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#### INTRODUCTION

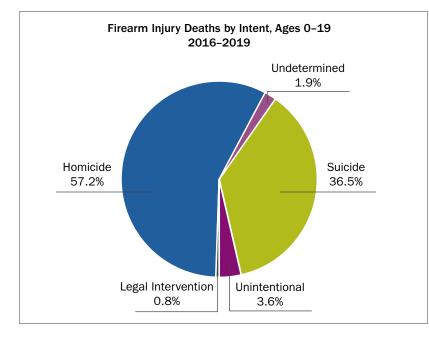
Deaths due to firearms account for almost one-quarter of all injury-related deaths among U.S. children ages 0 – 19. On average, annually over 3,300 U.S. children die and 13,000 suffer non-fatal wounds from firearms.<sup>1</sup> Firearm injuries are classified as intentionally self-inflicted (suicide), interpersonal (homicide or assault), unintentional (accidental firing without intention), legal intervention (injuries inflicted by the police or other law enforcement agents acting in the line of duty), and undetermined intent.<sup>2</sup> A firearm injury is a gunshot wound or penetrating injury from a weapon that uses a powder charge to fire a projectile; these include handguns, rifles, and shotguns. Injuries from air- and gas-powered guns, BB, and pellet guns are not considered firearm injuries as they do not use a powder charge to fire a projectile See the sidebar for more information on each type of firearm injury.

Among U.S. children ages 0 - 19 years, firearm injury rates increased from 3.3 per 100,000 in 2010 to 4.2 in 2019. In the four-year period of 2016 – 2019, among children 0– 19 years, there were 7,630 firearm homicides, 4,862 firearm suicides and 475 deaths due to unintentional shootings, accounting for almost 97% of firearm-related deaths in this population. Firearm-related deaths are more common among 10 – 19 year olds (7.7 per 100,000 in 2019) than among 0 – 9 year olds (0.4 per 100,000 in 2019).

<sup>1</sup> Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Web-based Injury Statistics Query and Reporting System (WISQARS) [online]. (2005) [2017-2019] Available from URL: <a href="https://www.cdc.gov/injury/wisqars">www.cdc.gov/injury/wisqars</a>; Healthcare Cost and Utilization Project (HCUP). Content last reviewed March 2021. Agency for Healthcare Research and Quality, Rockville, MD. <a href="https://www.ahrq.gov/data/hcup/index.html">https://www.ahrq.gov/data/hcup/index.html</a>.

<sup>2</sup> Centers for Disease Control and Prevention. (2020, May 22). *Firearm Violence Prevention*. <u>https://www.cdc.gov/violenceprevention/</u> <u>firearms/fastfact.html</u>.

Gun violence overall carries an annual cost to the U.S. health care system of \$170 billion, with \$16 billion for surgical operations alone.<sup>3</sup> In addition, there is a high psychological and emotional cost to firearm injuries. Children and youth who are exposed to gun violence experience lasting emotional scars, some developing post-traumatic stress disorder (PTSD) while others experience anger, withdrawal and desensitization to violence.<sup>4</sup> The psychological effects can also contribute to a continued cycle of violence, also facilitated by access to guns.<sup>5</sup>



- 3 American College of Surgeons. (2020). *New Study Documents Increasing Frequency, Cost, and Severity of Gunshot Wounds That Require Surgical Intervention*. <u>https://www.facs.org/Media/Press-Releases/2020/gsw-study-081020</u>. Accessed March 10, 2021.
- 4 Garbarino, J., Bradshaw, C. P., & Vorrasi, J. A. (2002). *Mitigating the Effects of Gun Violence on Children and Youth*. The Trustees of Princeton University. The Future of Children Journal Issue: Children, Youth, and Gun Violence Volume 12 Number 2 Summer/Fall 2002. Accessed March 10, 2021.
- 5 Vella, M. A., Warshauer, A., Tortorello, G., Fernandez-Moure, J., Giacolone, J., Chen, B., Cabulong A., Chreiman K., Sims C., Schwab CW., Reilly PM., Lane-Fall M., & Seamon M.J. (2020, January 1). Long-term Functional, Psychological, Emotional, and Social Outcomes in Survivors of Firearm Injuries. JAMA Surgery. <u>https://jamanetwork.com/journals/jamasurgery/fullarticle/2755361</u>. Accessed March 10, 2021.

