## Pre-teen Suicide Risk and the Need for Upstream Prevention



Riverside Suicide Prevention Coalition

John Ackerman, PhD Center for Suicide Prevention & Research Nationwide Children's Hospital



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### **Presentation Objectives**

- Identify preteen suicide risk and protective factors and how suicidal thoughts and behaviors are expressed in children as compared to adolescents
- 2. Review evidence for upstream suicide prevention highlighting barriers and opportunities when working with young children
- 3. Discuss promising strategies to identify, treat, and prevent preteen suicidal thoughts and behaviors
- Illustrate novel approaches to facilitate improved understanding, support, and help-seeking in elementary school settings



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### Nationwide Children's Hospital (Columbus, OH)

- Largest behavioral health department in a pediatric hospital setting in the US
- Broad continuum of outpatient, inpatient, crisis & prevention services
- Increasing acuity (+466% in ED visits for BH problems since 2005)
- Over 270k patient visits for primary behavioral health reasons in 2023

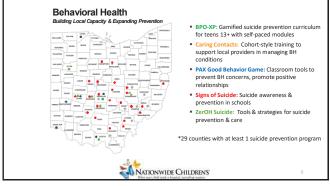




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# Nationwide Children's Hospital: Patient Origin Inpatient and Outpatient Unique Patients Nov 1, 2022 through Oct 31, 2023 - Behavioral Health Services referrals draw from a large portions of central and SE Ohio LEGEND Primary Serv Area - Secondary Serv Area - 1 INPT/CSU - 1 OUTPATIENT - 1 PCD Magastar Potent 2a Coate Date sedence entry within 2a Coate Date sed

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### **Center for Suicide Prevention & Research**

- Provide consultation and training on suicide prevention, assessment, intervention & postvention
- Provide suicide prevention trainings and education to youth and the adults who support them
- Reduce stigma and build awareness of mental health issues
- Identify and cultivate natural supports and coping strategies of young people and their families
- "To save children's lives and reduce suicide in Ohio and beyond through prevention efforts and cutting-edge research."





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# Burden of Mental Illness on Children 11% of children (ages 8 to 11) have or have had a mental illness with severe impairment 22% of teens (ages 13 to 18) have had a mental illness with severe impairment in their lifetime Only 50% of youth with a mental health disorder receive any behavioral health treatment | 150% of all | 166time mental | 16

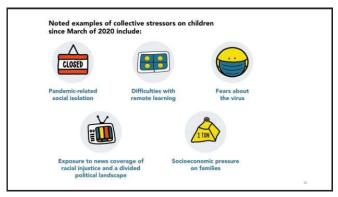
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# Surgeon General's Advisory: Protecting Youth Mental Health

"Mental health challenges in children, adolescents and young adults are real and widespread. Even before the pandemic, an alarming number of young people struggled with feelings of helplessness, depression and thoughts of suicide — and rates have increased over the past decade. The COVID-19 pandemic further altered their experiences at home, school and in the community, and the effect on their mental health has been devastating. The future well-being of our country depends on how we support and invest in the next generation."

— Vivek H. Murthy, MD, MBA, Surgeon General of the United States





# The Impact of COVID-19

- Symptoms of anxiety, depression, and suicidal ideation have increased
- Increased risk for MH symptoms:
  - Youth with intellectual and developmental disabilities
  - Racial and ethnic minority youth
  - LGBTQ+ youth
  - Youth in rural communities
  - Youth in immigrant households
  - Youth involved with justice, foster care, and/or child welfare systems
  - Youth experiencing homelessness

Source: Protecting Youth Mental Health: The U.S. Surgeon General's Advisory, 2021. Retrieved 12/7/2021, from Youth Mental Health Reports and Publications I HHS.go

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# Child mental health concerns impact family systems Six in 10 working parents reported being "very" to "extremely" concerned about their child's emotional health and development or behavior in the past two years. The Great Collide: An On Our Sleeves\* Study on the Impact of Children's Mental Health on America's Workforce

# **Developmental Considerations**





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### **Cognitive and Behavioral Differences**

- Differences in impulse control, emotion regulation, distress tolerance, perspective-taking, and other executive functions
- Less sophisticated language and self-talk
- Reduced understanding of abstract concepts (e.g., death)
   term "killing oneself" is often understood; "suicide" less so
   Many youth understand death is final but young children may believe dead people can still have experiences
- · Increased suggestibility
- · Difficulty understanding risk-related outcomes
- · Less self-directed use of coping skills



