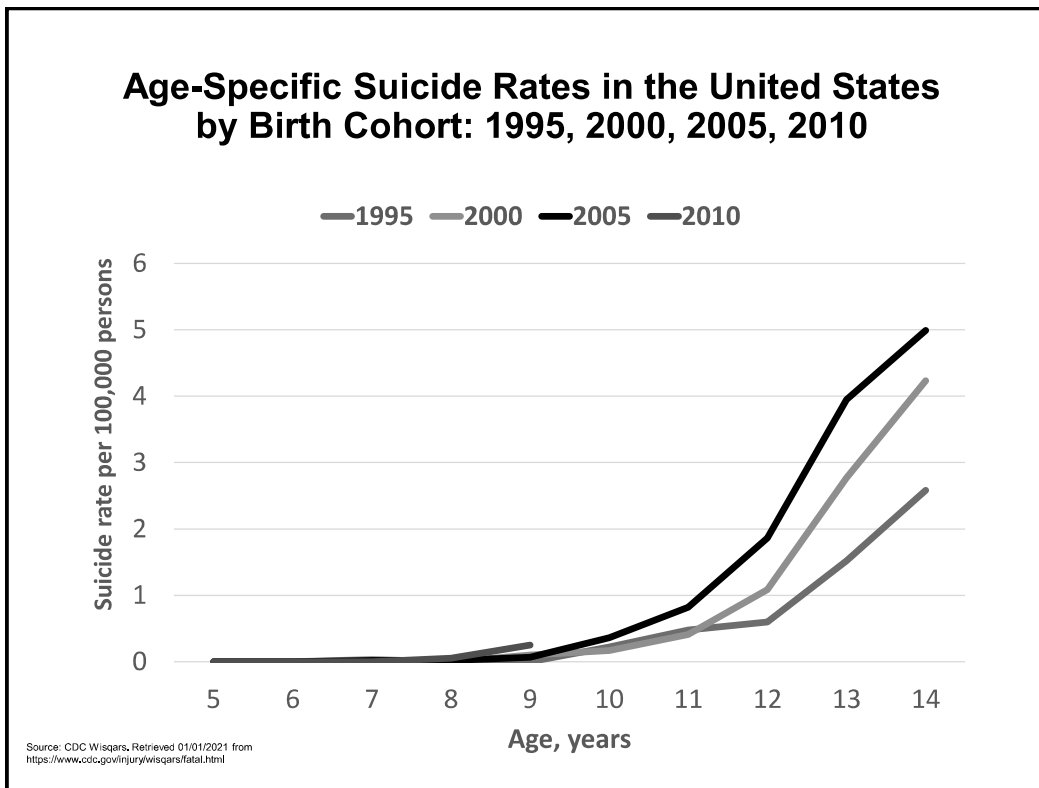
U.S. Youth Suicide Rate: Ages 5-12 Years, 2000 to 2020



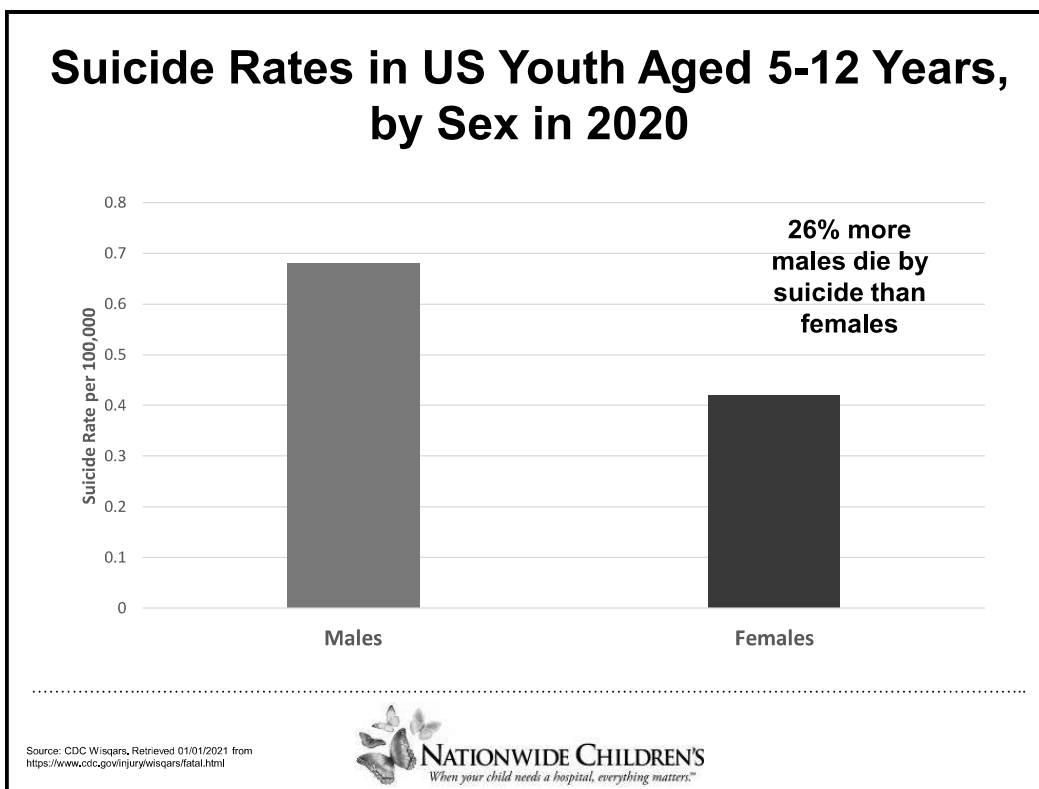
Source: CDC Wisqars, Retrieved 01/01/2021 from <https://www.cdc.gov/injury/wisqars/fatal.html>



