



STATE OF IOWA DEPARTMENT OF  
**Health** AND **Human**  
SERVICES

Iowa Youth Risk Behavior Survey: 2021 Findings

September 2023

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## Introduction

This report explores prevalence estimates and trends in youth risk behavior from the 2021 Iowa Youth Risk Behavior Survey (YRBS). The Iowa YRBS has been conducted biennially during the spring (January-June) of odd-numbered years among students in grades 9-12 enrolled in Iowa public high schools. Due to the COVID-19 pandemic, the 2021 Iowa YRBS administration was postponed until fall (September-December 2021) to accommodate ongoing school closures and virtual and hybrid school instruction models in use during spring 2021. The Iowa YRBS provides comparable data across survey years and with national and other jurisdictional YRBS data.

The questionnaire included demographic questions on age, sex, grade, ethnicity, race, sexual orientation, and gender identity. Except those assessing height, weight and ethnicity, all questions were multiple choice with a maximum of eight mutually exclusive response options and only one possible answer per question. Topics on the 2021 Iowa YRBS include but are not limited to: substance use, sexual behavior, unintentional injury and violence, dietary behaviors, physical activity, weight status and adverse childhood experiences (ACEs).

The Iowa YRBS is an important tool for measuring changes in critical adolescent health behaviors and experiences over time. These results help in understanding the factors that contribute to the leading causes of illness, death and disability among youth and young adults. Results from the 2021 Iowa YRBS presented in this report are presented as weighted prevalence estimates (see Methodology) and are representative of all Iowa public high school students in grades 9 through 12.

Iowa YRBS survey data is used to inform data-driven decision making related to services and policies at the state and local levels. Biennial administration of the Iowa YRBS allows for assessment of change over time in the health behaviors and experiences of Iowa high school students. This data is also used to monitor the progress made towards the state's Health Improvement Plan<sup>1</sup> (Healthy Iowans) and the national Healthy People 2030<sup>2</sup> objectives.

The data collected through the YRBS can be analyzed by demographic characteristics (sex, race/ethnicity, age, grade level, disability status and sexual orientation and gender identity). This report depicts analyses across different health behaviors and experiences of youth and identifies disparities within and across population subgroups. When interpreting these results, it is imperative to understand and recognize that there are many factors outside of youth's behavioral choices that impact their health. These include other individual, family, peer, school, economic and environmental factors that youth experience where they live, learn, work and play. The Iowa Department of Health and Human Services (HHS) is committed to building health equity for all communities (see more at <https://hhs.iowa.gov/Health-Equity>).

We would like to recognize that youth and their families experienced many disruptions and challenges during the COVID-19 pandemic that impacted their health and well-being. The prevalence rates reported from the 2021 YRBS may certainly be unique to the time period in which they were collected but also shed light on the impacts on youth stemming from or exacerbated by the pandemic.

## Executive Summary

### Weight Status, Nutrition, & Physical Activity

Over 30% of youth in Iowa were overweight or obese in 2021. Among Hispanic youth, the percentage reaches about 46%. The percentage of overweight and obese adolescents has remained unchanged from 2011 to 2021. Rates of fruit and vegetable consumption have also remained unchanged over the last 10 years. Additionally, youth in Iowa reported a lower prevalence of milk consumption and pop/soda consumption. The rate of breakfast consumption has remained unchanged. Physical inactivity among youth has increased since 2011, especially among males and White youth.

### Vehicle Safety & Substance Use

One out of four youth have engaged in risky driving involving alcohol. Although there has been a decrease in the percentage of students who rode with a driver who had been drinking alcohol over the past 10 years, Iowa's rate (19%) is higher than the national rate (14.1%). No change was reported in the percentage of youth who have driven under the influence of alcohol since 2011, and rates are similar to what is reported nationally. Less than half of youth reported cell phone use while driving, but the prevalence increases with grade level. This percentage has decreased over the past 10 years, but the prevalence among Iowa youth is higher national youth.

*Tobacco.* Cigarette use among youth has declined over the past 10 years – with less than 5% of youth currently smoking cigarettes. However, the current use of electronic vapor products (e-vapor) has increased from 9% in 2017 to 16.4% in 2021. *Alcohol.* There has been a decline in current alcohol use among youth over the past 10 years, but not in the rate of binge drinking. The decline in current alcohol use may be attributed to a lower percentage of males reporting current alcohol use in 2021 than in 2019. Still, about one out of five youth currently drink alcohol and one out of 10 are binge drinkers. *Marijuana.* The rate of ever using marijuana or currently using marijuana has remained unchanged since 2011. Current e-vapor product use, current alcohol use and binge drinking, ever using marijuana, and current marijuana use increase with grade level.

### Sexual Behavior & Pregnancy Prevention

Sexual activity among youth has decreased from 43.9% in 2011 to 29.3% in 2021 of youth ever having had sex. Being currently sexually active increases with grade level.

Compared to national rates, Iowa youth reported similar rates of a high number of partners, alcohol or drug use before last sexual intercourse, HIV or STD testing and condom use. Rates among Iowa youth were higher for birth control use and the use of dual pregnancy prevention methods than what was reported nationally. Condom use has declined from 61.4% in 2011 to 48.1%.

### School Safety & Bullying

Over the past 10 years, the percentage of youth who carried a gun on at least one day in the past month has decreased. Physical fighting among youth has decreased over the past 10 years, but males report higher levels than females. Although these trends are promising, rates of being bullied on school property as well as being electronically bullied were higher among Iowa youth than among youth nationally. Consequently, the percentage of youth who did not go to school due to a safety concern has doubled from 4% in 2011 to 8.3% in 2021. Among Hispanic youth, the percentage climbs to 16.1%.

### Mental Health & Suicidality

Two out of five (39.1%) youth have experienced persistent feelings of sadness or hopelessness in the past year, which has increased from 22.8% in 2011 and more recently from 33.3% in 2019. Among LGBTQ+ youth, this percentage rises to 67.7%. Over half of Asian students reported this. These feelings remain significantly higher among females than males.

About one-third of youth reported having poor mental health specifically during the pandemic. Telemedicine services, including mental health care, and drug and alcohol counseling, were utilized by about 12% of all youth during the pandemic. Only one out of five students who reported poor mental health during the pandemic also used telemedical services during the pandemic.

An estimated 33,377 public high school students in Iowa reported seriously considering suicide in the past year. The prevalence of considering suicide, making a plan about suicide, suicide attempts, and injurious suicide attempts have all increased among youth since 2011. Two out of five students with a disability (39.2%) and about half of LGBTQ+ students (45.9%) considered suicide in the past year. The prevalence of suicidal thoughts, plans, and attempts remains higher among females than males. Every student who was injured by a suicide attempt in the past year reported persistent feelings of sadness and hopelessness within that same time frame.

*Continued on next page*

## Positive Youth Development

In the 2021 YRBS, youth who reported closeness to people at school or being able to talk to friends or family about their feelings experienced a lower prevalence of prolonged sadness or hopelessness, indicating the protective nature of positive connections among youth and their family, friends, and adults at their school.

## Adverse Childhood Experiences (ACEs)

In the 2021 YRBS, youth reported on adverse childhood experiences including 1) verbal violence by a parent or adult in the household, 2) sexual violence by an adult at least 5 years older, 3) physical violence by a parent or adult, 4) living with someone in their home with a problem with alcohol or drugs, 5) living with someone in their home with mental health conditions, 6) witnessing domestic violence, and 7) separation from parent/guardian due to incarceration. Over three-quarters of Iowa youth have experienced at least one ACE (77.6%). As the number of ACEs increase, so does the prevalence of depressive symptoms and poor mental health. For example, among youth who experience no ACEs, 11.6% reported prolonged sadness or hopelessness; this percentage jumps to 80.8% among youth who reported experiencing four to seven ACEs.

## Health Disparities among Iowa Youth

Two Iowa high school student subgroups experience disparities on many YRBS measures. Disparities among youth with a disability and LGBTQ+ youth are profound. These disparities span many areas – from substance use and mental health to nutrition and physical activity.

LGBTQ+ youth reported a lower prevalence of sports participation as compared to their heterosexual peers. The prevalence of physical inactivity, alcohol-related risky driving, and ever using marijuana were higher among LGBTQ+ youth. Although many youth reported mental health challenges, mental health difficulties were especially significant among LGBTQ+ youth. Prolonged sadness and hopelessness, suicidal thoughts, making a plan for suicide, attempting suicide, and experiencing an injurious suicide attempt were all more prevalent among LGBTQ+ youth than heterosexual youth.

Students with a disability reported a higher prevalence of risky behaviors and substance use including alcohol-related risky driving, current e-vapor use, current alcohol use, and marijuana use. Students with a disability reported a higher prevalence of not going to school due

to safety concerns, adverse mental health challenges, including prolonged sadness and hopelessness, suicidal thoughts, making a plan for suicide, and attempting suicide than their peers without a disability. Students with a disability also indicated lower prevalence of milk consumption and sports participation as compared to their peers without a disability.

Each of the seven adverse childhood experiences (ACEs) noted previously were more prevalent among LGBTQ+ youth and youth with a disability than among heterosexual youth and youth without a disability. Dating violence was also more prevalent among both subgroups of young people.

# Methodology

## Questionnaire

In 2021, the Iowa YRBS questionnaire consisted of 99 questions. Of those, 78 questions were core questions from the standard questionnaire provided by Centers for Disease Control and Prevention (CDC). Twenty-one (21) questions were added to the standard questionnaire that reflected areas of interest for Iowa HHS and other partners. Of those, 16 questions measured experiences with Adverse Childhood Experiences (ACEs). Subject matter experts from Iowa HHS and partners' proposed changes, additions and deletions to the questionnaire using the standard questionnaire and a list of optional questions tested for reliability and provided by the CDC. The wording of each question, including recall periods, response options, and operational definitions for each variable can be found in the 2021 Youth Risk Behavioral Surveillance System documentation available at <https://www.cdc.gov/healthyyouth/data/yrbs/data.htm>.

The questionnaire was provided to participating sampled schools electronically using Qualtrics software. Paper questionnaires, pencils and Scantron response sheets were also available to schools. To ensure anonymity, students did not provide names, birthdates, Social Security numbers, student numbers or any other personally-identifying information on the survey.

## Sampling

The 2021 Iowa YRBS sampling frame consisted of all Iowa regular public high schools with students enrolled in grades 9-12. Alternative schools, special education schools, parochial schools, charter schools, and other private schools were excluded. The sampling frame was constructed from data files obtained from the Iowa Department of Education. The first stage sampling frame comprised 331 Iowa public high school buildings.

A two-stage, cluster sampling design was used to produce a representative sample of students in grades 9-12 in Iowa. In the first sampling stage, schools were selected with probability proportional to school enrollment size. A total of 35 schools were selected. In the second sampling stage, intact classes of a required subject or intact classes during a required period (for example, first period) were selected randomly within those recruited sampled schools. All students in sampled classes who could independently complete the survey at the school building were eligible to participate. Virtual and hybrid classrooms and students attending class virtually were not eligible. Refusals at the school-, class-, or student-levels were not replaced.

## Data Collection Procedures

Required protocol for Iowa YRBS data collection was designed by the CDC. Data collection was conducted consistent with applicable state law and HHS policy. Survey procedures were designed to protect students' privacy by allowing for anonymous participation. Participation was voluntary. Passive parental permission procedures were followed before survey administration. During survey administration, students completed the self-administered electronic or paper questionnaire during one class period (typically 45 minutes).

## Response Rates

In 2021, the Iowa YRBS response rate was 57%, representing 20 of the 35 sampled eligible schools. The student response rate was 89%, representing 1,396 students who submitted questionnaires out of the 1,567 sampled students. The overall response rate, found by multiplying the school response rate by the student response rate, was 51%. The data set was cleaned and edited for discrepancies. Quality control measures eliminated any questionnaire with 20 or fewer responses after editing. Any questionnaire which contained the same answer to 15 or more consecutive questions was also excluded. A total of 1,387 questionnaires were usable after data editing.

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## Methodology, Cont.

### Nonresponse Bias Analyses and Weighting

Prior to 2019, an overall response rate of 60% or greater was required by CDC to weight the data to be representative of the Iowa public high school student population in grades 9-12. Due to declining survey participation rates across many YRBS jurisdictions, CDC now conducts a nonresponse bias analysis on site-specific data where the overall response rate is below 60%. This analysis allows CDC to determine if the data can be weighted for representativeness.

In the 2021 Iowa YRBS cycle, CDC conducted a nonresponse bias analysis on Iowa's data. This analysis compared responding and nonresponding schools on school enrollment size (small, medium, or large), a measure of each school's level of poverty (indicated by the percentage of students at the school who were eligible for free or reduced-price lunch, and locale type (city, suburban, town, or rural). The analysis also compared responding and nonresponding students by grade and weighted sample and population percentages by grade, sex, race and ethnicity. Limited statistically significant differences between comparison groups were found, and data are presented as weighted prevalence rates that are representative of all Iowa public high school students in grades 9-12.