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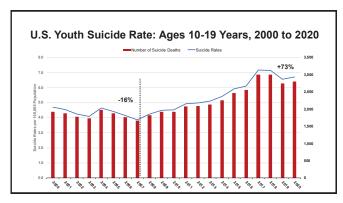
### **Family/Home Context**

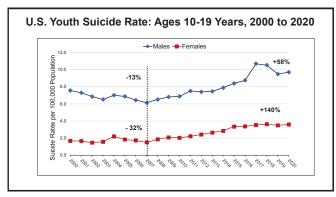
- · Younger children are more influenced by relationships in the immediate family which has +/- implications
  - · Perceived parental support and monitoring
  - Family conflict and exposure to violence
  - Early adverse experiences (e.g., sexual abuse, physical abuse)
  - · Family psychiatric history and family history of suicide
- Accessibility of lethal means & acquired capacity to harm self

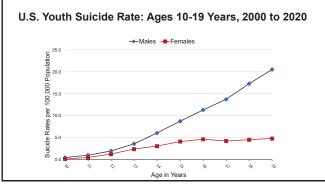


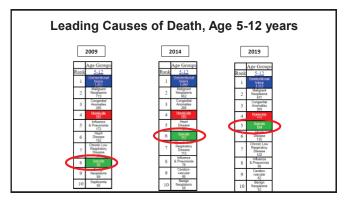


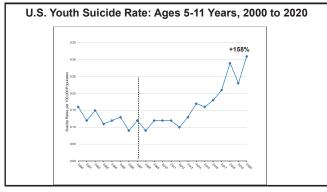


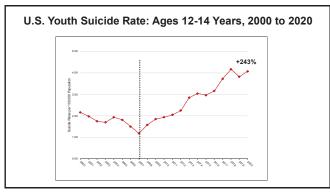


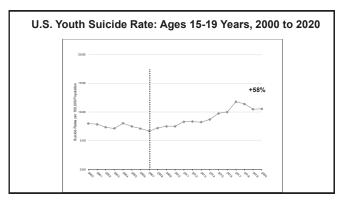












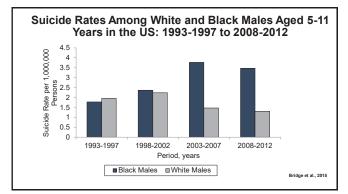
# Suicide Trends in Elementary School-Aged Children, 5-11 yrs, in the US, 1993 to 2012

Bridge et al., JAMA Pediatrics, 2015

- 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)
- 514 (78%) hanging/suffocation
- 441 (67% White Non-Hispanic);177 (27% Black)



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### National Violent Death Reporting System (NVDRS)

- State-based surveillance system collects data on violent deaths using **multiple sources** (e.g., medical examiners, coroners, law enforcement)
- Voluntary reporting system increasingly used (17 in 2003-2012 when paper was written; 34 in 2018; 42 as of 2022)
- Information collected includes demographics, method, location, risk/protective factors, circumstances related to suicide (e.g., depression, relationship or school problems)

Available at: http://www.cdc.gov/violenceprevention/nvdrs/



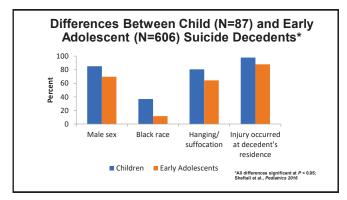
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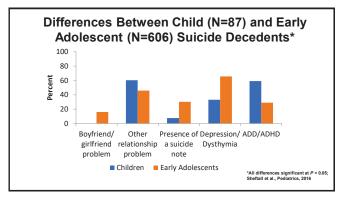
# Precipitating Circumstances of Suicide in Children and Early Adolescents

- 2003-2012 data on 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)

Sheftall et al., Pediatrics, 2016







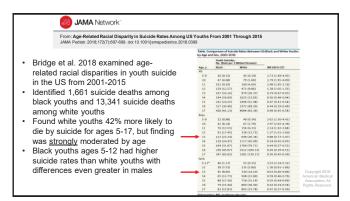
### Non-significant Differences Between Child and Early Adolescent Suicide Decedents

- In public custody at time of death
- · Legal problems
- Physical health problems
- School problems (incl. bullying)
- Death of a friend or family member
- History of suicide attempt
- Recent suicide of family member or friend
- Suicide intent disclosed (29.5% child vs. 28.9% early adolescent)
- Recent crisis
- Current mental health concern
- · History of mental health treatment
- Problems with alcohol or drugs
- Presence of alcohol or drugs at time of death (toxicology reports)