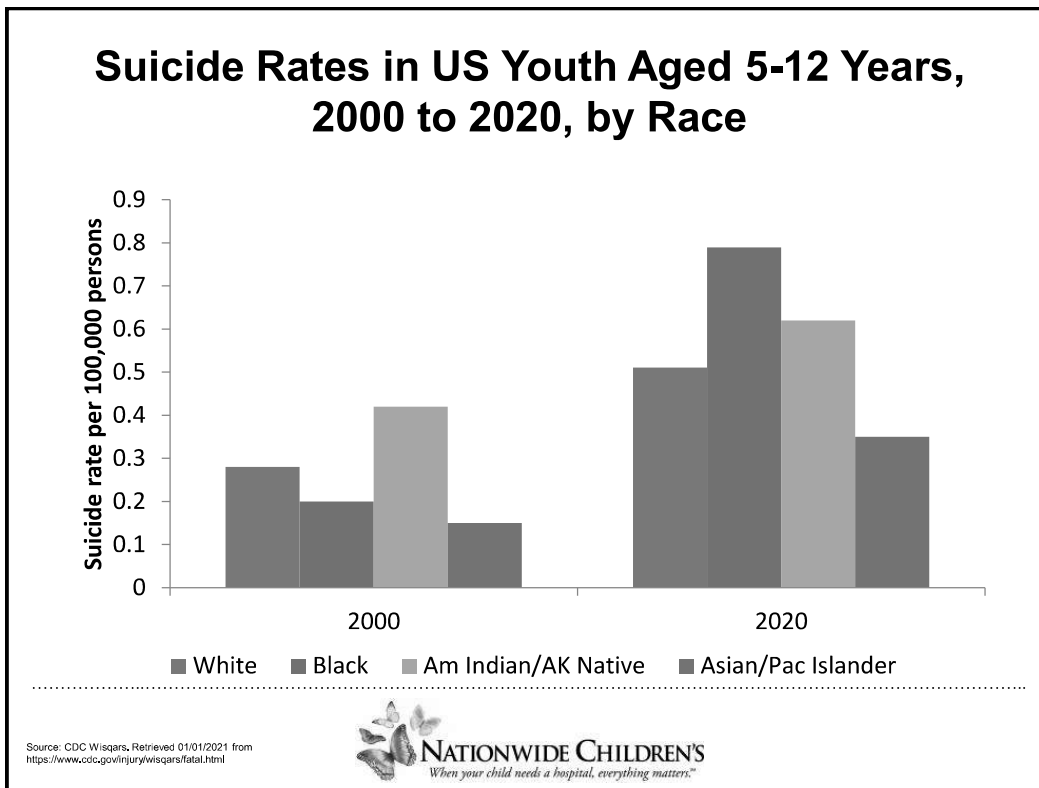
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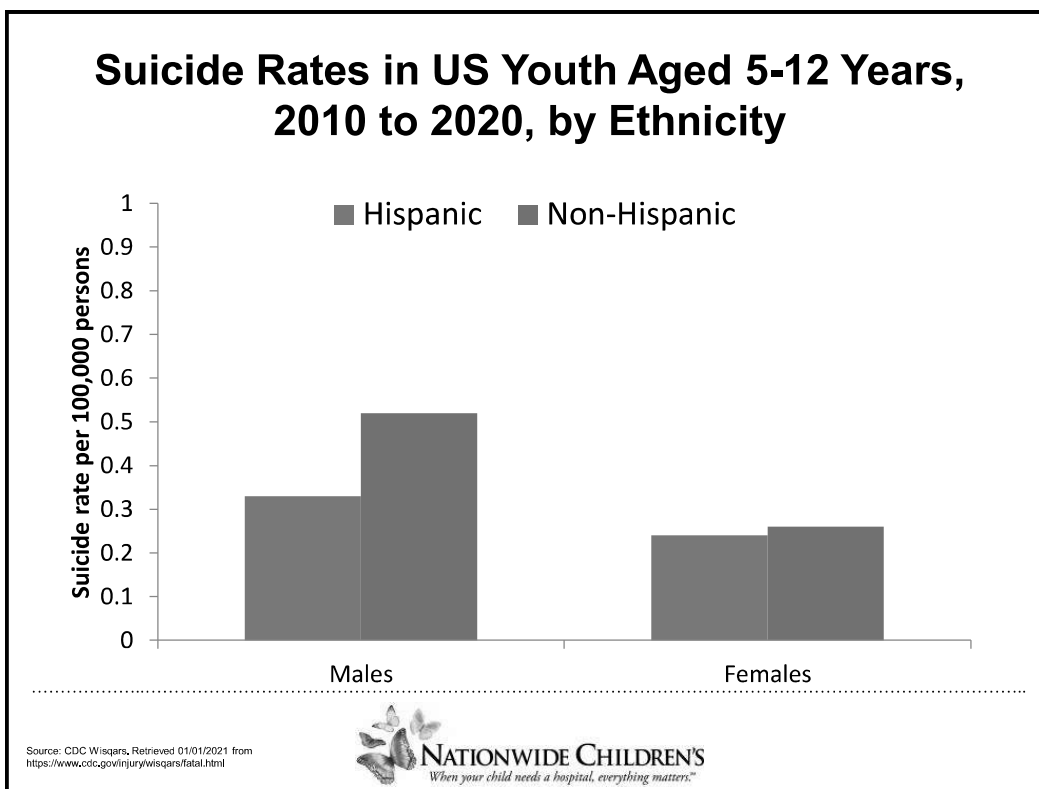
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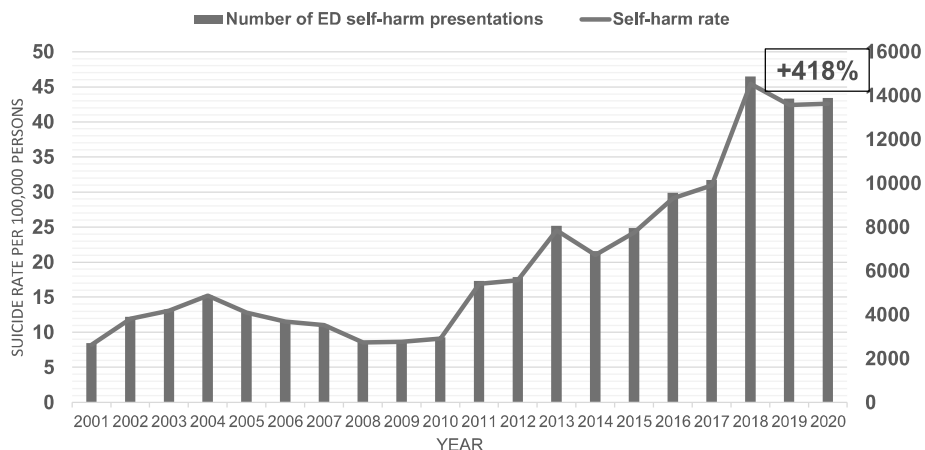


