

# MetroWest Adolescent Health Survey Key Indicator Report

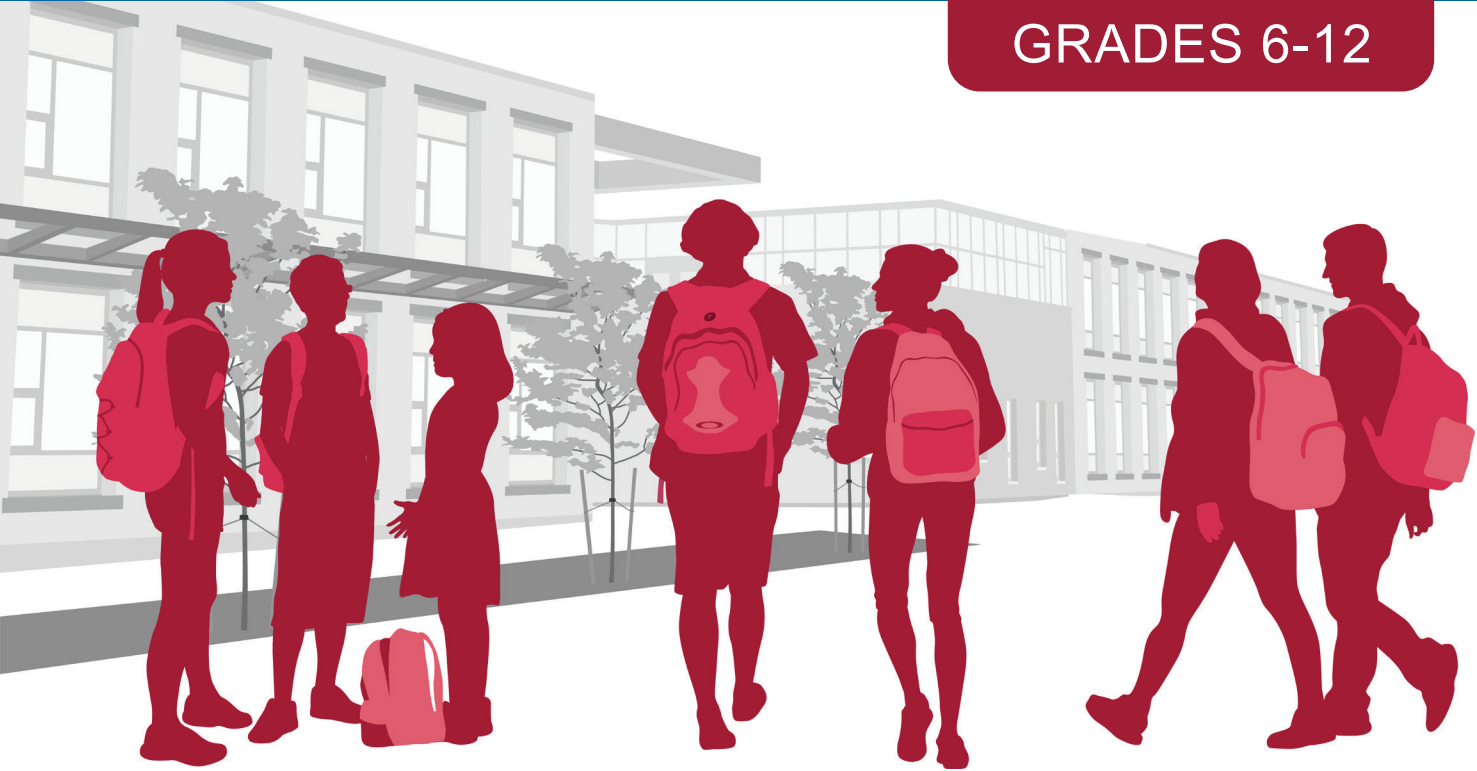
*Informing data-driven school and community  
health policies and practices*



# 2021

## Northborough, Southborough, and Algonquin Regional

GRADES 6-12



**METROWEST  
HEALTH  
FOUNDATION**

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# Key Indicators from the 2021 MetroWest Adolescent Health Survey

## Northborough and Southborough Public Schools

### Background and Summary of Methodology

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The MetroWest Adolescent Health Survey (MWHAS), an initiative of the MetroWest Health Foundation, has been monitoring trends in adolescent health and risk behaviors since 2006. The need for data to drive advancements in prevention efforts, programs, and policies has been made even more apparent during the COVID-19 pandemic. By providing timely, local data on pressing adolescent health issues, schools and communities are better equipped to understand and prioritize the challenges facing youth today. The MetroWest Health Foundation is deeply committed to supporting data-driven activities and strategies that can best support youth physical and mental wellbeing.