The weighted results can be used to make important inferences concerning health-related behaviors and experiences of all regular public high school students in grades 9 through 12. The tables in this report present prevalence estimates (the proportion or percentage of individuals reporting a specific characteristic) and an associated 95% confidence interval (95% CI).

### Limitations

The 2021 Iowa YRBS findings are subject to at least five limitations. First, the data in this report apply only to students in Iowa's regular public high schools in grades 9-12. Homeschooled students, students in private or charter schools, students in virtual or hybrid classes, and persons who do not attend school are not included. Therefore, the data are not representative of all persons in this age group. Second, the CDC found that all survey questions demonstrated strong test-retest reliability; even so, underreporting and overreporting are possible, but cannot be determined. Third, YRBS data analyses only indicate association between variables, not causality. The survey is not descriptive and does not provide explanations for any observed trends. Fourth, because the 2021 Iowa YRBS was administered in the fall semester rather than in the spring semester, this may affect comparisons with previous Iowa YRBS cycles administered in spring semesters. Finally, impacts from and precautions of COVID-19 might have reduced school and student participation.

### Data Availability and Dissemination

Iowa YRBS data collected between 1997 and 2021 are available through Youth Online (<https://nccd.cdc.gov/Youthonline/App/Default.aspx>) and YRBS Explorer (<https://yrbs-explorer.services.cdc.gov>). Iowa-specific data products from the 2021 YRBS can be found at: <https://hhs.iowa.gov/php/Iowa-Youth-Health-Assessment-Program>. Additional data analyses and products can be requested at the contact information listed on page I.



## Demographics of the 2021 Iowa YRBS Students

In 2021, 1,387 public high school students including 668 males and 711 females in grades 9 through 12 completed the Iowa YRBS questionnaire in their school. The corresponding table presents the distribution of this sample of students by:

- Sex
- Sexual orientation and gender identity
- Race/ethnicity
- Grade
- Disability status

Demographic Characteristics (n=1,387)	Weighted Percentage (%)
<b>Sex</b>	
Female	51.8
Male	48.2
<b>Sexual Orientation &amp; Gender Identity</b>	
LGBTQ <sup>+a</sup>	25.2
Heterosexual <sup>b</sup>	74.8
<b>Race/Ethnicity</b>	
Black, Non-Hispanic	5.7
Hispanic/Latino	12.3
White, Non-Hispanic	74.7
Another Race <sup>c</sup> , Non-Hispanic	2.8
Multiple Races, Non-Hispanic	4.4
<b>Grade</b>	
9 <sup>th</sup>	26.2
10 <sup>th</sup>	25.2
11 <sup>th</sup>	24.3
12 <sup>th</sup>	24.3
<b>Disability Status</b>	
Youth with a disability <sup>d</sup>	49.5
Youth with no disabilities	50.5

Note. Missing data was excluded from all analyses. *This was followed for subsequent data tables throughout the report.*

### YRBS Demographic Measures Used, 2021

<sup>a</sup>Youth who indicate their sexual identity to be gay or lesbian, bisexual, describe it in some other way, or are unsure about their sexual identity (questioning) OR who indicate that they consider themselves to be transgender. Missing data is excluded from the analysis: those who were unsure what the sexual identity question was asking, unsure what the sex at birth question was asking or were unsure if they were transgender, and if both questions were left blank. ***This subgroup is used throughout the following report.***

<sup>b</sup>Youth who indicate their sexual orientation to be heterosexual (straight) AND their consider their gender identity to be not transgender. ***This subgroup is used throughout the following report.***

<sup>c</sup>Includes American Indian or Alaska Native, Asian, or Native Hawaiian or Other Pacific Islander responses to “What is your race?” ***Due to small counts, subsequent analyses by race/ethnicity may combine multiple racial/ethnic categories. In most analyses in the subsequent report list Asian youth as a separate demographic.***

<sup>d</sup>Youth who have serious difficulty concentrating, remembering, or making decisions because of a physical, mental, or emotional problem OR who have any physical disabilities or long-term health problems. ***This variable is used throughout the following report.***

# Weight Status, Nutrition, & Physical Activity

## WEIGHT STATUS

Childhood obesity is a problem in the United States, and some groups of children and adolescents are more affected than others.<sup>3</sup> BMI categories for children and adolescents are based on sex- and age-specific percentile curves and can be used to monitor the weight gain of children and teens from ages 2 to 19. Many factors contribute to excess weight gain, including behavior, genetics, and societal and community-level factors.<sup>4</sup> A high BMI-for-age percentile is related to clinical risk factors for cardiovascular disease in childhood and young adulthood.<sup>5</sup>

- The prevalence rate of obesity among Iowa youth was 15.8% in 2021; 31.8% of youth were overweight or obese.
- The rate of overweight or obesity among all youth has not statistically changed from 2011 to 2021 (14.5% to 16% for overweight; 12.3% to 15.8% for obesity).
- About half of Hispanic youth (45.6%) and two out of five LGBTQ+ youth (40%) were overweight or obese.
- Rates did not statistically differ by sex, sexual orientation and gender identity, grade level or disability status.

Demographic Characteristics	Obesity		Overweight & Obesity	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	15.8	(12.3-20.2)	31.8	(27.6-36.1)
<b>Sex</b>				
Female	12.1	(8.3-17.4)	28.0	(22.1-33.8)
Male	19.7	(15.1-25.3)	35.9	(30.9-40.9)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	20.8	(14.7-26.9)	40.0	(31.5-48.5)
Heterosexual	14.8	(11.4-18.1)	29.9	(25.7-34.1)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	37.8	(21.4-54.3)
Hispanic/Latino	19.4	(13.6-26.8)	45.6	(35.4-55.7)
Asian	*	*	*	*
Another Race	*	*	*	*
White, Non-Hispanic	15.0	(11.4-19.5)	29.5	(24.5-34.6)
Multiple Races	13.8	(7.9-22.9)	24.1	(13.3-34.8)
<b>Grade</b>				
9 <sup>th</sup>	20.3	(9.0-31.6)	34.2	(20.9-47.5)
10 <sup>th</sup>	13.6	(8.6-18.6)	33.3	(30.0-36.7)
11 <sup>th</sup>	15.0	(10.5-19.6)	30.7	(24.8-36.6)
12 <sup>th</sup>	14.4	(10.3-18.5)	29.3	(24.3-34.3)
<b>Disability Status</b>				
Youth with a disability	17.0	(11.7-22.2)	36.5	(29.0-43.9)
Youth with no disabilities	15.6	(12.0-19.2)	28.7	(24.4-33.0)

\*Data is suppressed due to a numerator of less than 6, a denominator of less than 30 and/or a relative standard error of >30%. This notation is consistent throughout the report.

### YRBS Weight Status Measures Used, 2021

**Obesity:** Percentage of students who had obesity ( $\geq$  95<sup>th</sup> percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)

**Overweight:** Percentage of students who were overweight ( $\geq$  85<sup>th</sup> percentile but  $<$  95<sup>th</sup> percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)

**Overweight and obesity:** Percentage of students who were overweight ( $\geq$  85<sup>th</sup> percentile but  $<$  95<sup>th</sup> percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts) OR had obesity ( $\geq$  95<sup>th</sup> percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth charts)

## FRUIT & VEGETABLE CONSUMPTION

Eating fruits and vegetables as a part of a healthy eating pattern can help reduce the risk for diet-related chronic diseases, including cardiovascular disease, type 2 diabetes, some cancers, and obesity.<sup>6</sup> A diet that includes healthy foods is important for growth during adolescence, and healthy eating behaviors may continue into adulthood.<sup>7</sup>

- Fruit consumption among youth has statistically significantly decreased from 30.9% in 2011 to 25% in 2021.
- There has not been a statistical change in vegetable consumption over the last 10 years among youth.
- One-quarter of youth ate fruit or drank 100% fruit juices 2 or more times/day.
- One out of 10 youth (10.9%) ate vegetables 3 or more times/day.
- There were no statistical differences between fruit (2 or more times/day) or vegetable consumption (3 or more times/day) by the demographic categories analyzed.

Demographic Characteristics	Fruit Consumption		Vegetable Consumption	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	25.0	(22.5-27.7)	10.9	(8.8-13.5)
<b>Sex</b>				
Female	23.2	(19.7-27.1)	8.4	(6.0-11.7)
Male	26.7	(22.3-31.6)	13.5	(10.1-17.8)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	24.2	(18.6-29.8)	9.1	(4.6-13.6)
Heterosexual	25.1	(20.4-29.7)	10.9	(8.4-13.5)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	30.0	(16.6-47.9)	12.2	(6.1-23.1)
Hispanic/Latino	31.0	(24.9-37.9)	15.2	(8.7-25.2)
Asian	*	*	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	23.3	(20.5-26.4)	9.4	(6.9-12.6)
Multiple Races, Non-Hispanic	29.0	(20.3-39.7)	18.5	(11.9-27.5)
<b>Grade</b>				
9 <sup>th</sup>	28.1	(22.9-33.3)	*	*
10 <sup>th</sup>	25.4	(20.3-30.5)	11.4	(8.5-14.2)
11 <sup>th</sup>	25.6	(21.4-29.9)	12.6	(9.4-15.8)
12 <sup>th</sup>	20.1	(16.1-24.2)	9.6	(4.7-14.5)
<b>Disability Status</b>				
Youth with a disability	25.9	(22.1-29.6)	11.4	(7.7-15.0)
Youth with no disabilities	23.9	(19.1-28.6)	10.4	(8.3-12.4)

### YRBS Nutrition Measures Used, 2021

**Fruit consumption:** Percentage of students who ate fruit or drank 100% fruit juices two or more times per day (such as orange juice, apple juice, or grape juice) during the 7 days before the survey

**Vegetable consumption:** Percentage of students who ate vegetables three or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrot, or other vegetables) during the 7 days before the survey

## OTHER NUTRITIONAL PRACTICES: SODA/POP, MILK, AND BREAKFAST

Sugar-sweetened beverages, such as soda, fruit drinks, sports and energy drinks are not a component of the USDA Dietary Patterns, whereas calcium and vitamin D are considered dietary components of public health concern due to low intakes being associated with health concerns.<sup>6</sup> Decreasing consumption of sugar-sweetened beverages will help youth achieve a healthy dietary pattern.<sup>6</sup> School meal programs, such as the School Breakfast Program and provide one-third of daily calories and play a crucial role in the development of adolescents’ healthy dietary pattern.<sup>6</sup>

- The percentage of students who did not consume breakfast in the past week has not statistically changed since 2017 (16.4% vs. 19.1% in 2021). This is similar to the national rate (22%).
- Soda/pop consumption has statistically significantly decreased from 28.1% of youth consuming soda/pop one or more times/day in the past week in 2011 to 17.8% in 2021. This is similar to the national rate of 14.7%.
- Males consume soda or pop one or more times/day (24%) at a statistically higher rate than females (12%). The same trend was observed for milk consumption (males: 42.1% vs. females: 20.3%).

Demographic Characteristics	Soda/Pop Consumption		Milk Consumption	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	17.8	(14.0-22.3)	30.7	(28.0-33.6)
<b>Sex</b>				
Female	12.0	(9.4-15.3)	20.3	(17.0-24.1)
Male	24.0	(17.3-32.2)	42.1	(36.8-47.7)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	21.1	(14.1-28.0)	21.2	(16.6-25.9)
Heterosexual	16.9	(12.6-21.2)	34.1	(30.3-37.9)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	19.7	(12.1-27.4)	29.4	(21.4-37.4)
Asian	0.0	-	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	17.8	(13.4-22.2)	32.7	(30.5-34.8)
Multiple Races, Non-Hispanic	21.6	(10.6-32.6)	24.6	(16.2-32.9)
<b>Grade</b>				
9 <sup>th</sup>	14.3	(8.1-20.5)	31.0	(26.2-35.8)
10 <sup>th</sup>	18.3	(14.6-21.9)	31.1	(24.9-37.4)
11 <sup>th</sup>	20.5	(12.7-28.4)	35.3	(28.7-41.8)
12 <sup>th</sup>	17.9	(11.6-24.2)	25.4	(17.1-33.6)
<b>Disability Status</b>				
Youth with a disability	18.7	(12.2-25.2)	25.2	(19.3-31.1)
Youth with no disabilities	16.8	(13.8-19.9)	37.4	(32.2-42.5)

- Youth with a disability (25.2%) have a statistically significant lower prevalence of consuming milk one or more times/day than those with no disabilities (37.4%).
- Soda/pop and milk consumption did not differ statistically significantly by grade level.