# There are many types of firearm injuries, which can be fatal or nonfatal:

**Intentionally Self-Inflicted** includes firearm suicide or nonfatal self-harm.

**Unintentional** includes fatal or nonfatal firearm injuries that happen while cleaning or playing with a firearm or other incidents of an accidental firing without evidence of intentional harm.

**Interpersonal Violence** includes firearm homicide or nonfatal assault injury from a firearm.

Legal Intervention includes firearm injuries inflicted by the police or other law enforcement agents acting in the line of duty. For example, firearm injuries that occur while arresting or attempting to arrest someone, maintaining order, or ensuring safety. The term legal intervention is a commonly used external cause of injury classification and does not indicate the legality of the circumstances surrounding the death.

**Undetermined Intent** includes firearm injuries where there is not enough information to determine whether the injury was intentionally self-inflicted, unintentional, a legal intervention firearm death, or from an act of interpersonal violence. Approximately 7% of U.S. children (4.6 million) live in homes in which at least one firearm is stored loaded and unlocked.<sup>6</sup>

There are many proven strategies to prevent firearm-related injuries to children and youth, including the safe storage of firearms, focusing prevention efforts on the people and places most likely to be affected, and removing firearms from the home if your child is experiencing a mental health problem or life crisis.

This guide provides links to firearm safety resources available to you. It is divided into six sections: (1) Introduction; (2) Organizations; (3) Data; (4) Legislation and Policies; (5) Prevention Resources; and (6) Publications. The resources included in this guide are not meant to be comprehensive, nor are the listings intended as endorsements.

# ORGANIZATIONS

American Academy of Pediatrics www.aap.org

American College of Surgeons Committee on Trauma <u>https://www.facs.org/Quality-Programs/Trauma/Advocacy/IPC/firearm-injury</u>

Centers for Disease Control and Prevention (CDC) <u>https://www.cdc.gov/violenceprevention/firearms/fastfact.html</u>

Cure Violence <u>https://cvg.org/</u>

Harvard Injury Control Research Center | Harvard School of Public Health <u>https://www.hsph.harvard.edu/hicrc/</u>

Johns Hopkins Center for Gun Policy and Research | Bloomberg School of Public Health <u>https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-gun-policy-and-research/</u>

National Action Alliance for Suicide Prevention <a href="https://theactionalliance.org/">https://theactionalliance.org/</a>

National Center for the Prevention of Youth Suicides | American Association of Suicidology (AAS) <u>https://www.preventyouthsuicide.org/mission-index-impact</u>

<sup>6</sup> Azrael, D., Cohen, J., Salhi, C., & Miller, M. (2018, June). Firearm Storage in Gun-Owning Households with Children: Results of a 2015 National Survey. Journal of Urban Health: Bulletin of the New York Academy of Medicine. https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC5993703/. Accessed March 10, 2021.

Substance Abuse and Mental Health Services Administration (SAMHSA) https://www.samhsa.gov/

Suicide Prevention Resource Center (SPRC) https://www.sprc.org/

# DATA SOURCES

**CDC Data Sources** 

National Hospital Ambulatory Medical Care Survey (NHAMCS) | CDC <u>https://www.cdc.gov/nchs/ahcd/index.</u> <u>htm</u>

National Violent Death Reporting System (NVDRS) | CDC https://www.cdc.gov/violenceprevention/datasources/nvdrs/index.html

National Vital Statistics System (NVSS) | CDC https://www.cdc.gov/nchs/nvss/index.htm

School Associated Violent Death Study (SAVS) | CDC https://www.cdc.gov/violenceprevention/youthviolence/schoolviolence/savd.html

