



Youth and the Juvenile Justice System: 2022 National Report

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Chapter 3

Offending by youth

Highly publicized—often violent—events tend to shape public perceptions of offending by youth. It is important for the public, the media, elected officials, and juvenile justice professionals to have an accurate view of (1) the crimes committed by youth, (2) the proportion and characteristics of youth involved in law-violating behaviors, and (3) trends in these behaviors. This understanding can come from studying self reports of offending behavior, victim reports, and official records.

As documented in the following pages, many youth who commit crimes (even serious crimes) never enter the juvenile justice system. Consequently, developing a portrait of youth law-violating behavior from official records gives only a partial picture. This chapter presents what is known about the prevalence and incidence of offending by youth prior to the youth entering the juvenile justice system. It relies on self-report and victim data developed by the Bureau of Justice Statistics' National Crime Victimization Survey, the Centers for

Disease Control and Prevention's Youth Risk Behavior Surveillance Survey, and the National Institute on Drug Abuse's Monitoring the Future Study. Official data on offending by youth are presented from the Federal Bureau of Investigation's Supplementary Homicide Reports and its National Incident-Based Reporting System.

In this chapter, readers can learn the answers to many commonly asked questions: What proportion of youth are involved in crime at school? Is it common for youth to carry weapons to school? Are students fearful of crime at school? How prevalent is drug and alcohol use? How many homicides are committed by youth, and whom do they murder? When are crimes committed by youth most likely to occur? Are there gender and racial/ethnic differences in the law-violating behaviors of youth?

Official statistics on offending by youth as it relates to law enforcement, juvenile and criminal courts, and correctional facilities are presented in subsequent chapters in this report.

Self reports and official records are the primary sources of information on offending by youth

Self-report studies ask participants to report on their experiences and behaviors

Much of what is known about the prevalence and characteristics of offending by and against youth is derived from self-report studies and official statistics. Self-report studies can capture information on behavior that never comes to the attention of the justice system. Compared with official data, self-report studies tend to find a higher proportion of the youth population involved in law-violating behavior.

Self-report studies, however, have their own limitations. A youth's memory limits the information that can be captured. This, along with other problems associated with interviewing young children, is the reason that the National Crime Victimization Survey does not attempt to interview children under age 12. Some respondents are also unwilling to disclose law violations com-

mitted by or against them. Finally, it is often difficult for self-report studies to collect data from large enough samples to develop a sufficient understanding of relatively rare events, such as serious violent offending.

Official statistics document what comes to the attention of the justice system

Official records underrepresent offending by youth. Many crimes committed by youth are never reported to authorities. Many youth who commit offenses are never arrested or are not arrested for all of their law violations. As a result, official records systematically underestimate the scope of offending by youth. In addition, to the extent that other factors may influence the types of crimes or youth that enter the justice system, official records may distort the attributes of juvenile crime.

Official statistics can yield multiple interpretations

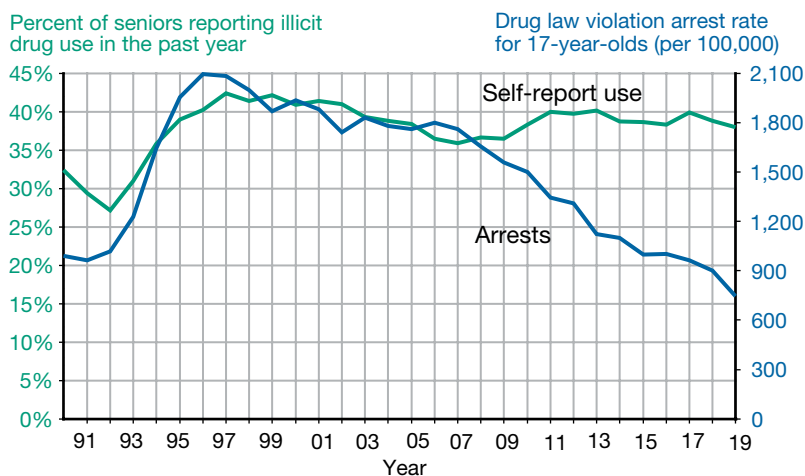
Relying on official statistics alone can lead to an incomplete understanding of offending by youth. Consider the trends in youth arrests for drug abuse violations. Since reaching a peak in the late 1990s, youth arrests for drug abuse violations have declined considerably. One interpretation of these official statistics could be that youth today are simply less likely to violate drug laws than were youth in the 1990s. National self-report studies, such as Monitoring the Future, however, find that illicit drug use changed little since the mid-2000s. If drug use is relatively stable, the declining youth arrest rate for drug crimes may represent societal tolerance of such behavior and/or an unwillingness to bring these youth into the justice system for treatment or punishment.

Although official records may be inadequate measures of the level of offending by youth, they are good indicators of justice system activity. Analysis of variations in official statistics across time and jurisdictions provides an understanding of justice system caseloads.

Used together, self-report and official statistics provide insight into offending and victimization

Delbert Elliott, founding director of the Center for the Study and Prevention of Violence and lead research investigator of the National Youth Survey, has argued that to abandon either self-report or official statistics in favor of the other is "rather shortsighted; to systematically ignore the findings of either is dangerous, particularly when the two measures provide apparently contradictory findings." Elliott stated that a full understanding of the etiology and development of youth law-violating behavior is enhanced by using and integrating both self-report and official data.

Trends in self-report drug use and official records of drug arrest rates have diverged in recent years



- Self-report and official data sources send a mixed message regarding youth drug use. According to self-report data, the proportion of high school seniors reporting use of any illicit drug (including marijuana) in the past year changed little since 2008, ranging from 36% to 40% through 2019. Conversely, the arrest rate for drug law violations involving 17-year-olds has declined 55% since 2008 (from 1,655 per 100,000 youth to 745 in 2019).

Source: Authors' adaptation of Miech et al.'s *Monitoring the Future National Survey on Drug Use, 1975–2010. Volume I: Secondary School Students* and authors' analysis of arrest data from the Bureau of Justice Statistics and the National Center for Juvenile Justice.

In 2019, about 1 in 8 high school students carried a weapon in the past month, and 1 in 36 carried a weapon to school

National survey monitors youth health risk behaviors

The Centers for Disease Control and Prevention’s Youth Risk Behavior Surveillance System (YRBSS) monitors health risk behaviors that contribute to the leading causes of death, injury, and social problems among youth in the U.S. Every 2 years, YRBSS collects data from a representative sample of 9th–12th graders in public and private schools nationwide. The 2019 survey included responses from 13,677 students from 44 states and 27 large cities.

In 2019, 3% of students carried a weapon to school

The 2019 YRBSS found that 13% of high school students said they had carried a weapon (e.g., gun, knife, or club) anywhere in the past 30 days and 3% said they carried a weapon on school property. Additionally, 4% of high school students said they carried a gun (anywhere) at least once in the past 12 months.

About 1 in 13 high school students were threatened or injured with a weapon at school

The proportion of students reporting weapon-related threats or injuries at school during the year was 7% in 2019.

Percent of students threatened or injured with a weapon at school in the past year:

Demographic	Total	Male	Female
Total	7.4%	8.0%	6.5%
9th grade	8.1	8.9	7.2
10th grade	8	8.3	7.3
11th grade	7.1	8.6	5.3
12th grade	5.9	5.9	5.7
White*	7.1	7.6	6.4
Black*	8.8	10.2	7.2
Hispanic	6.9	7.3	6.4
American Indian*	12.6	N/A	N/A
Asian*	3.2	4.7	1.6
Multiple race*	11.4	12.2	10.6

* Excludes persons of Hispanic ethnicity.

In 2019, male high school students reported carrying a weapon at least one day in the past month at higher rates than females, and White students reported carrying a weapon at higher rates than Black, Hispanic, and Asian youth

Demographic	Percentage of students reporting activity:		
	Carried a weapon	Carried a weapon on school property	Carried a gun
Total	13.2%	2.8%	4.4%
Male	19.5	3.7	6.7
Female	6.7	1.7	2.0
9th grade	12.5	2.0	3.9
10th grade	12.2	2.2	4.4
11th grade	12.9	3.3	4.5
12th grade	14.9	3.3	4.7
White	15.0	2.1	3.3
Black/African American	9.4	4.2	7.1
Hispanic/Latino	11.7	3.1	5.6
American Indian/ Alaska Native	NA	10.8	NA
Asian	5.2	1.3	0.9
Native Hawaiian/ Other Pacific Islander	NA	NA	NA
Multiple race	17.5	3.3	5.7

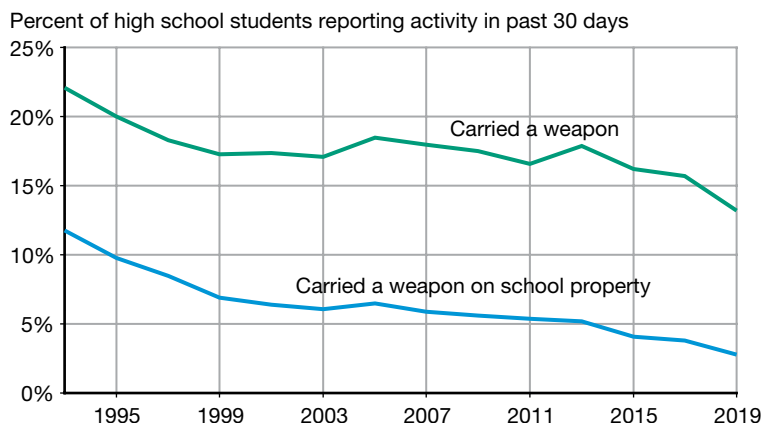
- Male high school students were more likely to report carrying a weapon than females (19.5% vs. 6.7%) and were more likely to carry a weapon on school property (3.7% vs. 1.7%) in 2019.
- White (15.0%) students were more likely than their Hispanic (11.7%), Black (9.4%), and Asian (5.2%) peers to carry a weapon in the last 30 days. However, American Indian/Alaskan Native youth were more likely than white, Hispanic, and Asian youth to report carrying a weapon on school property in the last 30 days.
- High school juniors and seniors were more likely to report carrying a weapon in the past 30 days than high school freshman.
- Males (6.7%) were more likely than females (2.0%) to report carrying a gun in the past 12 months, and Black (7.1%), Hispanic (5.6%) and white (3.3%) students were more likely to report carrying a gun than Asian (0.9%) students.

NA = Too few respondents to develop a reliable estimate.

Notes: Race categories exclude persons of Hispanic ethnicity. Persons of Hispanic ethnicity can be of any race. Respondents were asked to consider the last 30 days when reporting whether they had 1) carried a weapon or 2) carried a weapon on school property, and the last 12 months when reporting about carrying a gun (which did not include days when the youth carried a gun solely for hunting or for a sport). Weapon includes a gun, knife, or club.

Source: Author’s adaptation of Centers for Disease Control and Prevention’s *1991–2019 High School Youth Risk Behavior Survey Data*.

In 2019, about 1 in 8 (13%) high school students said they carried a weapon in the past 30 days, down from more than 1 in 5 (22%) in 1993



■ Roughly 1 in 35 (3%) high school students reported carrying a weapon on school property in 2019, down from about 1 in 8 (12%) in 1993.

Notes: For each behavior, respondents were asked if they had done so at least one day in the past 30 days. Weapon includes a gun, knife, or club.

Source: Authors' adaptation of Centers for Disease Control and Prevention's 1991–2019 High School Youth Risk Behavior Survey Data.

Overall, males were more likely than females to report being threatened or injured at school while Asian youth were less likely than White, Black, or Hispanic students to report being threatened or injured.

Fear of school-related crime kept 9 in 100 high schoolers home at least once in the past month

Nationwide in 2019, 9% of high school students missed at least 1 day of school in the past 30 days because they felt unsafe at school or when traveling to or from school, up from 6% in 2011. Females were more likely than males to miss school because of safety concerns. Regardless of gender, Hispanic students were more likely than White students to have missed school because they felt unsafe. Black males were more like than White males to stay home, while there was no statistically significant difference between Black and White females.

Percent of students who felt too unsafe to go to school in the past month:

Demographic	Total	Male	Female
Total	8.7%	7.5%	9.8%
9th grade	8.8	7.6	10.0
10th grade	8.1	7.1	9.2
11th grade	9.5	8.1	10.7
12th grade	8.1	7.0	8.8
White*	6.7	5.2	8.1
Black*	11.5	12.2	10.8
Hispanic	10.9	9.9	11.8
American Indian*	24.7	N/A	N/A
Asian*	5.1	4.9	5.4
Multiple race*	11.1	8.1	13.7

* Excludes persons of Hispanic ethnicity.

