NORTHEAST OHIO YOUTH HEALTH SURVEY

STARK COUNTY

Preliminary Findings from the 2018 Northeast Ohio Youth Health Survey

County Level Data Report

(Published Sept. 2018)

Contents

This document is a preliminary report and has been prepared using initial analyses of data gathered through the Northeast Ohio Youth Health Survey. Some of the results and recommendations may evolve as further analyses are completed.

Introduction

Between August 2017 and March 2018, the community of Stark County, Ohio experienced 12 suicides among middle and high school students. During this timeframe, the suicide rate among youth aged 10–19 years rose to more than 7 times the U.S. national rate and 11 times the 2011-2016 Stark County rate. In response to the rapid rise in suicides among adolescents in their community, Stark County Health Department (SCHD) and Ohio Department of Health (ODH) requested assistance from the Centers for Disease Control and Prevention (CDC) to examine factors contributing to increased suicidal behaviors among Stark County youth. To better understand the elements contributing to suicide among adolescents in Stark County, ODH and SCHD initiated a school-based survey with assistance from the CDC, Stark County Educational Service Center (SCESC) and Stark County Mental Health & Addiction Recovery (Stark MHAR). The goals of this survey were to identify factors contributing to risk and spread of suicidal behaviors and distinguish what activities, social supports, and other factors protect against suicide.

Background

Suicide is a serious and growing public health problem. Between 2000 and 2016, suicide rates increased by 36% in Ohio and 30% across the United States (Stone et al., 2018). Nationally, suicide is the second leading cause of death for people 10 to 34 years of age (CDC WISQARS, 2018). Suicide and suicidal behavior are associated with several risk and protective factors, are connected to other forms of injury and violence, and can cause serious health and economic consequences. Fortunately, suicide is preventable.

Risk Factors for Suicide

There is no single cause for a death by suicide; suicide is caused by a confluence of individual, relationship, cultural, and societal risk factors (CDC, 2018a). Risk factors are characteristics associated with suicide—they may not be direct causes of suicide (CDC, 2018b).

Protective Factors for Suicide

Protective factors buffer individuals from suicidal thoughts and behaviors (CDC, 2018a). Identifying and understanding protective factors is critical for the prevention of suicide (Wilkins et al., 2014).

RISK FACTORS Risk factors increase the likelihood young people will contemplate, attempt, or die by suicide.	DOMAIN	PROTECTIVE FACTORS Protective factors help buffer young people with high levels of risk factors from becoming suicidal.
> Family history of suicide > Family history of child maltreatment > Previous suicide attempt(s) > History of mental disorders, particularly clinical depression > History of alcohol and substance abuse > Feelings of hopelessness > Impulsive or aggressive tendencies > Local epidemics of suicide > Isolation, a feeling of being cut off from other people > Loss (relational, social, work, or financial) > Physical illness	Individual	> Effective clinical care for mental, physical, and substance abuse disorders > Easy access to a variety of clinical interventions and support for help seeking > Support from ongoing medical and mental health care relationships > Skills in problem solving, conflict resolution, and nonviolent ways of handling disputes > Cultural and religious beliefs that discourage suicide and support instincts for self-preservation
> Cultural and religious beliefs (e.g., belief that suicide is noble resolution of a personal dilemma) > Local epidemics of suicide > Barriers to accessing mental health treatment > Easy access to lethal methods > Unwillingness to seek help because of the stigma attached to mental health and substance abuse disorders or to suicidal thoughts	Community & Society	> Family and community support (connectedness) > Cultural and religious beliefs that discourage suicide and support instincts for self-preservation

How to Use This Report

This report provides preliminary Stark County level findings from the Northeast Ohio Youth Health Survey (NOYHS) to guide county, school district, and school suicide prevention and response activities. This report builds on information shared at the school-district level, providing an overview of suicide risk and protective factors among Stark County youth. Contextual statistics for Ohio & United States are provided where available.

County officials may use this report to:

- Identify areas of greatest need among youth in Stark County
- Leverage human and financial resources to formulate and implement a suicide prevention strategy
- Enhance awareness of suicide among county, state, and national leaders

School district officials may use this report to:

- Examine their school-district profile in relation to the Stark County profile to identify areas for growth and issues unique to their student population
- Learn more about patterns of risk factors that exist at the Stark County level
- Educate families and staff about risk and protective factors

Community partners may use this report to:

- Increase awareness about the magnitude of the problem
- Guide prevention strategies at the Stark County level
- Reduce stigma associated with suicidal behaviors

Methods

In April 2018, SCHD, ODH, and CDC partnered with SCESC and Stark MHAR to administer an online survey to 7th–12th grade students at all SCESC-affiliated schools. The survey was anonymous and included questions about connectedness, social media, mental health, life experiences, friendships, suicidal ideation, suicide attempts, and resiliency. The survey included both novel questions created for the Stark County context and validated questions gathered from a number of well-respected survey tools. NOYHS questions were developed in extensive consultation with CDC scientists and local stakeholders. After completing the online survey, all students were provided with a list of locally available mental health resources and supports. Additionally, Stark MHAR staffed each school with supplemental mental health counselors to meet with students who self-identified as desiring help after the survey.

Preliminary County-Level Results

Participation

Participation in NOYHS was offered to all school districts in the SCESC. In total, 15,083 students from 18 school districts in 3 counties participated in NOYHS in Spring 2018. In this report, only results of completed surveys from participating schools situated in Stark County are included. Results are not available for students attending non-participating public schools, students attending schools that did not include all survey modules, those at private/alternate/online/home schools, students absent from school, or those who opted out of participating. Among students who opened the survey link, 90.2% completed the survey. Students were able to skip individual questions by choosing the response, 'Prefer not to say', and still complete the survey. Students who completed the survey but did not report their grade level (0.7%) were excluded from the grade-stratified results. Students who completed the survey but did not report their sex (2.2%) were excluded from the sex-stratified results.

School and Community Involvement

School Record

Table 1 shows the breakdown of students by grade point average. It also shows the percentage of students who reported skipping school during this school year and the percentage of students

who reported having specific types of disciplinary actions ever in their life. These percentages are reported for all participating students, as well as broken down by grade level and by sex.

Table 1: School record and disciplinary actions among Stark County students, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
	%	%	%	%	%	%	%	%	%
Most recent grade point average									
4.0 or greater	24.1	25.3	23.9	23	24.6	23.4	23.9	18.8	29.5
3.5-3.9	32.8	40.5	36.1	29.8	31.6	28.7	29.8	30.4	35.2
3.0-3.49	23.2	20.3	22.9	23.8	21.9	25.7	25.6	25.9	20.5
2.5-2.9	12.2	8.7	10.4	14.4	12.9	13.8	13.5	15.3	9.3
2.0-2.49	5.1	3.2	4.5	6.2	6.1	5.4	5.2	6.4	3.8
Less than 2.0	2.5	2	2.2	2.9	2.9	3	2	3.4	1.6
Number of times skipped school in past year									
Never	63	66.7	65.9	62.3	64.8	60.9	55.1	64.6	61.6
1 or 2 times	23.5	22.1	22.1	24.5	24	23.8	25.1	22.1	24.9
3 to 10 times	10.7	9	10	10.7	8.6	12.3	14.9	10.4	11
More than 10 times	2.8	2.2	2	2.5	2.6	3	4.9	2.9	2.4
Disciplinary actions in lifetime									
In-school suspension	19.1	15.3	18.1	20.7	19.9	18.6	22.5	25.9	12
Out-of-school suspension	11.8	9.6	12.2	12.5	12.3	11.2	13.2	16.6	6.8
Expelled from school	1.1	0.9	1.3	1.4	0.8	0.8	1	1.5	0.6
Arrested	2.8	1.7	2.2	3	2.8	3.1	3.9	3.5	1.9
None of the above	77.1	81.8	78.2	74.7	76.3	78.3	72.8	69.3	85.4

* % represents the percentage of students reporting each response. For the question about disciplinary actions, students could provide multiple responses. The percentages of students who did not respond were 9.7% for the question about grade point average, 3% for the question about the number of times they had skipped school, 2.3% for the question about disciplinary actions.

PUTTING STARK COUNTY INTO CONTEXT: School Record

Among U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017):

- 73.5% of 7th–12th grade U.S. students reported never skipping school in the past school year
- 15.1% of 7th–12th grade U.S. students reported skipping school once or twice in the past school year
- 11.4% of 7th–12th grade U.S. students reported skipping school more than twice in the past school year
- 27.6% of 7th–12th grade U.S. students received out-of-school suspension in their lifetime
- 4.8% of 7th–-12th grade U.S. students were expelled from school in their lifetime

Participation in School and Community Activities

Studies demonstrate that participation in sports, school and community activities, and spiritual organizations reduce the probability of suicide and buffer the effects of suicide risk factors (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked about their participation in school and community extracurricular activities during this school year (2017–2018). Table 2 shows the percentage of students who participated in each type of activity. It also shows the percentage of students who participated in any school or

community activities versus no school or community activities. These percentages are reported for all participating students, as well as broken down by grade level and sex.

Table 2: Percentages of Stark County students participating in school and community extracurricular activities during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of Activity	%	%	%	%	%	%	%	%	%
Most recent grade point average									
Participated in any school activity	84.5	89.9	86.1	87.1	84.9	80.2	76.3	81.8	87.2
Any sport	57.3	63.7	62.7	60.9	58.4	49.9	44.6	61	54.2
Music/arts	40.1	58.6	47.1	41.4	33.1	28.2	28.3	32.8	47.2
Leadership/academic/yearbook	16.4	15.5	11.3	14.8	16.2	19.5	22.7	12.3	20.5
Other	25.8	21.1	21.6	25.4	27.9	29.9	30.5	20.7	30.8
Did not participate in any school activity	15.5	10.1	13.9	12.9	15.1	19.8	23.7	18.2	12.8
Community Activities									
Participated in any community activity	74.5	71.6	70.6	69.8	73	81.2	83.4	72.5	76.6
Church/religious organization	40	45.4	42	41.8	38.2	36.3	35.2	38.4	41.9
Volunteer organization	24.6	14.2	20.7	22.7	24.9	32.1	36	18.2	30.9
Organized sport/team outside of school	28.2	38.2	35.3	26.7	24.2	23.5	18.9	28.4	28.3
Paid employment	23.8	3.9	6.8	11.8	25.8	45.6	58.5	24.7	22.6
Other	17.9	18.9	17.5	19.3	16.4	18	16.6	15.1	20.4
Did not participate in any community activity	25.5	28.4	29.4	30.2	27	18.8	16.6	27.5	23.4
School and Community Activities									
Participated in at least 1 school or community activity	92.4	93.6	91.8	91.8	92.3	92.9	92.2	91	93.9
Did not participate in any school or community activities	7.2	6.1	7.8	7.8	7.4	6.9	7.6	8.6	5.9

* 1.9% of students did not respond to the question about participation in school activities. 5.2% of students did not respond to the question about participation in community activities. For both questions, students could provide multiple responses. 'Any sport' includes basketball, baseball/softball, soccer, track/cross country, football, tennis, golf, wrestling, cheerleading, dance, or other school sport. 'Music/arts' includes band/orchestra and art. 'Leadership/academic/yearbook' includes student government, newspaper/journalism, yearbook, debate/speech, and academic clubs (math, science, literature, etc.)

PUTTING STARK COUNTY INTO CONTEXT: School & Community Activities

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Surveillance Survey (YRBS):

> 54.3% of U.S. high school students (9^{th}–12^{th}) played on at least one sports team in the past year

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Surveillance Survey (YRBS):

> 62.2% of Ohio high school students (9^{th}–12^{th}) played on at least one sports team in the past year

Student Relationships

Feelings of Closeness and Connectedness

Protective factors against suicide include closeness to friends and family, positive school experiences, being part of a close school community, and a sense of connectedness to school (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012; Kaminski et al., 2010; Logan et al., 2011). Students were asked whether or not they agreed with a series of statements about school, friends, and family. Table 3 shows the percentage of students who agreed with each statement. These percentages are reported for all participating students, as well as broken down by grade level and by sex.

Table 3: Percentages of Stark County students agreeing with statements about school, friends, and family, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Statement	%	%	%	%	%	%	%	%	%
I feel close to people at school.	55.8	62.5	59.9	54.7	54.6	52.4	48.9	59.9	52.5
I feel like I am part of my school.	49.5	55.7	50.5	47.2	48.5	48.2	46.3	52.5	47.3
I am happy to be at my school.	47.5	56.3	49.8	45.6	45.3	44.7	42.2	51.8	44.2
The teachers at my school treat students fairly.	52.8	56	52.9	49.9	51.7	52.2	55	55.1	51.2
I feel safe in my school.	50.3	56.2	49.6	47.9	48.5	48.4	51.2	55.3	46.1
My friends care about me.	78.5	82.2	79	76.2	77.3	79.4	77.4	77.6	80.1
My family cares about me.	85.8	88.4	87.1	84.3	85.4	84.1	85.5	86.5	85.9
None of the above	3.8	2.5	3.5	4.4	4.7	3.9	3.8	3.3	4

* % represents the percentage of students agreeing with each statement. Students could provide multiple responses. 3.3% did not respond to this question.

PUTTING STARK COUNTY INTO CONTEXT: Feelings of Closeness & Connectedness

Among U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017):

- 59.9% of U.S. teens in grades 7–12 felt close to people at school
- 59.2% of U.S. teens in grades 7–12 felt like they were a part of their school
- 58.4% of U.S. teens in grades 7–12 were happy to be at their school
- 52.5% of U.S. teens in grades 7–12 felt treated fairly by their teachers
- 66.2% of U.S. teens in grades 7–12 felt safe in their school
- 84.8% of U.S. teens in grades 7–12 felt cared about by their friends
- 95.7% of U.S. teens in grades 7–12 felt cared about by their family

Family Support and Parental Supervision

Adolescents with family support and close parental supervision are at lower risk of suicide (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked about their interactions with their parents or guardians over the past month. Students were asked whether or not they had done specific activities with a parent or guardian (such as going shopping or to a movie) and whether or not they had certain types of interactions with a parent or guardian (such as talking about a significant other or about a personal problem) in the past month. Table 4 shows the percentage of students who reported experiences or interactions

with a parent or guardian in the past month. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 4: Percentages of Stark County students who reported specific types of activities or interactions with parents or caregivers over the past month, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of Activity	%	%	%	%	%	%	%	%	%
Activities with parent or guardian									
Went shopping together	79.4	83.2	80.3	79.4	80	76.2	75.9	73.2	85.9
Played a sport together	30.5	45.2	38.3	30.6	26.2	21.7	16.7	35.3	26.2
Attended a religious service or event together	40.5	43.9	41.2	41.7	40.4	38	36.6	39.3	42.1
Went to a movie/play/ museum/concert/ sporting event together	60.3	68.6	66	60.6	58.2	54.4	51.4	58.5	62.5
Worked on a project for school together	22.9	33.6	27	22.3	19.4	16.1	16.9	21	25.1
Interactions with parent or guardian									
Talked about someone student was dating	38.5	23.5	27.7	38.4	42.5	51.2	52.8	33	44.2
Talked about a party student was going to	29.9	26.6	29.5	30.6	30.5	29.9	32.8	28.8	31.4
Talked about a personal problem student was having	44.2	37.8	37.8	42.8	47.1	51.1	50.9	33	55.5
Talked about student's school work or grades	79	78.6	80.1	78.3	80.3	80.9	75.5	76.4	82.2
Seriously argued about student's behavior	27.4	25.8	26.2	30.5	29	27.8	24.4	24.3	30.3
No activities or interactions	**3.1**	**2.5**	**2.8**	**2.8**	**2.5**	**3.3**	**4.9**	**4**	**2**

* % represents the percentage of students who reported specific activities of types of interactions. 2.2% did not respond to this question. Students could provide multiple responses.