Sheftall et al., Pediatrics, 2016



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Journal of the American Academy of Child & Adolescent Psychiatry

Black Youth Suicide: Investigation of Current Trends and Precipitating Circumstances Author links open overlay panel

Arielle H. Sheftall PhDabFatimaVakil BSa Donna A. Ruch PhDa Rhonda C. Boyd Ph Dcd Michael A. Lindsey PhDef Jeffrey A. Bridge PhDab



Objective
Suicide among Black youth is a significant public health concern, yet research investigating the epidemiology of suicide in this population is limited. This study examines current trends and precipitating circumstances of suicide by sex and age group in Black youths 5 to 17 years of age, using 2 national databases.
Conclusion
Increases in Black youth suicide call for the prioritization of research aimed at identifying specific risk and protective factors as well as developmental mechanisms associated with Black youth suicidal behavior. To implement effective suicide prevention programming, understanding targets for intervention is necessary.

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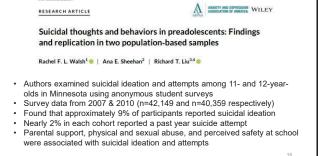


Prevalence and Family-Related Factors Associated With Suicidal Ideation, Suicide Attempts, and Self-injury in Children Aged 9 to 10 Years

- Nationally representative 21-site longitudinal study (ABCD; n=11,814 children aged 9-10)
- 6.4% for lifetime history of passive suicidal ideation; 4.4% for nonspecific active suicidal ideation; 2.4% for active ideation with method, intent, or plan
- 1.3% for suicide attempts
- 9.1% for non-suicidal self-injury (NSSI)
- $\bullet \ \ \text{Suicidal ideation associated with high family conflict, low parental monitoring and NSSI}$
- Very low parent-child concordance overall (88% of parents of youth reporting a suicide attempt were unaware of the attempt; 77% of parents of youth w/ ideation were unaware)

### ARTICLE Prevalence and correlates of suicidal ideation and suicide attempts in preadolescent children: A US population-based study Hannah R. Lawrence (1,2 to 1,2 Nationally representative 22-site longitudinal study (ABCD; n=11,875 children aged 9-10) administered a computerized structured interview (KSADS) 14.33% lifetime history of any suicidal ideation reported by child or caregiver 3.6% of sample report current suicidal ideation within 2 weeks of interview - 1.3% of sample reported by self or caregiver to have had a suicide attempt 0.26% of sample report suicide attempt within 2 weeks of interview Increased prevalence of <u>suicidal ideation</u> for preadolescents who identified as male, sexual minority, or multi-racial Increased prevalence of <u>suicide attempt</u> predicted by sexual minority status and household income < \$50k/year (no race or gender differences)

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Received; 7 April 2020 | Revised: 16 July 2020 | Accepted: 29 July 2020 |
DOI: 10.1002/ds.20987

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· Females > attempts over time using increasingly lethal means such as hanging/suffocation

IMA Netw Oneo 2019-2/5)-e193886. doi:10.1001/iamanetworkoneo.2019.388

JAMA Network Open
Original Investigation
Psychiatry
July 27, 2021
Characteristics and Precipitating Circumstances of Suicide Among Children Aged 5 to 11 Years
in the United States, 2013-2017

Donna A. Ruch, PhD<sup>1</sup>; Kendra M. Heck, MPH<sup>1</sup>; Arielle H. Sheftall, PhD<sup>1,2</sup>; et alCynthia A. Fontanella, PhD<sup>1,2</sup>; lots Stevens, PhD<sup>1,2</sup>; Motao Zhu, PhD<sup>1,2</sup>; Lisa M. Horowitz, PhD<sup>1,2</sup>; John V. Campo, MD<sup>1,2</sup>; leffrey A. Bridge, PhD<sup>1,2</sup> JAMA Netw Open. 2021;4(7):e2115683. doi:10.1001/jamanetworkopen.2021.15683

Key Points:
Question What characteristics and precipitating circumstances are associated with childhood

Suicide?