More than 1 in 5 high school students were in a physical fight—2 in 25 were in a fight at school

In 2019, 22% of high school students said they had been in one or more physical fights during the past 12 months, and 8% reported being in a fight at school. This is down 11 percentage points from the 2011 survey. Regardless of grade level or race/eth-

nicity, males were more likely than females to engage in fighting.

Percent of students who were in a physical fight in the past year:

Demographic	Total	Male	Female
Total	21.9%	28.3%	15.3%
9th grade	25.8	32.3	18.6
10th grade	23.3	29.2	17.3
11th grade	20.0	26.7	13.4
12th grade	17.6	24.2	10.9
White*	19.8	26.6	12.7
Black*	30.2	36.9	22.7
Hispanic	22.6	27.7	17.8
American Indian*	40.2	N/A	N/A
Asian*	12.0	17.6	6.1
Multiple race*	28.7	40.6	18.3

* Excludes persons of Hispanic ethnicity.

Regardless of gender, fighting was more common among Black students than White students. Hispanic females were more likely than their white peers to be involved in a fight, however there was no difference between Hispanic males and their white counterparts.

Nationwide, 8% of high school students had been in a physical fight on school property one or more times in the 12 months preceding the survey, down from 12% in 2011. Male students were substantially more likely to fight at school than female students at all grade levels and across racial/ethnic groups. Regardless of gender, Black students were more likely to fight at school than White students. Hispanic females were more likely to fight than their White counterparts.

Percent of students who were in a physical fight on school property in the past year:

Demographic	Total	Male	Female
Total	8.0%	11.4%	4.4%
9th grade	11.0	15.8	5.6
10th grade	8.3	11.4	5.1
11th grade	6.4	9.2	3.5
12th grade	5.8	8.5	2.8
White*	6.4	10.2	2.2
Black*	15.5	18.8	11.7
Hispanic	7.8	10.2	5.6
American Indian*	18.9	N/A	N/A
Asian*	4.9	6.8	3.0
Multiple race*	11.0	17.6	4.5

* Excludes persons of Hispanic ethnicity.

Across reporting states, the proportion of high school students who carried a weapon on school property in 2019 ranged from 1% (Pennsylvania) to about 9% (Alaska)

State	Percent reporting they carried a weapon on school property in the last 30 days			Percent reporting they were threatened or injured with a weapon on school property in the last year		
	Total	Male	Female	Total	Male	Female
U.S. total	2.8%	1.7%	3.7%	7.4%	6.5%	8.0%
Alabama	3.8	5.4	1.8	8.2	9.4	6.0
Alaska	8.5	12.0	3.8	NA	NA	NA
Arizona	3.9	5.1	2.2	6.7	8.5	4.4
Arkansas	5.3	6.9	3.3	8.1	7.5	8.3
California	2.7	3.1	2.3	12.3	13.9	10.6
Colorado	NA	NA	NA	NA	NA	NA
Connecticut	3.5	4.6	2.4	6.8	7.4	6.1
Delaware	NA	NA	NA	NA	NA	NA
Dist. of Columbia	4.9	3.5	6.1	9.4	7.0	11.1
Florida	2.3	3.0	1.4	8.2	9.2	6.9
Georgia	5.2	6.8	3.0	6.0	7.2	3.8
Hawaii	NA	NA	NA	NA	NA	NA
Idaho	7.1	10.9	3.1	7.9	9.6	6.0
Illinois	2.7	3.4	1.5	8.0	9.6	6.0
Indiana	NA	NA	NA	NA	NA	NA
Iowa	3.8	5.4	2.1	7.3	8.1	6.0
Kansas	4.2	6.4	1.6	8.2	10.0	5.8
Kentucky	2.7	4.0	0.9	7.1	7.9	5.8
Louisiana	3.8	5.5	1.9	12.4	12.9	10.6
Maine	4.6	6.3	2.3	5.8	6.9	4.3
Maryland	5.7	7.3	3.4	7.8	8.9	5.7
Massachusetts	1.8	2.8	0.7	4.5	5.5	2.9
Michigan	2.5	3.6	1.1	7.4	8.3	6.1
Mississippi	3.4	4.5	2.1	9.8	9.6	9.3
Missouri	4.6	5.9	3.0	NA	NA	NA
Montana	7.0	10.4	3.3	7.9	10.1	5.2
Nebraska	4.1	5.3	2.2	8.0	7.7	7.9
Nevada	NA	NA	NA	7.8	8.4	7.0
New Hampshire	2.8	4.0	1.4	6.4	7.0	5.5
New Jersey	2.1	2.4	1.6	7.6	8.9	6.1
New Mexico	4.0	5.2	2.8	NA	NA	NA
New York	NA	NA	NA	8.1	10.1	5.3
North Carolina	2.7	2.9	1.9	7.2	8.8	5.1
North Dakota	4.9	6.5	3.0	NA	NA	NA
Ohio	NA	NA	NA	NA	NA	NA
Oklahoma	5.2	7.5	2.7	6.1	7.5	4.4
Pennsylvania	1.3	1.5	1.1	7.6	8.6	6.4
Rhode Island	3.7	4.3	2.5	NA	NA	NA
South Carolina	3.2	4.7	1.6	10.2	12.5	6.7
South Dakota	5.3	7.3	2.6	8.1	8.6	6.8
Tennessee	NA	NA	NA	8.6	10.6	6.5
Texas	3.3	4.5	2.1	6.7	7.3	5.7
Utah	6.9	9.8	3.9	6.5	9.2	3.8
Vermont	4.9	7.1	2.6	7.0	7.6	6.3
Virginia	2.1	2.8	1.4	7.9	9.0	6.7
West Virginia	2.8	4.2	1.2	7.5	7.6	6.6
Wisconsin	NA	NA	NA	7.2	8.1	5.9
Median	3.8	5.2	2.2	7.7	8.6	6.0

NA = Data not available.

Notes: Weapon includes a gun, knife, or club. Totals include responses from students for whom gender was unknown. Minnesota, Oregon, Washington, and Wyoming did not participate in the data collection.

Source: Authors' adaptation of the Centers for Disease Control and Prevention's *1991–2019 High School Youth Risk Behavior Survey Data*.

Most teens report concern about school shootings

According to the National Center for Education Statistics, 453 school shootings occurred at K-12 schools in the U.S. between the 2009–10 and 2018–19 school years. More than 4 in 10 (45%) incidents resulted in injuries but no deaths, 30% resulted in fatalities, and 25% resulted in no injury or deaths. The 453 school shooting incidents produced 649 casualties (persons injured or killed in the course of the shooting), one-third (33%) of which were fatalities (including the death of the shooter); the remaining casualties involved injuries. The majority (62%) of school shootings occurred at high schools, 22% at elementary schools, and 12% at middle schools.

A 2018 survey of high school students conducted by the PEW Research Center found that more than half (57%) of youth ages 13–17 stated they were either “very worried” (25%) or “somewhat worried” (32%) that a shooting may occur at their school. Nearly three-quarters (73%) of Hispanic and 6 in 10 (60%) of Black youth expressed such concern, compared with half (51%) of White youth; nearly two-thirds (64%) of females were concerned a shooting may occur at their school, compared with half (51%) of boys.



In 2019, nearly half of high school seniors reported they had used an illicit drug at least once—more had used alcohol

The Monitoring the Future Study tracks the drug use of secondary school students

Each year, the Monitoring the Future (MTF) Study asks a nationally representative sample of more than 40,000 secondary school students in nearly 400 public and private schools to describe their drug use patterns through self-administered questionnaires. Surveying seniors since 1975, the study expanded in 1991 to include 8th and 10th graders. By design, MTF excludes dropouts and institutionalized, homeless, and runaway youth.

Marijuana is the most commonly used illicit drug among students

In 2019, nearly half (47%) of high school seniors said they had at least tried illicit drugs in their lifetime (including marijuana), as did nearly four in ten (37%) 10th graders and one in five (20%) 8th graders. Marijuana is by far the most commonly used illicit drug, and influences the proportion of students reporting illicit drug use. In 2019, 44% of high school seniors said they had tried marijuana, as did 34% of 10th graders and 15% of 8th graders. The prevalence of illicit drug use falls considerably when marijuana is removed: in 2019, 18% of seniors, 14% of 10th graders, and 11% of 8th graders reported using an illicit drug other than marijuana in their lifetime.

More than one-third (36%) of high school seniors had used marijuana in the past year, and 22% used it in the previous month. MTF also asked students if they had used marijuana on 20 or more occasions in the previous 30 days (daily use). In 2019, 6% of high school seniors reported daily use of marijuana.

In 2019, 8% of high school seniors reported using amphetamines at least once, making amphetamines the second most prevalent illicit drug after marijuana. Two percent of seniors re-

ported using amphetamines in the past month. Hallucinogens and tranquilizers were the next most prevalent drugs after amphetamines, with 7% and 6%, respectively, of seniors reporting use at least once in their lifetime. A small proportion of seniors reported using hallucinogens (2%) or tranquilizers (1%) in the past month.

In 2019, 4% of seniors said they had used cocaine at least once in their life. Half of this group (2% of all seniors) said they used it in the previous year, and less than one-quarter of users (1% of seniors) had used it in the preceding 30 days. About 2% of seniors reported previous use of crack cocaine: 1% in the previous year, and less than 1% in

the previous month. Heroin was the least commonly used illicit drug, with less than 1% of seniors reporting they had used it at least once. More than half of seniors who reported heroin use said they used it only without a needle.

Alcohol use and vaping nicotine are widespread at all grade levels

In 2019, nearly 6 in 10 (58%) high school seniors said they had tried alcohol at least once, and nearly three in ten (29%) said they used it in the previous month. Even among 10th graders, the use of alcohol was common: 48% had tried alcohol and almost one-fifth used it in the month prior to the survey.

More high school seniors report daily use of marijuana than alcohol or cigarettes

Substance	Proportion of seniors in 2019 who used			
	in lifetime	in last year	in last month	daily*
Alcohol	58.5%	52.1%	29.3%	1.7%
Been drunk	40.8	32.8	17.5	1.1
Cigarettes	22.3	NA	5.7	2.4
Vaping nicotine	40.8	35.3	25.5	11.6
Any illicit drug**	47.4	38.0	23.7	NA
Marijuana/hashish	43.7	35.7	22.3	6.4
Vaping marijuana	23.7	20.8	14.0	3.5
Amphetamines	7.7	4.5	2.0	0.3
Hallucinogens	6.9	4.6	1.8	0.1
Tranquilizers	6.1	3.4	1.3	0.1
LSD	5.6	3.6	1.4	0.1
Narcotics, not heroin	5.3	2.7	1.0	0.1
Inhalants	5.3	1.9	0.9	0.1
Sedatives	4.2	2.5	1.2	0.1
Cocaine	3.8	2.2	1.0	0.1
MDMA (ecstasy, molly)	3.3	2.2	0.7	0.1
Crack cocaine	1.7	1.0	0.7	0.2
Steroids	1.6	1.0	0.7	0.2
Methamphetamine	0.8	0.5	0.3	0.1
Crystal methamphetamine	1.3	0.6	0.4	0.1
Heroin	0.6	0.4	0.3	0.1

■ More than 1 in 4 seniors report vaping nicotine at least once in the past month, and more than 1 in 10 do so on a daily basis.

NA = Not included in the survey.

* Used on 20 or more occasions in the last 30 days or had 1 or more cigarettes per day in the last 30 days.

** Including marijuana

Source: Author's adaptation of Miech et al's *Monitoring the Future National Survey Results on Drug Use, 1975–2019, Volume 1: Secondary Students*.

MTF also asks youth about heavy drinking (defined as five or more drinks in a row) in the preceding 2 weeks. Fourteen percent (14%) of seniors, 9% of 10th graders, and 4% of 8th graders reported recent heavy drinking.