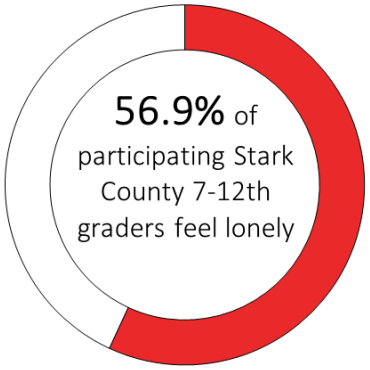
PUTTING STARK COUNTY INTO CONTEXT: Family Support and Parental Supervision

Among U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017):

- 75.0% of U.S. teens in grades 7–12 went shopping with a parent or guardian in the month before the survey
- 31.3% of U.S. teens in grades 7–12 played a sport with a parent or guardian in the month before the survey
- 40.4% of U.S. teens in grades 7–12 attended a religious service with a parent or guardian in the month before the survey
- 35.9% of U.S. teens in grades 7–12 went to a movie with a parent or guardian in the month before the survey
- 18.7% of U.S. teens in grades 7–12 worked on a school project with a parent or guardian in the month before the survey
- 52.3% of U.S. teens in grades 7–12 talked with a parent or guardian about a person they were dating or a party they were attending in the month before the survey
- 44.7% of U.S. teens in grades 7–12 discussed a personal problem with a parent or guardian in the month before the survey
- 40.1% of U.S. teens in grades 7–12 had a serious argument with a parent or guardian in the month before the survey

Feelings of Loneliness, Hopelessness, and Resiliency

Studies demonstrate that feeling lonely or isolated can increase risk of suicide (Heinrich & Guillone, 2006). Students' feelings of loneliness were measured using a 3-item scale called the Children's Loneliness Scale (Asher, Hymel, & Renshaw, 1984). Students were asked how often they felt alone, left out, or isolated from others. For each items, students could respond: "hardly ever," "some of the time," "often," or "prefer not to say." A score of 1–3 was assigned for each item, with higher scores reflecting having the feeling more frequently. Item scores were summed, and students with a total score of 5–9 were categorized as "lonely." Students with scores of 3–4 were categorized as "not lonely." Students who were missing any of the individual loneliness items were categorized as missing.

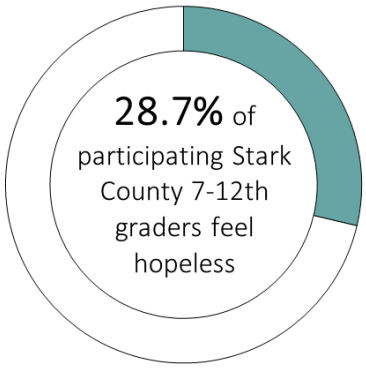


Based on these questions, 56.9% of students endorsed feelings of loneliness; 4.3% of students did not answer the loneliness questions.

Feeling hopeless is a risk factor for suicide (Wolfe, 2017). Feelings of hope and hopelessness were measured using a scale modified from the Brief-H-Neg and Flourishing Children Positive Indicators Project (Fraser, 2014; Lippman, 2011). Students were asked how much they agreed with the following statements:

- "I feel that it is impossible to reach the goals I would like to strive for."
- "The future seems to me to be hopeless and I can't believe that things are changing for the better."
- "I expect good things to happen to me."
- "I trust my future will turn out well."
- "I feel excited about my future."

A score of 1–5 was assigned for each item, with higher scores reflecting higher levels of disagreement. The statements about whether the student feels that it is impossible to reach goals he/she would like to strive for and whether the future seems hopeless were reverse coded. Item scores were summed, and students with scores of 13–25 were categorized as feeling hopeless. Students with scores of 5–12 were categorized as not feeling hopeless. Students who were missing any of the individual hopelessness items were categorized as missing.



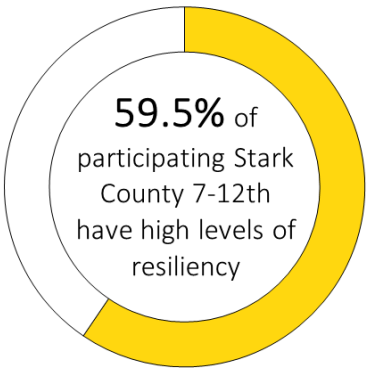
Based on these questions, 28.7% of participating Stark County students endorsed feelings of hopelessness; 5.4% did not answer the questions about hopelessness.

Studies demonstrate that qualities of resiliency can protect against suicide and buffer effects of suicide risk factors (Office of the Surgeon General & National Action Alliance for Suicide

Prevention, 2012). Resiliency was measured using an adapted version of the Child and Youth Resilience Measure (Ungar & Liebenberg, 2011). Students were asked to rate, on a 5-point scale, how much they agreed with a series of 28 statements. Higher scores indicated higher level of agreement. These statements covered topics including relationships with parents/caregivers, family, and friends; feelings of support, safety, and fair treatment; and participation in their communities. These items are intended to evaluate students' individual, caregiver, and contextual resiliency through assessments of personal skills, peer support, social skills, relationships with primary caregiver(s), and spiritual, educational, and cultural context of their lives. Below are example statements:

- "I have people I look up to."
- "I cooperate with people around me."
- "Getting an education is important to me."
- "I am proud of my ethnic background."
- "People think that I am fun to be with."
- "I talk to my family/caregivers about how I feel."
- "My best friend is a positive role model."

Item scores were summed. Based on their responses, students were identified as having high (average scores of 4–5), medium (average scores of 3–4), or low (average scores below 3) levels of resiliency. Students who were missing any of the individual resiliency items were categorized as missing.



59.5% of students were identified as having a high level of resiliency skills, 30.7% of students were identified as having a medium level of resiliency skills, and 9.8% of students were identified as having a low level of resiliency skills. 14.5% of students did not complete all resilience questions.

Social Media, Gaming, Computer Use, and Unsupervised Time

Research suggests that the use of digital media offers both benefits and risks to the health of children and teenagers (Chassiakos et al., 2016). Benefits of digital media use include exposure to new ideas and knowledge acquisition, increased opportunities for social contact and support, and new opportunities to access health-promotion messages and information. Risks of digital media include negative health effects on weight and sleep; exposure to inaccurate, inappropriate, or unsafe content and contacts; and compromised privacy and confidentiality (AAP, 2016). Research has suggested a U-shaped relationship between time spent online and depression, with increased risk of depression at both the high and low ends of internet use (Moreno et al., 2012; Kross et al., 2013). Risk of suicide is significantly higher among adolescents who use social media for 2 hours or more each day (Twenge et al., 2018). One study found that adolescents who use social media passively (e.g., viewing others' photos) report declines in life satisfaction, whereas those who use social media actively (e.g. interacted with others and posted

content) do not experience declines in life satisfaction (Kross et al., 2013). Both the number of hours spent on social media, and how social media is used, are key factors in determining the impact of social media on adolescent mental health (AAP, 2016).

Students were asked how many hours they spend on social media and how many hours they spend playing video or computer games, or using a computer for something that is not school related on an average school day. Students were also asked how many hours they spend on their own without a parent or guardian at home on an average school day. Table 5 shows the number of hours spent on each type of activity. These amounts are reported for all participating students, as well as broken down by grade level and by sex.

Table 5: Time spent on social media and video games on the average school day, and time spent unsupervised by an adult on the average school day, Stark County - Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Hours per average school day	%	%	%	%	%	%	%	%	%
Time spent on social media									
Less than 1 hour	27.7	39.9	33.2	28.2	23.5	19.9	19	38.5	17.1
1-2 hours	32.7	30.1	30.1	29.4	35.1	35.7	37.2	34.8	30.8
3-4 hours	24.4	18.1	20.7	25.4	26	28.6	28.7	17.2	31.6
5 hours or more	15.3	11.9	16	17	15.4	15.8	15.1	9.6	20.5
Time spent on video games									
Less than 1 hour	41.6	33.9	35.5	42.5	46.5	46.7	47	27.8	55.9
1-2 hours	27.6	29.9	28.7	28	24.8	28.1	25.2	30.8	24.6
3-4 hours	18.6	22	20.2	17.6	17.1	16.3	18	24.4	12.8
5 hours or more	12.2	14.1	15.6	11.9	11.7	8.9	9.8	17	6.7
Time spent unsupervised									
Less than 1 hour	43.5	54.7	50.3	45.4	42.4	34.7	30.1	44.3	43.3
1-2 hours	31.8	28.1	30.8	33	32.6	33.1	33.7	32.4	31.2
3-4 hours	14.5	10.2	11	12.8	14.9	19.6	20.3	13.1	15.8
5 hours or more	10.1	7.1	7.9	8.8	10	12.5	15.9	10.3	9.7

* % represents the percentage of students who responded. The percentages of students who did not respond were 4.4% for the question on time spent on social media, 4.4% for the question on time spent on video games, and 5.9% for the question on time spent unsupervised.

PUTTING STARK COUNTY INTO CONTEXT: Social Media, Gaming, and Other Computer Use

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Surveillance Survey (YRBS):

- 43.0% of U.S. high school students (9^{th}–12^{th}) spent more than 3 hours per day on Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not schoolwork on an average school day.
- 20.7% of U.S. high school students (9^{th}–12^{th}) watch more than 3 hours of television per day on an average school day.

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Surveillance Survey (YRBS):

- 37.3% of Ohio high school students (9^{th}–12^{th}) spent more than 3 hours per day on Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work on an average school day.
- 28.2% of Ohio high school students (9^{th}–12^{th}) watch more than 3 hours of television per day on an average school day.

Access to Medical and Psychological Care

Limited access to healthcare is a known risk factor for suicide (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked: "During this school year (2017–2018), have you always been able to get medical or psychological care when you thought you needed to?" If students answered no, they were asked to report all the reasons why they could not get the care they thought they needed. Table 6 shows the percentage of students reporting that they could versus could not always get medical or psychological care when they thought they needed to, as well as reasons for not being able to access care. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 6: Stark County students' access to medical or psychological care during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Hours per average school day	%	%	%	%	%	%	%	%	%
Always able to get medical or psychological care when needed									
Yes	84.3	88.2	85.8	83.7	83.8	80.8	82.8	88.8	80.6
No	15.7	11.8	14.2	16.3	16.2	19.2	17.2	11.2	19.4
Reasons for not being able to get medical or psychological care when needed									
Didn't know whom to go see	33.6	31.2	31	32.6	35.2	34	37.7	28.7	35.8
Didn't have transportation	13.4	11.8	11.4	16.1	13.5	11.7	14.5	11.6	13.1
My parent or guardian would not go with me	14.2	14.5	12.2	16.1	12	13.8	16.7	8.7	16.2
Didn't want my parents to know	47.5	45.7	49.3	50.5	50.9	42.2	45.6	33.3	54.4
I was afraid of what my doctor would say or do	28	24.7	31.9	33.3	26.6	21.6	29.4	20.9	30.7
I thought the problem would go away	47.5	37.1	52.8	50.2	46.8	49.3	46.1	34.7	53.8
I couldn't pay	16.7	11.3	6.6	16.8	17.2	21.3	25	10.5	19.1
I didn't have insurance	10.7	9.7	6.6	10.5	9.7	12.4	15.4	7.6	11.6
Another reason	40.1	50	43.2	44.9	35.6	33	36.8	47.7	35.6

* % represents the percentage of students who reported each response. For the question about reasons for not being able to get medical or psychological care when needed, % reported is among students who responded that they were not always able to get medical or psychological care when needed. For the question about reasons why students could not access medical or psychological care when needed, students could provide multiple responses. 13.7% of students did not respond to the question about being able to get medical or psychological care when needed. Among students who reported that they could not always get medical or psychological care when needed, 8.4% did not answer the question asking about reasons why they could not get care.

PUTTING STARK COUNTY INTO CONTEXT: Access to Medical/Psychological Care

Among U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017), **81.4% of U.S. teens were always able to get medical or psychological care when needed (in the year preceding the survey).**

Among those adolescents* unable to get medical or psychological care, reasons for not being able to get medical or psychological care when needed:

> 8.1% of U.S. teens in grades 7–12 didn't know whom to go see
> 8.7% of U.S. teens in grades 7–12 didn't have transportation
> 12.0% of U.S. teens in grades 7–12 didn't have a parent/guardian who would go with them
> 11.6% of U.S. teens in grades 7–12 didn't want a parent to know
> 15.7% of U.S. teens in grades 7–12 were afraid of what a doctor would say or do
> 63.4% of U.S. teens in grades 7–12 thought the problem would go away
> 15.7% of U.S. teens in grades 7–12 couldn't pay

* U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017)

Negative Life Experiences during This School Year (2017–2018)

Negative events and stressors can increase risk of suicidality among vulnerable persons (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked whether or not they had a series of negative life experiences during this school year. Table 7 shows the percentage of students who said they had each type of experience. These percentages are reported for all participating students as well as broken down by grade level and by sex.

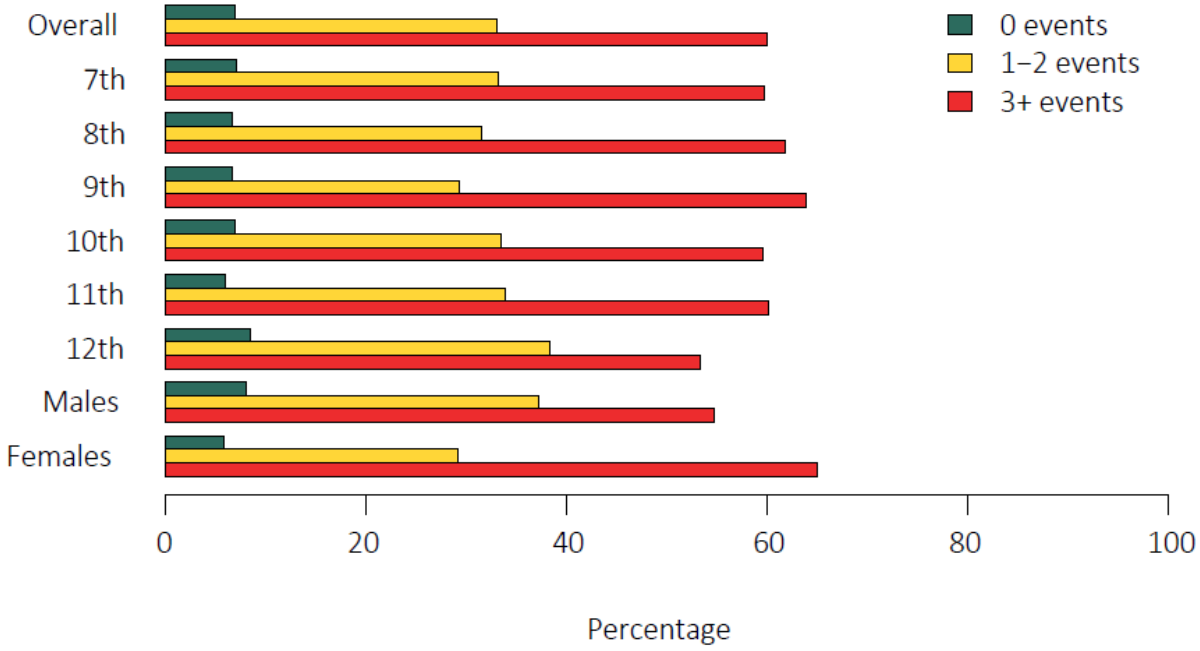
Table 7: Stark County students' negative life experiences during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Experience	%	%	%	%	%	%	%	%	%
My close family member died or became very sick.	43.3	49.7	47.5	46.1	40.3	37.7	36.1	38.9	47.4
My close friend died or became very sick.	10.4	9.2	8.5	11.2	11.7	11.9	10	8.7	11.9
I went through the break-up of a romantic relationship or friendship.	38.3	30.3	35.5	42.8	39.2	42.3	40.4	30.9	45.4
I was in a physical fight with someone at school.	7.8	11.9	10	7.7	6.5	5.3	3.5	11.3	3.9
I had a serious argument or disagreement with a family member, including a parent or guardian.	45.3	39.8	42.7	48.2	47.8	48.9	44.9	40.7	49.8
I had a serious argument or disagreement with a friend.	43.5	43.5	44	44.6	43.4	43.6	41.3	36.6	50.1
My parent or guardian took away my phone, computer, or tablet as punishment.	42.7	58.5	56	47.4	38.8	29.5	18.2	43.4	41.9
I got a bad grade on a test.	75.7	68.4	73	78.3	79.2	81.7	74.1	74.7	76.7
My parent or caregiver lost their job.	10.4	10	10.3	10.7	11.2	10.7	8.7	9.4	11
I moved to a new city or school district.	9.3	12.3	10.3	10.5	7.6	8	5.7	9.6	8.9

* % represents the percentage of students reporting that they had the experience. Students could provide multiple responses. The percentages of students who did not respond ranged from 2.6% to 3.4% for specific types of experiences.