Web-based Injury Statistics Query and Reporting System (WISQARS) | CDC <u>https://www.cdc.gov/injury/wisqars/index.html</u>

Wide-ranging Online Data for Epidemiologic Research (WONDER) | CDC <u>https://wonder.cdc.gov/</u>

Youth Risk Behavior Surveillance System (YRBSS) | CDC <u>https://www.cdc.gov/healthyyouth/data/yrbs/index.htm</u>

#### **Other Federal Data Sources**

Health Care Utilization Project (HCUP) | Agency for Healthcare Research and Quality (AHRQ) <u>https://www.ahrq.gov/data/hcup/index.html</u>



Bureau of Justice Statistics (BJS) | Office of Justice Programs <a href="https://www.bjs.gov/">https://www.bjs.gov/</a>

National Crime Victimization Survey (NCVS) | U.S. Census Bureau <u>https://www.census.gov/programs-surveys/ncvs.html</u>

National Electronic Injury Surveillance System – All Injury Program (NEISS-AIP) | Consumer Product Safety Commission (CPSC) <u>https://www.cpsc.gov/Research–Statistics/NEISS-Injury-Data</u>

National Incident-Based Reporting System (NIBRS) | Federal Bureau of Investigation (FBI) <u>https://www.fbi.gov/services/cjis/ucr/nibrs</u>

**Non-Federal Data Sources** 

Gun Violence Archive (GVA) https://www.gunviolencearchive.org/

National Fatality Review Case Reporting System | National Center for Fatality Review and Prevention <u>https://www.ncfrp.org/data/nfr-crs/</u>

# **LEGISLATION AND POLICIES**

National Firearms Act | Bureau Alcohol, Firearms, Tobacco of and Explosives (ATF) <u>https://www.atf.gov/rules-and-regulations/national-firearms-act</u>

State Firearms Laws Database | State Firearms Law <a href="https://www.statefirearmlaws.org/">https://www.statefirearmlaws.org/</a>

State Firearm Law Navigator | RAND Corporation https://www.rand.org/research/gun-policy/law-navigator.html#self-defense

State Gun Control Laws | FindLaw https://statelaws.findlaw.com/criminal-laws/gun-control.html

# **PREVENTION RESOURCES**

**General Prevention** 

Firearm Injury Prevention | Injury Free Coalition for Kids https://www.injuryfree.org/safetytpc\_display.cfm?PermanentId=ADC74F45-E6D2-4BCA-8D270EDDD0370F76 Gun Safety and Your Health | American College of Surgeons https://www.facs.org/-/media/files/quality-programs/trauma/ipc/gunsafety\_brochure.ashx

Personal Firearms: Programs that Promote Safe Storage and Research on Their Effectiveness | US Government Accountability Office (GAO) https://www.gao.gov/assets/690/687239.pdf

Homicide/Violence Prevention

A Comprehensive Technical Package for the Prevention of Youth Violence and Associated Risk Behaviors | CDC <u>https://www.cdc.gov/violenceprevention/pdf/yv-technicalpackage.pdf</u>

Violence Impacts Teens' Lives | Vital Signs CDC https://www.cdc.gov/injury/pdfs/features/teen-violence-impact/VS Violence Impacts Teens Lives-508.pdf

Violence Intervention Programs: A Primer for Developing a Comprehensive Program within Trauma Centers | American College of Surgeons <u>https://www.facs.org/quality-programs/trauma/advocacy/ipc/firearm-injury/hvip-primer</u>

**Suicide Prevention** 

CALM: Counseling on Access to Lethal Means | Zero Suicide <u>https://zerosuicide.edc.org/resources/key-resources/CALM</u>

Lethal Means and Suicide Prevention: A Guide for Community and Industry Leaders | National Action Alliance for Suicide Prevention

https://theactionalliance.org/sites/default/files/lethal means and suicide prevention-a guide for community and industry leaders final 0.pdf

Means Matter | Harvard School of Public Health <u>https://www.hsph.harvard.edu/means-matter/</u>