Information about vaping was added to the MTF survey in 2017. In 2017, one in four (25%) seniors said they had tried vaping nicotine at least once. That proportion grew and in 2019, vaping nicotine was the most likely substance to be used by students on a daily basis. In 2019, 41% of 12th grad-

ers, 37% of 10th graders, and 20% of 8th graders had tried vaping nicotine, and 26% of seniors, 20% of 10th graders, and 10% of 8th graders vaped nicotine in the preceding month. In addition, 12% of seniors, 7% of 10th graders, and 2% of 8th graders reported currently vaping nicotine daily.

While vaping nicotine has been on the rise, the prevalence of cigarette use has decreased since the 1990s. In 1997, 65% of seniors said they tried cigarettes; that proportion fell to 22% by 2019. Similarly, 25% of seniors, 18% of 10th graders, and 9% of 8th graders reported smoking cigarettes daily in

1997; those proportions decreased to 2% for seniors, 1% each for 10th and 8th graders in 2019.

Prevalence rates for most drugs were similar for males and females

Among seniors, 30% of males and 28% of females in 2019 reported alcohol use in the past 30 days, and 16% of males and 12% of females said they had five or more drinks in a row in the previous 2 weeks. Males were twice as likely as females to report daily alcohol use (2% vs. 1%).

Males were equally as likely as females to have used marijuana in the previous year (35% each) but more likely in the previous month (23% vs. 21%), and

For most drugs, a larger proportion of males reported use than females, and a larger proportion of White youth reported use than Black or Hispanic youth

Reference period/ substance	Proportion of seniors reporting use				
	Male	Female	White	Black	Asian/ Pacific Islander
Past month					
Alcohol	29.8%	28.5%	34.9%	19.4%	24.4%
Been drunk	17.2	17.4	21.9	10.5	11.6
Marijuana/hashish	23.0	21.1	21.3	23.8	20.4
Vaping marijuana	14.7	13.0	13.9	8.0	14.0
Cigarettes	6.9	4.0	7.9	3.2	4.5
Vaping nicotine	28.1	22.9	32.4	10.1	13.9
Past year					
Any illicit drug use*	37.5	37.7	38.1	38.3	35.9
Marijuana/hashish	35.2	35.5	35.6	35.7	33.4
Amphetamines	4.9	3.8	5.7	2.7	3.6
Hallucinogens	6.1	2.7	4.5	1.9	4.0
Tranquilizers	3.2	3.4	4.0	2.3	3.0
LSD	4.9	2.1	3.4	1.6	3.2
Narcotics, not heroin	3.4	1.8	3.3	1.7	2.5
Inhalants	2.2	1.5	1.8	1.9	1.3
Sedatives	2.5	2.3	2.6	2.0	2.4
Cocaine	2.6	1.7	2.2	0.9	2.7
MDMA (ecstasy, molly)	1.2	1.0	0.9	0.2	1.5
Steroids	1.4	0.6	0.8	1.8	1.4
Methamphetamine	0.7	0.2	0.4	0.6	0.5
Crystal methamphetamine	0.7	0.4	0.3	1.5	0.6
Heroin	0.5	0.2	0.2	0.7	0.5

* Including marijuana

Notes: Race categories exclude persons of Hispanic ethnicity. Male and female proportions are for 2019. Race proportions are for the current year and the prior year (2019 and 2018) to increase the subgroup sample size and provide more stable estimates.

Source: Author's adaptation of Johnston et al's Demographic Subgroup Trends Among Adolescents in the Use of Various Licit and Illicit drugs, 1975–2019, *Monitoring the Future Occasional Paper No. 94*.

Vaping use rose quickly and substantially

The two largest single year increases in substance use recorded by MTF involve vaping. The 9.9 percentage point increase in past month vaping nicotine by seniors between 2017 and 2018 was the largest one-year increase in the history of MTF, and the 6.5 percentage point increase in past month vaping of marijuana between 2018 and 2019 was the second largest one-year increase. Across grade levels, past month vaping of nicotine and marijuana increased annually since 2017.

Past month vaping use:

Grade/ substance	2017	2018	2019
8th grade			
Nicotine	3.5%	6.1%	9.6%
Marijuana	1.6	2.6	3.9
10th grade			
Nicotine	8.2	16.1	19.9
Marijuana	4.3	7.0	12.6
12th grade			
Nicotine	11.0	20.9	25.5
Marijuana	4.9	7.5	14.0

daily during the previous month (8% vs. 5%).

The proportions of male and female high school seniors reporting overall use of illicit drugs other than marijuana in the previous year were also similar (12% and 10%), but there are variations across drugs. The annual prevalence rate for methamphetamines among 12th grade males was more than three times the rate for 12th grade females, while the male rates for hallucinogens, LSD, heroin, OxyContin, Ritalin, rohypnol, and steroids were more than twice the rates for females.

Black high school seniors had lower tobacco, alcohol, and drug use rates than their White or Hispanic peers

In 2019, 10% of Black seniors said they had vaped nicotine in the past 30 days, compared with 32% of White seniors and 14% of Hispanic seniors. Similarly, past month cigarette use was lower for Black seniors (3%) than either Hispanic (4%) or White (8%) seniors. About one-fifth (19%) of Black seniors reported alcohol use in the past 30 days, compared with 35% of White seniors and 24% of Hispanic seniors. White seniors were more than twice as likely as Black seniors to have been drunk in the past month (22% vs. 10%), and nearly twice as likely as Hispanic seniors (12%).

For nearly all drugs, Black seniors reported lifetime, annual, 30-day, and daily prevalence rates that were lower than those of their White and Hispanic counterparts. For example, in 2019, annual prevalence rates for hallucinogens, LSD, cocaine, and ecstasy among White and Hispanic seniors were at least two times the rates for Black seniors, and amphetamine use among White seniors was twice that of their

Black peers. Conversely, past month marijuana use was higher among Black seniors (24%) than white (21%) or Hispanic (20%) seniors, as were annual prevalence rates for steroids, methamphetamine, crystal methamphetamine, and heroin.

More than 1 in 5 high school students were offered, sold, or given an illegal drug at school

According to the 2019 Youth Risk Behavior Surveillance Survey, 22% of high school students said they were offered, sold, or given an illegal drug on school property at least once during the past 12 months. The proportion was significantly higher for freshman males than their female counterparts, and the proportions for Black, Hispanic, and mixed race males were significantly

higher than the proportion for White males. Overall, Asian students were least likely to report being offered, sold, or given illegal drugs on school property than students of other races.

Percent of students who were offered, sold, or given illegal drugs on school property in the past 12 months, 2019:

Demographic	Total	Male	Female
Total	21.8%	22.8%	20.8%
9th grade	21.6	23.8	19.2
10th grade	23.7	25.1	22.1
11th grade	22.0	21.2	22.6
12th grade	19.6	20.6	18.6
White*	19.8	20.6	19.0
Black*	21.5	26.0	16.7
Hispanic	26.7	26.0	27.2
American Indian*	24.2	NA	NA
Asian*	14.5	15.6	13.2
Mixed race*	27.8	31.8	24.3

* Excludes persons of Hispanic ethnicity.
NA = Too few respondents to develop an estimate.

About 1 in 7 high school students tried alcohol before age 13 and about 1 in 17 tried marijuana

Demographic	Percent who had used before age 13					
	Alcohol			Marijuana		
	Total	Male	Female	Total	Male	Female
Total	15.0%	16.9%	13.0%	5.6%	7.2%	4.0%
9th grade	18.7	20.1	17.4	6.0	7.2	4.8
10th grade	15.4	17.1	13.6	5.7	7.4	4.1
11th grade	13.3	14.9	11.6	6.0	8.2	3.8
12th grade	11.9	14.9	8.6	4.4	5.8	2.9
White*	13.0	15.3	10.6	4.6	5.9	3.2
Black*	17.4	20.7	13.9	8.3	11.0	5.4
Hispanic	18.4	20.3	16.4	6.3	7.9	4.8
American Indian*	18.7	NA	NA	12.6	NA	NA
Asian*	8.4	8.7	8.2	1.1	1.1	1.0
Mixed race*	16.2	13.7	18.5	9.7	12.9	6.7

■ Regardless of grade, males were significantly more likely than females to report marijuana use before age 13.

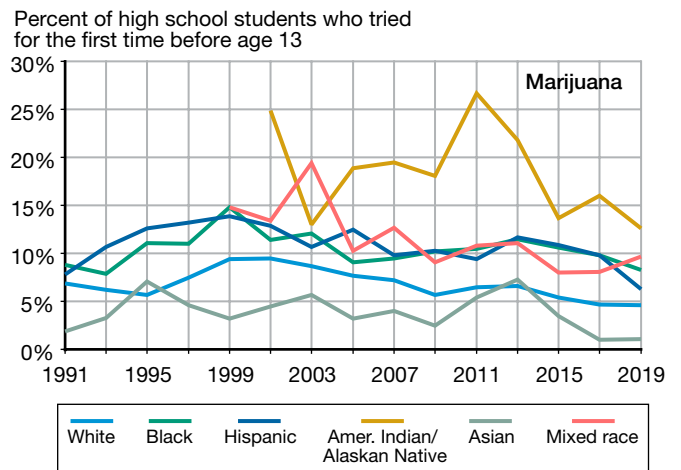
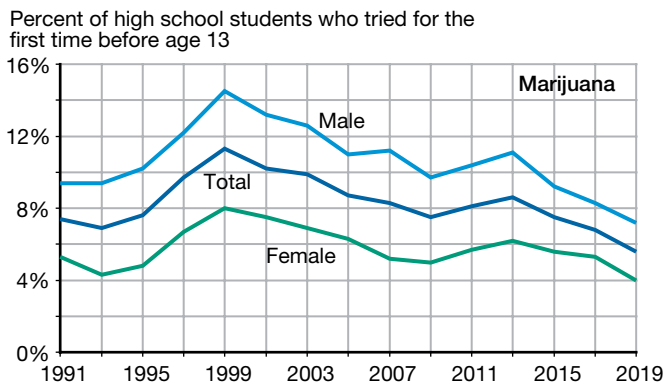
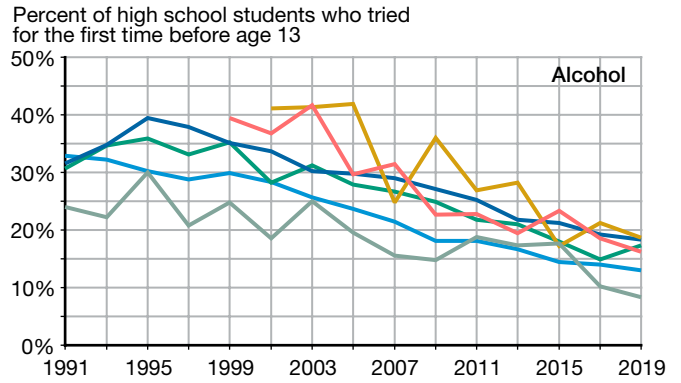
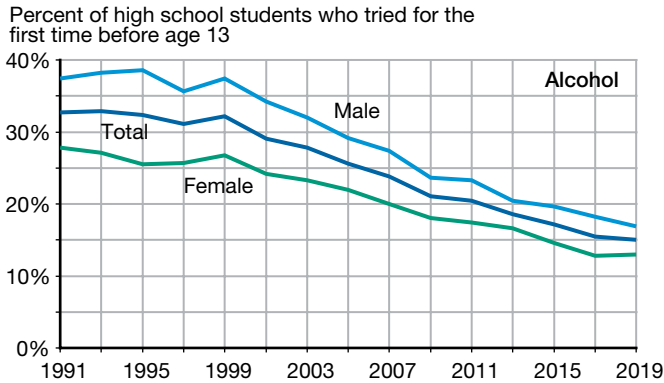
■ Overall, Black and Hispanic high school students were significantly more likely to report alcohol and marijuana use before age 13 than were White students.

NA = Too few respondents to develop an estimate.

* Excludes persons of Hispanic ethnicity.

Source: Authors' adaptation of the Centers for Disease Control and Prevention's 1991–2019 High School Youth Risk Behavior Survey Data.