### YRBS Nutrition Measures Used, 2021

**Breakfast consumption, none:** Percentage of students who did not eat breakfast during the 7 days before the survey

**Soda/pop consumption:** Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day (such as Coke, Pepsi, or Sprite, not counting diet soda or diet pop) during the 7 days before the survey

**Milk consumption:** Percentage of students who drank one or more glasses of milk per day (counting the milk they drank in a glass or cup, from a carton, or with cereal and counting the half pink of milk served at school as equal to one glass) during the 7 days before the survey

## PHYSICAL ACTIVITY

Regular physical activity, including aerobic, muscle-strengthening, and bone-strengthening activity, is important for cardiorespiratory fitness, building strong bones and muscles, and reducing the risk of health conditions such as type 2 diabetes, obesity, and heart disease.<sup>8</sup> Sports participation is one way to increase physical activity among youth and has the potential to improve physical and mental health, as well as social development.<sup>9-12</sup> Disparities are found in sports participation among particular subgroups including age, sex, race, disability status and family socioeconomic status.<sup>13-15</sup>

- Any physical activity among youth has statistically significantly declined from 91% in 2011 to 86.7% in 2021. The rate among Iowa youth is not statistically different from the national rate (84.2%).
- Sports participation has statistically significantly decreased from 64.1% in 2011 to 56.9% in 2021, but there was not a statistically significant decline from 2019 to 2021.
- There was a statistically significant 10% decline in prevalence rate of sports participation among males from 2011 to 2021.
- Sports participation is statistically lower among LGBTQ+ youth (35.2%) and youth with a disability (50.7%) than heterosexual youth and those without a disability (64.2%, 63.2% respectively).

Demographic Characteristics	Any Physical Activity		Sports Participation	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	86.7	(83.6-89.8)	56.9	(52.4-61.4)
<b>Sex</b>				
Female	85.9	(82.1-89.6)	55.6	(49.6-61.5)
Male	87.8	(83.2-92.3)	58.7	(54.2-63.0)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	77.2	(73.5-80.9)	35.2	(24.3-46.0)
Heterosexual	89.9	(86.7-93.0)	64.2	(60.1-68.2)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	*	*	48.9	(38.4-59.5)
Asian	*	*	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	11.6	(9.0-14.2)	59.9	(54.3-65.5)
Multiple Races, Non-Hispanic	15.0	(8.8-21.2)	55.0	(42.9-67.1)
<b>Grade</b>				
9 <sup>th</sup>	90.8	(88.7-92.9)	63.3	(57.1-69.4)
10 <sup>th</sup>	86.3	(82.5-90.0)	63.1	(56.9-69.2)
11 <sup>th</sup>	86.3	(82.7-89.9)	53.9	(46.4-61.3)
12 <sup>th</sup>	83.0	(73.6-92.3)	46.5	(37.5-55.5)
<b>Disability Status</b>				
Youth with a disability	85.4	(82.9-87.9)	50.7	(46.3-55.1)
Youth with no disabilities	88.3	(83.7-92.9)	63.2	(56.7-69.6)

- The prevalence of sports participation decreases by grade, but engaging in any physical activity did not statistically differ by grade level. There were no statistically significant differences in either measure by race/ethnicity.

### YRBS Physical Activity Measures Used, 2021

**Sports participation:** Percentage of students who played on at least one sports team (counting any teams run by their school or community groups) during the 12 months before the survey

**Physical activity, any:** Percentage of students who participated in at least 60 minutes of physical activity on at least 1 day (any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey);

**School physical education, daily:** Percentage of students who attended physical education (PE) classes on all 5 days (in an average week when they were in school)

# Vehicle Safety & Substance Use

## VEHICLE SAFETY

Those under the age of 20 years have the highest prevalence of distraction-related fatal crashes.<sup>16-17</sup> Those who use hand-held devices while operating a vehicle are much more likely to get into serious crashes, and drinking any alcohol increases the risk of being in a fatal crash.<sup>16-17</sup>

- There has been a statistically significant decrease in the percentage of students who rode with a driver who had been drinking alcohol in the past 10 years – from 23.8% in 2011 to 19% in 2021, which is higher than the national rate (14.1%). The percentage of students who drove a vehicle when they had been drinking has remained unchanged since 2017 (6.5% in 2017; 5.2% in 2021), and is similar to the national rate (4.6%).
- Alcohol-related risky driving was statistically more prevalent among youth with a disability (30.2%) than youth without a disability (18.5%).
- Cell phone use while driving a car has declined significantly from 55.2% in 2017 to 45.3% in 2021. The rate in Iowa is statistically higher than the national rate (36.1%).
- Cell phone use while driving statistically significantly increases with grade level (14.8% for 9<sup>th</sup> grade drivers vs. 59.2% for 12<sup>th</sup> grade drivers).
- The prevalence of risky driving (alcohol-related or using cell phone) did not statistically differ by race/ethnicity.

Demographic Characteristics	Alcohol-Related Risky Driving		Cell Phone Use While Driving	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	24.7	(20.6-28.9)	45.3	(36.7-53.8)
<b>Sex</b>				
Female	24.2	(19.6-28.8)	47.0	(36.9-57.1)
Male	25.2	(20.6-29.9)	43.7	(35.7-51.6)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	33.1	(24.9-41.2)	46.2	(35.0-57.4)
Heterosexual	22.3	(17.1-27.5)	44.8	(35.7-53.8)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	26.6	(11.1-42.0)	*	*
Hispanic/Latino	28.3	(16.2-40.3)	43.7	(26.1-61.3)
Asian	*	*	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	23.7	(19.2-28.1)	46.9	(37.9-55.9)
Multiple Races, Non-Hispanic	*	*	52.2	(35.6-68.7)
<b>Grade</b>				
9 <sup>th</sup>	25.4	(17.1-33.6)	14.8	(10.3-19.3)
10 <sup>th</sup>	24.4	(19.3-29.5)	41.9	(34.3-49.6)
11 <sup>th</sup>	24.5	(19.1-29.9)	59.6	(53.9-65.2)
12 <sup>th</sup>	24.8	(19.1-30.4)	59.2	(47.8-70.6)
<b>Disability Status</b>				
Youth with a disability	30.2	(25.4-35.1)	46.4	(36.8-55.9)
Youth with no disabilities	18.5	(14.1-22.9)	42.2	(34.3-50.0)

### YRBS Vehicle Safety Measures Used, 2021

**Drove vehicle after drinking:** Percentage of students who drove a car or other vehicle when they had been drinking alcohol (one or more times during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey)

**Rode with a drinking driver:** Percentage of students who rode with a driver who had been drinking alcohol (in a car or other vehicle, one or more times during the 30 days before the survey)

**Alcohol-related risky driving:** Percentage of students who rode with a drinking driver OR who drove a car or other vehicle when they had been drinking alcohol

**Cell phone use while driving:** Percentage of students who texted or e-mailed while driving a car or other vehicle on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey



## TOBACCO USE

E-cigarettes are the most common type of tobacco product among youth.<sup>18</sup> Factors that are associated with youth tobacco use include but are not limited to: the social and physical environment, biological and genetic factors, mental health, attitudes and beliefs, lower socioeconomic status, and accessibility of tobacco products.<sup>18</sup> There are long-term impacts of the adolescent brain’s exposure to nicotine including addiction, mood disorders, and decreased impulse control.<sup>19</sup>

- The percentage of youth who have ever tried cigarettes has statistically significantly decreased from 39.1% in 2011 to 17.4% in 2021; about 4.1% of youth currently smoke cigarettes. Iowa rates are similar to the national rates (17.8% and 3.8% respectively).
- Daily and current e-vapor product use have statistically significantly increased from 2017 to 2021 (0.9% to 4.9%, daily; 9% to 16.4%, current) - similar to the nation as a whole (5% and 18% respectively).
- Current e-vapor use statistically increases with grade level: over one-quarter of 12<sup>th</sup> graders current use e-vapor products.
- Current e-vapor use is statistically higher among youth with a disability (22.8%) than youth without a disability (8.7%).
- There were no statistically significant differences in current e-vapor use by race/ethnicity

Demographic Characteristics	Current E-Vapor Use	
	Prevalence Rate (%)	95% CI
<b>Total</b>	16.4	(12.7-20.8)
<b>Sex</b>		
Female	18.2	(13.4-24.2)
Male	14.1	(10.4-18.9)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	24.5	(17.6-31.3)
Heterosexual	13.6	(9.0-18.1)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	16.3	(3.2-29.4)
Hispanic/Latino	23.2	(16.3-30.1)
Asian	*	*
Another Race, Non-Hispanic	*	*
White, Non-Hispanic	14.8	(10.2-19.4)
Multiple Races, Non-Hispanic	27.3	(13.7-40.9)
<b>Grade</b>		
9 <sup>th</sup>	8.6	(6.2-11.7)
10 <sup>th</sup>	12.0	(8.1-17.4)
11 <sup>th</sup>	21.1	(17.4-25.4)
12 <sup>th</sup>	25.5	(19.6-32.4)
<b>Disability Status</b>		
Youth with a disability	22.8	(17.6-28.0)
Youth with no disabilities	8.7	(4.0-13.3)

### YRBS Tobacco Use Measures Used, 2021

**Cigarettes, ever tried:** Percentage of students who ever tried cigarette smoking, even one or two puffs

**Cigarettes, currently use:** Percentage of students who smoked cigarettes on at least 1 day during the 30 days before the survey

**Electronic vapor (e-vapor) product use, current:** Percentage of students who used an electronic vapor product (including e-cigarettes, vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods [such as JUUL, SMOK, Suorin, Vuse, and blu]) on at least 1 day during the 30 days before the survey

**Electronic vapor (e-vapor) product use, daily:** Percentage of students who currently used electronic vapor products daily (on all 30 days during the 30 days before the survey)



## ALCOHOL USE

Alcohol use in adolescence increases the risk of school, social, legal, and physical problems. In addition, alcohol-related motor vehicle crashes and other unintentional injuries, physical and sexual violence, memory problems, and changes in brain development are more likely to be experienced among youth who drink alcohol as compared to those who do not drink. The risk for these consequences may be greater among youth who binge drink as compared to non-binge drinkers. There is also evidence of early initiation of alcohol use being associated with an alcohol use disorder in adulthood.<sup>20</sup>

- There has been a statistically significant decline in current alcohol among youth from 37.1% in 2011 to 21.9% in 2021, but no statistically significant change in binge drinking rates since 2017 (13.4% in 2017 and 9.7% in 2021).
- There was a statistically significant decrease in current alcohol use among males from 25.5% in 2019 to 18.7% in 2021; this declining trend was not observed among females.
- One out of five youth currently drink alcohol (21.9%); one out of ten youth are current binge drinkers (9.7%).
- Youth rates of current alcohol use and current binge drinking in Iowa are similar to national rates (22.7% and 10.5% respectively) and statistically increase with grade level. Current alcohol use is statistically higher among youth with a disability (27.3%) as compared to youth without a disability (14.4%), but did not differ statistically by race/ethnicity.

Demographic Characteristics	Current Alcohol Use		Current Binge Drinking	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	21.9	(16.3-28.7)	9.7	(6.6-13.8)
<b>Sex</b>				
Female	24.8	(17.3-34.3)	10.1	(5.8-16.8)
Male	18.7	(14.7-23.4)	9.4	(6.9-12.6)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	21.6	(14.1-29.0)	10.1	(4.3-15.9)
Heterosexual	21.4	(15.6-27.2)	9.3	(5.8-12.8)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	0.0	-
Hispanic/Latino	23.5	(14.6-32.5)	*	*
Asian	*	*	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	23.0	(16.1-29.9)	11.1	(7.0-15.2)
Multiple Races, Non-Hispanic	19.6	(11.3-27.8)	*	*
<b>Grade</b>				
9 <sup>th</sup>	11.0	(7.0-16.9)	*	*
10 <sup>th</sup>	17.2	(12.3-23.5)	5.2	(3.2-8.2)
11 <sup>th</sup>	26.5	(22.4-31.1)	13.6	(10.6-17.3)
12 <sup>th</sup>	33.9	(23.5-46.1)	*	*
<b>Disability Status</b>				
Youth with a disability	27.3	(21.3-33.2)	11.8	(7.4-16.3)
Youth with no disabilities	14.4	(8.8-20.0)	5.8	(3.2-8.4)

### YRBS Alcohol Use Measures Used, 2021

**Alcohol use, current:** Percentage of students who drank at least one drink of alcohol on at least 1 day during the 30 days before the survey

**Binge drinking:** Percentage of students who had four or more drinks of alcohol in a row (female) or five or more drinks of alcohol in a row (male), within a couple of hours on at least 1 day during the 30 days before the survey

## MARIJUANA USE

Using marijuana in adolescence can harm brain development and can have negative social impacts for youth. Difficulty thinking, problem solving, and maintaining attention, problems with learning, memory, and reduced coordination can result from using marijuana in adolescence. Additionally, using marijuana can increase the risk for mental health issues, impaired driving, and the potential for addiction.<sup>20</sup>

- Among all youth, there has not been a statistically significant change in ever or currently using marijuana from 2011 to 2021; males reported a statistically significant decrease in ever using marijuana over the last 10 years – from 30.5% in 2011 to 18.7% in 2021, but not in current marijuana use (17.9% in 2011, 12.3% in 2021).
- One out of five youth have ever used marijuana (21.4%) or report current marijuana use (21.1%). Ever using marijuana is statistically higher among all US students (27.8%), and current marijuana use is similar among US (15.8%) and Iowa youth.
- One-third (33.9%) of 12<sup>th</sup> graders have ever used marijuana and one out of five (20.1%) currently use marijuana.