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Self-Harm Rates in US Youth Aged 5-12 Years, 2001 to 2020



Source: CDC WISQARS, Retrieved 01/01/2021 from <https://www.cdc.gov/injury/wisqars/fatal.html>



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Suicide Trends in Elementary School-Aged Children, 5-11 yrs, in the United States, 1993 to 2012

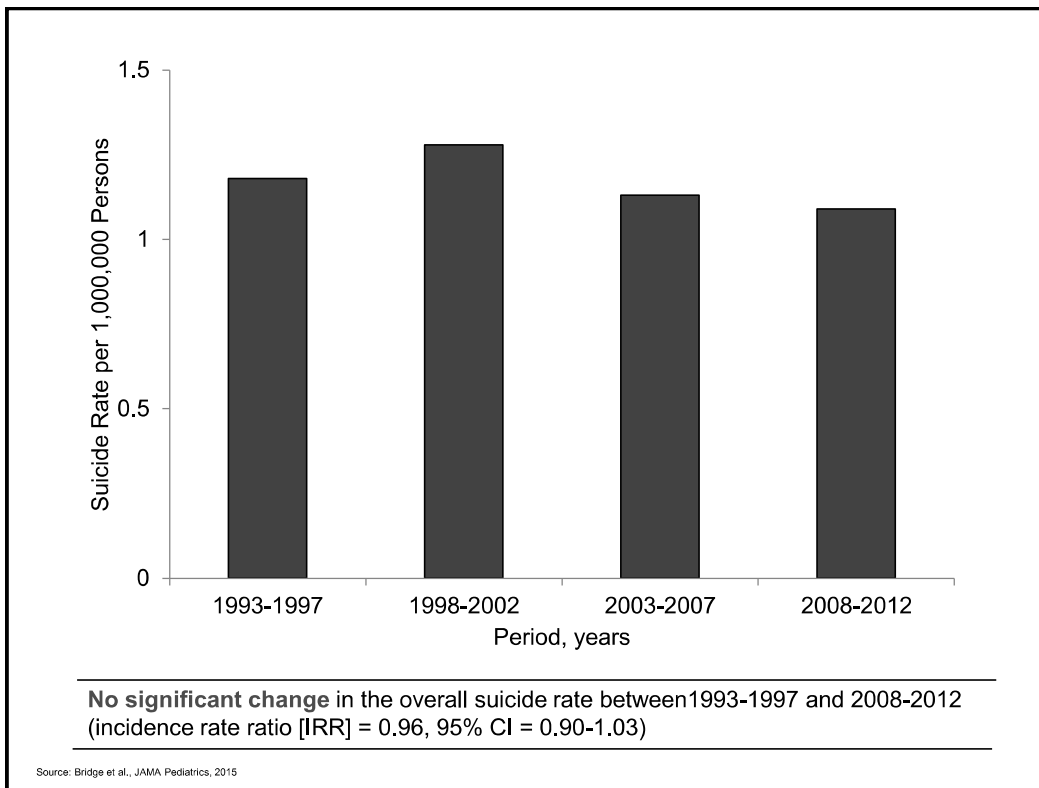
- 657 children died by suicide
 - ~33 deaths per year
 - 11th leading cause of death in 2012
- 553 (84%) boys
- 558 (85%) aged 10-11 years
- 441 (67%) white and 177 (27%) black
- 555 (84%) non-Hispanic
- 514 (78%) hanging/suffocation

