

Teen Homicide, Suicide, and Firearm Deaths

INDICATORS ON CHILDREN AND YOUTH

Updated: December 2015



In 2014, males ages 15 to 19 were three times more likely to commit suicide, six times more likely to be victims of homicide, and eight times more likely to be involved in a firearm-related death than were females of the same age.

Importance

Suicide and homicide were the second and third leading causes of death, respectively, among teens ages 15 to 19, after unintentional injury, in 2014.¹ Firearms were the instrument of death in 88 percent of teen homicides and 41 percent of teen suicides in 2014.² While non-firearm injuries result in death in only one out of every 760 cases, almost one in four youth firearm injuries is fatal.³

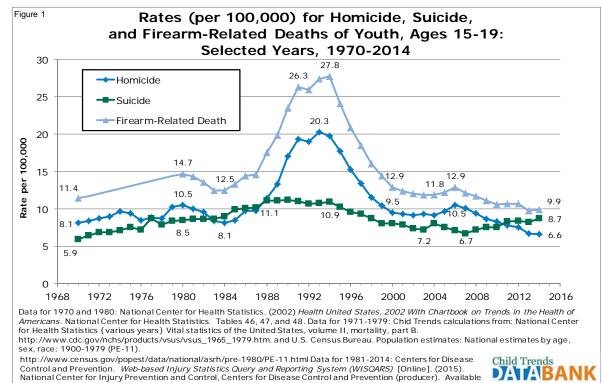
Although other teens are the perpetrators of many of the homicides of teens below age 18, two-thirds of the murderers are eighteen or older.⁴ Although school-related homicides receive substantial media attention, in the 2011-12 school year, they accounted for less than two percent of all child homicides.⁵

Mood disorders, such as depression, dysthymia, and bipolar disease, are major risk factors for suicide among children and adolescents.⁶ One study found that more than 90 percent of children and adolescents who committed suicide had some type of mental disorder.⁷ Stressful life events and low levels of communication with parents may also be significant risk factors.^{8,9} Female teens are about twice as likely to attempt suicide; however, males are much more likely to actually commit suicide.^{10,11}



Trends

Between the 1970's the early 1990s, the homicide rate for teens ages 15 to 19 more than doubled, from 8 in 1970 to a peak of 20 per 100,000 population in 1993. The rate declined steeply during the late 1990s, then leveled out at around nine deaths per 100,000 between 2000 and 2004. Although the rate of homicides increased between 2004 and 2006, to 11 deaths per 100,000, it has since decreased. In 2014, the homicide rate was seven deaths per 100,000, the lowest rate on record. (Figure 1)



at www.cdc.gov/injury/wisqars/fatal.html

Trends in firearm-related deaths (homicides and suicides, as well as deaths from unintended injuries) have followed a similar pattern for teens ages 15 to 19, with rates declining dramatically during the late 1990s, from 28 per 100,000 in 1994, to 13 per 100,000 in 2000. As with the homicide rate, the firearm-related death rate fluctuated slightly between 2000 and 2006, before decreasing to 10 deaths per 100,000 in 2014. (Figure 1)

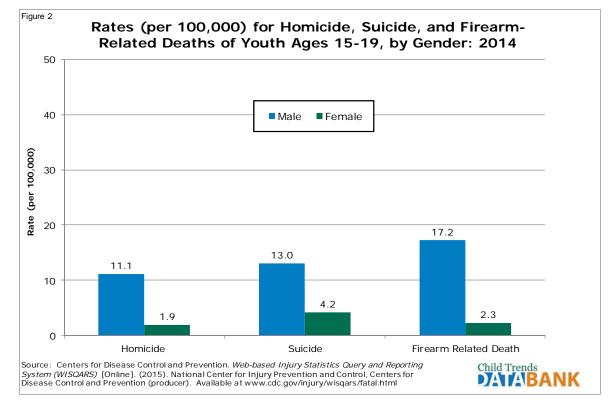
The teen suicide rate increased from 6 to 11 per 100,000 population between 1970 and 1988, remained steady until 1994, then declined to 7 per 100,000 in 2007. Since then, the rate has been increasing, and was at 9 per 100,000 in 2014. (Figure 1) Between 1994 and 2014,



suffocation suicide rates have increased significantly, for both males and females, and all race/ethnicity groups, with overall rates doubling over that period.¹² Suffocation, as used in suicide attempts, has a high likelihood of resulting in death.¹³