Demographic Characteristics	Ever Used Marijuana		Current Marijuana Use	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	21.4	(17.6-25.8)	21.1	(8.8-16.4)
<b>Sex</b>				
Female	23.7	(19.1-29.0)	11.7	(8.3-16.4)
Male	18.7	(15.4-22.5)	12.3	(9.0-16.6)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	32.3	(24.2-40.3)	18.7	(9.7-27.8)
Heterosexual	17.7	(13.9-21.4)	10.0	(6.6-13.5)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	20.0	(5.9-34.1)	*	*
Hispanic/Latino	29.4	(18.9-40.0)	20.2	(9.5-30.9)
Asian	*	*	*	*
Another Race, Non-Hispanic	*	*	*	*
White, Non-Hispanic	19.9	(15.1-24.7)	10.4	(6.6-14.2)
Multiple Races, Non-Hispanic	34.9	(23.6-46.1)	23.9	(8.2-39.7)
<b>Grade</b>				
9 <sup>th</sup>	9.5	(6.8-13.1)	4.4	(2.4-8.2)
10 <sup>th</sup>	16.3	(12.0-21.7)	*	*
11 <sup>th</sup>	27.2	(23.7-31.0)	15.7	(12.8-19.0)
12 <sup>th</sup>	33.9	(28.1-40.3)	20.1	(15.8-25.3)
<b>Disability Status</b>				
Youth with a disability	31.5	(25.3-37.8)	17.7	(12.5-23.0)
Youth with no disabilities	10.8	(7.7-13.8)	6.0	(2.9-9.1)

- Marijuana use statistically increases with grade level, is higher among youth with a disability than youth without a disability and does not statistically differ by race/ethnicity.
- A statistically higher percentage of LGBTQ+ youth (23.7%) have ever used marijuana than heterosexual youth (17.7%), but current use rates do not statistically differ by sexual orientation and gender identity.

### YRBS Marijuana Use Measures Used, 2021

**Marijuana use, ever:** Percentage of students who ever used marijuana one or more times during their life

**Marijuana use, current:** Percentage of students who used marijuana one or more times during the 30 days before the survey

# Sexual Behavior & Pregnancy Prevention

## SEXUAL ACTIVITY

During the developmental period of adolescence, youth begin to learn how to manage and express sexual feelings and desires and how to navigate romantic relationships.<sup>22</sup> Supports for healthy sexual decision making include positive relationships, access to health care, and the knowledge, attitudes, and skills necessary for protecting health.<sup>22</sup>

- Three out of 10 youth have ever had sexual intercourse (29.3%), similar to the national rate of 30%. This percentage has statistically significantly declined from 43.9% in 2011. Ever having had sexual intercourse statistically significantly increases with grade level.
- The rate of ever having sexual intercourse among males has statistically significantly declined from 2019 to 2021 (37.9% to 26.7%) but did not differ statistically significantly among females (36.7% to 31.6%).
- About one in five youth were currently sexually active, which is similar to the national rate (20.7%).
- The prevalence of ever having had sexual intercourse or being currently sexually active did not differ significantly by sex, sexual orientation and gender identity, race/ethnicity, or disability status.

Demographic Characteristics	Ever Had Sex		Currently Sexually Active	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	29.3	(22.6-37.1)	20.8	(15.9-26.8)
<b>Sex</b>				
Female	31.6	(24.5-39.7)	23.1	(17.7-29.5)
Male	26.7	(19.5-35.4)	18.2	(12.7-25.3)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	31.9	(23.5-40.3)	22.0	(16.1-27.9)
Heterosexual	28.9	(20.8-37.0)	20.7	(14.1-27.3)
<b>Race/Ethnicity<sup>b</sup></b>				
Black, Non-Hispanic	34.5	(17.7-56.3)	17.2	(9.2-29.9)
Hispanic/Latino	31.3	(22.1-42.3)	23.1	(16.0-32.0)
Asian	*	*	*	*
White, Non-Hispanic	29.1	(21.2-38.4)	21.1	(15.5-28.0)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	28.3	(16.9-43.2)	20.1	(10.6-34.7)
<b>Grade</b>				
9 <sup>th</sup>	11.1	(8.3-14.7)	7.3	(5.7-9.2)
10 <sup>th</sup>	23.1	(17.9-29.2)	14.8	(10.2-20.9)
11 <sup>th</sup>	36.8	(30.4-43.7)	27.2	(22.9-32.0)
12 <sup>th</sup>	48.5	(36.1-61.1)	36.1	(27.5-45.8)
<b>Disability Status</b>				
Youth with a disability	35.6	(26.9-44.2)	25.8	(18.2-33.3)
Youth with no disabilities	23.4	(15.5-31.3)	16.1	(10.2-22.0)

### YRBS Sexual Activity, HIV and STD Testing Measures Used, 2021

**Sexually active, current:** Percentage of students who had sexual intercourse with at least one person, during the 3 months before the survey

**Sexual intercourse, ever:** Percentage of students who ever had sexual intercourse

**Sexually transmitted disease (STD) testing:** Percentage of students who were tested for a STD other than HIV, such as chlamydia or gonorrhea during the 12 months before the survey

**Human immunodeficiency virus (HIV) testing:** Percentage of students who were ever tested for human immunodeficiency virus (HIV; not counting tests done if they donated blood)

## RISKY SEXUAL ACTIVITY, STD & HIV TESTING

Substance use is associated with behaviors that can put youth at risk for HIV infection, sexually transmitted diseases (STDs), and unintended pregnancy.<sup>23</sup> As the frequency of substance use increases, so does the likelihood of sex and the number of sex partners.<sup>24</sup> In 2020, one out of five new HIV cases in the nation were among those 13-24 years of age, and over half of the 20 million new STD cases reported nationally in 2020 were reported among those aged 15-24.

- The percentage of youth who reported sexual intercourse with four or more persons during their lifetime has statistically significantly decreased from 13.1% in 2011 to 6.4% in 2021. The state rate in Iowa is similar to the national rate (6%).
- There has not been a statistical change in reported substance use before last sexual intercourse over the last 10 years (18% in 2011, 19.5% in 2021). The state rate in Iowa is similar to the national rate (20.6%).
- The prevalence of STD testing and HIV testing among Iowa youth are not statistically different from national rates. A higher statistically higher percentage of 12<sup>th</sup> graders (8.9%) have been tested for HIV than 10<sup>th</sup> graders (3.7%). Youth with a disability (7.1% and 9% respectively) reported a statistically higher rate of HIV or STD testing than youth who did not report having a disability (1.9% and 2.1% respectively). *These analyses are not in the table.*

Demographic Characteristics	Multiple Sexual Partners		Alcohol or Drug Use & Sexual Behavior	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	6.4	(4.5-8.9)	19.5	(14.7-25.5)
<b>Sex</b>				
Female	6.1	(4.9-7.6)	18.1	(12.3-26.0)
Male	6.5	(3.8-10.7)	20.3	(13.9-28.7)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	10.0	(5.0-14.9)	31.0	(21.0-41.0)
Heterosexual	5.2	(3.3-7.2)	15.8	(8.5-23.1)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	*	*	*	*
Asian	*	*	*	*
White, Non-Hispanic	6.0	(3.8-8.1)	20.7	(11.9-27.5)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	*	*	*	*
<b>Grade</b>				
9 <sup>th</sup>	*	*	*	*
10 <sup>th</sup>	4.6	(3.7-5.6)	16.1	(9.2-26.6)
11 <sup>th</sup>	7.0	(4.7-10.2)	18.3	(13.0-25.3)
12 <sup>th</sup>	12.7	(8.4-18.9)	22.9	(14.5-34.1)
<b>Disability Status</b>				
Youth with a disability	*	*	*	*
Youth with no disabilities	9.9	(7.1-12.6)	22.8	(16.4-29.3)

### YRBS Risky Sexual Behavior Measures Used, 2021

**Alcohol or drug use and sexual behavior:** Percentage of students who drank alcohol or used drugs before last sexual intercourse among students who were currently sexually active

**Multiple sexual partners:** Percentage of students who had sexual intercourse with four or more persons during their life

## CONTRACEPTIVE USE & PREGNANCY PREVENTION

Safe and effective birth control options for adolescents who are sexually active or are considering having sex include long-reversible contraceptives (e.g. intrauterine devices (IUDs), hormonal implants), short-acting hormonal methods (e.g. pills, shot, patch), and barrier methods (e.g. condoms).<sup>25</sup> With the assistance of parents or guardians and healthcare providers, youth can consider things like effectiveness, ease of use, side effects, STD prevention, and cost before a method is chosen.<sup>26</sup>

Demographic Characteristics	Condom Use		Pregnancy Prevention Method		Dual Pregnancy Prevention Methods	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	48.1	(40.3-55.9)	46.1	(36.9-55.6)	17.0	(11.5-24.4)
<b>Sex</b>						
Female	48.3	(39.0-57.8)	49.4	(38.4-60.3)	19.6	(11.4-31.6)
Male	48.5	(39.3-57.8)	40.2	(29.8-50.7)	13.4	(8.2-21.1)
<b>Sexual Orientation &amp; Gender Identity</b>						
LGBTQ+	26.8	(12.3-41.2)	48.1	(37.6-58.5)	*	*
Heterosexual	55.1	(49.2-61.0)	44.6	(34.4-54.9)	18.4	(10.9-25.9)
<b>Race/Ethnicity</b>						
Black, Non-Hispanic	*	*	*	*	*	*
Hispanic/Latino	32.8	(23.1-42.4)	*	*	*	*
Asian	*	*	*	*	*	*
White, Non-Hispanic	51.7	(43.9-59.5)	48.7	(38.7-58.7)	20.9	(12.5-29.2)
Another Race, Non-Hispanic	*	*	*	*	*	*
Multiple Races, Non-Hispanic	*	*	*	*	*	*
<b>Grade</b>						
9 <sup>th</sup>	*	*	*	*	*	*
10 <sup>th</sup>	*	*	*	*	*	*
11 <sup>th</sup>	43.0	(29.2-56.9)	44.6	(33.3-55.9)	12.5	(7.1-18.0)
12 <sup>th</sup>	46.9	(31.8-62.0)	57.1	(36.4-77.7)	23.9	(12.7-35.1)
<b>Disability Status</b>						
Youth with a disability	43.7	(31.7-55.8)	46.9	(36.1-57.7)	16.9	(7.2-26.6)
Youth with no disabilities	53.9	(45.0-62.8)	42.4	(25.1-59.8)	16.5	(8.4-24.6)

- Among sexually active youth, 9.1% of youth reported not using any method to prevent pregnancy. Condom use has statistically significantly declined from 61.4% in 2011 to 48.1% in 2021.
- Half of youth used a condom (48.1%) or pregnancy prevention method (46.1%) during last sexual intercourse; fewer than one out of five youth used dual pregnancy prevention methods during last sexual intercourse (17%).
- Condom use among Iowa youth was similar to the national rate (51.8%), however, rates among Iowa youth were statistically higher than the national rate of 32.7% for a pregnancy prevention method used and the national rate of 10.2% for the use of dual pregnancy prevention methods during last sexual intercourse.
- Condom use, the use of a pregnancy prevention method, and using dual pregnancy prevention methods during last sexual intercourse did not differ statistically among sex, grade, or disability status.

### YRBS Pregnancy Prevention Measures Used, 2021

**Condom use:** Percentage of youth (or their partner) who used a condom during last sexual intercourse

**Pregnancy prevention, no method used:** Percentage of students who did not use any method to prevent pregnancy during last sexual intercourse with an opposite-sex partner, among students who were currently sexually active

**Pregnancy prevention, method used:** Percentage of students who used birth control pills; an IUD (such as Mirena or ParaGuard) or implant (such as Implanon or Nexplanon); or a shot (such as Depo-Provera), patch (such as OrthoEvra); or birth control ring (such as NuvaRing) before last sexual intercourse with an opposite-sex partner to prevent pregnancy, among students who were currently sexually active

**Pregnancy prevention, dual methods used:** Percentage of students who used both a condom during last sexual intercourse and birth control pills; an IUD, or implant, or a shot, or patch, or birth control ring before last sexual intercourse with an opposite-sex partner to prevent pregnancy, among students who were currently sexually active

# School Safety & Bullying

## SCHOOL SAFETY

School violence, or violence that occurs in a school setting, describes acts that are violent in nature which disrupt learning and have a negative impact on the students, school, and community. School violence can occur on school property, on the way to or from school, as well as during school-sponsored events or on the way to or from those events.<sup>27</sup>

- Approximately 3.8% of youth carried a weapon on school property at least one time in the past 30 days, which was similar to the national rate of 3.1%. A statistically higher percentage of multi-racial youth (11.2%) reported carrying a weapon on school property than White youth (3.5%).
- A statistically higher percentage of males (5.7%) have carried a weapon on school property than females (1.9%).
- The percentage of youth who did not go to school due to safety concerns has statistically increased from 4% in 2011 to 8.3% in 2021, particularly among females (3.5% to 9.9%). The 2021 Iowa rate was similar to the national rate (8.6%).