Source: Bridge et al., JAMA Pediatrics, 2015

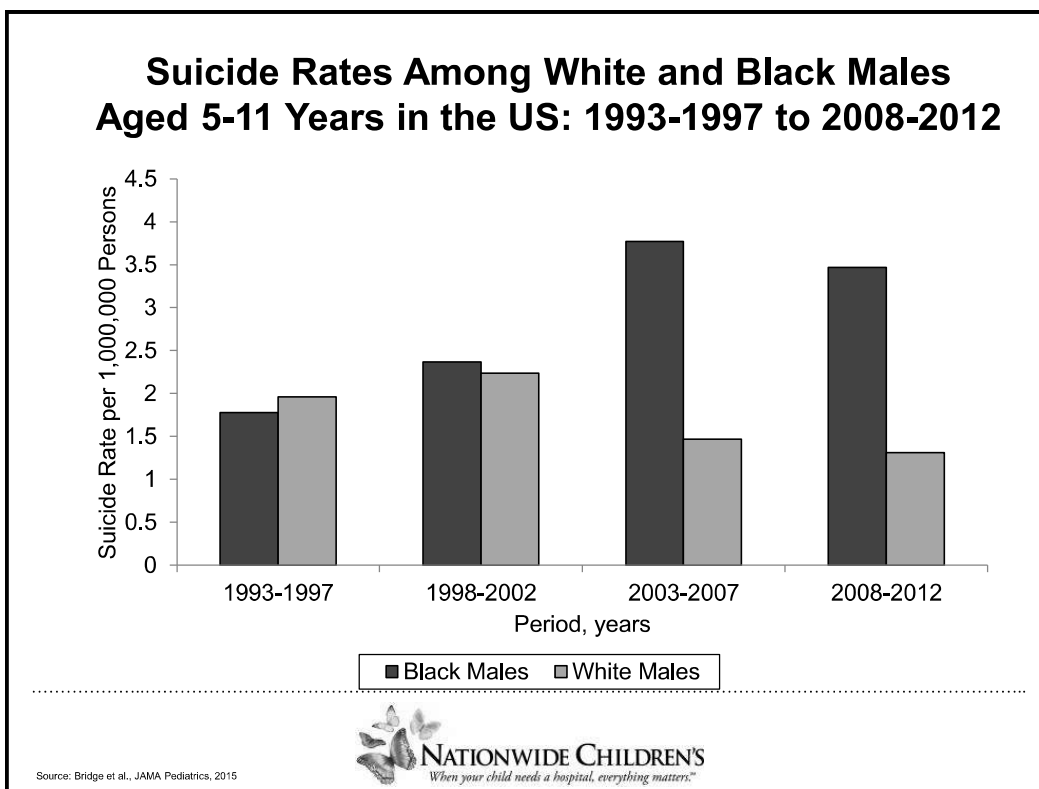


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Follow-up Study of Suicide in Elementary School-Aged Children and Early Adolescents

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National Violent Death Reporting System (NVDRS)

- State-based surveillance system collects data on all violent deaths
- **Uses multiple sources** (e.g., medical examiners, coroners, law enforcement)
- Expanded to all 50 states in 2018 however data online only 34 states
- **Information collected** includes circumstances related to suicide (e.g., depression, relationship or school problems)



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Precipitating Circumstances of Suicide in Children and Early Adolescents

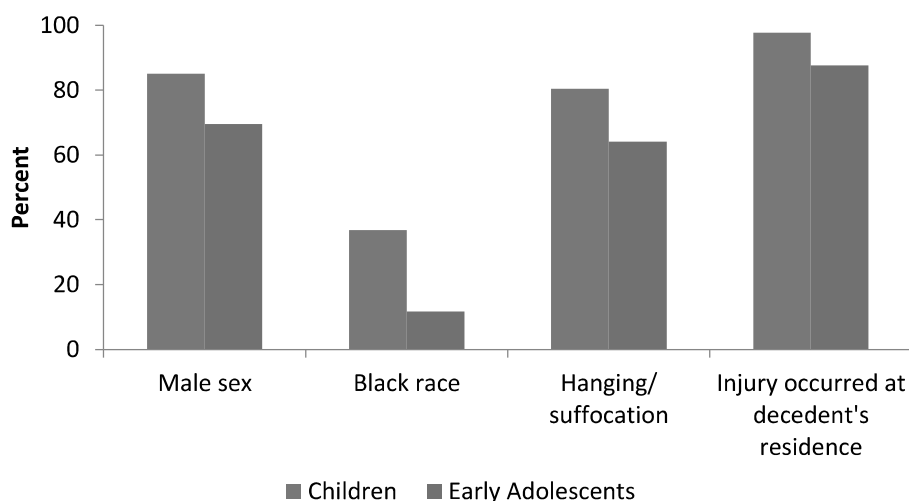
- 2003-2012 data on all suicide decedents aged **5 to 14 years**
- Restricted-use data available for **17 states**
- **Precipitating circumstances** included: mental health history/treatment, substance use, physical health history, stressful life events, & suicide-related circumstances
- Comparisons were made based on:
 - **Age group** (5-11 vs. 12-14 years)
 - **Race** (black vs. non-black)