Students were categorized into groups according to how many negative life experiences they said they had experienced during this school year. The three groups were having zero negative life experiences, having 1–2 negative life experiences, and having three or more negative life experiences this school year. Figure 1 shows percentages of students in each group. These percentages are reported for all participating students as well as broken down by grade level and sex.

FIGURE 1: NUMBER OF NEGATIVE EXPERIENCES DURING THIS SCHOOL YEAR (2017-2018) AMONG STARK COUNTY STUDENTS



Adverse Childhood Experiences

Childhood experiences, both positive and negative, have an enormous impact on lifelong health and opportunities, including mental health and suicidality (Dube et al., 2001). Adverse childhood experiences (ACEs) are often measured through a standardized set of questions known as the ACEs Scale (Felitti et al., 1998). Students were asked whether or not they had a series of adverse childhood experiences at any point during their life. Upon completion of the survey, all participants were provided with a list of services, including services for mental health and violence. Counseling was immediately provided to those who became upset during the survey or requested help.

Table 8 shows the percentage of students who said they had each type of experience. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 8: Lifetime adverse childhood experiences among Stark County students, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Experience	%	%	%	%	%	%	%	%	%
My parents separated or divorced.	38.8	36.3	41	38.4	39.6	39	38.4	37.3	40.1
I lived with someone who was depressed, mentally ill, or suicidal.	23	15.2	19.2	24.5	25.1	27.9	27.6	16.2	29.1
I lived with someone who was a problem drinker, alcoholic, used illegal street drugs, or abused prescription medications.	18.5	14	17	19.2	19.9	21	20.5	14.9	21.6
I lived with someone who went to jail or prison.	18.5	18.4	19.8	20	18.5	18	15.6	17.1	19.6
My parents or adults in my home slapped, hit, kicked, punched, or beat each other up.	6.4	5.8	6.3	6.8	6.8	7	5.6	9.2	7.4
A parent or adult in my home pushed, grabbed, slapped, hit, beat, kicked, or physically hurt me. (Not including spanking)	9.4	8.1	9.7	10.3	9.7	9.2	9.2	7.4	11.2
A parent or adult in my home swore at me, insulted me, humiliated me, put me down, or acted in a way that made me afraid I might be physically hurt.	22.4	19.7	21.9	23.9	23.8	23.5	21.4	17.5	27
A parent or person at least 5 years older than me sexually touched me, made me sexually touch them, attempted to have sex with me, or actually had sex with me.	3.9	3	3	4.3	4.8	4.1	4.1	1.4	6.1
I often felt that no one in my family loved me or thought I was important or special.	19.2	18	19.5	20.8	18.4	19.7	18.4	11.9	26
I often felt that I didn't have enough to eat, I had to wear dirty clothes, I had no one to protect me, or my parents were too drunk or high to take care of me.	3.5	3.2	3.5	4	3.3	3.4	3.2	2.5	4.2

* % represents the percentage of students reporting that they had the experience. Students could provide multiple responses. The percentages of students who did not respond ranged from 3.2% to 4.5% for specific types of experiences.

PUTTING STARK COUNTY INTO CONTEXT: Adverse Childhood Experiences

Among U.S. children* (0–17 years) represented in the 2016 National Survey on Children's Health:

- 25% of U.S. children aged 0–17 years ever lived with a parent or guardian who became divorced or separated
- 7.8% of U.S. children aged 0–17 years ever lived with someone who was severely depressed, mentally ill, or suicidal
- 9% of U.S. children aged 0–17 years ever lived with someone who had a problem with alcohol or drugs
- 8.2% of U.S. children aged 0–17 years ever lived with someone who served time in jail or prison
- 5.7% of U.S. children aged 0–17 years ever saw or heard parents or other adults slap, hit, kick, or punch each other

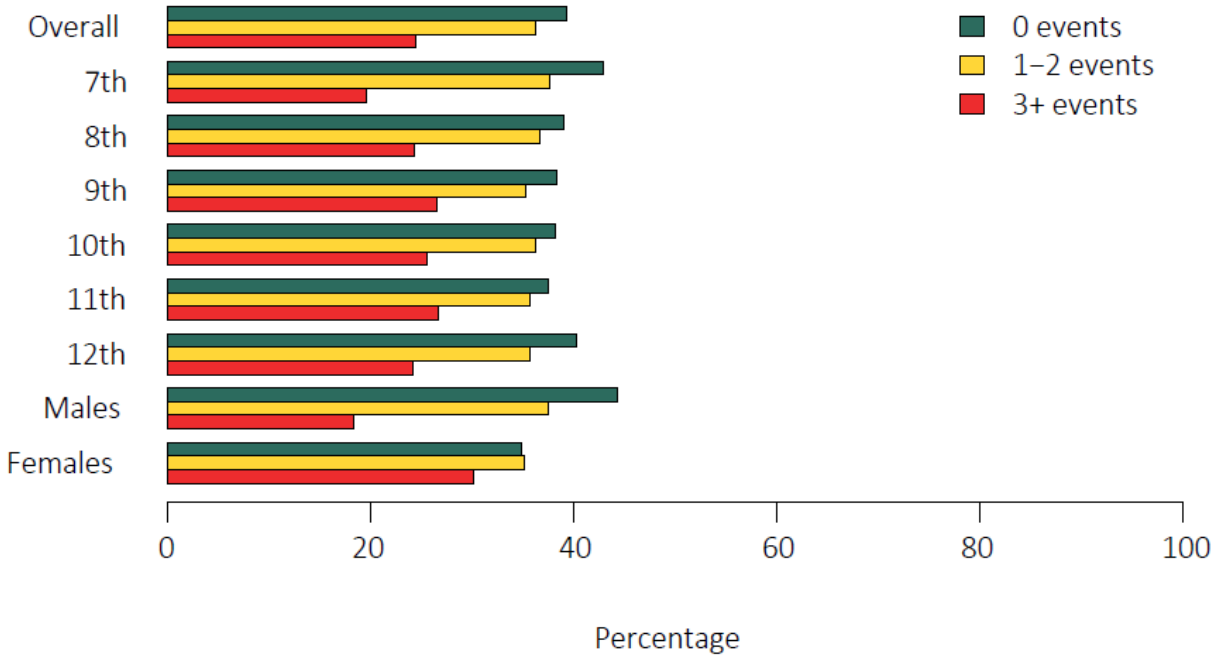
Among Ohio children* (0–17 years) represented in the 2016 National Survey on Children's Health:

- 27.7% of Ohio children aged 0–17 years ever lived with a parent or guardian who became divorced or separated
- 9.3% of Ohio children aged 0–17 years ever lived with someone who was severely depressed, mentally ill, or suicidal
- 10.7% of Ohio children aged 0–17 years ever lived with someone who had a problem with alcohol or drugs
- 11.1% of Ohio children aged 0–17 years ever lived with someone who served time in jail or prison
- 8.1% of Ohio children aged 0–17 years ever saw or heard parents or other adults slap, hit, kick, or punch each other

*Questions were asked of children's parents

Students were also categorized into groups according to how many adverse childhood experiences they said they had experienced. The three groups were zero adverse childhood experiences, 1–2 adverse childhood experiences, and three or more adverse childhood experiences in one's lifetime. Figure 2 shows percentages of students in each group. These percentages are reported for all participating students as well as broken down by grade level and sex.

FIGURE 2: NUMBER OF ADVERSE CHILDHOOD EXPERIENCES IN LIFETIME AMONG STARK COUNTY STUDENTS, SPRING 2018



PUTTING STARK COUNTY INTO CONTEXT: Adverse Childhood Experiences

Among U.S. children* (0–17 years) represented in the 2016 National Survey on Children's Health,

> 55% of U.S. children experienced 0 adverse childhood experiences in their lifetime
> 35% of U.S. children experienced 1–2 adverse childhood experiences in their lifetime
> 10% of U.S. children experienced 3 or more adverse childhood experiences in their lifetime

Among Ohio children* (0–17 years) represented in the 2016 National Survey on Children's Health,

> 51% of Ohio children experienced 0 adverse childhood experiences in their lifetime
> 35% of Ohio children experienced 1–2 adverse childhood experiences in their lifetime
> 15% of Ohio children experienced 3 or more adverse childhood experiences in their lifetime

*Questions were asked of children's parents

Substance Use

Alcohol and substance use are known risk factors for increased risk of death by suicide (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012).

Students' Substance Use

Students were asked whether or not they had used substances ever in their life as well as at least once during the past 30 days. Table 9 shows the percentage of students who said whether or not they used substances ever in their life and whether or not they used substances at least once in the past 30 days. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 9: Substance use ever in Stark County students' lifetime and in the past 30 days, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Substance	%	%	%	%	%	%	%	%	%
Used at any time in their life									
Any substance	45.6	23.2	33.6	44.3	52.9	60.5	66.1	44.6	46.4
Alcohol	44.8	21.8	32.7	43.6	51.8	60.2	65.6	43.6	46
Prescription pain medicine without a doctor's prescription	6.3	3.7	5.2	5.8	7.2	7.8	8.9	6.1	6.2
Prescription muscle relaxer or anxiety medication without a doctor's prescription	5.2	2.4	3.3	4.5	5.9	7.5	8.4	4.7	5.2
Heroin	0.5	0.4	0.5	0.4	0.7	0.2	0.6	0.7	0.2
Marijuana	17.7	4.3	8.2	15.3	22.5	28.2	32.9	17.7	17.7
Cocaine	1.5	0.5	1	0.9	1.8	1.9	2.8	1.6	1
Sniffed glue/huffed	2	1.7	1.4	2.1	2.6	2.1	2	2.1	1.6
Methamphetamines	0.9	0.6	0.5	0.6	1.2	0.9	1.7	1	0.6
Ecstasy	1.6	0.5	0.8	1.3	1.6	2.6	3.1	1.7	1.2
Synthetic marijuana	2.6	1.3	1.5	3	3.3	3.2	3.7	2.7	2.3
Used at least once in past 30 days									
Any substance	19	7.1	11.3	18.1	21.8	25.6	34.1	19.2	18.2
Alcohol	15.2	5.3	8.8	14.1	17.4	20.1	29.6	15.5	14.6
Prescription pain medicine without a doctor's prescription	2.1	1.4	1.9	2.2	2.6	2.1	2.1	1.8	2.1
Prescription muscle relaxer or anxiety medication without a doctor's prescription	1.5	1.2	0.7	1.3	2	1.8	2.1	1.3	1.4
Heroin	0.5	0.3	0.2	0.2	0.6	0.6	0.6	0.4	0.2
Marijuana	8.7	2.2	4.1	7.6	10.9	13.9	16.2	8.9	8.3
Cocaine	0.7	0.3	0.3	0.3	0.9	0.9	1.3	0.6	0.4
Sniffed glue/huffed	0.6	0.5	0.4	0.3	1	0.8	0.6	0.6	0.4
Methamphetamines	0.5	0.3	0.2	0.2	0.6	0.6	0.7	0.4	0.2
Ecstasy	0.7	0.4	0.2	0.5	1	1.1	1.1	0.7	0.5
Synthetic marijuana	1	0.4	0.5	1.1	1.5	1.1	1.2	1	0.7

* % represents the percentage of students reporting use of each type of substance. Students could provide multiple responses. The percentage of students who did not respond to questions about their use of substances ever in their lifetime was 2.3%. 4.4% of students did not respond to the question about substance use in the past 30 days.

PUTTING STARK COUNTY INTO CONTEXT: Students' Substance Use

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Survey (YRBS),

- 60.4% of U.S. 9th–12th graders have used alcohol at least once in their lifetime
- 14.0% of U.S. 9th–12th graders have taken prescription pain medications (without a doctor's prescription) at least once in their lifetime
- 1.7% of U.S. 9th–12th graders have used heroin at least once in their lifetime
- 35.6% of U.S. 9th–12th graders have used marijuana at least once in their lifetime
- 4.8% of U.S. 9th–12th graders have used cocaine at least once in their lifetime
- 6.2% of U.S. 9th–12th graders have used inhalants at least once in their lifetime
- 2.5% of U.S. 9th–12th graders have used methamphetamines at least once in their lifetime
- 4% of U.S. 9th–12th graders have used ecstasy at least once in their lifetime
- 6.9% of U.S. 9th–12th graders have used synthetic marijuana at least once in their lifetime

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Survey (YRBS),

- 58.2% of Ohio 9th–12th graders have used alcohol at least once in their lifetime
- 12.8% of Ohio 9th–12th graders have used prescription pain medications (without a doctor's prescription) at least once in their lifetime
- 2% of Ohio 9th–12th graders have used heroin at least once in their lifetime
- 35.7% of Ohio 9th–12th graders have used marijuana at least once in their lifetime
- 3.8% of Ohio 9th–12th graders have used cocaine at least once in their lifetime
- 8.8% of Ohio 9th–12th graders have used inhalants at least once in their lifetime

Binge Drinking

Students were asked how many days they engaged in binge drinking during the past 30 days. Students were provided the following definition of binge drinking to aid in responding to this question: '5 or more drinks of alcohol in a row, that is, within a couple of hours.' Table 10 shows how students responded for all participating students as well as by grade level and by sex.

Table 10: Number of days of binge drinking in last 30 days, Stark County - Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Number of days	%	%	%	%	%	%	%	%	%
0 days	92.2	97.3	96.2	93.4	91.4	89	83.1	91.8	92.8
1 or 2 days	4.9	1.3	2.3	4.3	5.5	6.4	11.1	5	4.8
3 to 5 days	1.2	0.4	0.3	0.8	1.5	1.9	3.2	1.2	1.2
6 to 9 days	0.5	0.1	0.2	0.5	0.3	1	0.9	0.6	0.4
10 to 19 days	0.4	0.1	0.1	0.3	0.3	0.5	0.8	0.5	0.2
20 days or more	0.9	0.6	0.8	0.6	1.1	1.1	1	1	0.6

* % represents the percentage of students reporting that they had the experience. Students could provide multiple responses. The percentages of students who did not respond ranged from 2.6% to 3.4% for specific types of experiences.