The proportion of high school students who first tried alcohol or marijuana before age 13 has been on the decline



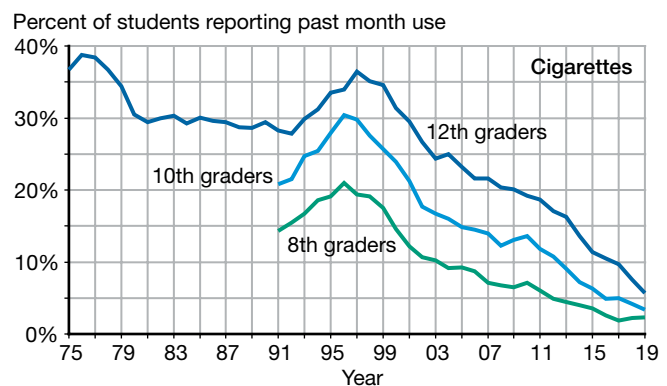
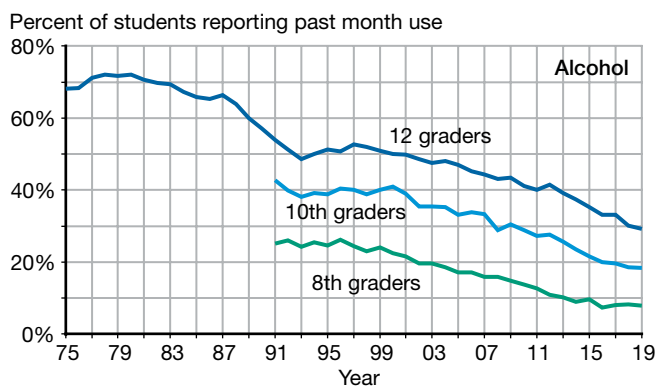
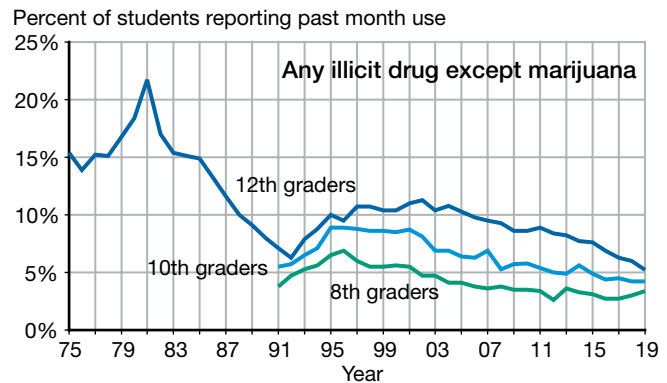
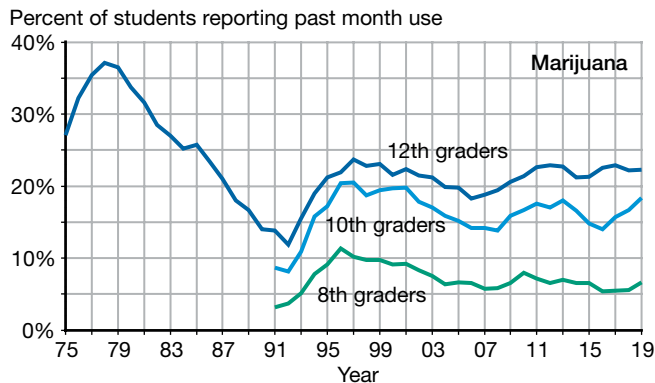
- A smaller proportion of students are trying alcohol or marijuana prior to entering high school. In 1991, 33% of high school students indicated they tried alcohol for the first time before they were 13 years old. By 2019, this proportion was cut in half, as 15% of high school students indicated they had tried alcohol before age 13.
- Onset of marijuana use followed a similar pattern. The proportion of high school students who tried marijuana before age 13 reached a peak in 1999, when 11% of high school students reported they had tried marijuana for the first time before age 13. By 2019, 6% of high school students reported they had tried marijuana for the first time before age 13.

Notes: Racial groups exclude persons of Hispanic ethnicity. Hispanic youth can be of any race. Native Hawaiian and Other Pacific Islanders were included in the Asian category prior to 1999. Due to a small number of sample respondents, estimates for Native Hawaiian and Other Pacific Islander youth are not available after 1998. The mixed race category was not introduced until 1999. Due to a small number of sample respondents, estimates for American Indian/Alaskan Native youth were not available prior to 2001.

Source: Authors' adaptation of the Centers for Disease Control and Prevention's *1991–2019 High School Youth Risk Behavior Survey Data*.

Use of illicit drugs other than marijuana has been on the decline, as has use of alcohol and cigarettes

Unlike marijuana use, the proportion of 10th and 12th graders reporting alcohol, cigarette, and illicit drug use reached historic lows in 2019



- Use of illicit drugs other than marijuana reported by 8th graders declined since the mid-1990s to reach a historic low in 2012; by 2019, the proportion of 8th graders reporting illicit drug use was about 1% above the 2012 low point. Similarly, illicit drug use reported by 10th and 12th graders declined since the mid-1990s; by 2019, the proportion of 10th and 12th graders reporting illicit drug use reached a historic low, 4% and 5%, respectively.
- While use of illicit drugs other than marijuana has declined, past month use of marijuana, the most widely used illicit drug, has increased in recent years particularly among older students. For example, the proportion of 10th and 12th graders reporting past month marijuana use increased 4 percentage points between 2006 and 2019. Among 8th graders, it was about the same in 2019 as in 2006.
- In 2019, the proportion of 12th graders who reported past month marijuana use was more than four times the proportion who reported past month use of illicit drugs (22% vs. 5%) but below the proportion who reported past month alcohol use (29%).
- For all three grades, past-month alcohol use fell steadily since the mid-1990s. The proportion of 10th and 12th graders reporting past month alcohol use reached a new low in 2019, while the proportion of 8th graders reporting past month alcohol use reached a low in 2017 and remained relatively steady through 2019.
- Similar to the trend in alcohol, past month cigarette use has declined for each grade since the mid-1990s. By 2019, the proportion of 10th and 12th graders reporting cigarette use reached an all-time low, while the proportion of 8th graders reporting cigarette use was about one-half of 1% above the 2017 low point. One caveat, however, is that while traditional cigarette use has declined, the proportion of students vaping nicotine has increased. For each grade, the proportion of students vaping nicotine in the past month more than doubled between 2017 and 2019.

Source: Authors' adaptation of Miech et al.'s *Monitoring the Future National Survey on Drug Use, 1975–2019. Volume I: Secondary School Students.*

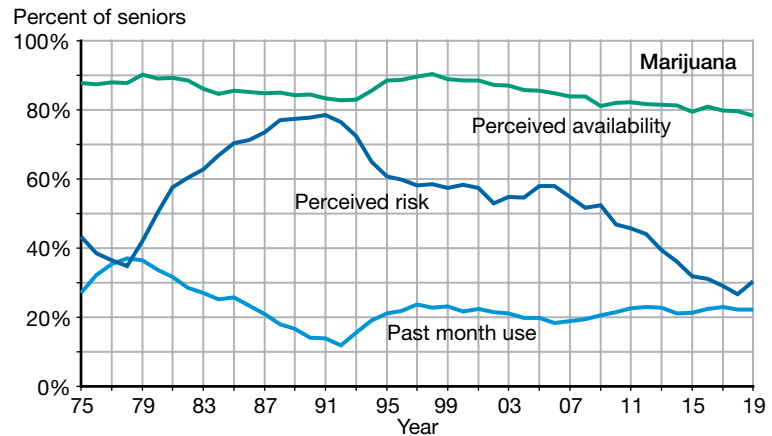
Change in students' use of marijuana and alcohol is tied to their perception of possible harm from use

The annual Monitoring the Future Study, in addition to collecting information about students' use of illicit drugs, alcohol, and tobacco, also collects data on students' perceptions regarding the availability of these substances and the risk of harm from using them.

Between 1975 and 2019, the proportion of high school seniors reporting use of marijuana in the 30 days prior to the survey fluctuated, peaking in 1978 and then declining consistently through 1992. After that, reported use increased through 1997, declined through 2006, and generally increased through 2019. When the perceived risk of harm (physical or other) from either regular or occasional use increased, marijuana use declined; when perceived risk declined, use increased. The perception that obtaining marijuana was "fairly easy" or "very easy" declined from 90% in 1998 to 78% in 2019.

Students' reported use of alcohol and perceptions of risk also shifted from 1975 to 2019. After 1978, alcohol use declined through the early 1990s, rose slightly through 1997, and then declined steadily to reach a historic low (29%) in 2019. As with marijuana, when the perceived risk of harm from weekend "binge" drinking increased, past month alcohol use declined; when perceived risk declined, use generally increased. Over the past 20 years, the proportion of seniors reporting that alcohol was "fairly easy" or "very easy" to obtain declined.

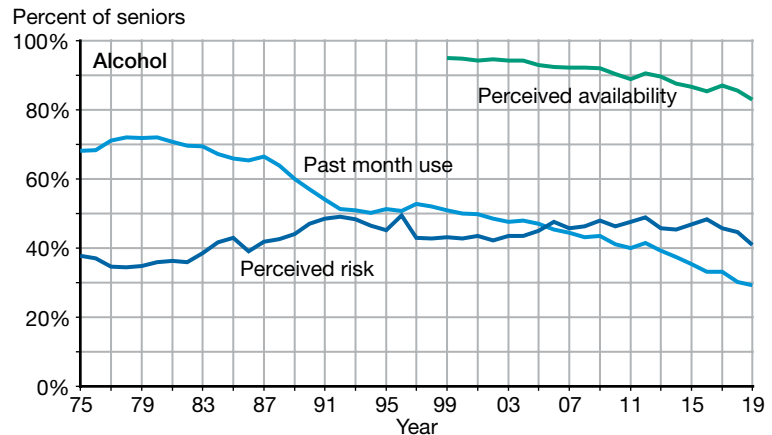
While perceived availability of marijuana and alcohol stayed within a limited range, changes in use reflected changes in perceived harm from use



Perceived availability: Percent saying fairly easy or very easy to get.

Perceived risk: Percent saying great risk or harm in regular use.

Past month use: Percent using once or more in the past 30 days.



Perceived availability: Percent saying fairly easy or very easy to get.

Perceived risk: Percent saying great risk of harm in having five or more drinks in a row once.

Past month use: Percent using once or more in the past 30 days. (The survey question on alcohol use was revised in 1993 to indicate that a "drink" meant "more than a few sips").

Source: Authors' adaptation of Miech et al.'s *Monitoring the Future National Survey on Drug Use, 1975–2019. Volume I: Secondary School Students*.



Serious violent crimes committed by youth declined substantially since the mid-1990s

National survey collects data on victims of crime and the assailant

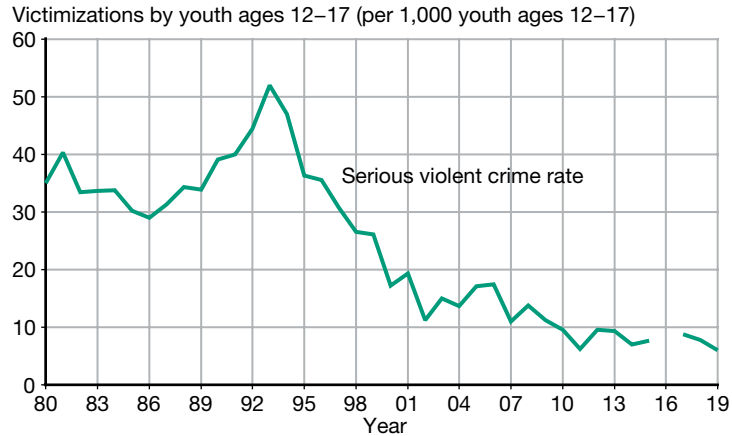
The National Crime Victimization Survey (NCVS) asks a nationally representative sample of persons ages 12 and older about crimes in which they were the victim. Administered by the Bureau of Justice Statistics, NCVS is the primary source of information on the characteristics of nonfatal criminal victimizations and on the number and types of crimes not reported to law enforcement. Violent crimes captured by NCVS include rape/sexual assault, robbery, aggravated assault, and simple assault.

While NCVS focuses on victims, it also collects information about the alleged perpetrator in crimes reported by victims. As a result, NCVS data can be used to monitor trends in offending by youth ages 12–17.