Demographic Characteristics	Carried Weapon on School Property		Did Not Go to School Due to Safety Concerns	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	3.8	(2.3-6.0)	8.3	(6.2-11.2)
<b>Sex</b>				
Female	1.9	(1.2-3.2)	9.9	(7.2-13.5)
Male	5.7	(3.5-9.4)	6.6	(4.3-10.2)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	4.4	(1.2-7.7)	12.7	(8.7-16.7)
Heterosexual	3.1	(1.4-4.8)	6.9	(4.1-9.8)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	*	*	16.1	(9.4-26.2)
Asian	*	*	0.0	-
White, Non-Hispanic	3.5	(2.0-6.3)	6.6	(4.8-9.0)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	11.2	(7.1-17.2)	18.3	(11.0-29.0)
<b>Grade</b>				
9 <sup>th</sup>	*	*	7.0	(4.3-9.7)
10 <sup>th</sup>	*	*	*	*
11 <sup>th</sup>	5.6	(2.9-8.3)	10.6	(5.2-16.0)
12 <sup>th</sup>	3.7	(1.3-6.1)	*	*
<b>Disability Status</b>				
Youth with a disability	3.3	(1.8-4.7)	14.5	(10.7-18.3)
Youth with no disabilities	1.5	(0.7-2.2)	2.5	(1.3-3.7)

- Hispanic youth and youth of multiple races reported statistically higher rates of not going to school due to safety concerns (16.1%, 18.3%) than White (6.6%) and Asian students (0%). Hispanic youth have experienced a statistically significant increase from 6.3% in 2019.
- Youth with a disability (14.5%) reported not going to school due to safety concerns at a statistically higher rate than youth without a disability (2.5%).

### YRBS School Safety Measures Used, 2021

**Did not go to school due to safety concerns:** Percentage of students who did not go to school because they felt unsafe at school or on their way to or from school on at least 1 day during the 30 days before the survey

**Carried weapon on school property:** Percentage of students who carried a weapon on school property (such as a gun, knife, or club, on at least 1 day during the 30 days before the survey



## VIOLENCE ON SCHOOL PROPERTY

Physical fighting among youth on school property is one type of school violence and is associated with unhealthy behaviors, such as substance use.<sup>27</sup> In Iowa, assault (homicide) was the third leading cause of death among those 15-19, according to 2018-2021 vital records.<sup>28</sup> Non-fatal violence often precedes fatal violence; violence in adolescence is also associated with violence in adulthood.<sup>29-31</sup>

- There has been a statistically significant decrease in any physical fighting among adolescents from 24.4% in 2011 to 17.1% in 2021. Iowa's rate is comparable to the national rate (18.3%). Physical fighting on school property has also statistically significantly decreased from 9.6% in 2011 to 6.7% in 2021. No statistically significant decline was reported from 2019 to 2021.
- There has also been statistically significant declines in physical fighting on school property among subgroups of youth over the past 10 years: 12.7% to 10.2% among males, 6.2% to 3.6% among females, and 8.3% to 5.2% among White youth.
- There was not a statistically significant change in fighting on school property across the last 10 years among Black (22.2% vs. 14.7%) or Hispanic youth (14.3% vs. 9.8%).
- Males (10.2%) reported physically fighting at school at a statistically higher rate than females (3.6%)
- One out of 10 youth with a disability reported physical fighting at school, which is statistically higher than the percentage reported among youth without a disability (3.5%).
- Rates of fighting at school did not differ statistically by sexual orientation and gender identity, race/ethnicity or grade level.

Demographic Characteristics	Physical Fight at School	
	Prevalence Rate (%)	95% CI
<b>Total</b>	6.7	(5.1-8.9)
<b>Sex</b>		
Female	3.6	(2.2-5.7)
Male	10.2	(7.6-13.6)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	6.8	(3.6-9.9)
Heterosexual	6.5	(4.8-8.2)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	14.7	(6.2-31.1)
Hispanic/Latino	9.8	(5.8-16.1)
Asian	*	*
White, Non-Hispanic	5.2	(3.8-7.2)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	10.4	(6.2-17.0)
<b>Grade</b>		
9 <sup>th</sup>	8.6	(4.7-12.4)
10 <sup>th</sup>	8.5	(5.3-11.6)
11 <sup>th</sup>	6.3	(3.4-9.2)
12 <sup>th</sup>	*	*
<b>Disability Status</b>		
Youth with a disability	10.0	(6.9-13.1)
Youth with no disabilities	3.5	(2.5-4.6)

### YRBS Violence Measures Used, 2021

**Physical fighting:** Percentage of students who were in a physical fight one or more times during the 12 months before the survey

**Physical fighting, school property:** Percentage of students who were in a physical fight on school property one or more times during the 12 months before the survey



## BULLYING

Bullying is a form of youth violence defined as “any unwanted aggressive behavior(s) by any youth or group of youth(s), who are not siblings or dating partners, that involves and an observed or perceived power imbalance, and is repeated multiple times or is likely to be repeated”.<sup>32</sup> Physical, psychological, social, or educational harm or distress can occur for the youth who is targeted. Bullying impacts victims, perpetrators, and those who witness bullying. Those who are bullied and those who bully are at risk for negative consequences.<sup>32</sup> Bullying has been linked to other forms of violence (e.g. child abuse and neglect, intimate partner violence, and sexual violence) through shared risk and protective factors.<sup>32-33</sup>

- One in five youth have been bullied at school in Iowa (19.6%), which is statistically higher than the national rate of 15%. The prevalence of bullying at school has not statistically changed since 2011 (22.5%). Similarly, the prevalence of e-bullying has not statistically changed since 2011 (16.8% vs. 18.8%), and the percentage in Iowa was statistically higher than the national rate (15.9%).
- In 2021, 33.8% of Iowa’s lesbian, gay, or bisexual youth reported being bullied at school, which is higher than the target for HP 2030.
- One-third of LGBTQ+ students were bullied at school, and three in 10 (29.4%) LGBTQ+ youth reported being e-bullied, compared to statistically lower prevalence rates among heterosexual youth (15.7% and 15.8%; see table).

Demographic Characteristics	Bullied at School		Bullied Electronically	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	19.6	(16.0-23.9)	18.8	(16.5-21.3)
<b>Sex</b>				
Female	22.8	(17.7-28.9)	24.9	(22.2-27.7)
Male	16.2	(13.8-18.9)	12.3	(10.6-14.3)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	33.0	(27.8-38.2)	29.4	(25.4-33.4)
Heterosexual	15.7	(11.7-19.8)	15.8	(13.5-18.1)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	15.6	(5.7-25.5)
Hispanic/Latino	19.7	(12.4-27.1)	18.3	(10.6-25.9)
Asian	*	*	*	*
White, Non-Hispanic	20.7	(16.4-25.0)	18.6	(15.9-21.3)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	19.4	(7.6-31.2)	20.6	(12.3-28.8)
<b>Grade</b>				
9 <sup>th</sup>	25.0	(18.5-31.6)	21.9	(16.6-27.2)
10 <sup>th</sup>	18.1	(12.1-24.1)	18.7	(14.1-23.2)
11 <sup>th</sup>	23.6	(19.0-28.2)	20.5	(16.6-24.4)
12 <sup>th</sup>	11.3	(6.2-16.4)	13.7	(8.6-18.8)
<b>Disability Status</b>				
Youth with a disability	29.5	(23.4-35.5)	28.4	(26.5-30.4)
Youth with no disabilities	10.8	(7.3-14.3)	10.0	(6.5-13.5)

- Being bullied at school did not differ statistically by sex, but being e-bullied was statistically more prevalent among females (24.9%) than males (12.3%). Neither type of bullying statistically differed by race/ethnicity.
- A statistically higher percentage of 9<sup>th</sup> graders (25%) reported being bullied at school as compared to 12<sup>th</sup> graders (11.3%); being electronically bullied did not differ statistically by grade level
- Youth with a disability reported a statistically higher prevalence of being bullied at school (29.5%) and being e-bullied (28.4%) than those without a disability (10.8% and 10% respectively).

### YRBS Violence Measures Used, 2021

**Bullied, school property:** Percentage of students who were bullied on school property ever during the 12 months before the survey

**Bullied, electronically:** Percentage of students who were electronically bullied (counting being bullied through texting, Instagram, Facebook, or other social media) ever during the 12 months before the survey

# Mental Health & Suicidality

## PROLONGED SADNESS OR HOPELESSNESS

In adolescence, poor mental health can impact different areas of a teen’s life (e.g. academically, decision making, and overall health). Among youth, mental health problems are associated with increased risk of drug use, experiencing violence, and risky sexual behaviors. Supporting youth mental health can come from many difference resources: schools, parents and families, peers, and healthcare providers. Teens are resilient, and school, peer, and family connectedness can help promote youth mental health, as well as support other areas of youth development.<sup>34</sup>

- Two out of five youth have had persistent feelings of sadness or hopelessness (39.1%), which is comparable to the national rate of 42.3%.
- The percentage of persistent feelings of sadness or hopelessness among youth has statistically increased over the past 10 years (22.8% in 2011 to 39.1% in 2021). There was also a statistically significant increase from 2019 (33.3%) to 2021 (39.1%).
- There has not been a statistically significant change in persistent feelings of sadness or hopelessness among Black youth from 2011 to 2021.
- Two-thirds (67.7%) of LGBTQ+ youth have had persistent feelings of sadness and hopelessness, which is a statistically higher percentage as compared to 31% of their heterosexual peers.
- A statistically higher percentage of Asian students (54.6%) reported prolonged sadness and hopeless as compared to their White peers (36.5%). No other statistical differences by race and ethnicity were observed in prolonged sadness and hopelessness.
- Over half of youth with a disability reported prolonged sadness and hopelessness (63.3%) compared to youth without a disability (17.1%). No statistical differences by grade level were reported.

Demographic Characteristics	Prolonged Sadness or Hopelessness	
	Prevalence Rate (%)	95% CI
<b>Total</b>	39.1	(35.0-43.2)
<b>Sex</b>		
Female	49.5	(45.1-54.0)
Male	27.5	(22.2-33.4)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	67.7	(61.0-74.5)
Heterosexual	31.0	(26.2-35.9)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	38.1	(22.6-53.7)
Hispanic/Latino	50.3	(37.3-63.3)
Asian	54.6	(46.0-63.1)
White, Non-Hispanic	36.5	(32.5-40.6)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	42.0	(30.5-53.5)
<b>Grade</b>		
9 <sup>th</sup>	35.1	(29.3-40.8)
10 <sup>th</sup>	38.4	(32.0-44.7)
11 <sup>th</sup>	47.1	(41.1-53.2)
12 <sup>th</sup>	36.3	(27.7-44.9)
<b>Disability Status</b>		
Youth with a disability	63.3	(57.1-69.5)
Youth with no disabilities	17.1	(13.9-20.2)

**YRBS Mental Health Measure Used, 2021**

**Prolonged sadness or hopelessness:** Percentage of students who felt sad or hopeless almost every day for greater than or equal to two weeks in a row so that they stopped doing some usual activities, ever during the 12 months before the survey

## SUICIDAL BEHAVIOR

In Iowa, intentional self-harm (suicide) was the second leading cause of death among those 15-19, according to 2018-2021 vital records.<sup>28</sup> Thoughts about suicide and suicide attempts are often associated with depression, in addition but not limited to a family history of suicide attempts, exposure to violence, firearm access, bullying, and feelings of hopelessness.<sup>35</sup>

- One out of five youth reported suicidal thoughts in the past year (22.6%), which is more students (33,377) than the entire population of Marshalltown<sup>35</sup>. The rate in Iowa is similar to the national rate of 22.2%.
- The prevalence of suicidal thoughts among youth has statistically increased from 14.6% in 2011 to 22.6% in 2021. This trend was also reported among females. There has not been a statistical change among males, Black or Hispanic students.
- The prevalence of making a plan for suicide has statistically increased from 11.5% in 2011 to 16.5% in 2021, especially among females (13.8% to 20.6%). The rate among Iowa youth is similar to the national rate of 17.6%.
- Half of youth with prolonged sadness or hopelessness (50.6%) reported suicidal thoughts, and over one-third (37.4%) reported making a plan for suicide.