PUTTING STARK COUNTY INTO CONTEXT: Binge Drinking

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Survey (YRBS),

> 13.5% of U.S. 9th–12th graders engaged in binge drinking* at least once in the past 30 days

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Survey (YRBS),

> 16.1% of Ohio 9th–12th graders engaged in binge drinking* at least once in the past 30 days

*In YRBS, binge drinking is defined as four or more drinks of alcohol in a row (if female) or five or more drinks of alcohol in a row (if male), within a couple of hours, on at least 1 day during the 30 days before the survey.

Substance Use by Students' Household Members

Students were asked whether or not someone they lived with had used substances during this school year. Living with someone who uses illicit drugs or is a problem drinker is a known adverse childhood experience (Felitti et al., 1998). For each type of substance, Table 11 shows the percentage of students who said they lived with someone who used that substance during this school year. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 11: Substance use by others in the Stark County student's household, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Substance	%	%	%	%	%	%	%	%	%
Used any substance (other than alcohol) during this school year	24.1	17.3	21.8	26.2	26.4	26.9	26.6	22.5	25.3
Prescription pain medicine without a doctor's prescription	6.8	5.4	5.7	7.4	8	7.5	6.5	6.1	7.2
Prescription muscle relaxer or anxiety medication without a doctor's prescription	6.5	5	5.4	7.6	7	7	6.8	5.1	7.5
Heroin	2.6	2.9	2.9	3	2.2	2.2	1.7	2.1	2.7
Marijuana	20.2	12.8	17.9	21.6	22.9	23.7	23.2	18.8	21.3
Cocaine	3.6	3.4	3.3	3.5	3.5	4	3.7	2.9	4
Sniffed glue/huffed	2.2	2	2.4	2.8	2.2	1.9	1.6	2	2.1
Methamphetamines	2.3	1.9	2.8	2.1	2.6	2	1.9	1.8	2.5
Ecstasy	2.2	1.1	2.1	2.4	2.6	2	2.8	2	2.1
Synthetic marijuana	3.7	2.5	3.7	4.4	4.9	3	3.6	3.3	4

* % represents the percentage of students reporting use of each type of substance. Students could provide multiple responses. The percentage of students who did not respond to questions about use of substances by others in their households was 2.6%.

Mental Health

History of Mental Health Problems

Students were asked whether they had ever been told by a health professional that they had depression, anxiety, attention deficit/hyperactivity disorder, Autism Spectrum Disorder or Asperger's syndrome, or another mental health problem before the 2017–2018 school year. Table 12 shows the percentage of students who reported that they had each type of mental

health problem. This question was asked to identify the baseline level of mental health needs in the Stark County community prior to the start of the suicide cluster. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 12: History of mental health problems before this school year among Stark County students, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Prior diagnosis	%	%	%	%	%	%	%	%	%
Any mental health problem	29.9	25.1	27.6	31.2	31	32.2	32.3	25	33.7
Depression	14.3	7.9	11.4	14.7	17.3	17.6	17.5	8.5	19.2
Anxiety	17.8	12	14.9	18.4	19.8	21	21.2	9.6	25.1
Attention deficit/hyperactivity disorder	12.4	13.3	12.2	12.7	12.1	11.3	12	15	9.3
Autism Spectrum Disorder or Asperger's syndrome	1.6	1.2	1.4	1.7	2.1	1.3	2	2.2	0.8
Another mental health problem	6.3	4.9	5.2	6.3	6.4	7.6	7.5	3.9	8.1
No history of mental health problem	70.1	74.9	72.4	68.8	69	67.8	67.7	75	66.3

* % represents the percentage of students reporting each response. Students could provide multiple responses. 8.1% of students did not respond to this question.

PUTTING STARK COUNTY INTO CONTEXT: History of Mental Health Problems

An estimated 49.5% of U.S. adolescents have been diagnosed with a mental health problem in their lifetime (Merikangas et al., 2010).

Exposure to Suicide-Related Content at School, Online, and in the Community

Certain types of exposure at home, online, and in the community can contribute to contagion of suicidal behaviors among adolescents, especially among vulnerable youth (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). These exposures include memorials for victims of suicide, social media posts, and conventional media. It is not yet known how much each of these exposures contribute to risk of suicidality (Cheng et al., 2014; Haw et al., 2013; Joiner, 1999). Students were asked a series of questions about exposure to vigils or moments of silence at school, social media, conventional news articles, memorials, and graffiti focused on recent teen suicides in their communities, as well as whether they had seen the Netflix show Thirteen Reasons Why. Table 13 shows the percentage of students reporting each exposure. These percentages are reported for all participating students as well as broken down by grade level and by sex.

Table 13: Percentage of Stark County students reporting exposure to school, social media, conventional news, and community programming related to suicide during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of exposure	%	%	%	%	%	%	%	%	%
Vigils or moments of silence for teenagers who died by suicide									
Yes	35.4	28.3	25.6	39	41.5	40.7	39.6	34.9	36.4
No	35.4	35.7	42.8	31.6	33.8	33.7	33.6	34.1	36.4
Not sure	29.2	36	31.6	29.5	24.6	25.6	26.8	31	27.2
Seen posts about recent teen suicides in your community									
Twitter	26.9	8.2	11.8	23.9	33.6	44.6	45.9	21.9	31.9
Instagram	46.3	35.2	43.9	51.4	50.4	50.1	47.8	37.2	55.2
YouTube	13.8	18.3	15.8	15.7	11.6	9.8	10.2	13.7	13.5
Facebook	24.6	14.7	16.7	23	27.2	31.8	38.3	18	31.1
Snapchat	49.3	35.1	44.9	56.1	56.8	53.5	50.4	40.7	58
Tumblr	1.9	1.9	1.7	2.3	1.9	1.8	1.8	1.3	2.2
Other chat apps (WhatsApp, WeChat, Marco Polo, House Party, FireChat, etc.)	2.1	3.2	2.1	2.6	1.7	1.5	1.3	1.8	2.2
Other anonymous apps (Sarahah, SayAt.Me, Monkey, Ask.Fm, etc.)	8.4	9.2	9.7	10.4	9.1	6.2	4.7	5.7	10.7
Other app or website	7.1	11.6	6.7	6.8	6.6	4.9	5.5	6.7	7.2
None of the above	33.2	45.4	39.7	30	28.6	26.5	26.7	41.8	24.6
Posted about recent teen suicides in your community									
Twitter	2.9	0.7	0.9	2.1	3.4	5.6	5.6	1.7	4
Instagram	3.9	3.4	3.5	4.5	4.5	3.6	3.5	2.6	4.9
YouTube	0.6	0.6	0.6	0.4	0.9	0.4	0.3	0.7	0.2
Facebook	2.7	1	1.5	2.6	3.3	3.7	4.6	1.5	3.7
Snapchat	8.4	8.3	10	10	7.8	7.6	5.6	5.8	10.8
Tumblr	0.4	0.3	0.2	0.6	0.5	0.3	0.3	0.3	0.3
Other chat apps (WhatsApp, WeChat, Marco Polo, House Party, FireChat, etc.)	0.5	0.5	0.4	0.4	0.2	0.4	0.6	0.4	0.3
Other anonymous apps (Sarahah, SayAt.Me, Monkey, Ask.Fm, etc.)	0.4	0.6	0.2	0.6	0.4	0.1	0.3	0.3	0.4
Other app or website	0.5	0.9	0.6	0.6	0.5	0.1	0.3	0.4	0.5
None of the above	87.4	89.6	87.3	86.5	87.6	86.7	87	91.5	83.7
Seen news articles about recent teen suicides in your community									
Online on a news site	50.1	40.4	44.1	49.2	54.7	57.8	58	44.2	56.5
In a paper newspaper	25.1	22.7	22.4	24.2	25.9	26.9	30.3	24.2	26.1
On TV	42.7	47.4	45.8	42.9	39.8	40.1	39.4	41.8	44
On radio	17.6	19.3	18.5	17.3	15	17.6	18.4	16.4	18.9
None of the above	29.2	30.8	31.7	30.6	28.4	26.7	25.8	32.5	25.5
Seen memorials for teens who died by suicide in your community									
On their locker at school	5	2.8	3.5	6.2	5.8	6.1	5.8	4.8	5.1
Elsewhere at school	9.6	6	5.3	10.9	12.1	11.6	13	9	10.3

Table 13: Percentage of Stark County students reporting exposure to school, social media, conventional news, and community programming related to suicide during this school year (2017-2018).* *(continued)*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of exposure	%	%	%	%	%	%	%	%	%
Seen memorials for teens who died by suicide in your community									
On YouTube	5.1	9.2	7	5.2	3.1	2.7	2.5	5.1	5
On the side of the road	7.9	7.5	6.7	7.7	8.4	9.1	7.8	6.2	9.4
At their house	4.1	3.4	3.7	3.9	4.4	4.9	4.4	3.7	4.4
Online memorial site	9.4	8	8.3	9	10	11.5	10.1	6.1	12.7
At another location	18.1	16	16.2	19.1	19.1	19.7	18.9	14.9	21.3
None of the above	63.6	67	68.2	62.4	62.1	59.9	60.9	69.4	57.8
Seen the following types of graffiti in your community									
Graffiti related to recent suicide deaths	4.3	4.5	3.6	4.7	4.4	4.5	4.1	3.5	5
Graffiti related to hopelessness	9.3	11.1	9.9	11.3	8.3	7.7	6.8	7.1	11.2
None of the above	88.8	87	88.9	86.8	89.3	90.3	91	91.3	86.7
Viewing of the Netflix show Thirteen Reasons Why									
Yes, seen any episodes	47.5	34.6	46	51	52.8	52.1	49.8	29.3	65.5
Yes, during this school year (after August 2017)	13.8	14	15.6	14.3	13.7	13.2	11.2	8.7	18.5
Yes, before this school year (before August 2017)	37	23.5	34.1	40.4	42.6	41.9	40.9	22	51.9
No, never watched it	52.5	65.4	54	49	47.2	47.9	50.2	70.7	34.5

* % represents the percentage of students reporting each response. For questions about social media, conventional news, memorials, and graffiti in community, and viewing of the Netflix show *Thirteen Reasons Why*, students could provide multiple responses. The percentages of students who did not respond ranged from 2.1% to 5.6%.

Reaction to Recent Teen Suicides in the Community

Students were asked how the recent teen suicides in their community had affected them emotionally. Table 14 shows the percentage of students reporting each level of emotional response. Percentages are reported for all participating students, as well as broken down by grade level and by sex.

Table 14: Emotional reaction to recent teen suicides.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Reaction	%	%	%	%	%	%	%	%	%
Very strongly affected	7.6	8.1	6.7	7.2	7.8	7.9	7.6	3.7	11
Strongly affected	16.4	16	16.2	16.7	16.2	16.5	17	10.1	22.4
Somewhat affected	26.1	24.9	25	26.6	26.1	26.6	28	21.3	30.8
A little affected	24.2	25.4	24.7	23.7	24.7	24.1	21.9	26	22.7
Not at all	25.8	25.5	27.3	25.8	25.1	24.9	25.5	38.9	13

* % represents the percentage of students reporting each response.

Students' Exposure to Others' Suicidal Ideation, Attempts, and Deaths

Previous studies have demonstrated that knowledge of a friend's suicidal behaviors can significantly increase a teen's own risk for suicide. In one study, exposure to suicidal behavior in a friend or family member posed the same risk of suicide as that conferred by being severely depressed (Nanayakkara, 2013). Teens are more likely to disclose suicidal feelings to a peer, rather than an adult (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked about whether their friends, significant others, or peers revealed that they had thought about, planned, or attempted suicide during this school year. Students were also asked whether any of their friends, significant others, or family members had attempted or died by suicide during this school year. Table 15 shows the percentage of students who reported each type of experience. These percentages are reported for all participating students, as well as broken down by grade level and sex.

Table 15: Percentages of Stark County students who reported that their friends, significant others, peers, and family members had disclosed suicide ideation, attempts, and deaths during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of experience	%	%	%	%	%	%	%	%	%
Suicidal ideation and attempts among friends, significant others, and peers									
Thought about suicide	31.4	29.2	30.1	33.3	31.6	32.7	31.4	22.2	39.8
Planned suicide	11.1	11.3	11.3	12.3	11.6	10.1	9.9	7.8	14.1
Attempted suicide	26.8	24.5	26.3	29.5	27	26.5	27.1	18.5	34.8
None of the above	59	61.9	59.9	57.6	58.1	58.5	58.1	69.6	49
Suicide attempt of friend, significant others or family member									
Friend from my school	15	16	13.6	15.7	16.5	13.6	14.3	10.4	19.3
Friend from another school	10.1	8.9	10.2	12.4	10.2	9.8	8.5	6.5	13.2
Significant other from my school	2.1	1.9	1.5	2.7	2.1	2.2	2.1	2.1	2
Significant other from another school	2	2.1	2.1	2.1	2.1	1.9	1.3	1.6	2.1
Family member	9.7	7.7	9.7	10.7	11.1	9.7	9.1	7	12
None of the above	72.1	72.5	73.6	69.8	70.6	72.6	73.9	79.3	65.4
Death by suicide of friend, significant other, or family member									
Friend from my school	5.1	3.4	2.9	4.6	8.6	5.9	5.7	4.5	5.6
Friend from another school	5.5	5.3	4.8	6.2	5.7	6.1	4.6	3.6	7.2
Significant other from my school	0.5	0.8	0.4	0.6	0.4	0.4	0.3	0.6	0.3
Significant other from another school	0.6	0.8	0.6	0.7	0.5	0.4	0.6	0.7	0.4
Family member	7.1	6.3	7.5	7.7	7.2	7.1	6.7	5.7	8.3
None of the above	84.2	85.8	86.4	83	81.5	83.2	85	87	81.8

* % represents the percentage of students who reported having each type of experience. For all questions, students could provide multiple responses. The percentages of students who did not respond was 6.5% for the question about suicide ideation and attempts among friends, significant others, and peers; 8.4% for the question about suicide attempts among friends, significant others, or family members; and 6.7% for the question about deaths by suicide among friends, significant others, or family members.

PUTTING STARK COUNTY INTO CONTEXT: Students' Exposure to Others' Suicidal Ideation, Attempts, and Deaths

Among U.S. adolescents in grades 7–12 participating in the National Longitudinal Study of Adolescent Health in 1994-1995 (Harris & Udry, 2017):

- 18.4% of U.S. adolescents in grades 7–12 had a friend or significant other who attempted suicide in the year prior to the survey
- 3.1% of U.S. adolescents in grades 7–12 had a friend or significant other who died by in the year prior to the survey
- 5.1% of U.S. adolescents in grades 7–12 had a family member who attempted suicide in the year prior to the survey
- 1.2% of U.S. adolescents in grades 7–12 had a family member who died by suicide in the year prior to the survey

Bullying, Safety, and Access to Guns

There is mixed research about the associations between bullying and suicide (Bowrosky, Taliaferro, & McMorris, 2013; Brunstein Komek, Sourander, & Gould, 2010; Brustein Klomet et al., 2009; Copeland et al., 2013). Bullying may be one of many identified risk factors for suicide in vulnerable adolescents (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked about their experiences of bullying during this school year. Students were asked whether they had been bullied in a series of specific locations or ways, or they could report that they had not been bullied. Students were provided the following definition of bullying to aid in responding to this question: "Bullying is when 1 or more people tease, threaten, spread rumors about, hit, shove, or hurt another person over and over again. It is not bullying when 2 people of about the same strength or power argue or fight or tease each other in a friendly way."