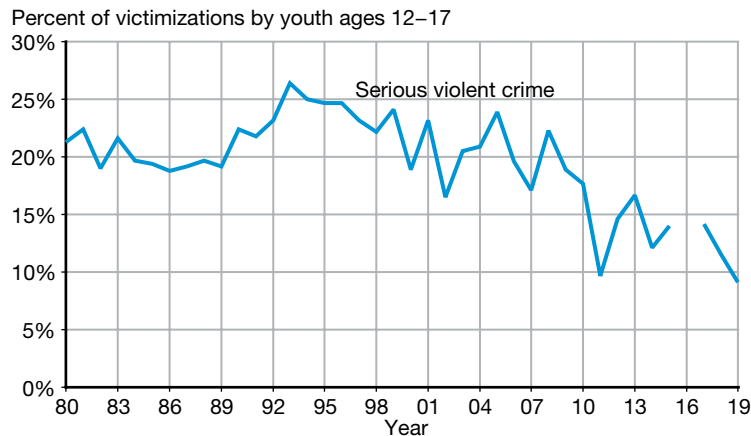
Serious violent crime committed by youth peaked in 1993

NCVS self-report data for rape/sexual assault, robbery, and aggravated assault are often combined with data from the FBI's Supplementary Homicide Reports, which reports murders committed, to monitor trends in serious violent crime—murder, rape/sexual assault, robbery, and aggravated assault. The number of serious violent crimes committed by youth ages 12–17 peaked at 1.1 million in 1993; in that year, more than one-fourth (26%) of all serious violent crimes were committed by youth ages 12–17. By 2019, youth ages 12–17 were involved in 146,000 serious violent crimes—about one-tenth (9%) of all serious violent crimes in that year—and the rate in 2019 was 87% below the 1993 peak.

The rate at which youth ages 12–17 committed serious violent crimes peaked in 1993 then generally declined through 2019



- The rate at which youth ages 12–17 committed serious violent crimes increased 49% from 1980 to its 1993 peak, then decreased 78% from 1993 to 2002. The rate increased slightly through 2006, then generally declined. The rate in 2019 was 66% below the 2006 rate.



- The proportion of serious violent crimes committed by youth ages 12–17 peaked in 1993 at 26%, then decreased to 11% in 2011. The proportion increased in 2013 before decreasing to the lowest level in 2019. In 2019, 9% of all serious violent victimizations were committed by youth ages 12 to 17.
- The proportion of serious violent victimizations involving multiple youth ages 12–17 ranged from a high of 65% in 1982 to a low of 30% in 2019.

Notes: Serious violent crime includes aggravated assault, rape, and robbery reported to the NCVS that involved at least one offender perceived by the victim to be 12–17 years of age, plus the number of homicides reported to the police that involved at least one perpetrator age 12–17. Homicide data were not available for 2019 at the time of publication; therefore, the number of homicides for 2018 is included in the overall total for 2019. Due to a sample increase and redesign in 2016, estimates in 2016 are not comparable to estimates for other years. Due to methodological changes in the 2006 National Crime Victimization Survey, use caution when comparing 2006 criminal perpetration estimates to those for other years. Because of changes made in the victimization survey, data prior to 1992 are adjusted to make them comparable with data collected under the redesigned methodology.

Source: Authors' adaptation of the Federal Interagency Forum on Child and Family Statistics' *America's Children: Key National Indicators of Well-Being*. Table BEH5.

After reaching a historic low in 2013, the number of homicides by youth increased 27% through 2019

More than 1 of every 3 murders in the U.S. are not solved

In 2019, the FBI reported that 16,400 persons were murdered in the U.S. In an estimated 10,100 (61%) of these murders, the incident was cleared by arrest or by exceptional means—that is, either a person was arrested and turned over to the court for prosecution or was identified but law enforcement could not place formal charges (e.g., death of the perpetrator). In the remaining 6,300 murders (36%) in 2019, law enforcement did not identify who committed the crime and their demographic characteristics are not known.

Estimating the demographic characteristics of these unknown individuals is difficult. Their attributes likely differ from those known to have committed murder. For example, it is likely that a greater proportion of those known to law enforcement have family ties to their victims and that a larger proportion of homicides committed by strangers go unsolved. An alternative to estimating characteristics of those responsible for unattributed murders is to trend only murders committed by known individuals. Either approach creates its own interpretation problems. In this section, all analyses of the FBI's *Supplementary Homicide Reports* (SHR) focus solely on individuals known to have committed a murder and, therefore, juveniles known to have committed a murder.

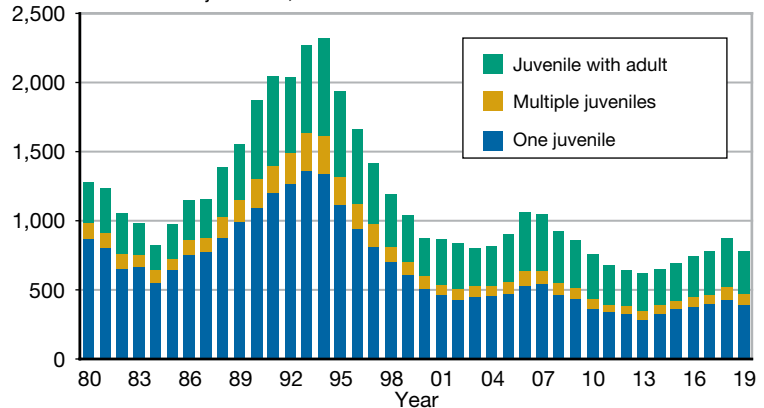
Juveniles were involved in 1 in 14 homicides in 2019

Youth under the age of 18 were involved in an estimated 780 murders in the U.S. in 2019—7% of all murders. In half of these murders (50%), the juvenile acted alone, in 11% they acted with one or more other youth, and in 39% they acted with at least one adult.

In 2019, 86% of the homicide victims of juveniles were male, 42% were

The number of homicides committed by juveniles reached a historic low in 2013—74% below the 1994 peak—then increased 27% through 2019

Homicide victims of juveniles, known to law enforcement

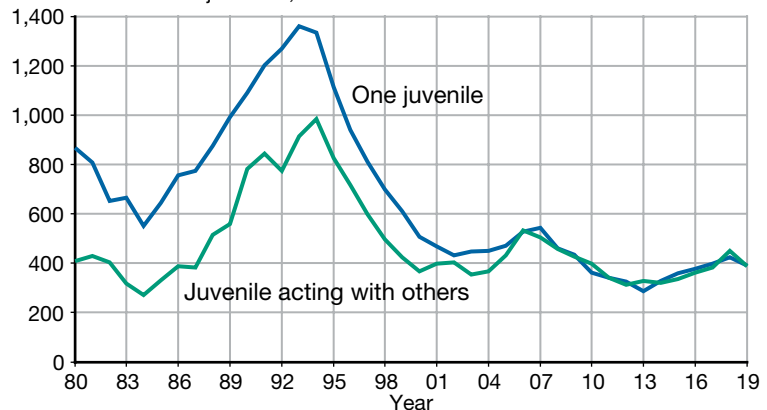


- In the 1980s, one-fourth (25%) of the murders committed by juveniles also involved an adult. The proportion grew to 31% in the 1990s, 38% in the 2000s, and reached 41% for the years 2010–2019.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

The number of murders committed by a juvenile acting alone increased between 2013 and 2019

Homicide victims of juveniles, known to law enforcement



- Murders involving a juvenile acting alone peaked in 1993, then fell 79% through 2013. Since reaching this historic low, the number of murders involving a lone juvenile increased 36% through 2019.
- The proportion of murders involving a juvenile acting alone has gradually declined, from 66% in the 1980s to 59% in the 1990s, and to 50% in the 2010s.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

White, and 55% were Black. The overwhelming majority (88%) of homicide victims of juveniles were killed with a firearm. More than half (57%) of the victims of juveniles were acquaintances, strangers (i.e., no personal relationship to the juvenile) accounted for 27% of victims, and 16% of victims were family members.

The proportion of murders committed by a juvenile that involved at least one other individual gradually increased since 1980. In the 1980s, about one-third of all murders committed by juveniles involved at least one other individual; this proportion grew to 47% in the 2000s, and reached 50% in 2019.

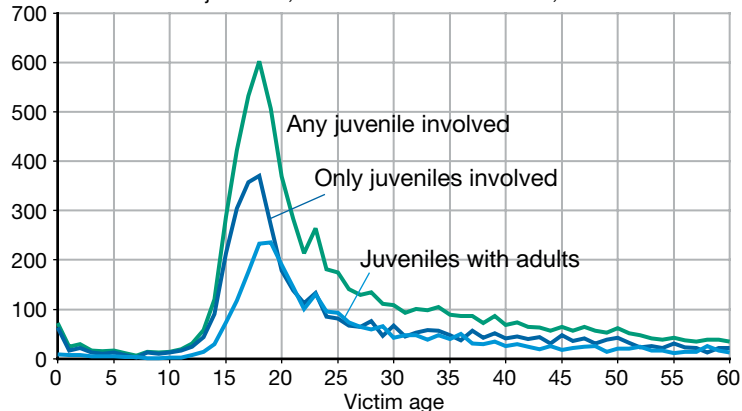
The overwhelming majority of murders committed by juveniles acting with other individuals involved an adult, rather than a youth. Between 2010 and 2019, an adult was involved in 81% of all murders committed by youth that involved multiple individuals.

Fewer juveniles were involved in murder in 2019 than in the 1990s

The increase in youth violence through the mid-1990s resulted in a number of changes in state legislation that exposed more youth to prosecution in the adult criminal justice system. Much of the concern was fueled by the dramatic rise in murders committed by youth between 1984 and 1994. However, the decade-long increase in homicides committed by youth was followed by a long period of decline: the number of murders committed by youth fell 72% between 1994 and 2013, reaching its lowest level since at least 1980. Despite a 27% increase since 2013, juveniles in 2019 were considerably less likely to be implicated in murder than youth in the 1990s: the number of murders involving youth in 2019 was 66% below the 1994 peak.

Between 2010 and 2019, most victims of homicide committed by youth were under age 25

Homicide victims of juveniles, known to law enforcement, 2010–2019

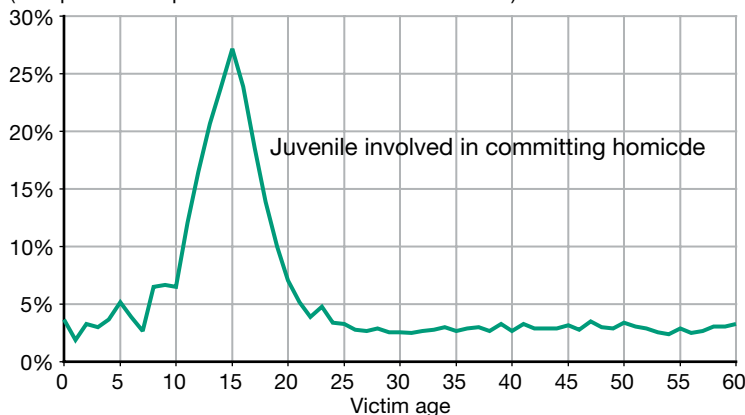


- Nearly 6 in 10 (58%) victims of homicide committed by juveniles were under age 25: 24% were under age 18 and 34% were ages 18–24. Conversely, 4% of victims of homicide committed by juveniles were over age 64.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 2010–2019.

Between 2010 and 2019, youth age 15 were most likely to be killed by a youth

Percent of all homicide victims in age group, 2010–2019 (with persons responsible known to law enforcement)



- Among all murder victims between 2010 and 2019, the proportion killed by juveniles dropped from 27% for victims age 15 to 3% for victims age 24 and then remained at or near 3% for all victims older than 25.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 2010–2019.

Trends in murders by juveniles are driven by several factors

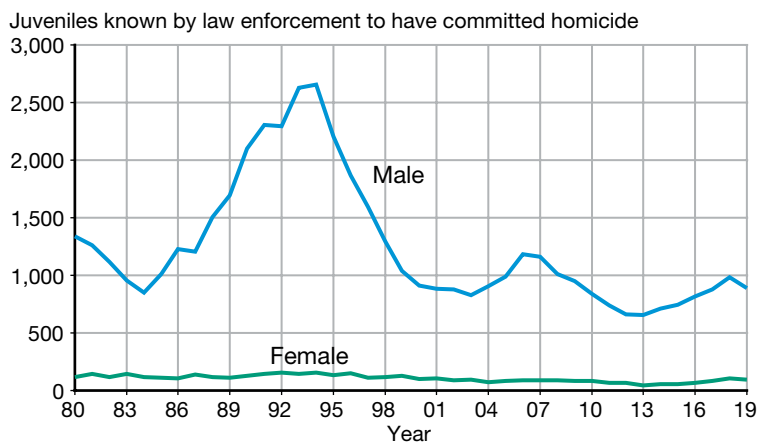
The dramatic rise in murders by juveniles between 1984 and 1994 was influenced by specific types of murders. Overall, the number of juveniles identified by law enforcement to have committed homicide nearly tripled during this period. However, the number of male juveniles implicated in homicides increased more than 200%, while the number of females increased less than 40%. Firearms also contributed to the increase: the number of juveniles who committed murder with a firearm quadrupled during this period, while the number committing murder without a firearm increased less than 30%. Finally, the number of juveniles who killed a family member increased about 20%, while the number of juveniles who killed an acquaintance or a stranger both increased about 220% during this period.