Findings in this multistate population-based qualitative study, indihood suicide was associated with multiple risk factors including mental health, prior suicidal behavior, trauma, and family or peer relation issues, with most suicides occurring by hanging or suffocation in the decedent's bedroom. Firems were the second most prevalent suicide method, and among cases with detailed information, all children obtained guns stored unsafely in the

Meaning The findings underscore the importance of early suicide prevention efforts that include improvements in suicide risk assessment, family relations, and lethal means restriction, particularly safe firearm storage.

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### **Suicide-Specific Interventions**

- No well-established interventions for preteens
- Glenn et al (2019) provided a review of evidence-based interventions for suicidal behaviors and self-harm in youth
- For teens, Dialectical Behavior Therapy (DBT-A) was the only well-established intervention from 26 randomized controlled trials (RCTs)
- Common elements of effective suicide-specific care:
  - Family-centered
  - Skills-based included emotion regulation, distress tolerance, mindfulness, interpersonal effectiveness, and problem-solving

  - Meaningful dose of personalized treatment to build relationship, trust, and capacity to navigate crisis

NATIONWIDE CHILDREN'S

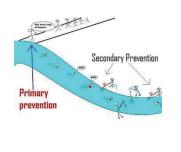
### **Suicide-Specific Interventions**

- Although there is a lack of strong preteen treatment outcome research to guide clinician decisions, the following elements should be considered by clinicians:
  - Routine screening, assessment, and safety planning with the youth
  - A family component to maximize parent support and supervision as well as strategies to reduce family conflict or the potential for maltreatment
  - Engage family members and trusted adults in lethal means safety efforts
  - Highlight community-level protective factors and ways to build self-worth and connectedness
  - Build youth coping skills and reinforce use frequently in and out of session
  - Help youth understand drivers of a suicidal crisis and how to stay safe
  - Potential candidates: DBT-C, SAFETY, ABFT, CAMS, CBT, FFT, MST, IPT



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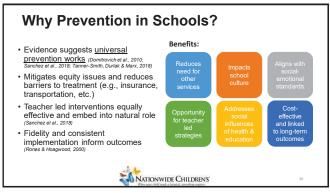
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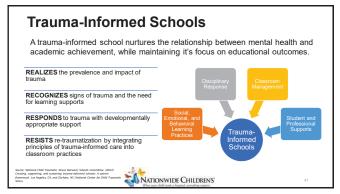
### **Upstream and Integrated Prevention**

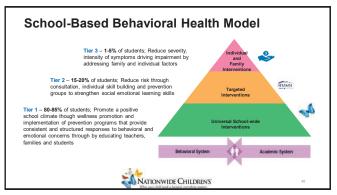
- We can't treat ourselves out of this public health crisis
- Trauma-informed, cost-effective, & compassionate
- · Addresses a range of barriers
  - Gaps in access and utilization (George, Zaheer & Kern, 2017)
  - Shortage of providers & barriers to treatment (Owens et al., 2002)
  - Capacity
    - Training, supervision, consultation (Tapia et al., 2017)
  - Limitations in providing evidence-based care
    - EBTs reached 1-3% of children in multi-state study (Bruns et al., 2015)



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### **Universal School-wide Interventions**

Goal: Promote a positive school climate through wellness promotion and implementation of prevention programs that provide consistent and structured responses to behavioral and emotional concerns

Strategies: Teacher, family and student education

- Programs:

   Elementary PAX Good Behavior Game; Triple P / IY

   Middle Signs of Suicide (SOS)

- Additional School-wide Supports:
   Needs and readiness assessment

  - Staff training Student SEL programming

Outcomes: Improved school climate and staff competence, enhanced social-emotional learning, reduced disruptive behaviors, improved academic performance, reduced suicidal behavior



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### **PAX Good Behavior Game**

NATIONWIDE CHILDREN'S

PAX Good Behavior Game is an evidence-based prevention program teacher driven as a part of their daily maintenance of their classroom. The program is rooted in social and emotional learning and adheres to the PBIS framework. The goal is to build self-regulation by reinforcing desirable prosocial behaviors and inhibiting unwanted problematic behaviors, incorporating the principals of trauma-informed care.



- PAX GBG is an evidence-based Tier 1 universal prevention model applied by teachers in the classroom
   Provides Tier 1 mechanisms and strategies for teachers, administrators, and school personnel to effectively implement PBIS Tier 1
   Research based strategies that teach self regulation
  - and behavior as a skill set



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### Why PAX Good Behavior Game?