Preventing Suicide: A Technical Package of Policy, Programs, and Practices | CDC <u>https://www.cdc.gov/violenceprevention/pdf/suicideTechnicalPackage.pdf</u>

Suicide Prevention | SAMHSA https://www.samhsa.gov/find-help/suicide-prevention

Suicide Prevention Lifeline | SAMHSA <u>https://suicidepreventionlifeline.org/</u>

#### PUBLICATIONS

Association of Changes in Missouri Firearm Laws with Adolescent and Young Adult Suicides by Firearms | JAMA Network (2020) Bhatt A, Wang Xi, Cheng AL, Morris KL, Beyer L, Chestnut A, Steigerwalt K, Metzner J <u>https://jamanetwork.com/article.aspx?doi=10.1001/</u> jamanetworkopen.2020.24303

Association of Minimum Age Laws for Handgun Purchase and Possession with Homicides Perpetrated by Young Adults Aged 18 to 20 Years | JAMA Pediatrics (2020) Moe CA, Haviland MH, Bowen AG

https://jamanetwork.com/journals/jamapediatrics/ article-abstract/2770131

Beyond Gun Laws—Innovative Interventions to Reduce Gun Violence in the United States | JAMA Psychiatry (2020)

Branas CC, Reeping PM, Rudolph KE https://jamanetwork.com/journals/jamapsychiatry/ fullarticle/2769625

Child Access Prevention Firearm Laws and Firearm Fatalities among Children Aged 0 to 14 Years, 1991-2016 | JAMA Pediatrics (2020) Azad HA, Monuteaux MC, Rees CA, Siegel M, Mannix R, Lee LK, Sheehan KM, Fleegler EW https://jamanetwork.com/journals/jamapediatrics/

article-abstract/2761305

Firearm Storage in Gun-Owning Households with Children: Results of a 2015 National Survey | Journal of Urban Health (2018) Azrael D, Cohen J, Salhi C, Miller M <u>https://www.ncbi.nlm.nih.gov/pmc/articles/</u> PMC5993703/

#### Selected State and Local Prevention Resources

Many state health departments and local organizations have produced their own prevention materials. To learn more about what may be available in your area, please contact your state or health department.

PSA Relevant to Teens in Utah | Utah Suicide Prevention Coaltion https://vimeo.com/232528101

Reopening RI: Is Your Home Suicide Proof? | Rhode Island Department of Health https://health.ri.gov/ publications/guidance/Is-Your-Home-Suicide-Proof.pdf

Safe-Guard Your Home: A Guide to Suicide Prevention at Home | Colorado School of Public Health https://www.colorado.gov/ pacific/sites/default/files/PW\_ ISVP\_Suicide\_Safe-guard-Home\_ Youth.pdf

Safe Streets Baltimore https://www.jhsph.edu/research/ centers-and-institutes/centerfor-prevention-of-youth-violence/ field\_reports/Safe\_Streets.html Household Gun Ownership and Youth Suicide Rates at the State Level, 2005 – 2015 | American Journal of Preventive Medicine (2019) Knopov A, Sherman J, Raifman JR, Larson E, Siegel MB <u>https://www.ajpmonline.org/article/S0749-3797(18)32383-3/fulltext</u>

Increasing Rate of Unintentional Firearm Deaths in Youngest Americans: Firearm Prevalence and Covid-19 Pandemic Implication | Journal of the National Medical Association (2021) Bleyer A, Siegel SE, Thomas CR,. <u>https://www.sciencedirect.com/science/article/abs/pii/S002796842030451X#bib40</u>

Initiation Age, Cumulative Prevalence, and Longitudinal Patterns of Handgun Carrying Among Rural Adolescents: A Multistate Study | Journal of Adolescent Health (2020) Rowhani-Rahbar A, Oesterle S, Skinner M.L., <u>https://www.jahonline.org/article/S1054-139X(19)30921-8/fulltext</u>



C Education Development 4 Center

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