In short, the historic rise in juvenile murder offending between 1984 and 1994 was the result of a growth in murders by male juveniles who committed their crime with a firearm and whose victims were nonfamily members. These factors combined to account for 74% of the increase in homicides by juveniles between 1984 and 1994.

Nearly all of the growth in homicides committed by juveniles was erased by the early 2000s, and by 2013, the number of juveniles known to have committed homicide reached a historic low. Two-thirds (66%) of the overall decline was attributable to the drop in murders of nonfamily members by juvenile males with a firearm.

Since reaching a historic low in 2013, the number of juveniles known to have committed homicide increased through 2019, but the increase was not as substantial as the increase 3 decades prior. The number of juveniles known to have committed homicide in 2019 was 40% above the 2013 low-point, and 65% below the 1994 peak.

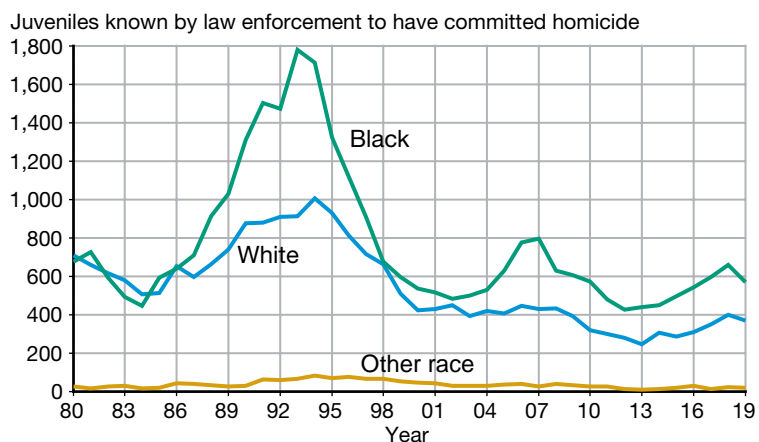
After reaching a historic low in 2013, the number of known male and female juveniles who committed homicide increased through 2019



- While the relative increase in female juveniles who committed homicide outpaced that of males between 2013 and 2019 (116% vs. 35%), females account for a small share of juveniles who commit homicide; since 2004, females accounted for 10% or less of juveniles who committed homicide.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

Despite recent increases, the number of juveniles who committed homicide in 2019 was well below the mid-1990s peak for both White and Black juveniles



- The number of juveniles who committed homicide peaked in 1993 for Black youth and 1994 for White youth. Since their respective peaks, the number of juveniles who committed homicide declined for both race groups through the mid-2010s and then increased. By 2019, the number of White juveniles who committed homicide was 51% above their 2013 low point and 63% below the 1994 peak. Similarly, the number of known Black juveniles who committed homicide in 2019 was 33% above their 2013 low point and 55% below the 1993 peak.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

Compared with the 1994 peak, the 2019 profile of youth known to have committed homicide included larger proportions of females and White youth. Additionally, a larger proportion of juveniles used a firearm in 2019 than in 1994, and a larger proportion of victims were either family members or acquaintances.

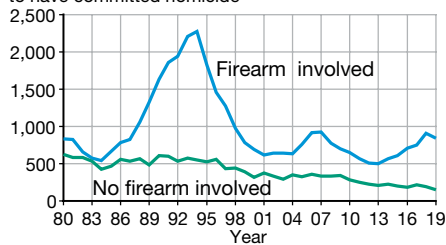
Profile of juveniles known by law enforcement to have committed homicide:

Characteristic	2013	2019
Age	100%	100%
Younger than 15	11	12
Age 15	14	17
Age 16	26	28
Age 17	50	43
Gender	100%	100%
Male	94	91
Female	6	9
Race	100%	100%
White	35	39
Black	63	59
American Indian	1	1
Asian/Pacific Islander	1	1
Weapon	100%	100%
Firearm	71	85
No firearm	29	15
Relationship to victim	100%	100%
Family	12	12
Acquaintance	50	59
Stranger	38	29

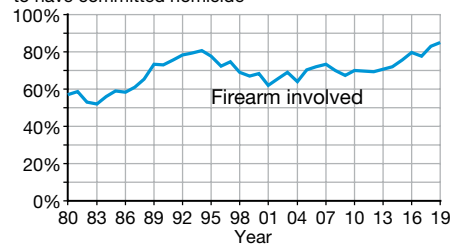
Note: 2013 was the year with the fewest number of juveniles known to have committed homicide. Detail may not total 100% because of rounding.

The number of juveniles who committed homicide with a firearm reached a historic low in 2013 and has since increased

Juveniles known by law enforcement to have committed homicide



Percent of juveniles known by law enforcement to have committed homicide



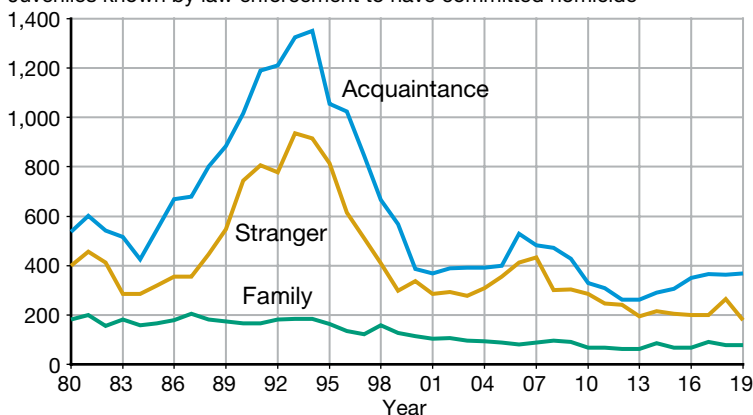
■ The number of juveniles who committed homicide with a firearm increased between 2001 and 2007, then declined 46% through 2013, reaching its lowest level since at least 1980. Since the 2013 low point, the number of juveniles who committed homicide with a firearm increased 68% through 2019.

■ While the number of juveniles who committed homicide with a firearm in 2019 was well below the 1994 peak, the proportion who committed homicide with a firearm was higher in 2019 (85%) than in 1994 (81%).

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

Victims of juveniles known to have committed homicide were more likely to be acquaintances or strangers than family members

Juveniles known by law enforcement to have committed homicide



■ Annually since 1980, juveniles killed more acquaintances than strangers. For example, in the 10-year period from 2010 through 2019, 52% juveniles killed an acquaintance, 36% killed a stranger, and 12% killed a family member.

Source: Authors' analysis of the FBI's *Supplementary Homicide Reports* for 1980–2019.

The characteristics of homicides committed by juveniles varied with the age, gender, and race of the juvenile

Juveniles known to law enforcement to have committed homicide, 2010–2019

Characteristic	All	Male	Female	Younger than			White	Black
				age 16	Age 16	Age 17		
Victim age	100%	100%	100%	100%	100%	100%	100%	100%
Younger than 13	3	3	10	7	2	2	4	3
13 to 17	20	21	14	23	23	17	21	20
18 to 24	34	34	32	25	33	39	33	35
Older than 24	43	43	44	45	43	42	42	43
Victim gender	100%	100%	100%	100%	100%	100%	100%	100%
Male	87	88	73	82	88	88	84	88
Female	13	12	27	18	12	12	16	12
Victim race	100%	100%	100%	100%	100%	100%	100%	100%
White	45	45	52	49	46	43	83	23
Black	51	52	45	48	51	54	14	75
American Indian	1	1	2	2	1	1	1	1
Asian/Pacific Islander	2	2	1	2	2	2	2	1
Victim/offender relationship*	100%	100%	100%	100%	100%	100%	100%	100%
Family	12	11	24	21	10	8	17	7
Acquaintance	52	52	53	46	53	55	53	51
Stranger	36	37	23	34	38	37	30	41
Firearm used	100%	100%	100%	100%	100%	100%	100%	100%
Yes	76	78	55	71	74	79	64	83
No	24	22	45	29	26	21	36	17
Number of offenders*	100%	100%	100%	100%	100%	100%	100%	100%
One	38	38	30	42	38	36	42	35
More than one	62	62	70	58	62	64	58	65

- Between 2010 and 2019, a greater proportion of homicides committed by female juveniles involved child victims under age 13 than those committed by male youth (10% vs. 3%).
- A larger proportion of victims of juveniles under age 16 were younger than age 18 (30%) than were the victims of juveniles age 16 (25%) or age 17 (19%).
- Female juveniles who commit homicide were more likely to involve female victims than homicides by males (27% vs. 12%) and to have victims who were family members (24% vs. 11%).
- While the overwhelming majority of homicides committed by juveniles are intraracial, homicides committed by Black youth were more likely than those by White youth to involve victims of another race (25% vs. 17%).
- Firearms were more likely to be involved in murders by male juveniles than females (78% vs. 55%) and in murders by Black juveniles than White juveniles (83% vs. 64%).
- The victims of White juveniles who committed homicide were more likely to be a family member than were the victims of Black juveniles (17% vs. 7%).
- Juveniles younger than age 16 who committed homicide were more likely to commit their crimes alone (42%), than juveniles age 16 (38%) or age 17 (36%), as were White juveniles compared with Black juveniles (42% vs. 35%). Conversely, female juveniles were more likely to commit their crimes with others than were males (70% vs. 62%).

* In this dataset, the term “offender” is used to describe the person identified by law enforcement as having committed the homicide. This could mean either that the person was arrested and turned over to the court for prosecution, or was identified but not placed under formal charges (e.g., because they were deceased).

Note: Data for American Indian and Asian are not shown due to the small number of these youth involved in homicide. Detail may not total 100% because of rounding.

Source: Authors’ analyses of the FBI’s *Supplementary Homicide Reports* for 1980–2019.

The daily timing of violent crime committed by youth differs on school and nonschool days

Youth and adults commit violent crimes at different times

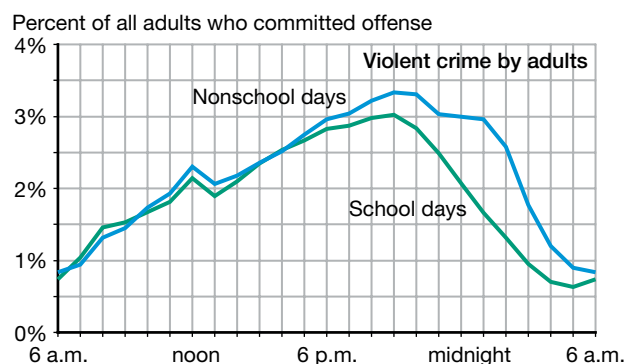
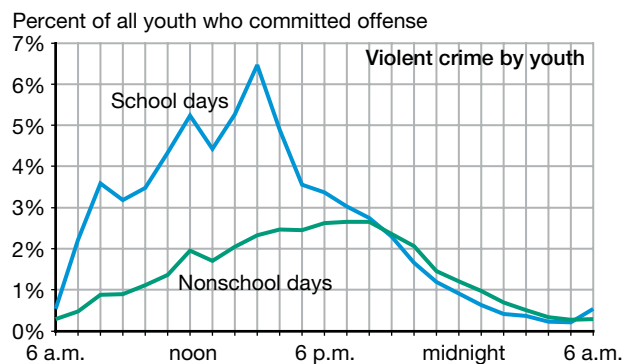
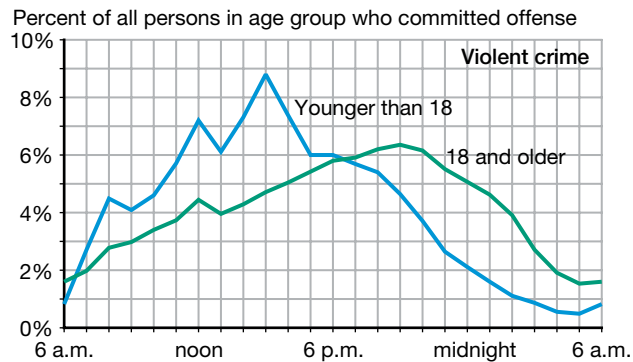
The FBI's National Incident-Based Reporting System (NIBRS) collects information on each crime reported to contributing law enforcement agencies, including the date and time of day the crime occurred. For calendar years 2018 and 2019, agencies in 45 states and the District of Columbia provided information on the time of day of reported crimes. Analyses of these data show that for many offenses, youth commit crimes at different times than adults, and the youth patterns vary on school and nonschool days.