Differences by Gender

Males ages 15 to 19 are approximately three times more likely than females to die from suicide, (13 and 4 per 100,000, respectively, in 2014), and six times more likely to die from homicide (11 and 2 per 100,000, respectively, in 2014). Males of this age are also eight times more likely to die from firearm-related incidents of any kind: in 2014, 17 per 100,000 males died by firearms, compared with 2 per 100,000 females. (Figure 2)

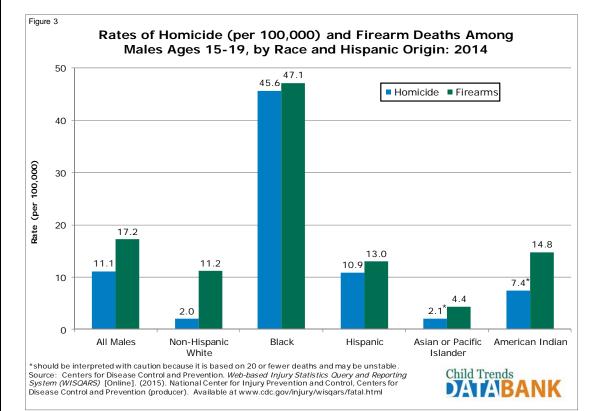


The disparity between males and females in rates of homicide generally increased between 1970 and 2014, from a factor of four to a factor of six. The disparity between males and females in the suicide rate peaked in 1995, when it was approximately six times as high for males as for females. (Appendix 1)



Differences by Race and Hispanic Origin¹⁴

In 2014, the homicide rate for black male teens was 46 per 100,000, more than 20 times higher than the rate for white male teens (2 per 100,000). Rates for other groups were 11 per 100,000 for Hispanic males, 7* per 100,000 for American Indian males, and 2* per 100,000 for Asian and Pacific Islander males. (Figure 3)



Among females, black and Hispanic teens had the highest homicide rates in 2014, at six and two per 100,000, respectively, followed by one per 100,000 for white and American Indian* females, and less than one* per 100,000 for Asian females. (Appendix 1)

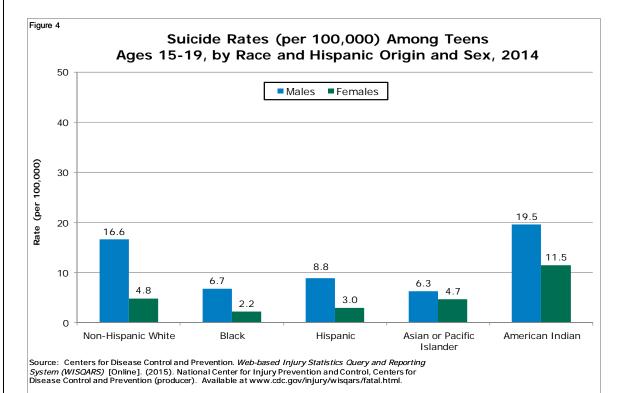
*Note: These estimates should be treated with caution, as they are based on 20 or fewer deaths and may be unstable.

Firearm deaths, which comprise a majority of teen homicides and suicides but also include accidental deaths, were highest in 2014 among black teens (47 per 100,000 males, and 5 per 100,000 females), and lowest among Asian teens (four per 100,000 males, and less than one per 100,000 females). American Indian and Hispanic teens had the second-highest rates (15 and 13 per 100,000 males, respectively, and one and two per 100,000 females, respectively).