The 2021 survey is the 8<sup>th</sup> administration of the MWAHS, and the first online survey administration. While the survey was administered every other year from 2006 to 2018, there was a one-year delay in the administration of the most recent survey in the fall of 2021 due to the challenges of surveying youth during remote learning. In 2021, 39,346 middle and high school students in all 25 communities in the MetroWest region participated in the survey.

In Northborough and Southborough, the 2021 MWAHS was administered to middle school students in grades 6 through 8 and high school students in grades 9 through 12. As in previous survey waves, local procedures were followed to inform parents of the survey and give them the choice to opt out their child(ren). Students were also informed that their participation was voluntary and that no names or other identifying information were being gathered. Data collection at each school was guided by a protocol that protected the privacy of students' responses. In Northborough and Southborough, student surveys were obtained from 886 students in grades 6 through 8 (96.3% middle school participation rate) and 1,003 students in grades 9 through 12 (79.9% high school participation rate).

### Inside the Key Indicator Report

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This brief report provides 2021 data on key behavioral indicators including: substance use, violence, bullying, mental health, sexual behavior (at the high school level only), and physical activity. The tables in this *Phase One* report summarize the data as follows:

- » **Trends from 2006 to 2021.** These tables provide district-level data for each survey wave in which your district has participated since 2006 to examine changes in adolescent behaviors over time. *Please note: At the middle school level, trend data is restricted to 7<sup>th</sup> and 8<sup>th</sup> grades because 6<sup>th</sup> grade was not surveyed in all years.*
- » **2021 Behavioral Indicators by Sex.** These tables display data for females and males separately to examine behavioral patterns related to biological sex.
- » **2021 Behavioral Indicators by Grade.** These tables display data for each grade separately to provide information on age-related patterns and the initiation of risk behaviors.

This *Phase One* report provides initial data to support communities as they review priorities and develop action plans to improve adolescent health and wellness. As in past survey waves, a customized and comprehensive *Phase Two* report will be provided later in the spring of 2022 to further inform local efforts.