Violent crimes (murder, sexual assault, robbery, and aggravated and simple assault) committed by adults increased hourly throughout the day, peaking around 9 p.m., then declining to a low point by 5 a.m. In contrast, violent crimes committed by youth peaked at 3 p.m. (the hour at the end of the school day) and then generally declined hour by hour until the low point at 5 a.m. At 9 p.m. when the number of adult violent crimes peaked, the number of violent crimes committed by youth was about half the number at 3 p.m.

The importance of the afterschool period in youth violence is confirmed when the days of the year are divided into two groups: school days (Mondays through Fridays in the months of September through May, excluding holidays) and nonschool days (every day from June through August, including holidays). A comparison of the school- and nonschool-day violent crime patterns finds that the 3 p.m. peak occurs only on school days and only for youth. The timing of adult violent crimes is similar on school and nonschool days, with one exception: the peak occurs later on non-school days (i.e., weekends and summer days).

Finally, the temporal time pattern of violent crimes committed by youth on nonschool days is similar to that of

Violent crime committed by youth peaks in the afterschool hours on school days



- Nearly two-thirds (64%) of violent crime committed by youth occurred on school days, while 53% of violent crime by adults took place on nonschool days.
- While the number of juveniles who committed homicide with a firearm in 2019 was well below the 1994 peak, the proportion who committed homicide with a firearm was higher in 2019 (85%) than in 1994 (81%).

Notes: Violent crime includes murder, violent sexual assault, robbery, aggravated assault, and simple assault.

Source: Authors' analysis of the FBI's *National Incident-Based Reporting System Master Files* for 2018 and 2019.

adults (but peaks an hour earlier than that of adults).

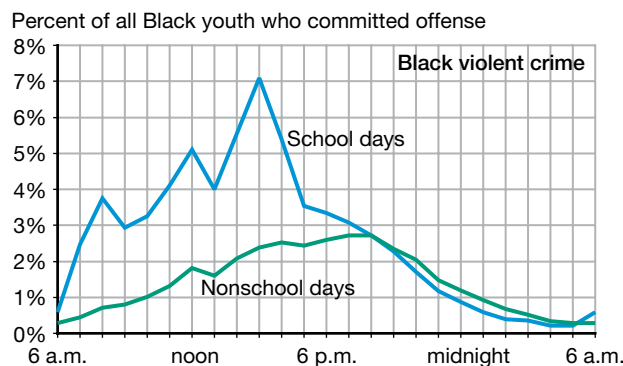
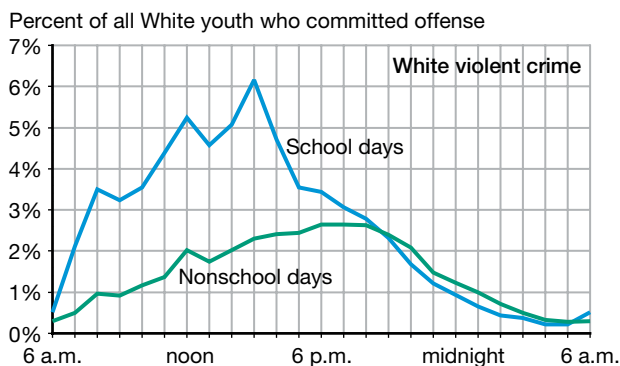
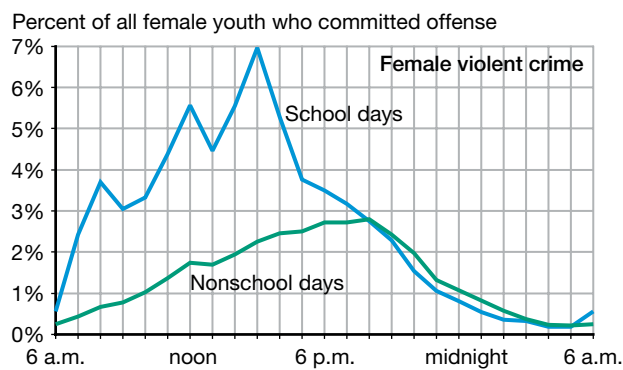
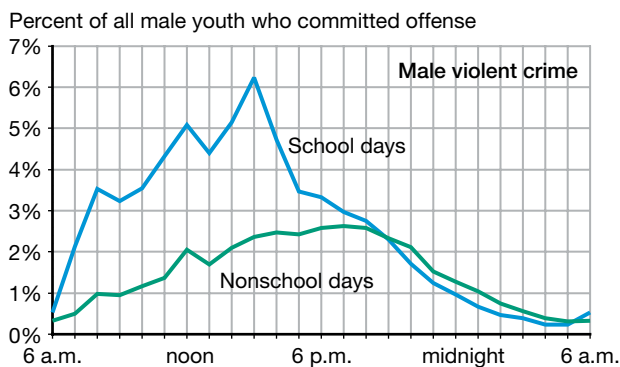
Crime reduction efforts should focus on the after school and early evening hours

The number of school days in a year is essentially equal to the number of non-school days in a year. Based on 2018–2019 NIBRS data, 64% of all violent

crimes by youth occurred on school days, and nearly 1 of every 5 (18%) of these crimes occurred in the 4 hours between 3 p.m. and 7 p.m. A smaller proportion of violent crime committed by youth (14%) occurred during the standard youth curfew hours of 10 p.m. to 6 a.m. However, the annual number of hours in the curfew period (i.e., 8 hours every day in the year) is 4 times greater than the number of hours

in the 3 p.m. to 7 p.m. period on school days (i.e., 4 hours in half of the days in the year). Therefore, the rate of violence by youth in the afterschool period was more than 5 times the rate in the juvenile curfew period. Consequently, efforts to reduce offending by youth after school would appear to have greater potential to decrease a community’s violent crime rate than curfews.

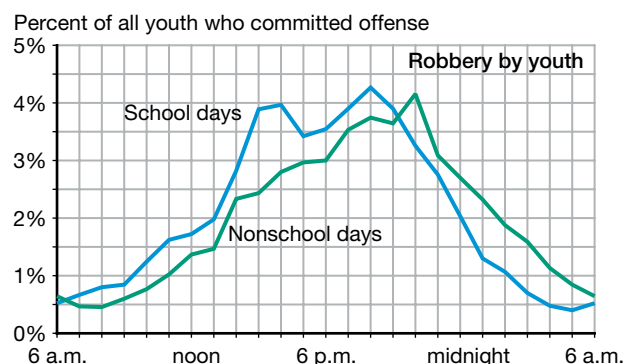
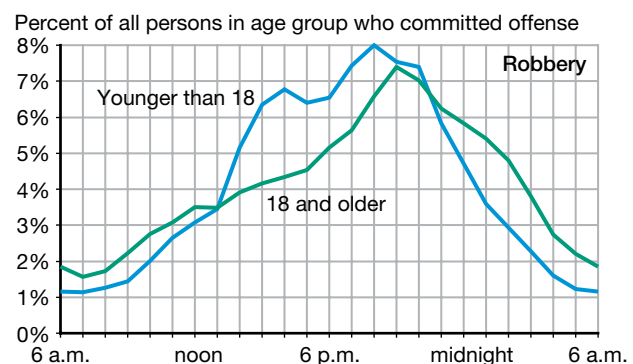
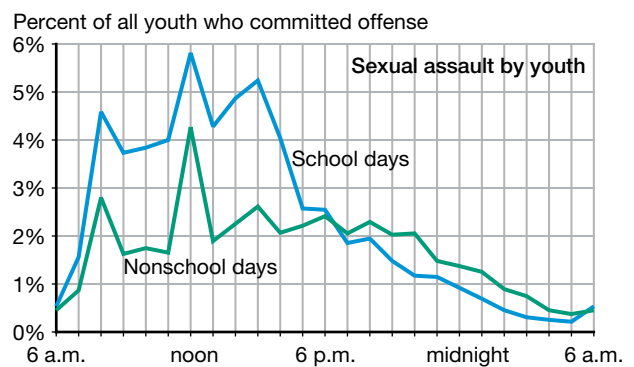
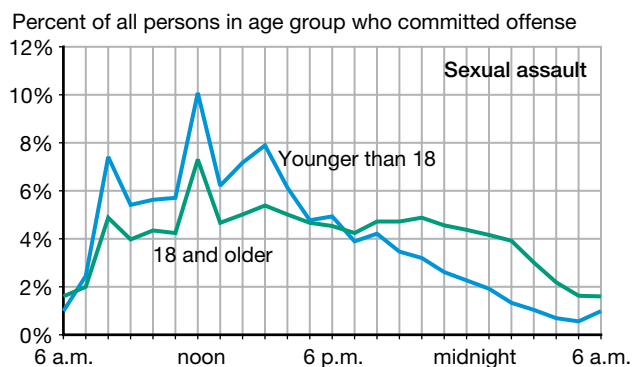
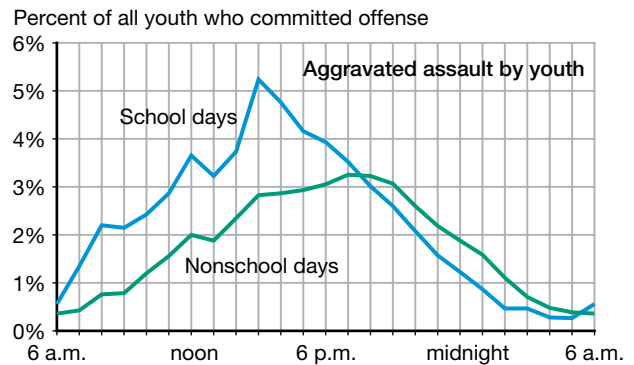
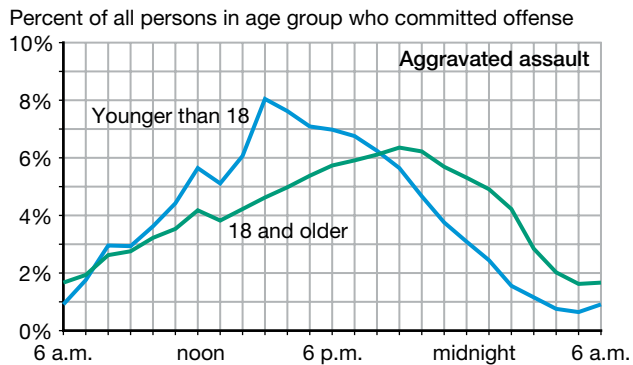
The time-of-day patterns of violent crime committed by youth are similar for males and females and for White youth and Black youth on school and nonschool days



Notes: Violent crime includes murder, violent sexual assault, robbery, aggravated assault, and simple assault.

Source: Authors’ analysis of the FBI’s *National Incident-Based Reporting System Master Files* for 2018 and 2019.