White teens had the second-lowest rate among males (11 per 100,000) and the second highest rate among females (two per 100,000). (Appendix 1, Figure 3)

In 2014, rates of suicide among male teens were highest among American Indians (20 per 100,000) and whites (17 per 100,000), followed by Hispanics at 9, blacks at 7, and Asian or Pacific Islanders at 6 per 100,000. Among females, American Indian teens had the highest rate at 12 per 100,000, followed by white teens at 5, Asian or Pacific Islander teens at 5, Hispanic teens at 3, and black teens at 2 per 100,000. (Figure 4) Among males, suicide rates have been increasing among white teens since 2007, but decreasing or remaining steady among other racial and ethnic groups. Among females, suicide rates have been rising among all groups since 2007. (Appendix 1)



State and Local Estimates

1990-2013 state rates for combined accident, homicide, and suicide are available from the KIDS COUNT Data Center at <u>http://datacenter.kidscount.org/data/tables/24-teen-deaths-by-accident-homicide-and-suicide?loc=1&loct=2</u>



Data for homicides by age group for all states and select counties are available from the Bureau of Justice Statistics at <u>http://bjsdata.ojp.usdoj.gov/dataonline/Search/Homicide/Homicide.cfm</u>

International Estimates

- Estimates of homicide rates among youth ages 10-29 for selected countries and global suicide rates for youth ages 15-24 are available from the 2002 World Report on Violence and Health at www.who.int/violence_injury_prevention/violence/world_report/chapters/en/
 (Tables 2.1 and 7.2)
- Estimates of death rates from self-harm and interpersonal violence for ages 15 to 29 in 2012 are available from the World Health Organization at <u>http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html</u>

National Goals

Through its *Healthy People 2020* initiative, the federal government has set national goals to reduce suicide attempts by adolescents, from 1.9 per 100, in 2009, to 1.7 by 2020; to reduce homicides (among all age groups), from 6.1 per 100,000 population in 2007, to 5.5; and to reduce firearm-related deaths (among all age groups) from 10.2 per 100,000 population in 2007, to 9.2.

Additional information available at:

Suicide attempts by adolescents: <u>http://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders/objectives</u>

Homicide and Firearm-Related Deaths: <u>http://www.healthypeople.gov/2020/topics-objectives/topic/injury-and-violence-prevention/objectives</u>



What Works to Make Progress on This Indicator

Brief, standardized screening of adolescents for suicide risk in the context of a primary health care visit can identify at-risk youth and prompt a referral for behavioral health services.^{15,16}

The National Registry of Evidence-Based Programs is a searchable database that includes the topics of violence prevention and suicide prevention. See http://nrepp.samhsa.gov/AdvancedSearch.aspx

An important component of reducing firearm-related injury is safe storage of household firearms, since firearms are present in about one-third of American households with children and youth.¹⁷ Gun ownership has been found to be a risk factor for homicide in the home.¹⁸

Related Indicators

- Unintentional Injuries: <u>www.childtrends.org/?indicators=unintentional-injuries</u>
- Infant Homicide: <u>www.childtrends.org/?indicators=infant-homicide</u>
- Adolescents Who Feel Sad or Hopeless:
 <u>www.childtrends.org/?indicators=adolescents-who-felt-sad-or-hopeless</u>
- Suicidal Teens: <u>www.childtrends.org/?indicators=suicidal-teens</u>
- Violent Crime Victimization: <u>www.childtrends.org/?indicators=violent-crime-</u> victimization
- Child Maltreatment: <u>www.childtrends.org/?indicators=child-maltreatment</u>
- Children's Exposure to Violence: <u>www.childtrends.org/?indicators=childrens-exposure-</u> to-violence
- Infant, Child, and Teen Mortality: <u>www.childtrends.org/?indicators=infant-child-and-</u> teen-mortality
- Neighborhood Safety: <u>www.childtrends.org/?indicators=neighborhood-safety</u>
- High School Students Carrying Weapons: <u>www.childtrends.org/?indicators=high-</u> school-students-carrying-weapons



Definition

Homicide, suicide, and firearm-related deaths are determined by physicians, medical examiners, and coroners' reports on death certificates. Deaths are classified using ICD 10 codes. For more information on ICD 10 classification see http://www.cdc.gov/nchs/data/dvs/icd10fct.pdf