Sheffall et al., Pediatrics, 2016



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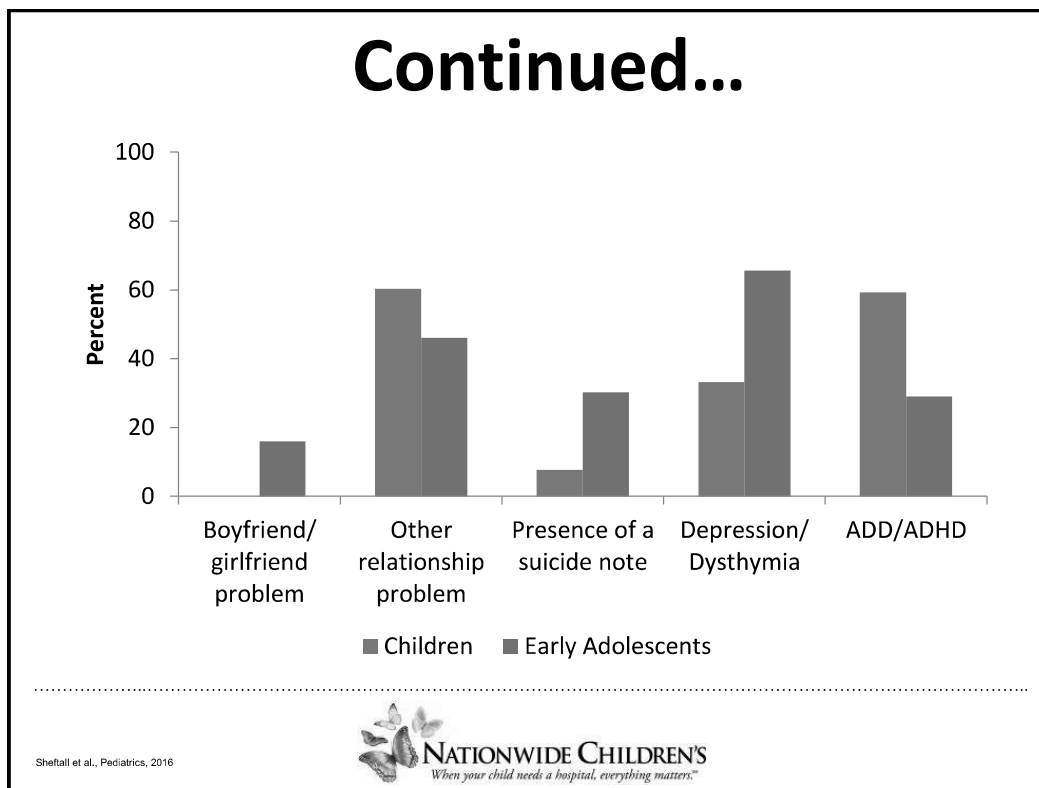
Differences Between Child (N=87) and Early Adolescent (N=606) Suicide Decedents*



Sheffall et al., Pediatrics, 2016

*All differences significant at $P < 0.05$


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No Differences Between Child and Early Adolescent Suicide Decedents


- Ethnicity
- Time of injury leading to death
- In public custody at time of death
- Perpetrator or victim of interpersonal violence
- Recent criminal legal problem
- Other legal problems
- Physical health problems
- School problems (including bullying behaviors)
- Recent crisis
- Death of a friend or family member
- History of suicide attempt
- **Suicide intent disclosed (29.5% child vs. 28.9% early adolescent)**
- Recent suicide of family member or friend
- Current mental health concern
- Current or past history of mental health treatment
- Problems with alcohol or drugs
- Presence of alcohol or drugs at time of death (toxicology reports)
- Race-by-precipitating circumstances interactions in child vs. early adol. decedents


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Sheftall et al., Pediatrics, 2016

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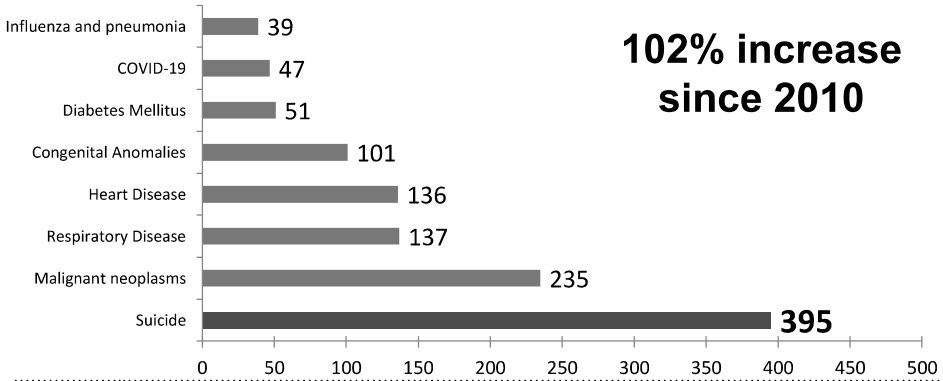
Black Youth Preteen Suicide and Suicidal Behavior



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The Problem of Black Youth Suicide*

- In 2020, suicide was the 3rd leading cause of death for Black youth aged 5-19 years in the United States