Table 16 shows the percentage of students who reported each type of bullying experience. These percentages are reported for all participating students, as well as broken down by grade level and sex.

Table 16: Percentages of Stark County students who reported experiencing bullying during this school year (2017-2018).*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of experience	%	%	%	%	%	%	%	%	%
Yes, have been bullied during this school year	**30.9**	**35.6**	**34.2**	**33.6**	**29.9**	**26.3**	**23**	**23.8**	**37.2**
On school property	22.6	27.1	26.3	24.2	21.8	18.5	15.3	18.3	26.2
Around my neighborhood	3.9	5.9	3.7	4	4.1	2.5	2.2	3.5	3.9
Online/social media	16.5	16.9	16.8	20.3	17.1	14.3	12.2	9.7	22.6
Text messaging	12.5	12.7	12.1	14.5	13.4	12.1	9.5	6.5	18.1
Other place	6.1	7.2	6.5	6.4	6.5	4.6	4.5	5.2	6.7
No, have not been bullied during this school year	**69.1**	**64.4**	**65.8**	**66.4**	**70.1**	**73.7**	**77**	**76.2**	**62.8**

* % represents the percentage of students who reported each type of experience. Students could provide multiple responses about the location where they experienced bullying. 6.8% of students did not respond to this question.

PUTTING STARK COUNTY INTO CONTEXT: Bullying

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Survey (YRBS),

- 19% of U.S. 9th–12th graders were bullied on school property in the previous year
- 14.9% of U.S. 9th–12th graders were electronically bullied in the previous year

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Survey (YRBS),

- 20.8% of Ohio 9th–12th graders were bullied on school property in the previous year
- 15.1% of Ohio 9thi12th graders were electronically bullied in the previous year

Firearms were the second most common method of suicide among U.S. children aged 10–19 years between 2010 and 2016 (CDC, 2018e). Access to means of suicide increases risk of completing suicide (CDC, 2018c; Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students were asked about whether they could access a gun if they wanted to. Among those who said that they would be able to access a gun if they wanted to, participants were asked where they could access a gun. Table 17 shows reported gun access, as well as specific locations where students would be able to access a gun. These percentages are reported for all participating students, as well as broken down by grade level and sex. Additionally, the percentage of students who ever attempted suicide *and* endorsed access to a firearm was calculated. Nearly 14% of Stark County students who have ever attempted suicide had access to a gun at the time of the survey in spring 2018.

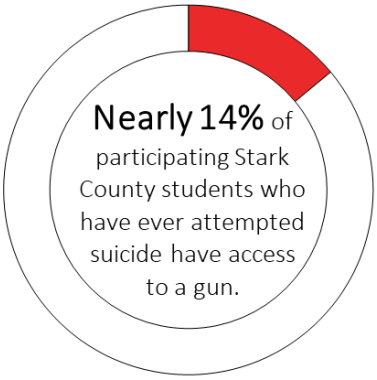


Table 17: Gun access among Stark County students and locations where students reported being able to access a gun, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Gun access	%	%	%	%	%	%	%	%	%
Ability to access a gun if wanted									
Yes, could get it	25.5	16.2	20.5	25.3	27.9	30.9	35.7	30.5	20.6
Could maybe get it with great effort	15.6	14.2	13.7	16.7	16.3	16.2	16.4	15.5	15.4
No, could not get it	58.9	69.7	65.8	58	55.8	52.9	47.9	53.9	64.1
Location of gun access									
At my home	77.6	79.2	82.1	78	77.4	76.3	74.1	76.3	79.4
At my friend's home	13.8	9.8	11.2	13.9	14.5	14.8	17.1	15	11.9
At my neighbor's home	8.8	9.2	8.2	9.5	9.5	8.3	7.8	8.9	8.1
Somewhere else	29.2	27.7	25.4	28.4	28.8	30.8	32.3	30.6	26.8

* % represents the percentage of students who reported each response. Only students who answered 'yes' or 'maybe' on the question asking about ability to access a gun if wanted were asked about the location where they could access a gun. Students could provide multiple responses about the location where they could access a gun. 12.5% of students did not respond to the question about ability to access a gun if wanted. Among students who answered 'yes' or 'maybe' on the question asking about ability to access a gun if wanted, 11% did not respond to the question about the location where they could access a gun.

PUTTING STARK COUNTY INTO CONTEXT: Firearms

An estimated 12.6% of U.S. adolescents aged 13–18 years old can access a gun at home (Simonetti et al., 2015).

One school safety measure being considered by many schools across the country is the use of School Resource Officers. Students were asked how the presence of a police officer or school resource officer (SRO) would make them feel. Table 18 shows responses for all participating students, as well as responses by grade level and by sex.

Table 18: Students' feelings of safety if a police officer or school resource officer (SRO) were present at their schools.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Feelings of safety	%	%	%	%	%	%	%	%	%
Much more safe	23	30.4	24	22.1	19.8	19	21.2	23.6	22.6
A bit more safe	34.7	35.7	35	32.7	35.3	35.6	34	34.9	35.1
Neither more nor less safe	36.1	27.3	34.7	38.8	38.8	40.2	38.8	34.9	37
A bit less safe	2.8	3.2	2.5	3.5	2.7	1.8	2.8	2.8	2.6
Much less safe	3.4	3.4	3.8	3	3.4	3.4	3	3.7	2.7

* % represents the percentage of students reporting each response. 3.8% did not respond to this question.

Depression and Thoughts of Suicide

Feelings of Depression

Students were asked about their feelings of depression around the time of spring break during the previous school year (April 2017) and during the past two weeks (April 2018). The purpose of asking about these two time-periods was to see whether students had experienced a change in feelings of depression since the onset of recent suicides in their community.

Depression was measured using a 2-item scale that is commonly used in clinical practice as a first-step depression screener (Kroenke, Spitzer, & Williams, 2003). In clinical practice, it is recommended that individuals who answer "yes" to one or more questions on this 2-item scale complete a more detailed assessment to determine whether they meet diagnostic criteria for a depressive disorder. For the purposes of this survey, the 2-item scale was used as a proxy for symptoms of depression. Following the survey, this information was provided to school districts to help them understand what proportion of their student population may benefit from further depression screening. Individual students were not referred based on results, as the survey was anonymous. Based on students' responses, students were categorized as having symptoms of depression.

When students were asked to think about *this time last year*, 24.2% of students had symptoms of depression. When students were asked about *the past two weeks*, 21.1% of students had symptoms of depression. An estimated 16.9% of students had symptoms of depression at both time points. 7.1% of students were missing data on one or both of the measures.

Students' Suicidal Ideation and Attempts

Suicidal Ideation and Attempts

A strong predictor of future death by suicide is a previous attempt (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Students with recent suicidal behaviors are at high risk of death. Students were asked a series of questions about suicide ideation and attempts before this school year (before August 2017) and during this school year (2017-2018). Possible responses to the question about suicidal thoughts included:

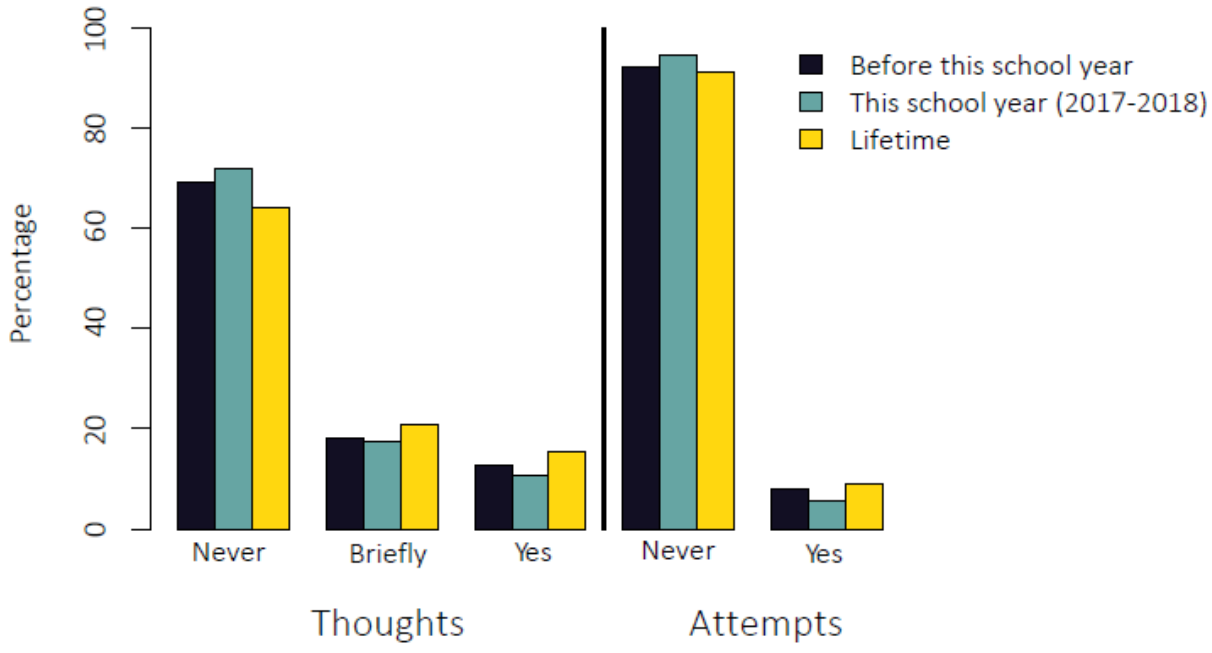
- "Never"
- "It was just a brief passing thought"
- "I had a plan at least once to kill myself but did not try to do it"
- "I had a plan at least once to kill myself and really wanted to die"

Possible responses to the question about suicide attempts included:

- "Never"
- "Yes, I have attempted to kill myself at least once, but did not want to die."
- "I have attempted to kill myself at least once, and really wanted to die."

Figure 3 summarizes students' suicidal thoughts and attempts last year, this year, and in their lifetime.

FIGURE 3: SUICIDAL IDEATION & ATTEMPTS AMONG STARK COUNTY STUDENTS



Tables 19 through 27 detail students' responses to these questions. Table 19 shows responses for all participating students. Tables 20 and 21 show responses broken down by sex. Tables 22 through 27 show responses broken down by grade level.

Table 19: Suicidal ideation and attempts among participating Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	69.2	71.7	64
Yes, just a brief passing thought	18	17.6	20.7
Yes, had a plan	12.7	10.7	15.3
Attempted to kill oneself			
Never	92	94.4	91.1
Yes, attempted at least once	8	5.6	8.9

* % represents the percentage of students who reported each response. Students were asked to select only one option for each question. The percentages of students who did not respond were: 5% for the question about suicide ideation before this school year, 5% for the question about suicide ideation during this school year, 5.9% for the question about suicide ideation during lifetime, 5.2% for the question about suicide attempts before this school year, 5.1% for the question about suicide attempts during this school year, and 6.1% for the question about suicide ideation during lifetime.

Table 20: Suicidal ideation and attempts among participating male Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	77.7	80	73.3
Yes, just a brief passing thought	15	13.9	17.7
Yes, had a plan	7.3	6.2	9
Attempted to kill oneself			
Never	95.3	96.9	94.8
Yes, attempted at least once	4.7	3.1	5.2

Table 21: Suicidal ideation and attempts among participating female Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	61.2	64	55.2
Yes, just a brief passing thought	21.1	21.2	23.8
Yes, had a plan	17.7	14.7	21
Attempted to kill oneself			
Never	88.9	92.3	87.7
Yes, attempted at least once	11.1	7.7	12.3

Table 22: Suicidal ideation and attempts among participating 7th grade Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	78.7	75.8	71.5
Yes, just a brief passing thought	12.4	14.4	16.6
Yes, had a plan	8.9	9.9	11.9
Attempted to kill oneself			
Never	94.9	94.7	93.6
Yes, attempted at least once	5.1	5.3	6.4

Table 23: Suicidal ideation and attempts among participating 8th grade Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	73.7	73.7	67.8
Yes, just a brief passing thought	15.7	16.5	19.1
Yes, had a plan	10.5	9.8	13.1
Attempted to kill oneself			
Never	92.6	93.6	91.6
Yes, attempted at least once	7.4	6.4	8.4

Table 24: Suicidal ideation and attempts among participating 9th grade Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	66	69.2	60.2
Yes, just a brief passing thought	20.5	19	24
Yes, had a plan	13.5	11.8	15.8
Attempted to kill oneself			
Never	91.7	93.4	90.9
Yes, attempted at least once	8.3	6.6	9.1

Table 25: Suicidal ideation and attempts among participating 10th grade Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	66.2	69.1	61.5
Yes, just a brief passing thought	19.5	19.2	21.5
Yes, had a plan	14.4	11.7	17.1
Attempted to kill oneself			
Never	90.7	94.8	90.2
Yes, attempted at least once	9.3	5.2	9.8

Table 26: Suicidal ideation and attempts among participating 11th grade Stark County students, Spring 2018.*

Type of suicidal ideation or attempt	Before this school year (before August 2017) %	During this school year (2017-2018) %	Lifetime %
Thought about killing oneself			
Never	65.2	70.9	61.7
Yes, just a brief passing thought	19.8	19.5	21.2
Yes, had a plan	15	9.6	17.1
Attempted to kill oneself			
Never	90.8	95.4	90
Yes, attempted at least once	9.2	4.6	10

Table 27: Suicidal ideation and attempts among participating 12th grade Stark County students, Spring 2018.*			
	Before this school year (before August 2017)	During this school year (2017-2018)	Lifetime
Type of suicidal ideation or attempt	%	%	%
Thought about killing oneself			
Never	62.2	71.2	58.6
Yes, just a brief passing thought	23.4	18.9	24.9
Yes, had a plan	14.4	9.9	16.5
Attempted to kill oneself			
Never	90.5	95.8	90.2
Yes, attempted at least once	9.5	4.2	9.8

PUTTING STARK COUNTY INTO CONTEXT: Suicidal Ideation and Attempts

Among U.S. adolescents participating in the 2017 Youth Risk Behavior Survey (YRBS),

- 17.2% of U.S. 9th–12th graders report suicidal ideation in the past year
- 13.6% of U.S. 9th–12th graders report suicidal ideation with plan in the past year
- 7.4% of U.S. 9th–12th graders report attempting suicide in the past year

Among Ohio adolescents participating in the 2013 Youth Risk Behavior Survey (YRBS),

- 14.3% of Ohio 9th–12th graders report suicidal ideation in the past year
- 11.1% of Ohio 9th–12th graders report suicidal ideation with plan in the past year
- 6.2% of Ohio 9th–12th graders report attempting suicide in the past year

Students were asked to report their feelings about death and suicide in the *past few weeks*. Table 28 shows the percentage of students who responded "yes" to each question. These percentages are reported for all participating students, as well as broken down by grade level and sex.

Table 28: Stark County students' recent thoughts about death and suicide, Spring 2018.*									
	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of thought	%	%	%	%	%	%	%	%	%
Felt that you or your family would be better off if you were dead	13.8	11.8	14.5	16.2	14.2	12.8	12.9	8.3	18.8
Wished you were dead	15.1	11.8	14.2	17.9	16	15.5	14.8	9.2	20.4
Had thoughts about killing yourself	9.4	8.9	8.5	11.3	9.9	8.9	8.4	6.2	12.1

* % represents the percentage of students who responded 'yes'. The percentages of students who did not respond were 7.1% for the question about feeling that you or your family would be better off if you were dead; 6.9% for the question about wishing you were dead; and 6.5% for the question about having thoughts about killing yourself. Multiple responses possible.

Lastly, students were asked whom they were most comfortable talking to about thoughts of suicide. The results are summarized in Table 29. These percentages are reported for all participating students, as well as broken down by grade level and sex.