Demographic Characteristics	Ever Considered Suicide		Made a Plan for Suicide	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	22.6	(18.8-26.8)	16.5	(13.9-19.5)
<b>Sex</b>				
Female	29.5	(25.1-34.3)	20.6	(16.4-25.6)
Male	14.8	(11.4-19.0)	11.4	(8.2-15.7)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	45.9	(36.4-55.4)	33.1	(28.1-38.2)
Heterosexual	15.8	(12.9-18.7)	11.7	(9.4-13.9)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	20.0	(7.1-33.0)	*	*
Hispanic/Latino	26.7	(13.3-40.1)	20.7	(7.0-34.4)
Asian	*	*	*	*
White, Non-Hispanic	21.6	(18.3-25.0)	15.4	(13.6-17.2)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	30.8	(19.3-42.4)	*	*
<b>Grade</b>				
9 <sup>th</sup>	22.7	(18.8-26.6)	17.9	(14.5-21.3)
10 <sup>th</sup>	21.7	(14.3-29.2)	16.3	(9.4-23.2)
11 <sup>th</sup>	26.8	(22.4-31.2)	19.1	(14.7-23.5)
12 <sup>th</sup>	19.3	(10.4-28.2)	13.0	(8.6-17.4)
<b>Disability Status</b>				
Youth with a disability	39.2	(32.2-46.2)	28.7	(24.9-32.5)
Youth with no disabilities	7.5	(5.2-9.8)	5.8	(3.2-8.4)
<b>Depressive Symptoms</b>				
Prolonged sadness or hopelessness	50.6	(44.4-56.9)	37.4	(30.6-44.3)

- Half of lesbian, gay, or bisexual students (50.5%) have had suicidal thoughts.
- The prevalence of suicidal thoughts and making a plan were statistically higher among LGBTQ+ youth (45.9%, 33.1%) and youth with a disability (39.2%, 28.7%) than heterosexual youth (15.8%, 11.7%) and those without a disability (7.5%, 5.8%; see table).

### YRBS Suicidality Measure Used, 2021

**Suicidal thoughts:** Percentage of students who seriously considered attempting suicide during the 12 months before the survey

**Suicide, plan:** Percentage of students who made a plan about how they would attempt suicide during the 12 months before the survey

## ATTEMPTED SUICIDE

Suicide and suicidal behavior are influenced by social determinants of health in which persons live, play, work, and learn.<sup>37</sup> Among adolescents, suicide attempts may be associated with feelings of stress, self-doubt, pressure to succeed, disappointment, and loss.<sup>38</sup> Suicide rates for those 10-24 years of age has increased over 50% from 2000 to 2021.<sup>37</sup> Some groups (e.g. sexual and gender minorities, people of color, and tribal populations) experience a higher risk of suicide and suicidal behavior than others.<sup>37</sup>

- One out of 10 high school students reported ever attempting suicide (10.2%), which is also the national rate. The prevalence of youth suicide attempts has statistically increased from 6% in 2011 to 10.2% in 2021, and more specifically among females (7.7% to 13.3%).
- In Iowa, every student who was injured by a suicide attempt in the past year had also reported prolonged sadness or hopelessness.
- The prevalence of injurious suicide attempts among all youth or males has not statistically changed since 2011, but the rate has risen steadily and statistically significantly among females (2% to 3.7%). More recently, there has been a statistically significant *decline* in the prevalence of injurious suicide attempts among all youth (4.5% in 2019 to 2.9% in 2021) and specifically among males (3.9% to 1.7%).
- No statistically significant differences in the prevalence of attempting suicide or injurious suicide attempt by race/ethnicity or grade level were observed.

Demographic Characteristics	Ever Attempted Suicide		Injurious Suicide Attempt	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	10.2	(8.7-11.9)	2.9	(2.1-4.1)
<b>Sex</b>				
Female	13.3	(10.2-17.0)	3.7	(2.3-5.8)
Male	6.3	(4.3-9.1)	1.7	(1.0-2.8)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	22.0	(16.8-27.3)	6.9	(3.4-10.3)
Heterosexual	6.6	(4.7-8.4)	1.7	(0.9-2.5)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	15.9	(6.1-25.8)	*	*
Asian	*	*	*	*
White, Non-Hispanic	8.3	(6.1-10.4)	*	*
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	17.7	(8.0-27.5)	*	*
<b>Grade</b>				
9 <sup>th</sup>	*	*	*	*
10 <sup>th</sup>	9.4	(5.9-13.0)	*	*
11 <sup>th</sup>	11.3	(9.2-13.4)	*	*
12 <sup>th</sup>	*	*	*	*
<b>Disability Status</b>				
Youth with a disability	18.1	(14.3-21.9)	5.8	(3.5-8.2)
Youth with no disabilities	2.8	(1.2-4.4)	*	*
<b>Depressive Symptoms</b>				
Prolonged sadness or hopelessness	23.6	(19.5-27.7)	7.4	(4.9-9.9)

### YRBS Suicidality Measures Used, 2021

**Suicide, attempted:** Percentage of students who actually attempted suicide one or more times during the 12 months before the survey

**Suicide, injurious attempt:** Percentage of students who had a suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse during the 12 months before the survey

## MENTAL HEALTH DURING THE COVID-19 PANDEMIC

Mental health has been declining among youth in the U.S. since 2009. Persistent feelings of sadness and hopelessness among youth increased 40% between 2009 and 2019.<sup>39</sup> According to CDC’s Acting Principal Deputy Director, Debra Houry (2022), “The COVID-19 pandemic has created stressors that have the potential to further erode students’ mental wellbeing.”<sup>40</sup> These stressors included emotional or physical abuse by a parent or other adult in the home and a parent or other adult in their home losing a job.<sup>40</sup> Accessing mental health services via virtual or telephone platforms can help patients and their families overcome some typical barriers to in-person health services, such as finances or transportation. Importantly, not all youth and families are equipped to access these services.<sup>41</sup>

- About one-third (32.7%) of youth reported having poor mental health during the pandemic.
- Females (41.4%) reported a statistically higher prevalence of poor mental health during the pandemic than males (23.1%). There were no statistical differences by sex in using telemedical services. No statistical differences in either measure were observed by race/ethnicity or grade level.
- LGBTQ+ youth and youth with a disability reported a statistically higher rate of poor mental health during the pandemic (57.4%, 48.1%) than heterosexual youth (26%) and those without a disability (18.6%). These youth reported a statistically higher prevalence of using telemedical care during the pandemic (LGBTQ+ youth: 21.2%, youth with a disability: 18%) than heterosexual youth (9.6%) and youth without a disability (6.7%).
- Over half of youth who felt prolonged sadness or hopelessness in the past year also reported poor mental health during the pandemic (57.8%); one out of five (21.3%) used telemedicine during the pandemic. In addition, one out of five youth (22.7%) who had poor mental health during the pandemic also used telemedical services during that time. *This analysis is not in the above table.*

Demographic Characteristics	Poor Mental Health during Pandemic		Telemedicine Used during Pandemic	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	32.7	(28.5-37.3)	12.2	(10.4-14.2)
<b>Sex</b>				
Female	41.4	(37.3-45.6)	15.2	(12.4-18.5)
Male	23.1	(17.7-29.6)	9.0	(6.2-12.7)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	57.4	(46.7-68.0)	21.2	(18.0-24.5)
Heterosexual	26.0	(22.1-29.9)	9.6	(8.0-11.2)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	40.9	(21.1-60.7)	11.9	(5.2-18.7)
Hispanic/Latino	32.6	(18.7-46.6)	17.8	(12.7-23.0)
Asian	34.3	(21.2-47.4)	*	*
White, Non-Hispanic	31.9	(26.9-36.8)	11.3	(9.2-13.3)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	36.5	(23.1-49.8)	*	*
<b>Grade</b>				
9 <sup>th</sup>	34.0	(25.6-42.4)	13.4	(9.1-17.8)
10 <sup>th</sup>	30.2	(25.3-35.0)	12.6	(9.9-15.3)
11 <sup>th</sup>	38.2	(32.2-44.3)	11.5	(6.9-16.1)
12 <sup>th</sup>	28.0	(17.2-38.9)	11.2	(7.9-14.5)
<b>Disability Status</b>				
Youth with a disability	48.1	(41.6-54.6)	18.0	(14.3-21.6)
Youth with no disabilities	18.6	(14.9-22.2)	6.7	(4.3-9.2)
<b>Depressive Symptoms</b>				
Prolonged sadness or hopelessness	57.8	(51.9-63.8)	21.3	(17.2-25.3)

### YRBS ACEs Measures Used, 2021

**Poor mental health during pandemic:** Percentage whose mental health during the COVID-19 pandemic was not good most of the time or always

**Telemedicine services during pandemic:** Percentage who received mental health care, including treatment or counseling for the use of alcohol or drugs, using a computer, phone, or other device

# Adverse Childhood Experiences (ACEs) & Violence

## ADVERSE CHILDHOOD EXPERIENCES (ACES)

ACEs are traumatic incidents which can upset a child’s sense of safety and well-being. Adversity experienced early in life can have lasting impacts, such as higher levels of depression, smoking, heart disease, alcoholism and alcohol abuse, illicit drug use, intimate partner violence, suicide attempts, and days missed at work due to poor health in adulthood.<sup>42-44</sup>

- The majority of youth in Iowa reported at least one ACE (77.6%).
- LGBTQ+ youth had the highest rate of experiencing 4-7 ACEs (36.6%), followed by Multiracial youth (30.8%) and those with a disability (30.4%).
- Females reported a statistically higher prevalence of 4-7 ACEs than males (23.8% vs. 12.4%).
- There were no statistical differences in the prevalence of ACEs by grade level.

The impact of ACEs is cumulative – the more ACEs a child is exposed to, the greater the likelihood of experiencing health and social problems later in life.<sup>43</sup> Those with six or more ACEs live 20 years less than those without any ACEs.<sup>46</sup>

Demographic Characteristics	0 ACEs		4-7 ACEs	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	22.4	(19.4-25.4)	18.3	(15.0-21.6)
<b>Sex</b>				
Female	18.7	(15.1-22.3)	23.8	(19.0-28.7)
Male	26.1	(20.3-31.8)	12.4	(8.5-16.3)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	7.2	(4.6-9.9)	36.6	(29.1-44.1)
Heterosexual	26.3	(22.1-30.4)	13.3	(10.3-16.3)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	25.6	(9.1-42.2)
Hispanic/Latino	*	*	20.2	(12.4-27.9)
Asian	*	*	*	*
White, Non-Hispanic	23.0	(19.3-26.6)	16.7	(13.2-20.1)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	17.9	(7.3-28.4)	30.8	(20.8-40.7)
<b>Grade</b>				
9 <sup>th</sup>	23.2	(18.5-27.9)	16.5	(13.4-19.6)
10 <sup>th</sup>	24.3	(22.0-26.7)	17.8	(11.8-23.8)
11 <sup>th</sup>	19.4	(15.2-23.6)	22.1	(14.3-30.0)
12 <sup>th</sup>	22.7	(16.8-28.5)	17.4	(10.0-24.7)
<b>Disability Status</b>				
Youth with a disability	10.0	(7.3-12.7)	30.4	(24.8-36.0)
Youth with no disabilities	33.3	(28.6-38.1)	7.1	(5.4-8.8)

- As the number of ACEs increased, so does the prevalence of persistent sadness or hopelessness and poor mental health. Among youth reporting at least three of the seven ACEs, 80.8% reported sadness or hopelessness and 67.8% reported poor mental health (see table to the right).

Number of ACEs	Prolonged Sadness or Hopelessness		Poor Mental Health	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
0 ACEs	11.6	(8.2-15.0)	13.2	(7.0-19.3)
1-2 ACEs	31.9	(28.4-35.5)	31.7	(27.2-36.3)
3 ACEs	50.7	(41.5-59.8)	37.1	(29.3-45.0)
4-7 ACEs	80.8	(75.3-86.4)	67.8	(59.1-76.4)

### YRBS ACEs & Mental Health Measures Used, 2021

**ACEs:** a count out of seven ACEs experienced by the youth, ever: Verbal violence; Physical violence; Sexual violence by an adult; Witnessing domestic violence, in home; Separation from parent due to incarceration; Substance use problem, adult in home; Mental illness, adult in home

**Poor mental health:** Percentage of students who reported that their mental health was most of the time or always not good (including stress, anxiety, and depression) during the 30 days before the survey



## VERBAL OR PHYSICAL VIOLENCE TOWARD YOUTH BY PARENT

Child emotional abuse is defined as behaviors that harm children’s self-worth or emotional well-being. Child emotional neglect refers to the failure to meet a child’s emotional needs, which include validating and appropriately responding to feelings. Child abuse and neglect can have long-term impacts on the health, opportunity, and well-being of young people.<sup>47</sup>

- Ever experiencing any verbal violence by a parent or adult in the home (66.2%) is statistically more common among youth than ever experiencing any physical violence by a parent or adult in the home (23.3%).
- Females (71.7%) had a statistically higher prevalence of experiencing verbal violence by a parent than males (60.7%); the prevalence of experiencing physical violence did not differ statistically by sex.
- LGBTQ+ youth reported a statistically higher prevalence of experiencing verbal violence by a parent (83.7%) or physical violence by a parent (38.2%) than their heterosexual peers (62.2%, 18.9% respectively).
- Hispanic youth (36.4%) reported a statistically higher prevalence of experiencing physical violence by a parent than White youth (19.7%); the prevalence of experiencing verbal violence did not differ statistically by race/ethnicity.