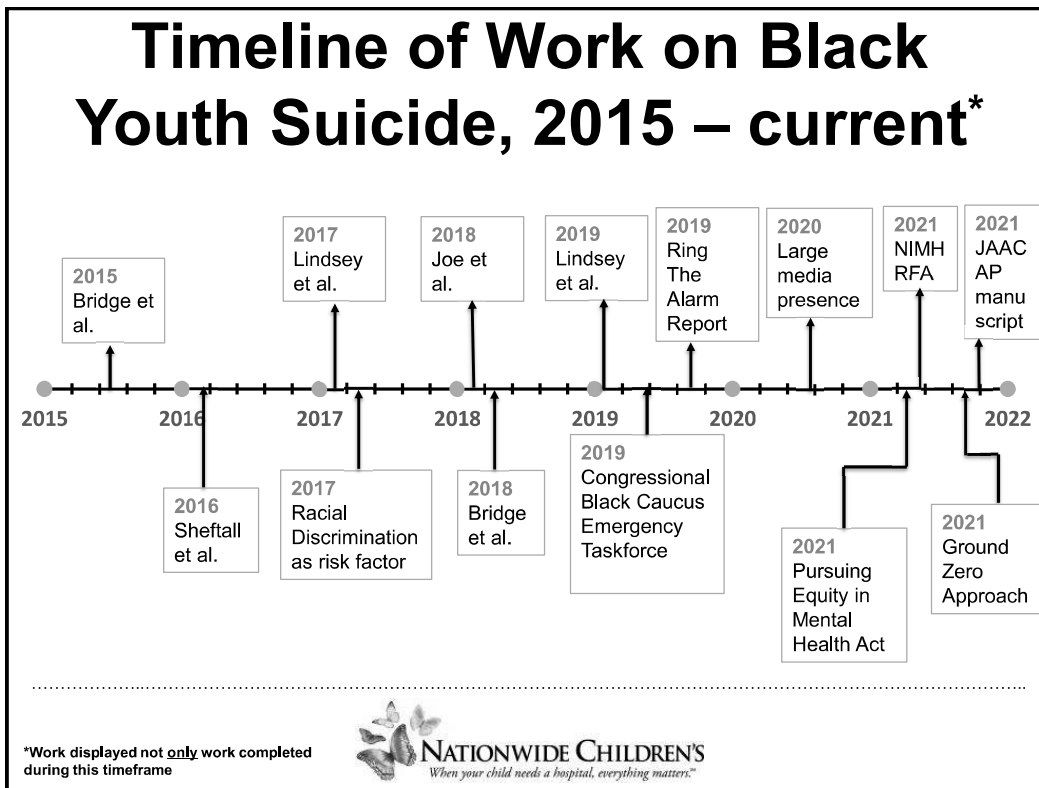
Cause of Death	Number of Deaths
Influenza and pneumonia	39
COVID-19	47
Diabetes Mellitus	51
Congenital Anomalies	101
Heart Disease	136
Respiratory Disease	137
Malignant neoplasms	235
Suicide	395

102% increase
since 2010

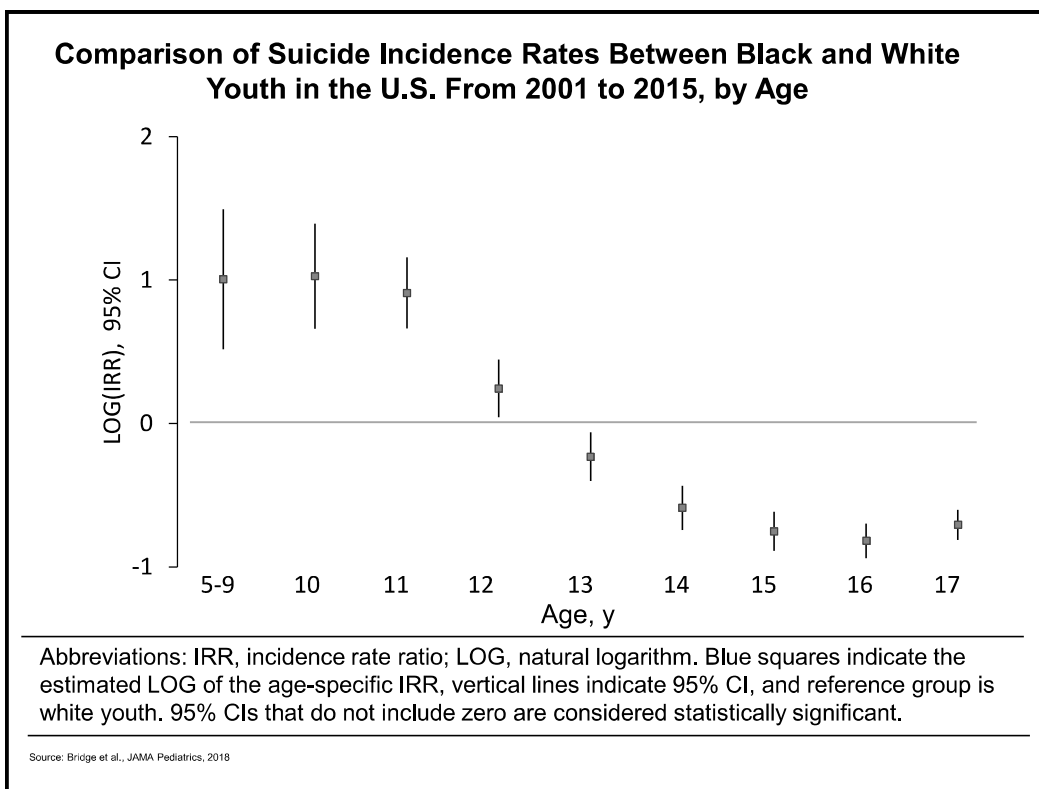


Source: CDC WISQARS, Retrieved 01/01/2021 from <https://www.cdc.gov/injury/wisqars/fatal.html>