Table 29: Who Stark County students would tell their thoughts of suicide, Spring 2018.*

	Overall	Grade						Sex	
		7	8	9	10	11	12	M	F
Type of confidante	%	%	%	%	%	%	%	%	%
Parent or caregiver	52.8	61.5	57.7	50.5	49.9	47.7	47.9	58.2	48.3
Another member of family	32.2	42.3	37	29.4	30.8	25.7	26.3	35.2	29.8
Adult in the community	8	11.1	9.1	7	7.6	5.5	7.1	9.9	6.1
Friend	60.1	59.7	62.2	59.2	59.6	59.8	60.7	57.6	63.1
Teacher	16.9	24.5	19.1	13.5	15.2	14.7	13.4	19.1	14.8
Guidance counselor	22.9	34.5	28.5	21.1	20.2	15.5	14.9	25.5	20.6
Another adult at school	8.5	13.9	11	7	7.4	5.4	5.1	10.3	6.7
Religious official	14.5	19.9	16.3	13.8	14	11	10.7	17.5	11.8
Police officer	8.1	14.8	10.1	6.4	6.4	5	4.9	11	5.3
Medical professional	18.7	23.2	20.2	16.5	17.9	16.3	18.3	19.9	17.8
Other	9.5	11.3	10.3	9.5	8.6	8.9	7.3	10.6	8.1
No one	18.5	14	16.8	20.1	20	19.3	21.5	18.8	17.7

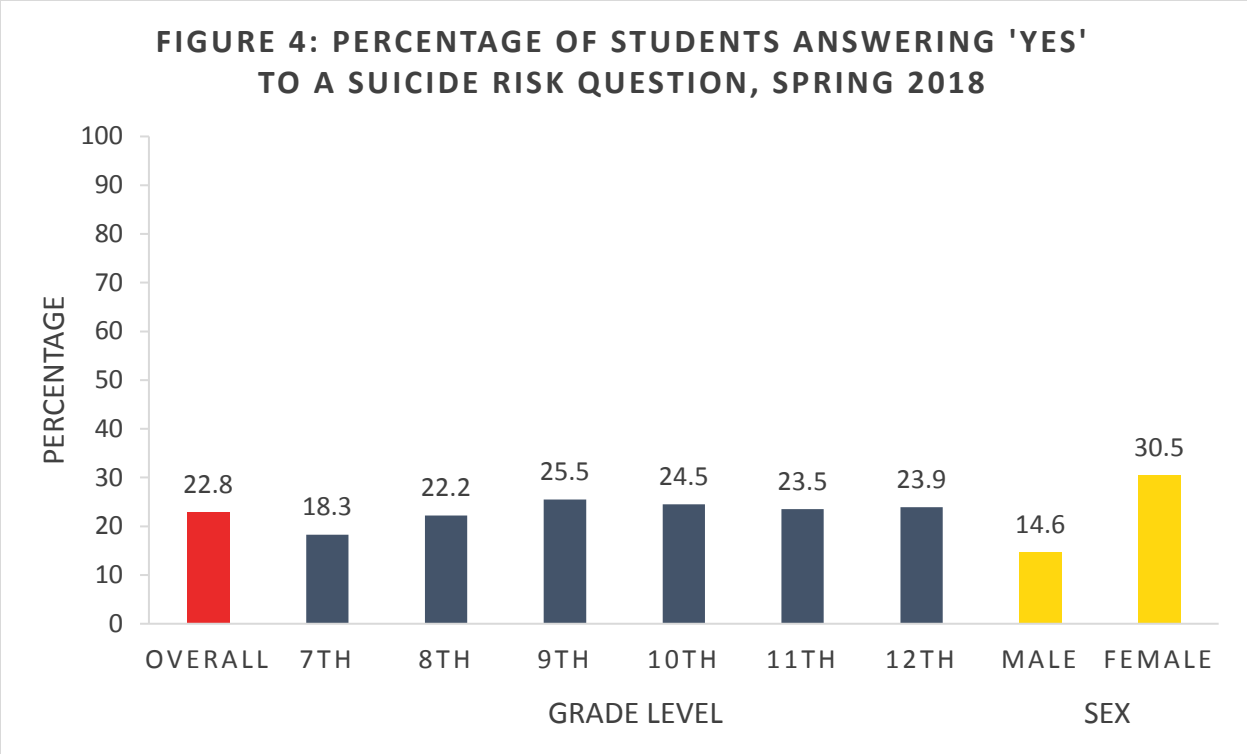
* % represents the percentage of students who responded. Students could provide multiple responses. The percentage of students who did not respond was 5.3%.

Responses to Suicide Risk Questions

Certain mental health questions are commonly used to better understand the need for further support or assessment by a trained counselor or other professional. This section of the report presents the percentage of students answering 'yes' to at least one of the following questions:

- "In the past few weeks, have you wished you were dead?"
- "In the past few weeks, have you felt that you or your family would be better off if you were dead?"
- "In the past week, have you been having thoughts about killing yourself?"
- "Have you ever tried to kill yourself?"

Figure 4 shows the percentage of students who answered 'yes' to one or more of these questions by grade, sex, and for the overall school district. Understanding this information can help schools guide allocation of counseling and support resources.



Student Suicide Risk and Exposure History

Using the results from the suicide risk questions described in the previous section, the percentage of students with each potential risk/protective factor presented in this report was calculated for those who answered at least one suicide risk question with a 'yes.' The results of this cross tabulation are below in Table 30.

Table 30: Summary of Stark County student risk/protective factors and answering 'yes' to a suicide risk question, Spring 2018.

Factor	Prevalence Of Factor (%)	Among Students with Factor	
		Suicide Risk Identified (%)	No Suicide Risk Identified (%)
GPA at Time of Survey			
Low GPA (<2.5)	7.3	35.6	64.4
High GPA (≥2.5)	92.7	20.9	79.1
Ever Skipped School			
More than 1 or 2 times	12.9	38.7	61.3
1 or 2 times or less	87.1	20.4	79.6
Ever Disciplinary action			
Any	22.4	34.0	66.0
None	77.6	19.5	80.5
Participation in school activities in past school year (2017–2018)			
No school activities	15.5	28.9	71.1
Any school activities	84.5	21.7	78.3
Participation in community activities in past school year (2017–2018)			
No community activities	25.4	27.6	72.4
Any community activities	74.6	21.3	78.7

Table 30: Summary of Stark County student risk/protective factors and answering 'yes' to a suicide risk question, Spring 2018. *(continued)*

Factor	Prevalence of Factor (%)	Among Students with Factor	
		Suicide Risk Identified (%)	No Suicide Risk Identified (%)
Participation in school or community activities in past school year (2017–2018)			
No school or community activities	7.5	29.3	70.7
Any school or community activities	92.5	22.3	77.7
Closeness and connectedness			
Agreed with 3 or fewer statements	38.8	38.4	61.6
Agreed with 4 or more statements	61.2	12.8	87.2
Activities with parent in past month			
No activities with parent	2.8	43.8	56.2
Any activities with parent*	97.2	22.0	78.0
Able to get medical or psychological care			
No	14.7	58.5	41.5
Yes	85.3	16.9	83.1
Negative life experiences during this school year			
3 or more experiences	59.9	31.8	68.2
1 or 2 experiences	33.1	10.2	89.8
0 experiences	7.0	5.4	94.6
Adverse childhood experiences in lifetime			
3 or more experiences	23.5	54.6	45.4
1 or 2 experiences	36.2	20.4	79.6
0 experiences	40.4	6.6	93.4
Participant substance use in lifetime			
Any	43.8	34.9	65.1
None	56.2	13.3	86.7
Participant substance use in past 30 days			
Any	17.7	44.6	55.4
None	82.3	17.7	82.3
Participant binge drinking in past 30 days			
More than once or twice	2.7	54.4	45.6
Once or twice or less	97.3	21.6	78.4
Household member substance use in school year			
Any	23.5	43.7	56.3
None	76.5	16.4	83.6
Participant ever diagnosed with mental health problem prior to August 2017			
Any	28.7	46.0	54.0
None	71.3	13.4	86.6
Exposed to any vigils or moments of silence for teenagers who died by suicide during this school year (2017–2018)			
Yes	38.6	24.0	76.0
No	61.4	22.1	77.9

Table 30: Summary of Stark County student risk/protective factors and answering 'yes' to a suicide risk question, Spring 2018. *(continued)*

Factor	Prevalence of Factor (%)	Among Students with Factor	
		Suicide Risk Identified (%)	No Suicide Risk Identified (%)
Seen any social media posts about recent teen suicides in your community during this school year (2017–2018)			
Yes	67.9	26.7	73.3
No	32.1	14.7	85.3
Posted on social media about recent teen suicides in your community during this school year (2017–2018)			
Yes	12.6	48.0	52.0
No	87.4	18.9	81.1
Seen any news articles about recent teen suicides in your community during this school year (2017–2018)			
Yes	72.4	23.6	76.4
No	27.6	20.6	79.4
Seen any memorials for teens who died by suicide in your community during this school year (2017–2018)			
Yes	37.7	27.1	72.9
No	62.3	20.0	80.0
Seen any suicide- or hopelessness-related graffiti in your community during this school year (2017–2018)			
Yes	11.1	49.4	50.6
No	88.9	19.2	80.8
Seen any episodes of the Netflix show Thirteen Reasons Why (in lifetime)			
Yes	47.4	29.2	70.8
No	52.6	17.1	82.9
Emotional reaction to recent teen suicides in your community			
Strongly or very strongly	23.5	39.7	60.3
Somewhat, a little, not at all	76.5	17.7	82.3
Experienced bullying during this school year (2017–2018)			
Any bullying	29.7	43.8	56.2
No bullying	70.3	13.8	86.2
Access to gun			
Can access gun	38.3	32.2	67.8
Cannot access gun	61.7	17.5	82.5
Friend, significant other, or peer disclosed thoughts about suicide during this school year (2017–2018)			
Yes	40.1	42.4	57.6
No	59.9	9.8	90.2
Friend or family member attempted suicide during this school year (2017–2018)			
Yes	27.1	45.8	54.2
No	72.9	13.8	86.2
Friend or family member died by suicide during this school year (2017–2018)			
Yes	15.5	43.8	56.2
No	84.5	18.6	81.4
Communicating about thoughts of suicide			
Would tell no one	17.4	37.3	62.7
Identified someone he/she would tell	82.6	20.2	79.8
Time spent on social media per day			
3–4 hours or more	39.6	30.4	69.6
<3 hours	60.4	17.8	82.2
Time spent on video games per day			
3–4 hours or more	31.2	25.5	74.5
<3 hours	68.8	21.4	78.6

Table 30: Summary of Stark County student risk/protective factors and answering 'yes' to a suicide risk question, Spring 2018. *(continued)*

Factor	Prevalence Of Factor (%)	Among Students with Factor	
		Suicide Risk Identified (%)	No Suicide Risk Identified (%)
Time spent unsupervised per day			
3–4 hours or more	23.4	33.1	66.9
<3 hours	76.6	19.6	80.4
Loneliness			
Yes	55.3	37.0	63.0
No	44.7	5.1	94.9
Hopelessness			
Yes	27.1	50.6	49.4
No	72.9	12.2	87.8
Resilience			
Low	9.8	68.7	31.3
Medium	30.7	33.3	66.7
High	59.5	8.4	91.6

*Excluding arguing with a parent

Student Suicide Attempt in Lifetime and Exposure History

Each potential risk/protective factor was also examined by whether or not students had ever attempted suicide. The results of this examination are presented in Table 31.

Table 31: Summary of Stark County student risk/protective factors and presence of suicide attempt in student lifetime, Spring 2018.

Factor	Prevalence Of Factor (%)	Among Students With Factor	
		Ever Attempted Suicide (%)	Never Attempted Suicide (%)
GPA at Time of Survey			
Low GPA (<2.5)	7.2	17.1	82.9
High GPA (≥2.5)	92.8	7.9	92.1
Ever Skipped School			
More than 1 or 2 times	12.7	19.3	80.7
1 or 2 times or less	87.3	7.3	92.7
Ever Disciplinary action			
Any	22.1	17.1	82.9
None	77.9	6.4	93.6
Participation in school activities in past school year (2017–2018)			
No school activities	15.5	12.1	87.9
Any school activities	84.5	8.2	91.8
Participation in community activities in past school year (2017–2018)			
No community activities	25.3	10.0	90.0
Any community activities	74.7	8.4	91.6
Participation in school or community activities in past school year (2017–2018)			
No school or community activities	7.5	11.8	88.2
Any school or community activities	92.5	8.6	91.4

Table 31: Summary of Stark County student risk/protective factors and presence of suicide attempt in student lifetime, Spring 2018. (*continued)*

Factor	Prevalence Of Factor (%)	Among Students With Factor: Ever Attempted Suicide (%)	Among Students With Factor: Never Attempted Suicide (%)
Closeness and connectedness			
Agreed with 3 or fewer statements	38.6	15.5	84.5
Agreed with 4 or more statements	61.4	4.5	95.5
Activities with parent in past month			
No activities with parent	2.7	16.8	83.2
Any activities with parent*	97.3	8.5	91.5
Able to get medical or psychological care			
No	14.3	22.6	77.4
Yes	85.7	6.9	93.1
Negative life experiences during this school year			
3 or more experiences	59.8	12.9	87.1
1 or 2 experiences	33.2	2.9	97.1
0 experiences	7.0	1.2	98.8
Adverse childhood experiences in lifetime			
3 or more experiences	23.2	25.6	74.4
1 or 2 experiences	36.5	6.6	93.4
0 experiences	40.3	1.2	98.8
Participant substance use in lifetime			
Any	43.2	15.8	84.2
None	56.8	3.5	96.5
Participant substance use in past 30 days			
Any	17.3	22.4	77.6
None	82.7	5.8	94.2
Participant binge drinking in past 30 days			
More than once or twice	2.6	36.7	63.3
Once or twice or less	97.4	7.9	92.1
Any household member substance use this school year (2017–2018)			
Any	23.2	20.9	79.1
None	76.8	5.2	94.8
Participant ever diagnosed with mental health problem prior to August 2017			
Any	28.2	22.8	77.2
None	71.8	3.3	96.7
Exposed to any vigils or moments of silence for teenagers who died by suicide during this school year (2017–2018)			
Yes	38.7	9.2	90.8
No	61.3	8.6	91.4
Seen any social media posts about recent teen suicides in your community during this school year (2017–2018)			
Yes	67.8	10.9	89.1
No	32.2	4.8	95.2
Posted on social media about recent teen suicides in your community during this school year (2017–2018)			
Yes	12.4	23.4	76.6
No	87.6	6.6	93.4

Table 31: Summary of Stark County student risk/protective factors and presence of suicide attempt in student lifetime, Spring 2018. (*continued)*