Demographic Characteristics	Verbal Violence, Ever		Physical Violence, Ever	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	66.2	(63.5-69.0)	23.3	(20.0-26.6)
<b>Sex</b>				
Female	71.7	(68.6-74.8)	25.0	(20.9-29.1)
Male	60.7	(55.0-66.3)	21.3	(16.6-26.1)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	83.7	(76.7-90.7)	38.2	(31.9-44.5)
Heterosexual	62.2	(58.6-65.7)	18.9	(15.5-22.3)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	30.7	(18.3-43.1)
Hispanic/Latino	66.3	(57.0-75.7)	36.4	(27.7-45.1)
Asian	*	*	*	*
White, Non-Hispanic	67.0	(63.2-70.7)	19.7	(16.5-22.9)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	63.8	(51.7-76.1)	29.6	(18.1-41.1)
<b>Grade</b>				
9 <sup>th</sup>	66.3	(61.1-71.4)	17.6	(12.6-22.6)
10 <sup>th</sup>	63.9	(61.2-66.5)	18.8	(14.0-23.6)
11 <sup>th</sup>	69.5	(64.4-74.5)	27.5	(20.8-34.3)
12 <sup>th</sup>	65.1	(59.1-71.0)	29.8	(22.6-36.9)
<b>Disability Status</b>				
Youth with a disability	80.0	(77.2-82.9)	32.0	(26.4-37.6)
Youth with no disabilities	54.3	(50.9-57.8)	14.9	(10.6-19.3)

- Youth with a disability reported a statistically higher prevalence of experiencing both verbal violence by a parent (80%) and physical violence by a parent (32%) than youth without a disability (54.3%, 14.9% respectively).

### YRBS ACEs Measures Used, 2021

**Verbal violence by a parent, ever:** Percentage of students who responded “always”, “most of the time”, “sometimes”, or “rarely” to the question: *During your life, how often has a parent or other adult in your home sworn at you, insulted you, or put you down?*

**Physical violence by a parent, ever:** Percentage of students who responded “always”, “most of the time”, “sometimes”, or “rarely” to the question: *During your life, how often has a parent or other adult in your hit, beat, kicked, or physically hurt you in any way?*



## SEXUAL VIOLENCE

Child sexual abuse refers to the pressuring or forcing of a child to engage in sexual acts, which includes fondling, penetration, or exposing a child to other sexual activities.<sup>47</sup> Girls who are sexually abused are at a higher risk of suffering from physical violence and sexual re-victimization, self-harming behavior, and being a victim of intimate partner violence later in life.<sup>48</sup>

- About one-quarter of youth with sadness or hopelessness reported experiencing sexual violence by anyone in the past year (23.6%), which is a statistically higher prevalence than those with sadness or hopelessness who have ever experienced sexual violence by an adult (13.1%).
- Ever experiencing sexual violence by an adult was statistically less prevalent (6.4%) than experiencing sexual violence by anyone in the past year (12.1%). Rates reported by Iowa youth are mirrored by youth across the nation (8.5% and 11% respectively among all US youth).
- Sexual violence is statistically more prevalent among females and those with a disability than males and youth without a disability, but did not differ by race/ethnicity.
- One out of four LGBTQ+ adolescents reported sexual violence by anyone in the past year (25%).
- 11<sup>th</sup> graders (17.9%) reported a higher prevalence of sexual violence by anyone in the past year than 9<sup>th</sup> or 10<sup>th</sup> graders (8.5%, 9.9% respectively).

Demographic Characteristics	Sexual Violence by Anyone, Past Year		Sexual Violence by Adult, Ever	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	12.1	(10.4-13.6)	6.4	(5.8-7.2)
<b>Sex</b>				
Female	17.1	(14.2-20.0)	10.5	(9.4-11.7)
Male	6.8	(4.8-8.7)	2.3	(1.5-3.4)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	25.0	(18.8-31.3)	15.8	(11.8-19.7)
Heterosexual	8.6	(7.1-10.0)	3.7	(2.6-4.7)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	13.1	(4.6-21.5)	8.3	(3.4-13.3)
Asian	*	*	*	*
White, Non-Hispanic	11.7	(10.3-13.1)	5.5	(4.6-6.4)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	*	*	*	*
<b>Grade</b>				
9 <sup>th</sup>	8.5	(5.6-11.3)	5.7	(2.2-9.1)
10 <sup>th</sup>	9.9	(6.4-13.4)	6.8	(5.0-8.5)
11 <sup>th</sup>	17.9	(14.5-21.2)	6.6	(4.3-9.0)
12 <sup>th</sup>	12.5	(7.2-17.8)	6.9	(3.8-9.9)
<b>Depressive Symptoms</b>				
Prolonged sadness or hopelessness	23.6	(19.9-27.4)	13.1	(11.3-14.9)

### YRBS ACEs Measures Used, 2021

**Sexual violence by anyone, past year:** Percentage of students who experienced sexual violence (being forced by anyone to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to do, one or more times during the 12 months before the survey)

**ACE: sexual violence by an adult, ever:** Percentage of students who reported that an adult or person at least 5 years older than them made them do sexual things they did not want to do (counting things such as kissing, touching, or being made to have sexual intercourse)

## SUBSTANCE USE PROBLEM OR MENTAL ILLNESS IN THE HOME

ACEs are related to aspects of a child’s environment that can inhibit their sense of safety, stability, and bonding, such as growing up with a parent or adult in the home with a substance use disorder (SUD) or mental health problem.<sup>42</sup> Adolescents who live with a parent or adult in the home who has a SUD may be at an increased risk of following this model of behavior by the parent/adult. These youth may experience school or legal problems, conflict within the family, and have a difficult time forming healthy peer relationships, in addition to being more likely to have anxiety, depressive, and oppositional disorders.<sup>49</sup> Children who have parents with a mental illness are at a higher risk for developing social, emotional, and/or behavioral problems due to the possibly inconsistent and unstable home environment.<sup>50</sup>

- Over one out of four youth have lived with someone in their home with substance use (SU) problem (30.4%), and about two out of five youth have lived with someone in their home who has a mental illness (MI, 37.9%).
- More female youth reported ever living with someone who had a MI (46.1%) than males (29.3%). The prevalence of ever living with someone who has a SU problem did not differ statistically by sex or race/ethnicity.
- LGBTQ+ youth and those with a disability reported a statistically higher prevalence of ever living with someone with a SU problem (46.6%, 43.2%) or MI (61.4%, 55.4%) than heterosexual youth (25.8%, 31.4%) and those without a disability (18.6%, 22%).
- A statistically higher prevalence of 11<sup>th</sup> graders reported ever living with someone with a MI (42.1%) than 9<sup>th</sup> graders (32.8%); the prevalence of having lived with someone with a SU problem did not statistically differ by grade level.

Demographic Characteristics	Substance Use (SU) Problem in the Home, Ever		Mental Illness (MI) in the Home, Ever	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	30.4	(27.1-33.8)	37.9	(34.0-42.0)
<b>Sex</b>				
Female	33.2	(29.6-36.9)	46.1	(40.2-52.0)
Male	27.4	(21.9-33.7)	29.3	(24.4-34.8)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	46.6	(39.7-53.4)	61.4	(57.0-65.7)
Heterosexual	25.8	(22.0-29.6)	31.4	(26.6-36.2)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	33.3	(23.4-43.2)	30.0	(20.1-40.0)
Hispanic/Latino	36.8	(23.2-50.4)	34.7	(25.4-44.1)
Asian	*	*	*	*
White, Non-Hispanic	28.6	(25.0-32.1)	38.6	(34.1-43.0)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	36.4	(24.5-48.3)	50.9	(39.0-62.7)
<b>Grade</b>				
9 <sup>th</sup>	29.4	(24.0-34.8)	32.8	(28.8-36.8)
10 <sup>th</sup>	29.6	(22.6-36.7)	37.6	(30.5-44.7)
11 <sup>th</sup>	33.3	(28.1-38.5)	42.1	(37.9-46.3)
12 <sup>th</sup>	29.6	(23.8-35.3)	40.5	(31.4-49.7)
<b>Disability Status</b>				
Youth with a disability	43.2	(37.0-49.4)	55.4	(50.5-60.3)
Youth with no disabilities	18.6	(13.8-23.4)	22.0	(17.5-26.6)
<b>Depressive Symptoms</b>				
Prolonged sadness or hopelessness	50.6	(46.0-55.2)	61.5	(57.8-65.1)

- Over half of youth with prolonged sadness have lived with someone with a SU problem (50.6%) or a MI (61.5%).

### YRBS ACEs Measures Used, 2021

**Substance use problem, adult in home, ever (SU):** Percentage of students who ever lived with someone who was having a problem with alcohol or drug use

**Mental illness, adult in home, ever (MI):** Percentage of students who ever lived with someone who was depressed, mentally ill or suicidal

## WITNESSING DOMESTIC VIOLENCE

Adults who are violent toward their partners are also at a higher risk of violence toward their children.<sup>51</sup> Children who witness violence in the home are at risk for physical and mental health problems, and also are at a higher risk of being violent in their own future relationships.<sup>52</sup>

- One in seven youth have ever witnessed domestic violence in their home (14.7%).
- The prevalence of ever witnessing domestic violence did not statistically differ by race/ethnicity.
- A statistically higher percentage of LGBTQ+ youth ever witnessed domestic violence (26.5%) than heterosexual youth (11.5%). The prevalence of witnessing domestic violence in the home did not statistically differ by sex or grade level.
- The rate of witnessing domestic violence was statistically higher among youth with a disability (22.4%) than among youth without a disability (7.5%).
- One out of four youth who reported prolonged sadness or hopelessness in the past year had ever witnessed domestic violence in their home (25.7%).

Demographic Characteristics	Ever Witnessed Domestic Violence	
	Prevalence Rate (%)	95% CI
<b>Total</b>	14.7	(12.4-17.0)
<b>Sex</b>		
Female	17.4	(13.9-20.9)
Male	11.7	(8.8-14.7)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	26.5	(20.8-32.2)
Heterosexual	11.5	(9.4-13.6)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	*	*
Hispanic/Latino	17.9	(13.1-22.8)
Asian	*	*
White, Non-Hispanic	12.8	(10.4-15.3)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	22.9	(12.8-32.9)
<b>Grade</b>		
9 <sup>th</sup>	12.2	(8.8-15.5)
10 <sup>th</sup>	12.4	(8.2-16.6)
11 <sup>th</sup>	18.8	(13.8-23.7)
12 <sup>th</sup>	15.8	(10.9-20.7)
<b>Disability Status</b>		
Youth with a disability	22.4	(19.0-25.9)
Youth with no disabilities	7.9	(6.4-9.4)
<b>Depressive Symptoms</b>		
Prolonged sadness or hopelessness	25.7	(21.8-29.6)

### YRBS ACEs Measures Used, 2021

**Domestic violence, in home, ever:** Percentage of students who reported that their parents or other adults in their home most of the time, always, sometimes, or rarely slapped, hit, kicked, punched, or beat each other up during their life

## PARENTAL INCARCERATION

Children of incarcerated parents are about six times more likely to become incarcerated themselves. However, the burden of risk is not equally distributed. African American and Hispanic youth are more likely than White youth to have an incarcerated parent.<sup>53</sup> The most common consequence of parental incarceration on a minor is antisocial behavior, which could limit resiliency when facing other negative experiences.<sup>54</sup>

- About one in eight (13.7%) youth have been separated from a parent due to parental incarceration.
- The rate of youth being separated from a parent due to incarceration was statistically higher among Multiracial youth (28.3%) than among White youth (11.6%).
- A statistically higher percentage of LGBTQ+ youth experienced separation from a parent (21.3%) than heterosexual youth (11.6%). Separation from a parent did not statistically differ by sex or grade level.
- The prevalence of being separated from a parent due to incarceration was statistically higher among youth with a disability (20.3%) than among youth without a disability (7.5%).
- One in five youth who reported prolonged feelings of sadness or hopelessness had been separated from a parent due to incarceration (22.4%).

Demographic Characteristics	Ever Separated from Parent	
	Prevalence Rate (%)	95% CI
<b>Total</b>	13.7	(11.5-15.8)
<b>Sex</b>		
Female	15.2	(13.6-16.9)
Male	12.1	(9.2-15.0)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	21.3	(14.7-27.9)
Heterosexual	11.6	(9.2-14.0)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	*	*
Hispanic/Latino	18.3	(12.4-24.2)
Asian	*	*
White, Non-Hispanic	11.6	(9.6-13.5)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	28.3	(18.2-38.4)
<b>Grade</b>		
9 <sup>th</sup>	14.3	(11.7-16.9)
10 <sup>th</sup>	12.3	(7.7-16.9)
11 <sup>th</sup>	17.5	(11.8-23.1)
12 <sup>th</sup>	10.6	(6.6-14.6)
<b>Disability Status</b>		
Youth with a disability	20.3	(16.7-24.0)
Youth with no disabilities	7.5	(5.1-9.9)
<b>Depressive Symptoms</b>		
Prolonged sadness or hopelessness	22.4	(18.6-26.1)

### YRBS ACEs Measures Used, 2021

**Separation from parent due to incarceration, ever:** Percentage of students who had ever been separated from a parent or guardian because they went to jail, prison, or detention center

## UNMET BASIC NEEDS

Physical neglect is the failure to meet a child’s basic physical needs, which include housing, food, clothing, education, and access to medical care.<sup>47</sup> Experiencing economic hardship can put stress on families, which could increase the risk for abuse and neglect. Children who are abused or neglected may suffer from emotional or psychological problems.<sup>47</sup>

- More than one out of 10 youth reported not having their basic needs met (11.6%).
- Youth who experience the highest rates of unmet basic needs include Black youth (24.9%), Hispanic youth (20.4%), LGBTQ+ youth (17.2%) and youth with a disability (15.2%).
- Black (24.9%) and Hispanic (20.4%) youth reported a statistically higher prevalence of not having their basic needs met than White (9.1%) youth.
- Over 15% of youth who reported prolonged sadness or hopelessness also reported unmet basic needs.
- The prevalence of unmet basic needs did not differ statistically significantly by grade level.
- Youth with a disability (15.2%) reported a statistically higher prevalence of unmet basic needs than youth without a disability (8.3%).