- More nurturing classroom environments
- Increased academic performance
- Improved long-term outcom

- PAX classrooms typically report:

  45 to 60 additional minutes of instruction

  Up to 75% reduction in disturbing or disruptive behavior

  Up to 60% decrease in discipline referrals

  Up to 20 to 30% decrease in special

  - education referrals
     Sig increases in Math and Reading scores

the teacher throughout esults in:	

### Long-term outcomes include:

- Term outcomes include:

  Up to 50% reduction in suicidal ideation

  68% reduction in tobacco use

  33% reduction in alcohol dependence

  50% reduction in other substance use

  23% reduction in violent & criminal behaviors
- (e.g., Bradshaw et al., 2009; Wilcox et al., 2008)

NATIONWIDE CHILDREN'S

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Signs of Suicide is an evidence-based program designed to reach the entire population, without regard to individual risk factors and are intended to reach a very large audience.

- Full model involves gatekeeper training (staff and parent education), student awareness training, peer-to-peer support, screening & risk assessment
  - Train all adults to identify depression symptoms and warning signs for suicide
  - Teach action steps to <u>students and adults</u> when encountering suicidal behavior
  - · Increase student awareness and help-seeking



### Acronym (ACT)

- ✓ Acknowledge
- ✓ Care Show that you care
- ✓ Tell a trusted adult



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## Signs of Suicide (SOS)



### Evidence-based universal suicide prevention

- Three RCTs show 40-64% reduction in selfreported suicide attempts at 3-month follow-up (Aseltine & DeMartino, 2004; Aseltine, 2007; Schilling et al., 2016)
- Significantly greater pre-post knowledge and attitudes about depression
- Increase in help-seeking behaviors not
- significant • (Aseltine, 2007)

- Incorporates best practice elements
- Implemented by school staff
- Engages existing supports including school staff, parents, peers, community
- Increases dialogue around mental
- health, reducing stigma Sustainable



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### School-Based Depression & Suicide Screening

- $\bullet$  Universal suicide screening of  $5^{th}~\&~6^{th}$  graders is feasible and acceptable as part of enhanced Signs of Suicide(SOS) implementation
- Screening occurs after staff training, caregiver education, counselor training, student SOS curriculum, and protocols for positive screens including triage, risk assessment, safety planning, and disposition/referral



## **CSPR Preteen Student Screening Data**

- 5th-6th graders = 4,734
- 7-12th graders = 43,861
- $^{\bullet}\,5^{th}$   $6^{th}$  graders had more positive screens (17%) than  $7^{th}\text{-}12^{th}$  graders (15%)
- Higher outpatient referral rates (7.7% vs 5.0%)
- Slightly higher rate of crisis referral (0.76% vs 0.57%)
- Preteen youth had more requests to speak to an adult about concerns generally (21% vs 9%)



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### **Current Gaps in Preteen Suicide Prevention**

- Identification and prediction of preteen suicide risk is poor
- · When youth are identified, access to care is limited
- Few research studies explore specific risk/protective factors
- Few well-supported intervention or prevention approaches in this age group
- School and community organizations are under-prepared to address preteen suicide risk
- · Insufficient funding



# **Opportunities**

- Preteens experience suicidal thoughts & behaviors, share their distress with peers, & display actionable warning signs
- Preteens are often willing to discuss difficult emotional topics with trusted adults when given a safe platform to do so
- Screening identifies youth early (upstream)
- · Pathways to support youth in crisis exist
- Pair with SEL programming and/or MTSS





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### Where to go from here?

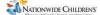
- Commit to upstream suicide prevention with meaningful family and community input
- · Build from an SEL framework
- Consider identification tools that are clear, concrete, and validated with young children (e.g., ASQ)
- Develop and test suicide intervention and prevention models with attention to developmental considerations
- Focus on staff skills training and sustainable implementation
- Track outcomes and effectiveness over time



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# Program Elements of Effective Preteen Suicide Prevention

- Engage at the level of the learner with lots of reinforcement
- Account for developmental differences in cognition, language, and social development
- Make programs universal but culturally relevant/dynamic
- Ensure staff and peers can support risk identification and have a clear pathway for engaging community BH partners
- Impact school culture by reducing stigma and increasing connectedness
- Reduce interpersonal threats and systemic factors that lead to invalidation based on identity



### **Little ACTs**

- •Upstream suicide prevention is urgently needed
- •Youth need support before experiencing a crisis
- •Skills can be taught in elementary school (Gr 3-5)
- •Curriculum must account for developmental differences
- •Learning will occur through storytelling, animation, games and interactive lessons



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### **SOS Little ACTs – Upstream Prevention**

- •Ongoing diverse, nationally representative focus groups will help us identify how to address this topic in a developmentally sensitive way BUT without avoiding a very real problem.
- •SOS Little ACTs
- •Prototype video
- Help-seeking model



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\* https://bepresentohio.org/bpoxp/.