Data Sources

- Data for 1981-2014: Centers for Disease Control and Prevention. Web-based Injury Statistics Query and Reporting System (WISQARS). National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Available at: www.cdc.gov/injury/wisqars/index.html
- Data for Total, Male and Female 1970 and 1980: National Center for Health Statistics.
 (2002). Health United States, 2002 with Chartbook on Trends in the Health of Americans. National Center for Health Statistics. 2002. Tables 46, 47, and 48.
- Race data for 1970 and 1980: *Trends in the well-being Of America's children and youth 2001*. U.S. Department of Health and Human Services. Office of the Assistant Secretary for Planning and Evaluation. Tables HC 3.4A and 3.5.

Raw Data Source

National Vital Statistics System www.cdc.gov/nchs/deaths.htm

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Appendix 1 - Homicide, Suicide, and Firearm Deaths among Youth

Ages 15-19 (Rates per 100,000 population): Selected Years, 1970-2014

	1970	1980	1990	1993	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Homicide	8.1	10.5	17.0	20.3	17.8	9.5	9.3	9.2	9.3	9.2	9.7	10.5	10.1	9.4	8.7	8.3	7.8	7.6	6.6	6.6
Male	12.1	15.9	28.0	33.9	29.1	15.5	15.5	15.1	15.7	15.0	16.4	17.8	17.0	15.9	14.5	14.0	13.0	12.8	11.4	11.1
White	5.2	10.9	12.4	14.7	14.2	8.0	7.8	8.2	7.9	7.8	8.5	8.6	7.9	7.7	7.4	6.4	6.0	5.3	4.9	4.5
White, non-Hispanic	-	-	5.5	6.2	5.8	3.5	3.9	3.9	3.6	3.3	3.5	3.4	3.4	3.6	2.9	2.4	2.7	2.3	2.2	2.0
Black	65.2	48.8	115.0	138.2	108.4	57.2	57.7	52.5	57.7	53.3	57.9	63.6	63.9	56.9	50.5	51.7	48.5	50.8	44.9	45.6
Hispanic	-	-	49.7	57.3	53.5	25.7	22.7	23.8	23.1	23.5	25.1	25.3	22.0	19.7	19.8	17.9	14.7	13.6	11.8	10.9
Asian or Pacific Islander	-	-	14.8	23.7	20.5	7.5	6.6	8.2	6.6	6.8	7.1	10.2	4.8	4.7	1.9*	3.2*	3.0*	2.3*	2.8*	2.1*
American Indian	-	-	6.5*	4.1*	6.6*	14.4	13.6	15.5	13.7	12.6	11.0*	13.8	8.3*	8.1*	10.5	11.9	7.6*	7.3*	5.3*	7.4*
Female	3.2	4.9	5.4	5.9	5.8	3.1	2.7	2.9	2.6	2.9	2.5	2.8	2.7	2.7	2.5	2.3	2.2	2.0	1.6	1.9
White	2.1	3.9	3.6	3.6	3.9	2.1	2.0	1.9	1.8	2.0	1.7	1.9	2.0	1.7	1.7	1.5	1.4	1.2	1.1	1.2
White, non-Hispanic	-	-	2.8	2.8	3.3	1.9	1.9	1.6	1.4	1.9	1.5	1.7	1.8	1.3	1.4	1.2	1.3	1.0	0.9	1.0
Black	10.6	11.0	15.6	18.2	16.1	8.4	6.4	7.9	6.6	7.6	6.1	7.6	6.6	7.3	6.3	6.8	6.6	6.0	4.6	5.6
Hispanic	-	-	7.2	7.1	6.5	2.8	2.5	3.0	2.9	2.8	2.7	2.8	2.5	3.1	2.6	2.1	1.6	1.7	1.7	1.9
Asian or Pacific Islander	-	-	2.6*	3.2*	2.3*	0.9*	1.1*	1.8*	1.9*	1.1*	1.2*	1.4*	0.9*	0.4*	0.5*	0.7*	0.4*	0.5*	0.5*	0.8*
American Indian	-	-	16.3*	22.7	30.5	2.9*	4.1*	4.6*	5.1*	4.3*	5.3*	2.3*	2.8*	3.8*	4.7*	0.5*	2.1*	2.7*	2.2*	1.1*