# **Middle School Key Indicators**

2006–2021 Trends  
2021 Patterns by Sex  
2021 Patterns by Grade

# Northborough and Southborough Middle Schools (Grades 7-8)

## 2006-2021 Trends in Key Indicators

*MetroWest Adolescent Health Survey*

	Year of Survey (%)							
	2006	2008	2010	2012	2014	2016	2018	2021
	–	(727)	(707)	(732)	(718)	(721)	(634)	(609)
<b>SUBSTANCE USE</b>								
Lifetime cigarette smoking	–	9.8	3.4	7.0	3.7	2.8	2.2	2.1
Current cigarette smoking (past 30 days)	–	4.6	1.9	3.5	1.3	2.0	0.8	0.5
Lifetime electronic vapor product use*	–	–	–	–	4.5	5.4	9.3	4.5
Current electronic vapor product use (past 30 days)*	–	–	–	–	2.1	3.2	4.0	2.4
Lifetime alcohol use	–	18.5	10.2	13.7	10.5	10.1	9.7	11.9
Current alcohol use (past 30 days)	–	10.2	4.0	7.0	3.7	4.2	4.0	4.0
Binge drinking (past 30 days) <sup>†</sup>	–	4.2	0.6	1.8	1.3	1.1	0.6	0.5
Lifetime marijuana use	–	5.6	2.7	5.1	2.1	3.2	2.2	2.5
Current marijuana use (past 30 days)	–	4.6	1.4	2.8	1.0	2.2	1.3	0.9
Lifetime inhalant use	–	9.1	4.0	3.7	2.4	2.8	3.1	3.8
<b>VIOLENCE</b>								
Physical fighting (lifetime)	–	46.4	38.3	32.8	37.1	31.7	32.7	34.1
Physical fighting on school property (lifetime)	–	14.2	10.5	6.0	10.7	8.1	10.7	9.9
Carried a weapon (lifetime)	–	17.6	15.9	16.0	19.0	18.3	19.3	17.9
Carried a weapon on school property (lifetime)	–	3.2	1.0	1.2	1.4	1.0	0.9	1.5
<b>BULLYING VICTIMIZATION</b>								
Bullying victim (past 12 months)	–	50.8	43.7	38.5	35.6	28.2	26.3	35.9
Bullying victim on school property (past 12 months)	–	42.2	37.6	33.4	28.7	24.5	23.5	30.0
Cyberbullying victim (past 12 months)	–	15.8	17.4	16.1	22.6	19.7	16.5	26.2
<b>MENTAL HEALTH</b>								
Life "very" stressful (past 30 days)	–	15.0	14.7	12.3	15.4	13.7	20.2	19.6
Depressive symptoms (past 12 months)	–	16.1	12.3	11.7	15.2	9.7	14.2	21.1
Self-injury (past 12 months)	–	10.2	7.6	7.1	7.5	7.9	9.1	17.0
Considered suicide (lifetime)	–	11.8	10.7	10.4	11.6	10.4	13.5	19.8
Attempted suicide (lifetime)	–	2.1	2.7	2.6	3.0	1.8	2.3	6.5
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>								
Exercised for ≥20 minutes on 3 or more days/week	–	79.8	75.1	81.8	80.4	80.7	78.1	76.4
Overweight or obese <sup>‡</sup>	–	19.1	17.9	14.6	17.8	18.3	14.4	20.0

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

# Northborough and Southborough Middle Schools (Grades 6-8)

## 2021 Key Indicator Patterns by Sex

*MetroWest Adolescent Health Survey*

	Sex (%)		Total (%)
	Female (436)	Male (442)	
<b>SUBSTANCE USE</b>			
Lifetime cigarette smoking	2.1	1.4	1.8
Current cigarette smoking (past 30 days)	0.2	0.5	0.4
Lifetime electronic vapor product use*	4.3	2.6	3.5
Current electronic vapor product use (past 30 days)*	2.1	1.2	1.8
Lifetime alcohol use	9.8	11.6	10.8
Current alcohol use (past 30 days)	3.1	3.4	3.2
Binge drinking (past 30 days) <sup>†</sup>	0.5	0.2	0.4
Lifetime marijuana use	1.7	2.0	1.8
Current marijuana use (past 30 days)	0.5	0.7	0.6
Lifetime inhalant use	4.9	2.5	3.8
<b>VIOLENCE</b>			
Physical fighting (lifetime)	21.7	47.4	34.5
Physical fighting on school property (lifetime)	4.7	17.4	11.2
Carried a weapon (lifetime)	12.1	22.4	17.2
Carried a weapon on school property (lifetime)	1.4	1.2	1.3
<b>BULLYING VICTIMIZATION</b>			
Bullying victim (past 12 months)	39.9	28.0	34.0
Bullying victim on school property (past 12 months)	33.5	23.4	28.6
Cyberbullying victim (past 12 months)	29.3	19.1	24.3
<b>MENTAL HEALTH</b>			
Life "very" stressful (past 30 days)	24.7	11.3	18.4
Depressive symptoms (past 12 months)	26.3	11.1	18.9
Self-injury (past 12 months)	20.5	8.9	14.8
Considered suicide (lifetime)	24.2	10.8	17.5
Attempted suicide (lifetime)	9.5	1.6	5.7
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>			
Exercised for ≥20 minutes on 3 or more days/week	70.0	85.0	77.0
Overweight or obese <sup>‡</sup>	18.9	22.6	20.7