\* A web-based primary suicide prevention program teaching youth to:

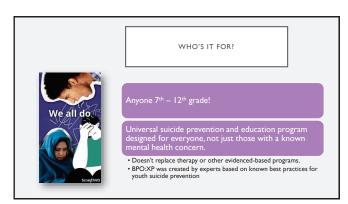
\* Communicate about mental health

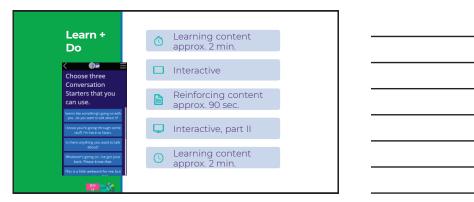
\* Support themselves and their peers

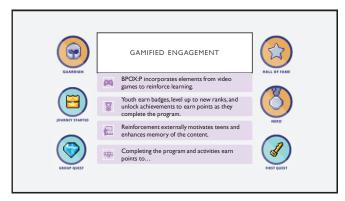
\* Understand warning signs of suicide

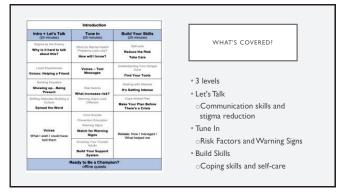
\* Seek help from trusted adults or crisis resources

\* It seeks to empower youth to prevent suicide and normalize seeking help for mental health concerns.

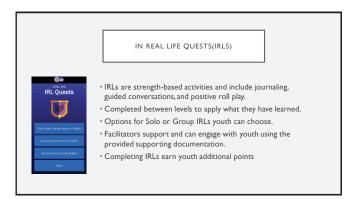


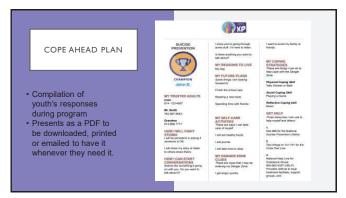














### **Suicide Prevention Resources**

www.nationwidechildrens.org/suicide-research

https://kidsmentalhealthfoundation.org/

http://www.sprc.org/ http://afsp.org/

https://www.suicidology.org/

988 Suicide & Crisis Lifeline: https://www.samhsa.gov/find-help/988 Crisis Text Line, text "4HOPE" to 741-741: http://www.crisistextline.org/

Trevor Project: http://www.thetrevorproject.org/ After a suicide: A toolkit for schools (2nd Ed.):

https://sprc.org/wp-content/uploads/2022/12/AfteraSuicideToolkitforSchools-3.pdf Suicide in Schools: A Practitioner's Guide to Multi-level Prevention, Assessment,

Intervention, and Postvention, 2nd Edition by Erbacher, Singer & Poland (2023).



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### **Questions & Comments**

Center for Suicide Prevention and Research

http://www.nationwidechildrens.org/suicideprevention

Email: John.Ackerman@nationwidechildrens.org Or <u>suicideprevention@nationwidechildrens.org</u>

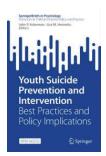
Thank you!



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Youth Suicide Prevention and Intervention: Best Practices and **Policy Implications** 

Open Access (free!): https://link.springer.com/book/10.1007/978-3-031-06127-1





### **Comprehensive resources**





American Foundation for Suicide Prevention, & Suicide Prevention Resource Center. (2018). After a suicide: A toolkit for schools (2nd ed.) Waltham, MA: EDC.

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### Appreciation for ongoing support from the Center for **Suicide Prevention and Research**

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### **Funders**

- NCH Big Lots Behavioral Health Services
- Ohio Suicide Prevention Foundation
- Ohio Department Mental Health & Addiction Services
- · Alcohol, Drug, and Mental Health Board of Franklin County Nationwide Children's Hospital Foundation

### **Partners**

- School Staff, Administrators, Teachers, Students, Families
- Community BH Partners, Boys & Girls Clubs of Central Ohio CSPR Research Team & OSU Behavioral Health & Psychiatry
- On Our Sleeves, Mindwise Innovations, FableVision Studios, VSR