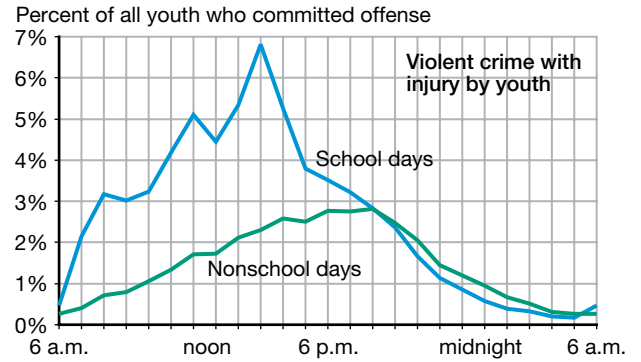
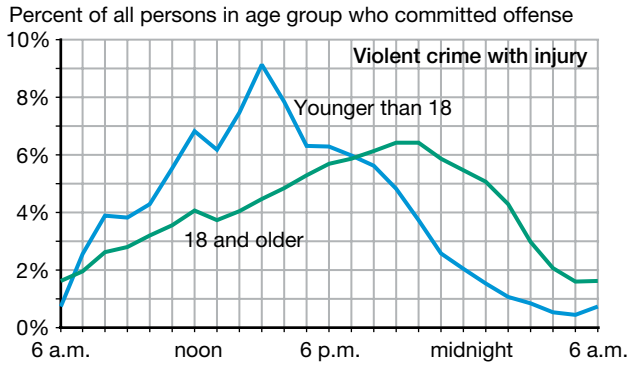
The daily timing of aggravated assault and sexual assault committed by youth vary for school days and nonschool days



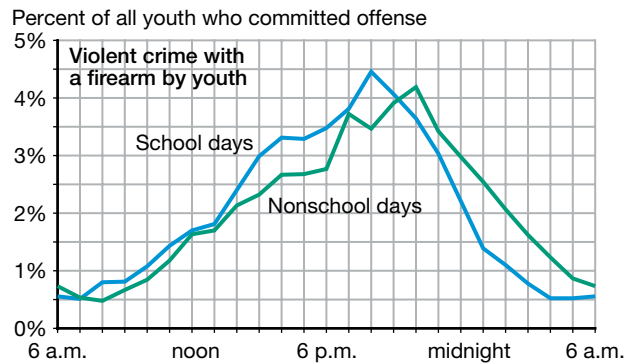
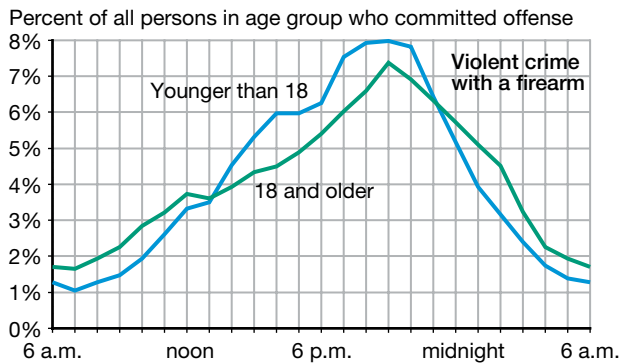
- Aggravated assault committed by youth peaked at 3 p.m. on school days, coinciding with the end of the school day, while sexual assaults committed by youth spiked at 8 a.m., noon, and 3 p.m. on school and nonschool days.
- Unlike the pattern for aggravated assault and sexual assault, the daily timing of robbery by youth is similar to the adult pattern, peaking in the evening hours on both school and nonschool days.
- Aggravated assault committed by youth is more likely before 8 p.m. on school days than on nonschool days (i.e., weekends and all summer days).

Source: Authors' analysis of the FBI's *National Incident-Based Reporting System Master Files* for 2018 and 2019.

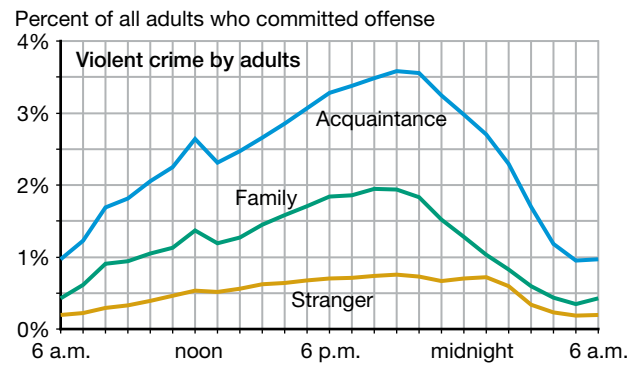
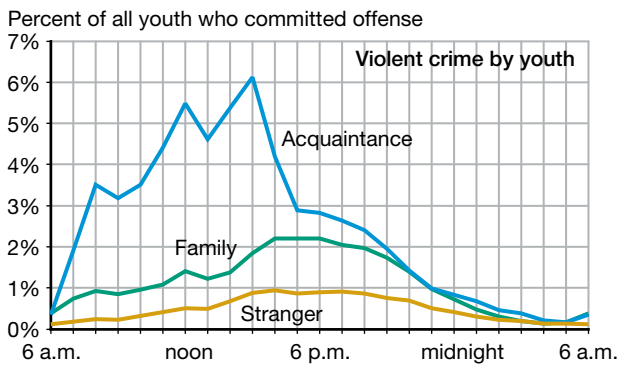
Youth injure more victims in the hours around the close of school than at any other time



Similar to adults, youth are most likely to commit a violent crime with a firearm between 8 p.m. and 10 p.m.



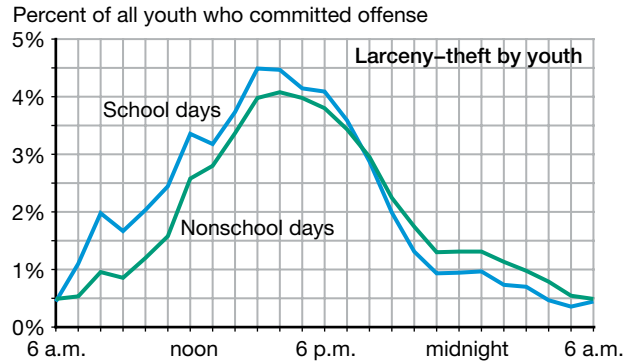
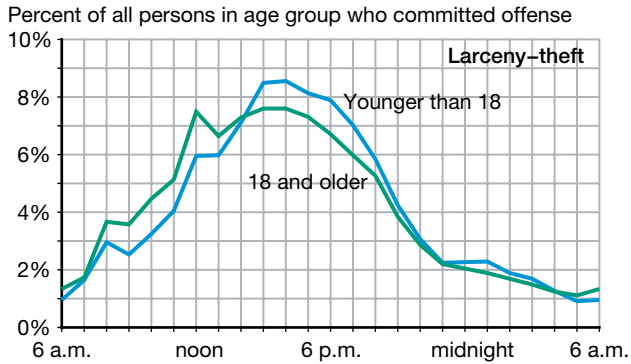
The after school peak in violent crime by youth largely involves victims who are acquaintances



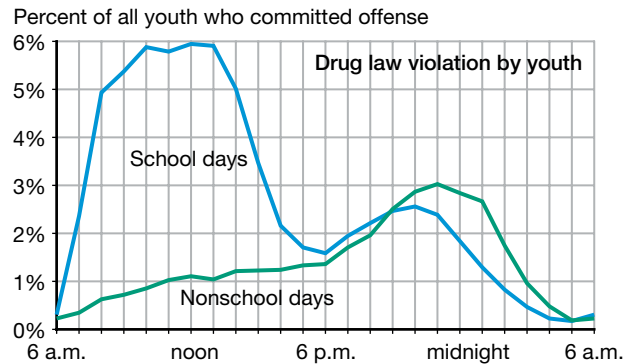
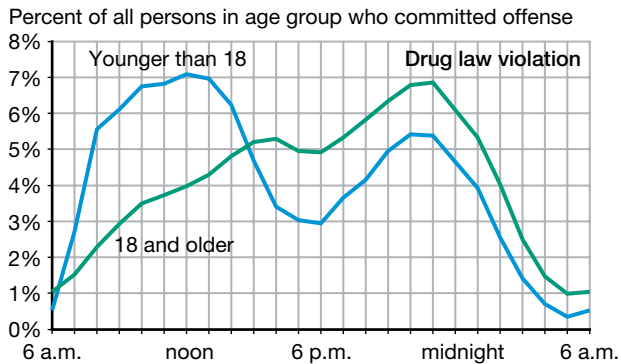
Notes: Violent crime includes murder, violent sexual assault, robbery, aggravated assault, and simple assault. However, violent crime with a firearm excludes simple assault (a firearm is not applicable to simple assault because the offense would become aggravated assault).

Source: Authors' analysis of the FBI's *National Incident-Based Reporting System Master Files* for 2018 and 2019.

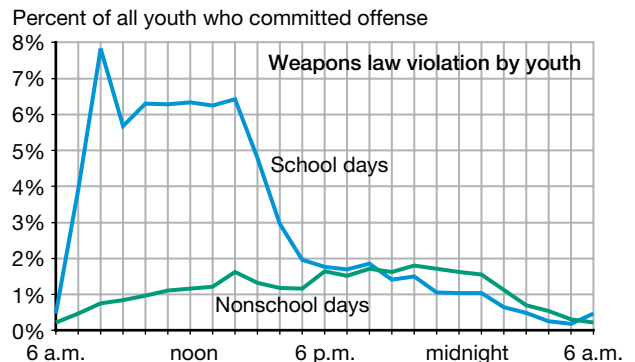
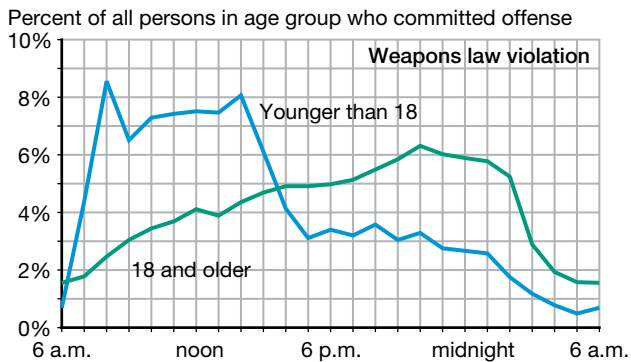
Unlike the daily pattern for violent crime, larceny-theft follows a similar pattern for youth and adults, and for youth on school and nonschool days



The daily timing of drug law violations known to law enforcement indicate how often schools are a setting for such offenses and their detection



Similar to the pattern for drug law violations, the time and day of weapons law violations by youth reflect the role schools play in bringing these matters to the attention of law enforcement



Source: Authors' analysis of the FBI's *National Incident-Based Reporting System Master Files* for 2018 and 2019.

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Miech, R., Johnston, L., O'Malley, P., Bachman, J., Schulenberg, J., and Patrick, M. 2020. *Monitoring the Future National Survey Results on Drug Use, 1975–2019: Volume I, Secondary School Students*. Ann Arbor, MI: Institute for Social Research, the University of Michigan. Available online: monitoringthefuture.org/results/publications/monographs.

Arrest rate source note

Arrest estimates developed by the Bureau of Justice Statistics for 1990–2014 were retrieved from their *Arrest Data Analysis Tool* [available online at www.bjs.gov/index.cfm?ty=datool&surl=/arrests/index.cfm, retrieved December 12, 2018]; the National Center for Juvenile Justice developed arrest estimates for 2015–2019 based on data published in the FBI's *Crime in the United States* reports for the respective years; population data for 1990–1999 is from the National Center for Health Statistics (prepared by the U.S. Census Bureau with support from the National Cancer Institute), *Bridged-Race Intercensal Estimates of the July 1, 1990–July 1, 1999, United States Resident Population by County, Single-Year of Age, Sex, Race, and Hispanic Origin* [machine-readable data files available online at www.cdc.gov/nchs/nvss/bridged_race.htm, released July 26, 2004]; population data for 2000–2009 is from the National Center for Health Statistics (prepared under a collaborative arrangement with the U.S. Census Bureau), *Intercensal Estimates of the Resident Population of the United*

States for July 1, 2000–July 1, 2009, by Year, County, Single-Year of Age (0, 1, 2, . . . , 85 Years and Over), Bridged Race, Hispanic Origin, and Sex [machine-readable data files available online at www.cdc.gov/nchs/nvss/bridged_race.htm, as of October 26, 2012, following release by the U.S. Census Bureau of the revised unbridged intercensal estimates by 5-year age group on October 9, 2012]; and population data for 2010–2019 are from the National Center for Health Statistics (prepared under a collaborative arrangement with the U.S. Census Bureau), *Vintage 2019 Postcensal Estimates of the Resident Population of the United States (April 1, 2010, July 1, 2010–July 1, 2019), by Year, County, Single-Year of Age (0, 1, 2, . . . , 85 Years and Over), Bridged Race, Hispanic Origin, and Sex* [machine-readable data files available online at www.cdc.gov/nchs/nvss/bridged_race.htm, as of July 9, 2020, following release by the U.S. Census Bureau of the unbridged vintage 2019 postcensal estimates by 5-year age group, retrieved on July 29, 2020].

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