Factor	Prevalence Of Factor (%)	Among Students With Factor: Ever Attempted Suicide (%)	Among Students With Factor: Never Attempted Suicide (%)
Seen any news articles about recent teen suicides in your community during this school year (2017–2018)			
Yes	72.5	9.3	90.7
No	27.5	7.6	92.4
Seen any memorials for teens who died by suicide in your community during this school year (2017–2018)			
Yes	37.6	11.9	88.1
No	62.4	7.0	93.0
Seen any suicide- or hopelessness-related graffiti in your community during this school year (2017–2018)			
Yes	10.9	23.2	76.8
No	89.1	6.9	93.1
Ever Seen any episodes of the Netflix show Thirteen Reasons Why			
Yes	46.9	12.5	87.5
No	53.1	5.7	94.3
Emotional reaction to recent teen suicides in your community			
Strongly or very strongly	23.2	18.5	81.5
Somewhat, a little, not at all	76.8	6.0	94.0
Experienced bullying during this school year (2017–2018)			
Any bullying	29.4	20.0	80.0
No bullying	70.6	4.1	95.9
Access to gun			
Can access gun	37.9	13.6	86.4
Cannot access gun	62.1	6.2	93.8
Friend, significant other, or peer disclosed thoughts about suicide during this school year (2017–2018)			
Yes	39.8	18.1	81.9
No	60.2	2.8	97.2
Friend or family member attempted suicide during this school year (2017–2018)			
Yes	26.7	22.2	77.8
No	73.3	3.9	96.1
Friend or family member died by suicide during this school year (2017–2018)			
Yes	15.3	21.8	78.2
No	84.7	6.4	93.6
Communicating about thoughts of suicide			
Would tell no one	17.4	14.3	85.7
Identified someone he/she would tell	82.6	7.9	92.1
Time spent on social media per day			
3–4 hours or more	39.5	12.7	87.3
<3 hours	60.5	6.3	93.7
Time spent on video games per day			
3–4 hours or more	31.2	10.2	89.8
<3 hours	68.8	8.1	91.9
Time spent unsupervised per day			
3–4 hours or more	23.2	14.2	85.8
<3 hours	76.8	7.3	92.7

Table 31: Summary of Stark County student risk/protective factors and presence of suicide attempt in student lifetime, Spring 2018. (*continued)*

Factor	Prevalence Of Factor (%)	Among Students With Factor	
		Ever Attempted Suicide (%)	Never Attempted Suicide (%)
Loneliness			
Yes	55.6	14.7	85.3
No	44.4	1.5	98.5
Hopelessness			
Yes	27.0	20.3	79.7
No	73.0	4.4	95.6
Resilience			
Low	9.5	32.5	67.5
Medium	31.2	12.0	88.0
High	59.3	3.0	97.0

*Excluding arguing with a parent

Limitations

The findings from this survey are subject to some limitations. First, given the cross-sectional nature of the survey, the quality of information collected is dependent on participant recall. The survey was anonymous to preserve student's privacy; despite the anonymity of the survey, it is possible that some at-risk students did not feel comfortable answering, resulting in an under-reporting of certain risk factors. Additionally, cross-sectional surveys present associations between factors, but do not establish causality. The presence of an association between a risk factor and suicidal ideation cannot be interpreted as the risk factor directly causing suicidal ideation. Next, only students attending participating schools in Stark County that completed all survey modules are included. Of the 23 school districts in the Stark County ESC, 18 participated. Seventeen school districts completed all survey modules. Students at non-participating school districts or school districts that did not use all survey modules may vary significantly from participating school districts. Additionally, students attending private, alternate, online, or home schools; students absent on the day of the survey; and students who opted out of participating are not represented by the survey. It is possible that the prevalence of risk and protective factors are different for these populations. Interpretation of the preliminary results in this report should be undertaken with the population surveyed in mind. Next, this survey represents risk factors among those with suicidal ideation and suicide attempts. The risk factors among this population may be different from those who died by suicide. To better understand the risk factors among decedents of suicide, ongoing data resources such as Ohio Violent Death Reporting System and the Ohio Youth Risk Behavior Survey (YRBS) should be evaluated. Lastly, the survey used best available, validated screening questions to evaluate complex concepts like hopelessness, loneliness, and resiliency when available. As these are complicated constructs, it is possible that the brief nature of the survey questions did not adequately capture these schemas, limiting the ability to make conclusions about specific factors of interest.

Preliminary Findings and Opportunities for Prevention

The most effective way to prevent suicide is to use a number of complementary strategies (Stone et al., 2017; SAMHSA, 2012). It is important to remember that the field of suicide prevention is evolving as ongoing research reveals best practices. The results presented in this report are preliminary, and the following recommendations are based on the best available evidence, particularly CDC's *Preventing Suicide: A Technical Package of Policy, Program, and Practices*. This technical package provides a core set of strategies to achieve and sustain substantial reduction in suicide, helping communities sharpen their focus on prevention activities with the greatest potential to prevent suicide.

Below, some key preliminary findings and potential opportunities for prevention are outlined. These strategies are merely a starting point for stakeholder discussion: the most sustainable, effective interventions emerge at the local level.

Strengthen Access and Delivery of Suicide Care

Mental illness is an important risk factor for suicide (WHO, 2014; Harris & Barraclough, 1998). Unfortunately, relatively few people in the U.S. with mental health disorders receive treatment for those conditions (Wang et al., 2002). Lack of access to mental healthcare is one factor contributing to the under-treatment of mental health problems in the U.S. (Cunningham, 2009). Identifying ways to improve access to affordable, quality, timely mental healthcare for people in need is a critical step in the prevention of suicide (WHO, 2014).

> Increase youth's access to mental healthcare. Nearly 16% of Stark County youth were not always able to get medical or psychological care when needed. Engaging community partners in improving healthcare access for youth may be a valuable strategy. Additionally, providing youth with information about confidential resources for mental healthcare may benefit youth at risk for stigmatization.

Create Protective Environments

Prevention efforts that focus not only on individual behavior change (e.g., help-seeking, treatment interventions) but on changes to the environment can increase the likelihood of positive behavioral and health outcomes (Haddon, 1980). Creating environments that address risk and protective factors where individuals live, work, and play can help prevent suicide (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012; Dahlberg et al., 2002).

> Reduce access to lethal means among persons at risk of suicide. Twenty-three percent of Stark County youth have access to a gun; nearly twice the percentage of other U.S. adolescents (12.6%). Nearly 14% of Stark County students who have ever attempted suicide have access to a gun. Among persons who attempt suicide, those who use firearms are more likely to die than those who use other means. Collaborating with gun owners, firearm dealers, shooting clubs, hunting organizations, and others to promote firearm safety is an important strategy for reducing suicide risk. Most firearm safety educational materials focus on the prevention of accidents rather than suicide. Brochures and websites promoting firearm safety to gun

owners could include a statement regarding the importance of being alert to signs of suicide in a loved one and keeping firearms out of the person's reach. Collaborating with gun-owner groups to design and deliver this message will help ensure that it is culturally relevant, technically accurate, comes from a trusted source, and does not have an anti-gun bias. Most gun-owner groups promote the safe storage of firearms when not in use (i.e., stored locked and unloaded, with ammunition locked separately) to protect against accidents, theft, and unauthorized use. The safe storage of firearms in Stark County can help prevent suicide, particularly from attempts that take place during short-lived crises and attempts made by individuals living in a household where firearms are present (Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012).

- Community policies and culture. Less than half of Stark County youth feel safe at school. Further exploration of actions that would promote feelings of safety, including key informant interviews with students, may be worthwhile. Nearly 60% of Stark County youth reported they would feel "a bit more safe" or "much more safe" if a police officer or school resource officer was present at their school.
- Community-based strategies to reduce youth substance use. Nearly half of Stark County youth have used a substance at least once. The most common substances used by Stark County youth are alcohol, marijuana, and prescription pain medications. Substance use in adolescence increases risk of addiction, poor academic performance, involvement with the juvenile justice system, and suicide. Evidence-based programs, such as those outlined in the National Institute on Drug Abuse's (NIDA) *Preventing Drug Use among Children and Adolescents (In Brief),* may be effective in preventing adolescents from trying substances and protect against the adverse effects of substance use (Robertson et al., 2003). Substance abuse prevention resources specific to Ohio can be found at Start Talking!, a multi-pronged initiative from the Office of the Governor to fight drug abuse from all angles.

Promote Connectedness

Promoting connectedness among individuals and within communities through modeling peer norms and enhancing community engagement may protect against suicide (Whitley & Mckenzie, 2005; De Silva et al., 2005).

- Community engagement activities. Compared with other youth in Ohio, Stark County youth are more involved in school and community activities. Despite this trend, nearly one in 10 adolescents in Stark County is not involved in any school or community activities. Given the important role of connectedness in preventing suicide, stakeholders may consider increasing outreach activities to students not actively involved in their school or community.
- Promotion of connectedness. Stark County youth feel less connected to their school, friends, and family than other adolescents in the U.S. Events and activities that build students' and families' sense of community may benefit Stark County youth in a number of ways, including buffering against risk of suicide.
- Parental engagement activities. Parental involvement in youth life through activities and interactions is important for prevention of suicide. Stark County youth report higher

percentages of parental involvement, when compared with U.S. adolescents. These important relationships should be encouraged and strengthened where possible.

Teach Coping and Problem-Solving Skills

The inability to use adequate strategies to cope with acute stressors or identify and solve problems has been characterized among suicide attempters (Pollock & Williams, 2004). Teaching and providing youth with the skills to tackle every day challenges and stressors is an important component to preventing suicide (Stone et al., 2017).

- Social-emotional learning programs. Over 60% of Stark County youth have experienced at least one adverse childhood experience in their lifetime, higher than adolescents at the state and national level. Adverse childhood experiences can be prevented through interventions like strengthened economic supports for struggling families and parenting programs like the *Incredible Years, Families Matter,* and *Strengthening Families 10-14* (Stone et al., 2017).
- Increase youth resiliency. The negative effects of adverse childhood experiences can be buffered through programs that increase children's resiliency. Stakeholders in Stark County may consider implementing programs that increase problem-solving and coping skills, promote healthy relationships, and develop mindfulness to combat the effects of adverse childhood experiences. This may involve interventions for children of younger ages – directing action towards children in elementary school to build resiliency for future generations. One such evidence-based program is the *Pax Good Behavior Game*, which uses classroom behavior-management methods to prevent a number of negative outcomes, including suicidal ideation, drug and alcohol use disorders, regular smoking, antisocial personality disorder, delinquency, and incarceration for violent crimes (Embry, 2002). For older youth, Ohio Mental Health and Addiction Services (Ohio MHAS) created the Be Present campaign to educate and empower peers, friends, classmates, and siblings of at-risk youth to provide needed support. Be Present provides easy-to-use prevention and mental-wellness resources to help youth better cope with life's stressors and support others.

Identify and Support People at Risk

Attention to vulnerable populations is an important and necessary step in preventing suicide (Stone et al., 2017). Such vulnerable populations include, but are not limited to, individuals with lower socio-economic status; youth living with a mental health problem; people who have previously attempted suicide; victims of violence; individuals of sexual minority status; and members of certain racial and ethnic minority groups (Kann et al., 2016; Russell & Joyner, 2001; Curtin, Warner & Hedegaard, 2016). Supporting people at risk requires proactive case finding, effective response, crisis intervention, and evidence-based treatment.

- Gatekeeper training. Over 40% of participating students were aware of a friend's, family member's, or significant other's suicidal ideation, suicide attempt or death by suicide. Over 60% of participating students would tell a friend if they were having suicidal ideation and over 50% of students would disclose suicidal ideation to a parent. These statistics represent the strong potential for close friends and family members in Stark County to act as

"gatekeepers" for individuals at risk of suicide. Gatekeeper training is designed to train peers, teachers, coaches, clergy, emergency responders, primary and urgent care providers, and others in the community to identify people who may be at risk of suicide and to respond effectively, including facilitating treatment seeking and support services (Stone et al., 2017). Gatekeeper training may be implemented in a variety of settings to identify and support people at risk (Isaac et al., 2009).

Lessen Harms and Prevent Future Risk

Millions of people are bereaved by suicide every year in the United States and throughout the world (WHO, 2014). Risk of suicide and suicide risk factors have been shown to increase among people who have lost a friend/peer, family member, co-worker, or other close contact to suicide (Pitman et al., 2014). Care and attention to the bereaved is therefore of high importance. Despite good intentions, media and others responding to suicide may add to this risk. Research suggests that exposure to sensationalized reporting on suicide may heighten the risk of suicide among vulnerable individuals and can inadvertently contribute to what is known as suicide contagion (Etzersdorfer & Sonneck, 1998; Niederkrotenthaler & Sonneck, 2007).

- Postvention. Sixteen percent of Stark County youth lost a friend, significant other, or family member to death by suicide in 2017–2018. Associates of decedents may be at increased risk of suicide. Persons substantially affected by suicide should be referred for further counseling or other services as needed. In suicide clusters, persons have attempted suicide or died by suicide even though they did not personally know victims who died by suicide earlier in the cluster. Education efforts to increase knowledge of the warning signs of suicide and encourage help-seeking behaviors may be beneficial to identify persons substantially affected by suicide.
- Responding to a death. Activities that glorify suicide victims or sensationalize suicide deaths have the potential to increase suicidal behaviors among youth exposed to these events. Nearly 40% of Stark County youth attended a vigil or moment of silence for a teenager who died by suicide. These events, while intended to demonstrate sincere compassion, can be potentially very dangerous. Communities may consider following suicide response guidelines for all announcements to students. Resources for safe suicide response are included in the Additional Resources section of this report.
- Safe reporting about suicide. Three-quarters of youth saw a news article about the teen suicides in Stark County in the past year. Sensationalism in news reporting is a real problem in the setting of a suicide cluster, as it potentiates the risk of suicide among readers who identify with the decedent. Engaging local and state media partners in suicide coalition planning and prevention efforts may be helpful to ensure adherence to safe suicide reporting guidelines.
- Safe messaging about suicide. Thirteen percent of Stark County youth posted on social media and nearly 70% of Stark County youth saw posts on social media about the recent suicides among adolescents. It is important for school & county stakeholders to monitor social media channels regularly and respond to any disclosures of suicidal thoughts or behaviors. Social

media posts should include links to online crisis resources, such as the National Suicide Prevention Lifeline (1-800-273-TALK/8255). Posts with incorrect or sensationalized information may be taken down to prevent the spread of misinformation. Social media posts that promote hope, connectedness, social support, resiliency, and help-seeking are most beneficial.

Administer Ongoing Youth Health and Behavior Surveys

Some school districts may wish to regularly assess the health and wellbeing of their students. Following this practice on an annual or biennial basis can provide key information, such as: effectiveness of interventions and prevention strategies; assessment of new and emerging risk and protective factors; assessment of differences and changes between grades, sexes, districts and other subpopulations. There are multiple existing surveys that districts may choose to utilize.

- Ohio Youth Risk Behavior Survey (YRBS). The Ohio YRBS is part of a national survey that is conducted in high schools (grades 9-12) every two years. Ohio first started administering the survey in 1993. A random sample of high schools are approached to take the survey, and if the participation rate is sufficiently high, the results can be generalized to all Ohio students. Topics surveyed include: unintentional injury and violence, tobacco use, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and disease, dietary behaviors, and physical inactivity.
- Ohio Healthy Youth Environments Survey (OHYES!). OHYES! is a youth survey designed to measure the health risk behaviors and environmental factors that impact youth health and safety. The survey gathers information on issues like alcohol, tobacco, and other drug use, unintentional and intentional injuries, physical health, activity and well-being, and related environmental risk and protective factors. Surveys are anonymous, and only county-level and district reports are publicly available. Youth respondents (or their parents/guardians) may decline to participate in the survey, skip any question they do not feel comfortable with, and may stop at any time.
- Northeast Ohio Youth Health Survey (NOYHS). The NOYHS survey that was administered in Stark County in 2018 can be utilized for future assessments. The Ohio Department of Health can assist with electronic dissemination of the survey and provide raw data to participating districts.