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	1970	1980	1990	1993	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Suicide	5.9	8.5	11.1	10.8	10.3	8.0	7.9	7.3	7.2	8.1	7.5	7.1	6.7	7.2	7.5	7.5	8.3	8.3	8.3	8.7
Male	8.8	13.8	18.2	17.4	17.1	13.0	12.8	12.0	11.4	12.4	11.8	11.3	10.8	11.3	11.6	11.7	12.9	12.5	12.4	13.0
White	9.4	15.0	19.4	18.3	18.1	13.8	13.9	13.3	12.5	13.4	13.1	12.2	11.7	12.1	12.9	12.9	14.4	14.0	13.7	14.7
White, non-Hispanic	-	-	20.0	18.7	18.6	14.8	15.4	14.2	13.3	14.3	14.0	13.3	12.5	13.5	14.1	14.2	16.2	15.5	15.8	16.6
Black	4.7	5.6	11.5	14.2	13.6	9.5	7.2	6.8	6.4	7.2	7.0	6.7	6.5	8.1	6.5	6.8	6.9	6.9	7.0	6.7
Hispanic	-	-	11.0	14.0	13.6	8.5	7.4	8.5	8.5	9.0	8.6	7.1	8.4	6.9	8.2	8.1	7.9	8.8	6.8	8.8
Asian or Pacific Islander	-	-	12.0	10.2	9.4	8.1	6.9	5.5	6.4	8.0	4.4	7.6	7.7	4.7	6.4	6.3	7.5	6.3	8.7	6.3
American Indian	-	-	36.6	19.8*	22.4	23.4	26.5	21.0	22.0	28.0	20.4	25.0	20.2	25.8	23.9	24.3	22.8	22.3	23.1	19.5
Female	2.9	3.0	3.7	3.8	3.1	2.8	2.7	2.3	2.6	3.5	3.0	2.8	2.4	3.0	3.2	3.1	3.5	3.9	3.9	4.2
White	2.9	3.3	4.0	4.2	3.2	2.9	2.9	2.6	2.9	3.7	3.1	3.0	2.7	3.0	3.4	3.4	3.8	4.3	4.3	4.4
White, non-Hispanic	-	-	4.0	4.2	3.2	3.0	3.0	2.7	3.0	3.9	3.3	3.0	2.9	3.1	3.5	3.5	4.1	4.7	4.5	4.8
Black	2.9	1.6	1.9	1.4*	2.3	1.4	1.3*	1.1*	0.9*	1.9	1.4	1.2	1.2	2.0	1.8	1.1	2.0	2.3	2.2	2.2
Hispanic	-	-	3.2	3.2	2.6	2.4	2.4	1.9	2.3	2.6	2.2	2.7	1.7	2.3	2.5	2.9	2.8	2.5	3.2	3.0
Asian or Pacific Islander	-	-	4.0*	3.8*	3.8*	3.2*	2.7*	2.0*	2.4*	2.3*	2.8*	3.1*	1.7*	3.1*	3.6*	3.0*	2.8*	3.7	2.2*	4.7
American Indian	-	-	6.5*	11.4*	1.9*	7.2*	7.6*	5.3*	8.3*	12.3*	13.0	7.4*	6.6*	10.2*	7.9*	11.0	8.0*	7.0*	7.1*	11.5