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

# Northborough and Southborough Middle Schools (Grades 6-8) 2021 Key Indicator Patterns by Grade

*MetroWest Adolescent Health Survey*

	Grade (%)			Total (%) (886)
	6 <sup>th</sup> (277)	7 <sup>th</sup> (309)	8 <sup>th</sup> (300)	
<b>SUBSTANCE USE</b>				
Lifetime cigarette smoking	1.1	0.7	3.4	1.8
Current cigarette smoking (past 30 days)	0.0	0.3	0.7	0.4
Lifetime electronic vapor product use*	1.5	3.1	5.8	3.5
Current electronic vapor product use (past 30 days)*	0.4	1.4	3.4	1.8
Lifetime alcohol use	8.6	7.8	15.9	10.8
Current alcohol use (past 30 days)	1.5	1.4	6.6	3.2
Binge drinking (past 30 days) <sup>†</sup>	0.0	0.0	1.0	0.4
Lifetime marijuana use	0.4	1.1	3.8	1.8
Current marijuana use (past 30 days)	0.0	0.4	1.4	0.6
Lifetime inhalant use	4.0	4.0	3.5	3.8
<b>VIOLENCE</b>				
Physical fighting (lifetime)	35.3	32.8	35.5	34.5
Physical fighting on school property (lifetime)	14.0	9.7	10.2	11.2
Carried a weapon (lifetime)	15.8	15.5	20.1	17.2
Carried a weapon on school property (lifetime)	0.7	0.3	2.7	1.3
<b>BULLYING VICTIMIZATION</b>				
Bullying victim (past 12 months)	29.9	32.2	39.6	34.0
Bullying victim on school property (past 12 months)	25.5	27.2	32.8	28.6
Cyberbullying victim (past 12 months)	20.2	21.7	30.6	24.3
<b>MENTAL HEALTH</b>				
Life "very" stressful (past 30 days)	15.7	13.3	25.4	18.4
Depressive symptoms (past 12 months)	14.2	17.2	24.9	18.9
Self-injury (past 12 months)	10.2	14.5	19.4	14.8
Considered suicide (lifetime)	12.8	18.3	21.2	17.5
Attempted suicide (lifetime)	3.9	5.1	7.8	5.7
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>				
Exercised for ≥20 minutes on 3 or more days/week	78.4	79.9	73.4	77.0
Overweight or obese <sup>‡</sup>	22.7	22.5	17.9	20.7

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Students who were ≥85th percentile for body mass index by age and gender, based on reference data

# High School Key Indicators

2006–2021 Trends  
2021 Patterns by Sex  
2021 Patterns by Grade

# Algonquin Regional High School (Grades 9-12)

## 2006-2021 Trends in Key Indicators

### MetroWest Adolescent Health Survey

	Year of Survey (%)							
	2006	2008	2010	2012	2014	2016	2018	2021
	–	–	(1,332)	(1,377)	(1,296)	(1,308)	(1,337)	(1,003)
<b>SUBSTANCE USE</b>								
Lifetime cigarette smoking	–	–	19.4	19.1	15.1	11.3	11.9	8.4
Current cigarette smoking (past 30 days)	–	–	8.1	8.0	6.8	4.6	2.8	2.4
Lifetime electronic vapor product use*	–	–	–	–	29.6	26.4	43.4	24.0
Current electronic vapor product use (past 30 days)*	–	–	–	–	16.5	14.6	31.5	13.9
Lifetime alcohol use	–	–	52.7	58.1	52.7	56.4	54.8	48.7
Current alcohol use (past 30 days)	–	–	31.2	38.2	31.9	37.5	32.7	30.8
Binge drinking (past 30 days) <sup>†</sup>	–	–	17.3	23.1	18.1	19.9	19.0	18.0
Rode with driver who had been drinking (past 30 days)	–	–	16.9	17.7	14.7	14.8	13.0	11.1
Lifetime marijuana use	–	–	28.0	33.4	29.7	33.0	35.0	23.6
Current marijuana use (past 30 days)	–	–	19.8	23.8	19.1	25.5	24.3	15.4
Lifetime prescription drug misuse <sup>‡</sup>	–	–	10.3	11.8	6.9	6.1	6.4	5.7
<b>VIOLENCE</b>								
Physical fighting (past 12 months)	–	–	20.0	17.2	11.3	12.3	14.4	11.6
Physical fighting on school property (past 12 months)	–	–	5.8	5.5	3.3	3.1	4.1	2.7
Carried a weapon (past 30 days)	–	–	5.2	5.6	5.3	6.8	5.6	3.2
Carried a weapon on school property (past 30 days)	–	–	2.0	1.9	1.2	1.3	1.1	0.6
<b>BULLYING VICTIMIZATION</b>								
Bullying victim (past 12 months)	–	–	34.9	27.8	24.3	22.8	23.5	21.7
Bullying victim on school property (past 12 months)	–	–	30.6	23.8	20.7	19.2	20.7	17.3
Cyberbullying victim (past 12 months)	–	–	19.2	22.2	21.2	20.2	18.3	20.4
<b>MENTAL HEALTH</b>								
Life "very" stressful (past 30 days)	–	–	25.8	26.6	35.0	33.9	39.3	37.5
Depressive symptoms (past 12 months)	–	–	18.1	18.2	18.8	17.6	20.6	26.7
Self-injury (past 12 months)	–	–	14.2	14.3	13.8	13.3	14.8	20.8
Considered suicide (past 12 months)	–	–	10.3	11.9	9.7	12.8	14.7	18.2
Attempted suicide (past 12 months)	–	–	3.1	4.3	3.1	3.4	4.6	5.2
<b>SEXUAL BEHAVIOR</b>								
Lifetime sexual intercourse	–	–	21.4	24.7	22.4	20.3	21.4	18.4
Currently sexually active (past 3 months)	–	–	15.5	20.0	17.8	15.7	18.0	14.9
Condom use at last intercourse <sup>§</sup>	–	–	64.9	69.8	68.8	64.0	58.3	59.4
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>								
Exercised for ≥60 minutes on 5 or more days/week	–	–	40.8	46.1	46.7	47.4	51.6	52.5
Overweight or obese**	–	–	15.2	14.9	16.4	16.2	16.0	14.2