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From: **Age-Related Racial Disparity in Suicide Rates Among US Youths From 2001 Through 2015**
 JAMA Pediatr. 2018;172(7):697-699. doi:10.1001/jamapediatrics.2018.0399

Table. Comparison of Suicide Rates Between US Black and White Youths by Age and Sex, 2001-2015

Age, y	Youth Suicides, No. (Rate per 1 Million Persons)		IRR (95% CI) ^a
	Black	White	
All			
5-9	26 (0.53)	45 (0.19)	2.73 (1.69-4.43)
10	47 (4.68)	79 (1.68)	2.79 (1.95-4.00)
11	101 (9.93)	190 (4.00)	2.48 (1.95-3.16)
12	129 (12.57)	471 (9.86)	1.28 (1.05-1.55)
13	167 (16.16)	979 (20.37)	0.79 (0.67-0.93)
14	194 (18.69)	1625 (33.65)	0.56 (0.48-0.64)
15	252 (24.25)	2496 (51.48)	0.47 (0.41-0.54)
16	317 (30.49)	3372 (69.20)	0.44 (0.39-0.49)
17	428 (41.13)	4084 (83.39)	0.49 (0.45-0.54)
Boys			
5-9	22 (0.88)	40 (0.34)	2.62 (1.56-4.41)
10	42 (8.24)	67 (2.78)	2.97 (2.02-4.36)
11	70 (13.55)	154 (6.33)	2.14 (1.62-2.84)
12	91 (17.45)	336 (13.72)	1.27 (1.01-1.60)
13	122 (23.24)	649 (26.34)	0.88 (0.73-1.07)
14	129 (24.47)	1117 (45.09)	0.54 (0.45-0.65)
15	164 (31.07)	1760 (70.71)	0.44 (0.37-0.52)
16	238 (45.07)	2512 (100.33)	0.45 (0.39-0.51)
17	347 (65.62)	3281 (130.17)	0.50 (0.45-0.56)
Girls			
5-11 ^b	40 (1.17)	53 (0.33)	3.53 (2.34-5.32)
12	38 (7.53)	135 (5.80)	1.30 (0.91-1.86)
13	45 (8.85)	330 (14.10)	0.63 (0.46-0.86)
14	65 (12.73)	508 (21.60)	0.59 (0.46-0.76)
15	88 (17.20)	736 (31.19)	0.55 (0.44-0.69)
16	79 (15.44)	860 (36.30)	0.43 (0.34-0.54)
17	81 (15.83)	803 (33.78)	0.47 (0.37-0.59)

Source: Bridge et al., JAMA Pediatrics, 2018

Abbreviation: IRR, incidence rate ratio.

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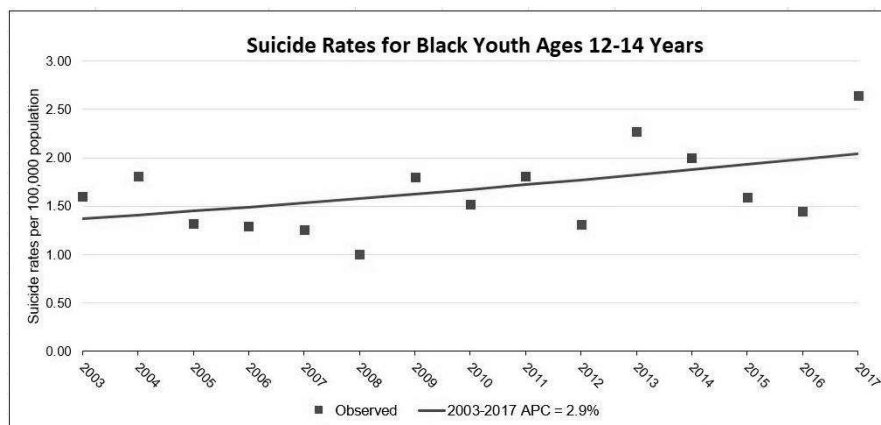
RING THE ALARM
 THE CRISIS OF BLACK YOUTH SUICIDE IN AMERICA

Report Released December 2019

A REPORT TO CONGRESS FROM THE CONGRESSIONAL BLACK CAUCUS
**EMERGENCY TASKFORCE ON BLACK YOUTH
 SUICIDE AND MENTAL HEALTH**
 REPRESENTATIVE BONNIE WATSON COLEMAN, TASK FORCE CHAIR

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Black Youth Suicide Rates: 2003 to 2017 by Age



Source: Sheftall et al., 2021, JAACAP



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Precipitating Circumstances of Suicide in Black Youth