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	1970	1980	1990	1993	1995	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Firearm-Related Deaths	11.4	14.7	23.5	27.4	24.1	12.9	12.3	12.0	11.9	11.8	12.2	12.9	12.1	11.7	11.1	10.6	10.6	10.7	9.7	9.9
Male	19.2	24.5	40.4	47.2	41.6	22.4	21.5	20.8	20.8	20.3	21.5	22.7	21.2	20.4	19.3	18.4	18.4	18.5	17.0	17.2
White	-	-	26.5	28.5	27.4	15.6	14.9	14.7	14.2	14.2	14.4	14.4	12.4	13.0	13.1	11.7	12.6	12.1	11.4	11.8
White, non-Hispanic	-	-	20.5	21.1	20.0	12.3	12.3	11.2	11.1	10.8	10.6	10.3	8.9	10.3	10.3	9.4	11.2	10.6	10.5	11.2
Black	-	-	119.8	151.8	118.9	61.5	59.9	55.2	58.1	53.7	59.4	65.5	66.9	59.0	52.4	52.7	49.5	52.9	47.1	47.1
Hispanic	-	-	52.0	63.2	60.4	27.9	24.3	26.5	24.8	25.5	26.7	27.0	23.2	20.5	19.8	17.8	15.5	15.5	13.0	13.0
Asian or Pacific Islander	-	-	22.2	29.0	26.9	8.8	7.1	9.5	7.0	8.2	8.7	11.5	6.3	5.2	2.5*	4.3	3.8	3.8	4.9	4.4
American Indian	-	-	29.5	30.7	43.9	22.0	22.6	21.6	20.2	21.8	19.8	21.3	15.5	16.7	17.4	19.3	15.2	16.6	14.2	14.8
Female	3.5	4.6	5.7	6.5	5.6	2.9	2.6	2.7	2.4	2.9	2.4	2.5	2.5	2.4	2.4	2.3	2.5	2.4	2.0	2.3
White	-	-	4.6	4.9	4.1	2.4	2.3	2.1	2.0	2.3	1.9	1.8	2.0	1.7	1.9	1.8	1.9	1.9	1.7	1.8
White, non-Hispanic	-	-	3.9	4.2	3.7	2.2	2.2	1.9	1.7	2.3	1.9	1.7	1.9	1.5	1.8	1.7	2.0	2.0	1.8	1.8
Black	-	-	12.1	15.6	13.9	5.7	4.4	6.0	4.2	5.7	4.8	5.8	5.3	6.0	5.0	5.3	6.0	5.6	3.9	5.1
Hispanic	-	-	6.8	7.8	5.7	2.7	2.8	2.5	2.7	2.5	2.0	2.2	2.3	2.5	2.2	2.0	1.4	1.3	1.5	1.9
Asian or Pacific Islander	-	-	2.0*	3.8*	3.2*	2.1*	0.2*	0.7*	1.7*	1.3*	1.0*	1.4*	0.9*	0.4*	0.9*	0.4*	0.4*	0.7*	0.8*	0.8*
American Indian	-	-	7.6*	6.2*	3.8*	4.3*	2.1*	4.0*	5.7*	3.7*	4.1*	1.7*	1.7*	2.7*	2.6*	1.6*	2.1*	1.1*	2.2*	1.1*

*These rates should be interpreted with caution because they are based on 20 or fewer deaths and may be unstable.

Sources: Data for Total, Male and Female for 1970-1980: National Center for Health Statistics. (2002) *Health United States, 2002 With Chartbook on Trends in the Health of Americans*. National Center for Health Statistics. Tables 46, 47, and 48. Data for Race from 1970-1980: *Trends in the Well-Being of America's Children and Youth 2001*. Tables HC 3.4A and 3.5. U.S. Department of Health and Human Services. Office of the Assistant Secretary for Planning and Evaluation; All data for 1995-2014: Centers for Disease Control and Prevention. (2015). *Web-based Injury Statistics Query and Reporting System (WISQARS)* [Online]. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (producer). Available at www.cdc.gov/injury/wisqars/fatal.html



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¹² Centers for Disease Control and Prevention. (2015). Op cit.



¹³ Sullivan, E. M., Annest, J. L., Simon, T. R., Luo, F., & Dahlberg, L. L. (2015). Suicide trends among persons aged 10-24 years—United States, 1994-2012. *MMWR, 64*(8), 201-205.

¹⁴ Hispanics may be any race. Estimates for whites in this report do not include Hispanics.

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