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription; in 2021, added "or differently than how a doctor told you to use it"

§ Among currently sexually active youth

\*\*Students who were ≥85th percentile for body mass index by age and gender, based on reference data



# Algonquin Regional High School (Grades 9-12)

## 2021 Key Indicator Patterns by Sex

*MetroWest Adolescent Health Survey*

	Sex (%)		Total (%)
	Female (518)	Male (482)	(1,003)
<b>SUBSTANCE USE</b>			
Lifetime cigarette smoking	9.7	6.9	8.4
Current cigarette smoking (past 30 days)	2.3	2.5	2.4
Lifetime electronic vapor product use*	26.0	21.9	24.0
Current electronic vapor product use (past 30 days)*	15.4	12.3	13.9
Lifetime alcohol use	53.2	44.1	48.7
Current alcohol use (past 30 days)	35.2	26.1	30.8
Binge drinking (past 30 days) <sup>†</sup>	21.2	14.7	18.0
Rode with driver who had been drinking (past 30 days)	12.2	9.9	11.1
Lifetime marijuana use	25.6	21.4	23.6
Current marijuana use (past 30 days)	14.3	16.7	15.4
Lifetime prescription drug misuse <sup>‡</sup>	6.3	5.0	5.7
<b>VIOLENCE</b>			
Physical fighting (past 12 months)	6.0	17.6	11.6
Physical fighting on school property (past 12 months)	0.4	5.3	2.7
Carried a weapon (past 30 days)	1.9	4.6	3.2
Carried a weapon on school property (past 30 days)	0.2	1.1	0.6
<b>BULLYING VICTIMIZATION</b>			
Bullying victim (past 12 months)	24.1	19.2	21.7
Bullying victim on school property (past 12 months)	17.3	17.3	17.3
Cyberbullying victim (past 12 months)	23.3	17.4	20.4
<b>MENTAL HEALTH</b>			
Life "very" stressful (past 30 days)	48.8	25.0	37.5
Depressive symptoms (past 12 months)	35.6	17.0	26.7
Self-injury (past 12 months)	27.8	13.0	20.8
Considered suicide (past 12 months)	23.2	12.7	18.2
Attempted suicide (past 12 months)	6.9	3.3	5.2
<b>SEXUAL BEHAVIOR</b>			
Lifetime sexual intercourse	16.6	20.4	18.4
Currently sexually active (past 3 months)	13.4	16.6	14.9
Condom use at last intercourse <sup>§</sup>	50.7	67.1	59.4
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>			
Exercised for ≥60 minutes on 5 or more days/week	43.2	63.0	52.5
Overweight or obese**	13.3	15.2	14.2