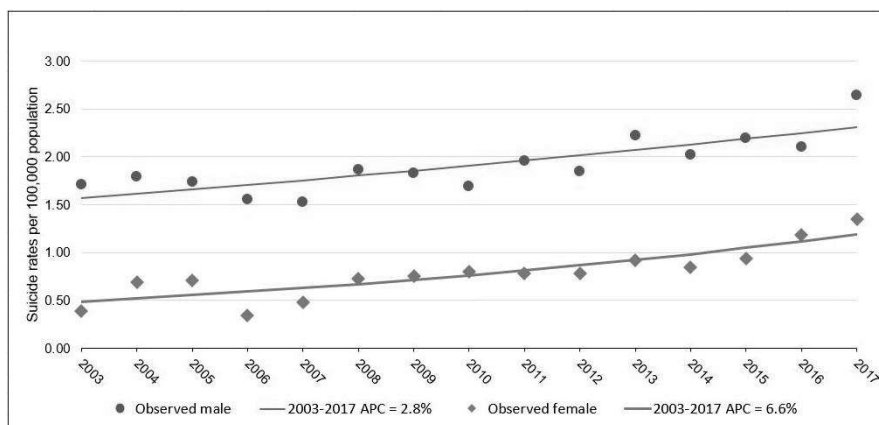
- **Youth 5-11 years and 12-14 years**
 - Die in own residence
 - Family problem/crisis
 - School problem/crisis
 - Injury within 24 hours of an argument
 - **ADHD/ADD diagnosis**
 - **More girls died by suicide**

Source: Sheftall et al., 2021, JAACAP



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Black Youth Suicide Rates: 2003 to 2017 by Sex



Source: Sheftall et al., 2021, JAACAP



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Sex Specific Precipitating Circumstances

- **Girls**
 - Relationship problems/crisis
 - Die within 24 hrs of argument
 - Physical health concerns
 - History (hx) of suicidal thoughts, plans, & attempts
 - Current mental health (mh) concern, receiving current mh treatment (tx), & hx of mh tx
 - Depression/dysthymia and anxiety

Source: Sheftall et al., 2021, JAACAP



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Continued...

- **Boys**
 - Recent criminal/legal problem
 - ADHD mental health diagnosis

Source: Sheftall et al., 2021, JAACAP



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Assessment of Suicidal Behaviors in Preteens



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Assessment of Suicidal Behavior for Preteens

- Columbia Suicide Severity Rating Scale (C-SSRS)
- Ask Suicide-Screening Questions (ASQ)
- Not many exist for youth 5-12 years

Sources: Posner et al. 2011 *Am J Psychiatry*; Chappell et al. 2012 *Am J Psychiatry*; Chioreso et al. 2017 *J Child Adolesc Psychopharmacol*; Horowitz et al., 2012 *Arch Pediatr Adolesc Med*; Cwik et al., 2020 *Int Rev Psychiatry*.



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The Good News

Suicide is Preventable!



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Prevention Opportunities



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Preteen Suicide Prevention

- Emotion dysregulation to prevent SB (primary prevention)
 - Promoting Alternative Thinking Strategies (PATHS)
 - Sources of Strength
- Provide insight for signs and symptoms associated with SB (gatekeeper training)
 - Signs of Suicide (SOS)

Sources: Greenberg et al.1995. Dev Psychopathol; Sourcesofstrength.org
www.mindwise.org



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Black Youth: Ground Zero Approach

- Understand what are the culturally relevant risk factors (e.g., discrimination)
- Establish theories and test theories considered universal with minoritized groups
- Investigate the trajectory of ideation to behavior in Black youth
- Mixed methods approaches are needed

Source: Sheftall & Miller 2021, JAMA Pediatrics



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Promising Avenues for Black Youth Suicide Prevention

- Engage community organizations
- Faith-based
 - Helping Alleviate Valley Experiences Now (HAVEN)
Molock et al., 2008
- School-based
 - Adapted-Coping with Stress Course (A-CWS)
Robinson et al., 2021
- Gatekeeper Trainings
 - After-school programs, barber and beauty shops,
Columbus Urban League

Source: Sheftall & Miller 2021, JAMA Pediatrics



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Source:
<https://www.npr.org/sections/gosandsoda/2020/08/01/892983791/photos-living-tree-bridges-in-a-land-of-clouds>

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Suicide Prevention Resources

- Suicide Prevention Lifeline 1-800-273-TALK (8255)
- Spanish Suicide Prevention Lifeline 1-877-727-4747
- Crisis Text 741-741 (Text "HOME")
- SAMHSA HS Suicide Prevention <http://store.samhsa.gov/product/Preventing-Suicide-A-Toolkit-for-High-Schools/SMA12-4669>
- <http://actionallianceforsuicideprevention.org/>
- <http://www.sprc.org/>
- <https://www.withyouhere.org/>
- <http://afsp.org/>
- <https://www.starcenter.pitt.edu/>
- <http://jasonfoundation.com/>
- <http://zerosuicide.sprc.org/>
- <http://www.thetrevorproject.org/>
- <https://www.translifeline.org/>
- <http://www.crisistextline.org/>
- <http://www.suicidepreventionlifeline.org/>
- <https://Aakomaproject.org>
- <https://projectliftservices.org/>



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Thank you!

CSPR Research Team

- Kate Duffy
- Ildico Osei Twerefour
- Jeffrey A. Bridge
- Donna Ruch
- Kendra Heck
- Jacki Tissue
- Elizabeth Cannon
- Eyban Farah
- Nikhitha Kakarala
- Max Netwon

CSPR Suicide Prevention Team

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