Target Both Female and Male Students

Preliminary findings from this survey highlight sex differences among several suicide risk factors and behaviors. For example, over 52% of female students reported spending more than two hours of an average school day on social media compared to nearly 27% of male students. As previously mentioned, excess social media use has been associated with depression (Moreno et al., 2012; Kross et al., 2013). Female students also self-reported higher prevalence of depression and anxiety when compared to males (19.2% vs 8.5% and 25.1% vs 9.6%, respectively). Over 11% of female students reported at least one suicide attempt in their lifetime compared to nearly 5% of male students. With that said, sex disparities between suicide attempts and suicide deaths are

well documented in the literature; while females are more likely to attempt suicide, males die by suicide at nearly four times the rate of females (CDC, 2015). Therefore, invention strategies should continue to target both sexes.

Summary

Suicide is preventable. Youth in Stark County face many difficulties and possess many strengths. This report describes the prevalence of key risk and protective factors among youth in Stark County. Stakeholders may use these data to guide future strategies and direct resources to areas of greatest need. Multi-sectoral action is needed to make prevention possible. With timely and effective evidence-based interventions, treatment and support, both suicides and suicide attempts can be prevented.

Additional Resources

Suicide Prevention

Evidence-Based Prevention

Search tool from Suicide Prevention Resource Center to help partners make decisions about the programs and practices that will be a part of a comprehensive approach to suicide prevention.
http://www.sprc.org/keys-success/evidence-based-prevention

Los Angeles County Youth Suicide Prevention Project

Website with separate sections for school administrators, school staff, parents, and students. Each section contains information sheets, videos, and other helpful resources. The website also has links to resources on a variety of at-risk populations and special issues in suicide prevention.
http://preventsuicide.lacoe.edu

Preventing Suicide: A Toolkit for High Schools

Toolkit helps high schools, school districts, and their partners design and implement strategies to prevent suicide and promote behavioral health among their students. It describes the steps necessary to implement all the components of a comprehensive school-based suicide prevention program and contains numerous tools to help carry out the steps.
http://store.samhsa.gov/product/Preventing-Suicide-A-Toolkit-for-High-Schools/SMA12-4669?WT

The Trevor Project

The Trevor Project is a national organization with a focus on crisis and suicide prevention among lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth. It provides a toll-free crisis phone line, an online social networking community for LGBTQ youth and their friends and allies, educational programs for schools, and advocacy initiatives.
http://www.thetrevorproject.org

Crisis Planning

Practical Information on Crisis Planning

Guide for schools and communities to navigate crisis planning. Provides overview of critical concepts and components of crisis planning with examples of promising practices.
https://rems.ed.gov/docs/PracticalInformationonCrisisPlanning.pdf

Crisis Response

Crisis Text Line

Crisis Text Line provides free emotional support and information to teens in any type of crisis, including feeling suicidal. Individuals can text with a trained specialist 24 hours a day. Text "HOME" to 741741.
http://www.crisistextline.org/

Postvention Guidelines

Practical guide from Australia, designed to assist schools in responding to the tragic occurrence of suicide or attempted suicide within their student community. Includes actionable items and suggested timeline for schools in the process of responding to a suicide.
https://www.education.sa.gov.au/doc/suicide-postvention-guidelines

Postvention Manual

Guide for schools and communities to develop their own postvention procedures.
https://www.starcenter.pitt.edu/Files/PDF/Manuals/Postvention.pdf

Resources for Parents & Families

Children, Teens, and Suicide Loss

Plain language guide for parents & families on how to support youth through loss of a loved one to suicide.
https://afsp.org/find-support/ive-lost-someone/resources-loss-survivors/children-teens-suicide-loss/

Jason Foundation Parent Resource Program

Website containing basic information about suicide and how families can help prevent youth suicide. It also has a video of a parent and community seminar that includes basic information on suicide and provides awareness and suicide prevention strategies for parents and other adults.
http://jasonfoundation.com/get-involved/parent/parent-resource-program/

Society for the Prevention of Teen Suicide

Website's parent section provides information to help families talk with teens about suicide or the death of a friend by suicide. It includes a link to the video Not My Kid: What Every Parent Should Know, which features eight parents from culturally diverse backgrounds asking two experts common questions about youth suicide.
http://www.sptsusa.org/parents/

Social Media

Tips on Social Media from Riverside Trauma Center

Numerous resources from Riverside Trauma Center, including: talking to children about *13 Reasons Why*; responding to traumatic event; and tips on social media after a suicide loss for students, school administrators, and parents.
http://riversidetraumacenter.org/trauma-center-resources/

How to Use Social Media for Suicide Prevention

Resource from California Mental Health Services Authority to help organizations or communities evaluate if use of social media for suicide prevention is right for them, and if so, tips for how to implement safe, effective messages into organizations' social messaging.
http://eiconline.org/teamup/wp-content/files/13-CALM-0106-Socialmedia_Guide_FNL.pdf

Recommendations for Reporting on Suicide

Guidelines developed by leading experts in suicide prevention for safe media reporting on suicide.
http://www.reportingonsuicide.org

Action Alliance Framework for Successful Messaging

Research based resource to improve public messaging about suicide.
http://suicidepreventionmessaging.org/

Suicide Contagion

Suicide Clusters and Contagion

Journal article from *Principal Leadership* providing an overview of the concept of suicide contagion, factors driving suicide contagion, and how school leadership may prevent or disrupt contagion.
http://cdpsdocs.state.co.us/safeschools/Resources/Suicide%20Clusters/Suicide_Clusters_NASSP_Sept_%2009.pdf

Works Cited

Asher SR, Hymel S, Renshaw PD. Loneliness in children. Child development. 1984 Aug 1:1456-64.

Bickham DS, Hswen Y, Rich M. Media use and depression: exposure, household rules, and symptoms among young adolescents in the USA. International Journal of Public Health. 2015;60(2):147-155.

Borowsky IW, Taliaferro LA, McMorris BJ. Suicidal thinking and behavior among youth involved in verbal and social bullying: risk and protective factors. The Journal of adolescent health: official publication of the Society for Adolescent Medicine. 2013;53(1 Suppl):S4-12.

Brunstein Klomek A, Sourander A, Gould M. The association of suicide and bullying in childhood to young adulthood: a review of cross-sectional and longitudinal research findings. Can J Psychiatry. 2010;55(5):282-288.

Brunstein Klomek A, Sourander A, Niemela S, et al. Childhood bullying behaviors as a risk for suicide attempts and completed suicides: a population-based birth cohort study. J Am Acad Child Adolesc Psychiatry. 2009;48(3):254-261.

Centers for Disease Control and Prevention. 2013 Youth Risk Behavior Survey Data. 2018; www.cdc.gov/yrbs.

Centers for Disease Control and Prevention. 2017 Youth Risk Behavior Survey Data. 2018; www.cdc.gov/yrbs.

Centers for Disease Control and Prevention. Adverse childhood experiences. 2016; https://www.cdc.gov/violenceprevention/acestudy/index.html.

Centers for Disease Control and Prevention. Preventing Suicide Factsheet. 2018; https://www.cdc.gov/violenceprevention/pdf/suicide-factsheet.pdf.

Centers for Disease Control and Prevention. Suicide: Facts at a Glance. 2015; https://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf

Centers for Disease Control and Prevention. Suicide: Risk and Protective Factors. 2018; https://www.cdc.gov/violenceprevention/suicide/riskprotectivefactors.html.

Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). Atlanta, GA: National Center for Injury Prevention and Control. 2018; https://www.cdc.gov/injury/wisqars/index.html.

Cheng Q, Li H, Silenzio V, Caine ED. Suicide contagion: A systematic review of definitions and research utility. PLoS One. 2014;9(9):e108724.

Copeland WE, Wolke D, Angold A, Costello EJ. Adult psychiatric outcomes of bullying and being bullied by peers in childhood and adolescence. JAMA Psychiatry. 2013;70(4):419-426.

Cunningham PJ. Beyond parity: primary care physicians' perspectives on access to mental health care. Health Affairs (Millwood). 2009;28(3):w490-501.

Curtin SC, Warner M, Hedegaard H. Increase in suicide in the United States, 1999-2014. NCHS Data Brief. Hyattsville, MD: National Center for Health Statistics; 2016.

Dahlberg LL, Krug EG. Violence-a global public health problem. In: Krug EG, Dahlberg LL, Mercy JA, Zwi AB, Lozano R, eds. World Report on Violence and Health. Geneva, Switzerland: World Health Organization; 2002:1-21.

De Silva MJ, McKenzie K, Harpham T, Huttly SR. Social capital and mental illness: a systematic review. Journal of Epidemiology & Community Health. 2005 Aug 1;59(8):619-27.

Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. Childhood Abuse, Household Dysfunction, and the Risk of Attempted Suicide Throughout the Life Span: Findings From the Adverse Childhood Experiences Study. JAMA. 2001;286(24):3089–3096.

Embry DD. The Good Behavior Game: A best practice candidate as a universal behavioral vaccine. Clinical child and family psychology review. 2002 Dec 1;5(4):273-97.

Etzersdorfer E, Sonneck G. Preventing suicide by influencing mass-media reporting. The Viennese experience 1980–1996. Archives of Suicide Research. 1998 Jan 1;4(1):67-74.

Felitti VJ, Anda RF, Nordenberg D, Williamson DF, et al. Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. American Journal of Preventive Medicine. 1998;14(4):245-58.

Fraser L, Burnell M, Salter LC, et al. Identifying hopelessness in population research: a validation study of two brief measures of hopelessness. BMJ Open. 2014;4(5):e005093.

Haddon W. Advances in the epidemiology of injuries as a basis for public policy. Public Health Reports. 1980;95(5):411-421.

Harris KM and Udry, JR. National Longitudinal Study of Adolescent to Adult Health (Add Health), 1994-2008 [Public Use]. Ann Arbor, MI: Carolina Population Center, University of North Carolina-Chapel Hill [distributor], Inter-university Consortium for Political and Social Research [distributor], 2017-10-24. https://doi.org/10.3886/ICPSR21600.v18

Harris EC, Barraclough B. Excess mortality of mental disorder. British Journal of Psychiatry. 1998;173:11-53.

Haw C, Hawton K, Niedzwiedz C, Platt S. Suicide clusters: A review of risk factors and mechanisms. Suicide & life-threatening behavior. 2013;43(1):97-108.

Heinrich LM, Gullone E. The clinical significance of loneliness: a literature review. Clinical psychology review. 2006;26(6):695-718.

Isaac M, Elias B, Katz LY, Belik SL, Deane FP, Enns MW, Sareen J, Swampy Cree Suicide Prevention Team (12 members). Gatekeeper training as a preventative intervention for suicide: a systematic review. The Canadian Journal of Psychiatry. 2009 Apr;54(4):260-8.

Joiner TE. The clustering and contagion of suicide. Current Directions in Psychological Science. 1999;8(89-92).

Kaminski JW, Puddy RW, Hall DM, Cashman SY, Crosby AE, Ortega LAG. The relative influence of different domains of social connectedness on self-directed violence in adolescence. Journal of Youth and Adolescence. 2010; 39:460-73. Epub 2009.

Kann L, McManus T, Harris WA, Shanklin SL, Flint KH, Hawkins J, Zaza S. Youth risk behavior surveillance-United States, 2015. MMWR Surveillance Summaries 2016; 65 Suppl 6, 1-174.

Kroenke K, Spitzer RL, Williams JB. The patient health questionnaire-2: validity of a two-item depression screener. Medical Care. 2003;41:1284-1294.

Lippman LH & Moore KA. Flourishing Children Positive Indicators Development Project Cognitive Interview Protocols. https://www.childtrends.org/wp-content/uploads/2013/05/Child_Trends-2012-08-21-FCPI-CIProtocol. PDF. 2010-2011.

Logan JE, Crosby AE, Hamburger ME. Suicidal Ideation, Friendships with Delinquents, Social and Parental Connectedness, and Differential Associations by Sex: Findings among a High-Risk Pre/Early Adolescent Population. Crisis 2011; 6:1-11.

Merikangas KR, He JP, Burstein M et al. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Survey Replication—Adolescent Supplement (NCS-A). Journal of American Academy of Child and Adolescent Psychiatry. 2010:49(10):980-989.

Nanayakkara S, Misch D, Chang L, Henry D. Depression and exposure to suicide predict suicide attempt. Depression and anxiety. 2013;30(10):991-996.

Niederkrotenthaler T, Sonneck G. Assessing the impact of media guidelines for reporting on suicides in Austria: interrupted time series analysis. Australian and New Zealand Journal of Psychiatry. 2007 Jan 1;41(5):419-28.

Pitman A, Osborn D, King M, Erlangsen A. Effects of suicide bereavement on mental health and suicide risk. The Lancet Psychiatry. 2014 Jun 1;1(1):86-94.

Robertson EB, David SL, Rao SA. Preventing drug use among children and adolescents: A research-based guide for parents, educators, and community leaders. National Institute on Drug Abuse (NIDA). 2003 Oct.

Office of the Surgeon General & National Action Alliance for Suicide Prevention. 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.

Ohio Department of Health. Ohio Youth Risk Behavior Survey 2013. https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/chss/adolescent-health/2013-illegal-and-prescription-drugs-ppt.pdf?la=en. Accessed July 9, 2018.

Pollock LR, Williams JM. Problem-solving in suicide attempters. Psychological medicine. 2004 Jan;34(1):163-7.

Russell ST, Joyner K. Adolescent sexual orientation and suicide risk: Evidence from a national study. American Journal of public health. 2001 Aug;91(8):1276-81.

Simonetti JA, Mackelprang JL, Rowhani-Rahbar A, et al. Psychiatric comorbidity, suicidality, and in-home firearm access among a nationally representative sample of adolescents. JAMA Psychiatry. 2015;72(2):152-159.

Stone DM, Bartholow B, Crosby A, Davis S, Wilkins N. Preventing Suicide: A Technical Package of Policy, Programs, and Practices. Atlanta, GA: National Center for Injury Prevention and Control, U.S. Centers for Disease Control and Prevention; 2017.

Stone DM, Simon TR, Fowler KA, Kegler SR, Yuan K, Holland KM, Ivey-Stephenson AZ, Crosby AE. *Vital Signs:* Trends in State Suicide Rates — United States, 1999–2016 and Circumstances Contributing to Suicide — 27 States, 2015. MMWR Morb Mortal Wkly Rep 2018;67:617–624.

Sullivan EM, Annest JL, Simon TR, Luo F, Dahlberg LL. Suicide trends among persons aged 10-24 years–United States, 1994-2012. MMWR Morb Mortal Wkly Rep. 2015;64(8):201-205.

Twenge JM, Joiner TE, Rogers ML, Martin GN. Increases in depressive symptoms, suicide-related outcomes, and suicide rates among U.S. adolescents after 2010 and links to increased new media screen time. Clinical Psychological Science. 2018;6(1):3-17.

Ungar M, Liebenberg L. Assessing resilience across cultures using mixed methods: Construction of the child and youth resilience measure. Journal of Mixed Methods Research. 2011 Apr;5(2):126-49.

Wang PS, Demler O, Kessler RC. Adequacy of treatment for serious mental illness in the United States. American Journal of Public Health. 2002;92(1):92-98.

Whitley R, McKenzie K. Social capital and psychiatry: review of the literature. Harvard review of psychiatry. 2005 Jan 1;13(2):71-84.

Wilkins N, Tsao B, Hertz M, Davis, R, Klevens, J. Connecting the Dots: An Overview of the Links Among Multiple Forms of Violence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, Oakland, CA: Prevention Institute; 2014.

Wolfe KL, Nakonezny PA, Owen VJ, et al. Hopelessness as a predictor of suicide ideation in depressed male and female adolescent youth. Suicide & life-threatening behavior. 2017.

World Health Organization. *Suicide prevention: a global imperative*. Geneva, Switzerland: WHO Press; 2014.