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription or differently than how a doctor told you to use it

§ Among currently sexually active youth

\*\*Students who were ≥85th percentile for body mass index by age and gender, based on reference data

# Algonquin Regional High School (Grades 9-12)

## 2021 Key Indicator Patterns by Grade

*MetroWest Adolescent Health Survey*

	Grade (%)				Total (%) (1,003)
	9 <sup>th</sup> (241)	10 <sup>th</sup> (268)	11 <sup>th</sup> (228)	12 <sup>th</sup> (265)	
<b>SUBSTANCE USE</b>					
Lifetime cigarette smoking	3.4	6.0	6.7	16.7	8.4
Current cigarette smoking (past 30 days)	0.4	0.8	2.2	6.1	2.4
Lifetime electronic vapor product use*	7.1	21.5	25.3	40.7	24.0
Current electronic vapor product use (past 30 days)*	2.5	11.7	16.1	24.4	13.9
Lifetime alcohol use	32.9	43.0	55.8	62.7	48.7
Current alcohol use (past 30 days)	13.6	25.7	36.2	46.7	30.8
Binge drinking (past 30 days) <sup>†</sup>	3.0	15.2	19.7	33.0	18.0
Rode with driver who had been drinking (past 30 days)	10.5	9.8	8.8	14.8	11.1
Lifetime marijuana use	6.3	17.3	26.9	42.9	23.6
Current marijuana use (past 30 days)	2.1	11.4	15.8	31.5	15.4
Lifetime prescription drug misuse <sup>‡</sup>	4.3	5.3	6.5	6.6	5.7
<b>VIOLENCE</b>					
Physical fighting (past 12 months)	13.4	12.7	7.5	12.2	11.6
Physical fighting on school property (past 12 months)	2.9	1.5	2.7	3.8	2.7
Carried a weapon (past 30 days)	2.9	2.2	3.6	4.2	3.2
Carried a weapon on school property (past 30 days)	0.4	0.4	0.0	1.5	0.6
<b>BULLYING VICTIMIZATION</b>					
Bullying victim (past 12 months)	23.1	18.7	23.6	22.0	21.7
Bullying victim on school property (past 12 months)	18.0	13.1	20.9	17.8	17.3
Cyberbullying victim (past 12 months)	23.4	23.6	16.6	17.7	20.4
<b>MENTAL HEALTH</b>					
Life "very" stressful (past 30 days)	22.6	37.1	42.9	46.9	37.5
Depressive symptoms (past 12 months)	22.5	24.8	31.2	28.6	26.7
Self-injury (past 12 months)	20.8	21.8	24.0	16.9	20.8
Considered suicide (past 12 months)	16.5	18.1	18.5	19.4	18.2
Attempted suicide (past 12 months)	3.5	6.1	3.7	7.1	5.2
<b>SEXUAL BEHAVIOR</b>					
Lifetime sexual intercourse	4.3	9.8	21.0	38.4	18.4
Currently sexually active (past 3 months)	3.5	7.2	15.6	33.2	14.9
Condom use at last intercourse <sup>§</sup>	62.5	63.2	58.8	58.5	59.4
<b>PHYSICAL ACTIVITY AND BODY WEIGHT</b>					
Exercised for ≥60 minutes on 5 or more days/week	61.4	53.0	48.2	47.8	52.5
Overweight or obese**	13.7	16.5	14.9	11.7	14.2

\* Includes electronic cigarettes (e-cigarettes) like JUUL, Phix, Vuse, MarkTen, and blu, and other electronic vapor products, like vapes, vape pens, e-cigars, e-hookahs, hookah pens, and mods; in 2021, disposable products like Puff Bars, Stig, and Viigo were added to the definition.

† From 2006 to 2014, binge drinking was defined as 5 or more drinks in a row on one or more occasion for all students. Since 2016, binge drinking has been defined as 4 or more drinks in a row for females and 5 or more drinks in a row for males.

‡ Without a doctor's prescription or differently than how a doctor told you to use it

§ Among currently sexually active youth

\*\*Students who were ≥85th percentile for body mass index by age and gender, based on reference data

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