Demographic Characteristics	Unmet Basic Needs	
	Prevalence Rate (%)	95% CI
<b>Total</b>	11.6	(9.3-14.0)
<b>Sex</b>		
Female	10.8	(8.5-13.1)
Male	12.6	(8.0-17.3)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	17.2	(13.6-20.9)
Heterosexual	9.1	(6.8-11.3)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	24.9	(12.5-37.3)
Hispanic/Latino	20.4	(15.4-25.3)
Asian	*	*
White, Non-Hispanic	9.1	(7.0-11.3)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	9.8	(3.2-16.4)
<b>Grade</b>		
9 <sup>th</sup>	10.6	(6.8-14.3)
10 <sup>th</sup>	9.4	(6.1-12.7)
11 <sup>th</sup>	13.3	(8.8-17.8)
12 <sup>th</sup>	13.3	(7.1-19.5)
<b>Disability Status</b>		
Youth with a disability	15.2	(12.2-18.2)
Youth with no disabilities	8.3	(5.8-10.8)

### YRBS Neglect Measure Used, 2021

**Unmet basic needs:** The percent of youth who responded “never” to the question: *During your life, how often has there been an adult in your household who tried hard to make sure your basic needs were met, such as looking after your safety and making sure you had clean clothes and enough to eat?*

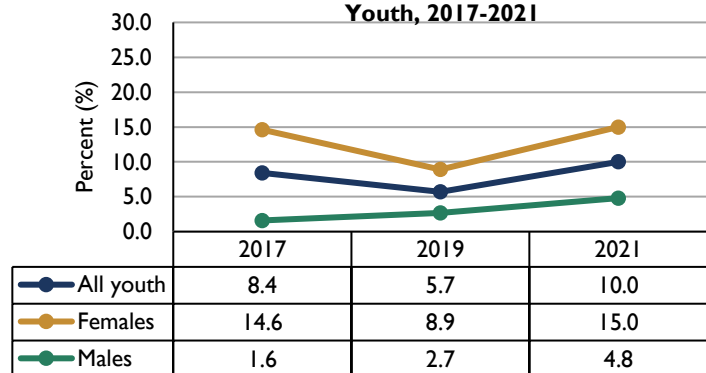
## DATING VIOLENCE

Teen dating violence (TDV) can take place in person or through technology and is a type of intimate partner violence that can include physical or sexual violence, physiological aggression, or stalking. Youth who are victims of dating violence are more likely to experience symptoms of anxiety and depression, engage in substance use, show antisocial behaviors, and have suicidal thoughts. TDV can have negative impacts on health, opportunity, and well-being as youth become adults.<sup>55</sup>

- Among all youth, the prevalence of *sexual dating violence* has fluctuated since 2017 (see Figure 1). *Sexual dating violence* among males has statistically increased since 2017. The rate in 2021 among Iowa youth (10%) was similar to the national rate of 9.7%. There has not been any statistical changes in *physical dating violence* since 2017.
- More than one out of eight youth reported experiencing dating violence (sexual or physical; 13.8%). The prevalence statistically increases to one in four youth with a disability (24%) and one in three LGBTQ+ youth (31.7%; see table below).
- The prevalence of dating violence was statistically higher among females (19.1%) than males (8%).
- The prevalence of dating violence statistically significantly increased with grade level and did not statistically differ by race/ethnicity.

Demographic Characteristics	Dating Violence	
	Prevalence Rate (%)	95% CI
<b>Total</b>	13.8	(10.6-17.0)
<b>Sex</b>		
Female	19.1	(15.9-22.3)
Male	8.0	(4.3-11.6)
<b>Sexual Orientation &amp; Gender Identity</b>		
LGBTQ+	31.7	(24.4-38.9)
Heterosexual	8.6	(6.9-10.3)
<b>Race/Ethnicity</b>		
Black, Non-Hispanic	*	*
Hispanic/Latino	20.8	(12.5-29.2)
Asian	*	*
White, Non-Hispanic	12.9	(10.3-15.5)
Another Race, Non-Hispanic	*	*
Multiple Races, Non-Hispanic	17.1	(3.4-30.8)
<b>Grade</b>		
9 <sup>th</sup>	8.9	(5.5-12.4)
10 <sup>th</sup>	*	*
11 <sup>th</sup>	20.0	(15.6-24.4)
12 <sup>th</sup>	*	*
<b>Disability Status</b>		
Youth with a disability	24.0	(18.6-29.5)
Youth with no disabilities	3.8	(2.3-5.4)
<b>Poor Mental Health</b>		
Prolonged sadness or hopelessness	26.8	(21.4-32.3)

**Figure 1. Prevalence of Sexual Violence among Iowa Youth, 2017-2021**



### YRBS Dating Violence Measures Used, 2021

**Dating violence, physical:** Percentage of students who experienced being physically hurt on purpose by someone they were dating or going out with [counting such things as being hit, slammed into something, or injured with an object or weapon] one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey

**Dating violence, sexual:** Percentage of students who experienced being forced by someone they were dating or going out with to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to do, one or more times during the 12 months before the survey, among students who dated or went out with someone during the 12 months before the survey

**Dating violence, any:** percentage of students who experienced physical OR sexual dating violence

## BAD OR UNFAIR TREATMENT BASED ON INDIVIDUAL CHARACTERISTICS

Racism is a system of structuring opportunity and assigning value based on how one looks or the color of their skin that unfairly disadvantages some and unfairly advantages other individuals and communities.<sup>56</sup> Racism is a social determinant of health and a driver of systemic inequities of health outcomes. Youth experiences of racial discrimination are associated with anxiety, depression, poor mental health, and low self-esteem, as well as health risk and delinquent behaviors.<sup>57-59</sup> Lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth may face discrimination, harassment, family or social rejection, and violence in reaction to their identities which can negatively impact their health.<sup>60</sup>

- About one in seven LGBTQ+ youth have been treated unfairly due to their sexual orientation (15.6%).
- Hispanic (11.3%) and Multiracial youth (11.8%) reported the highest rates of being treated poorly due to their race or ethnicity.
- About one in 10 youth who have prolonged sadness or hopelessness have either been treated unfairly due to their race or ethnicity (8.4%) or their sexual orientation (9.7%).
- The majority of youth who are treated badly due to race or ethnicity (70.5%) or sexual orientation (88.9%) also reported prolonged sadness or hopelessness. *This analysis is not listed in the table.*

Demographic Characteristics	Unfair Treatment Based on Race or Ethnicity		Unfair Treatment Based on Sexual Orientation	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	4.7	(3.5-6.2)	4.3	(3.3-5.5)
<b>Sex</b>				
Female	5.9	(3.9-8.8)	5.7	(4.1-7.8)
Male	3.4	(2.1-5.5)	2.6	(1.3-4.9)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	7.5	(3.8-11.2)	15.6	(11.3-19.8)
Heterosexual	3.6	(2.1-5.2)	0.9	(0.3-1.4)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	*	*	*	*
Hispanic/Latino	11.3	(5.4-17.3)	7.2	(3.7-10.6)
Asian	*	*	*	*
White, Non-Hispanic	1.7	(0.8-2.6)	3.8	(2.9-4.8)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	11.8	(5.7-17.9)	*	*
<b>Grade</b>				
9 <sup>th</sup>	4.5	(2.5-6.4)	*	*
10 <sup>th</sup>	5.5	(2.3-8.6)	*	*
11 <sup>th</sup>	*	*	*	*
12 <sup>th</sup>	4.4	(2.6-6.2)	5.1	(2.2-8.0)
<b>Disability Status</b>				
Youth with a disability	7.8	(4.8-10.8)	8.2	(6.4-10.0)
Youth with no disabilities	*	*	*	*
<b>Poor Mental Health</b>				
Prolonged sadness or hopelessness	8.4	(5.0-11.7)	9.7	(7.7-11.7)

### YRBS Discrimination Measures Used, 2021

**Unfair treatment, based on race/ethnicity:** Percentage of students who most of the time or always felt that they were treated badly or unfairly because of their race or ethnicity during their life

**Unfair treatment, based on sexual orientation:** Percentage of students who most of the time or always felt that they were treated badly or unfairly because of their sexual orientation during their life



# Positive Youth Development

## CLOSENESS TO THOSE AT SCHOOL & ABILITY TO TALK ABOUT FEELINGS

School connectedness, or a sense of being cared for, supported, and belonging at school, can play a major role in the healthy development of youth.<sup>40</sup> Youth who feel connected to peers and adults at school report lower levels of persistent sadness/hopelessness, suicidal thoughts, and attempted suicide.<sup>40</sup> Schools may provide opportunities for academic, social, and mental and physical health services that can be protective against negative outcomes. Families and the broader community also can play a role in providing opportunities that foster positive youth development.

- In 2021, over half of youth reported feeling close to people at their school (57.6%), which is lower than the national rate (61.5%).
- There were no statistical differences in the prevalence of closeness to people at school or the ability to talk to family members or friends about feelings by sex or grade level.
- The percentage of youth who feel close to people at school was statistically higher among heterosexual youth (63%), youth without a disability (68.4%) and White youth (60.7%), as compared to LGBTQ+ youth (54.3%), youth with a disability (45.4%) and Black (42.5%), Hispanic (45.7%) or Multiracial (49.4%) youth.
- The percentage of youth who felt that they are able to talk to family or friends was statistically higher among heterosexual youth (73%), youth without a disability (77%), and White youth (73.1%), as compared to LGBTQ+ youth (57.7%), youth with a disability (60%), Black youth (49.8%), and Hispanic youth (52.3%).
- Youth who felt a closeness to people at school or the ability to talk to family and friends had a statistically lower prevalence rate of sadness or hopelessness (34.2%) than youth who did not feel close to people at school or have the ability to talk to family or friends (60.5%). *This analysis is not in the table.*

Demographic Characteristics	Closeness to People at School		Ability to Talk to Family Member or Friends	
	Prevalence Rate (%)	95% CI	Prevalence Rate (%)	95% CI
<b>Total</b>	57.6	(53.5-61.6)	69.0	(65.1-72.9)
<b>Sex</b>				
Female	54.3	(49.3-59.3)	68.2	(63.2-73.1)
Male	61.4	(56.9-65.8)	70.0	(64.8-75.2)
<b>Sexual Orientation &amp; Gender Identity</b>				
LGBTQ+	40.4	(33.6-47.1)	57.7	(51.1-64.3)
Heterosexual	63.0	(59.5-66.5)	73.0	(69.1-77.0)
<b>Race/Ethnicity</b>				
Black, Non-Hispanic	42.5	(23.7-61.3)	49.8	(42.9-56.7)
Hispanic/Latino	45.7	(38.9-52.4)	52.3	(39.1-65.5)
Asian	*	*	*	*
White, Non-Hispanic	60.7	(56.4-64.9)	73.1	(69.8-76.4)
Another Race, Non-Hispanic	*	*	*	*
Multiple Races, Non-Hispanic	49.4	(35.2-63.6)	74.2	(60.3-88.0)
<b>Grade</b>				
9 <sup>th</sup>	58.4	(50.6-66.2)	69.2	(63.1-75.3)
10 <sup>th</sup>	61.0	(51.2-70.8)	73.3	(69.0-77.6)
11 <sup>th</sup>	53.6	(45.3-61.9)	64.9	(59.0-70.8)
12 <sup>th</sup>	57.3	(52.6-61.7)	68.5	(61.4-75.6)
<b>Disability Status</b>				
Youth with a disability	45.4	(40.1-50.6)	60.0	(54.3-65.7)
Youth with no disabilities	68.4	(63.8-73.1)	77.0	(72.8-81.3)

### YRBS Positive Youth Development Measures Used, 2021

**Ability to talk to family member or friends about feelings:** Percentage who most of the time or always felt that they were able to talk to an adult in their family or another caring adult OR a friend about their feelings during their life

**Closeness to those at school:** Percentage who agree or strongly agree that they feel close to people at their school

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