



**DENVER  
PUBLIC HEALTH™**

# HOW GUN VIOLENCE AFFECTS YOUTH IN DENVER

## THE PROBLEM AND OPPORTUNITIES FOR ACTION

SEPTEMBER 2019



**Presented in Partnership With:**

Colorado Faith Communities United to End Gun Violence

Denver Department of Public Health and Environment

Denver Department of Public Safety

Denver Health At-Risk Intervention and Mentoring Program

Denver Health Department of Emergency Medicine

Denver Health Level I Adult and Level II Pediatric Trauma Center

Project PAVE

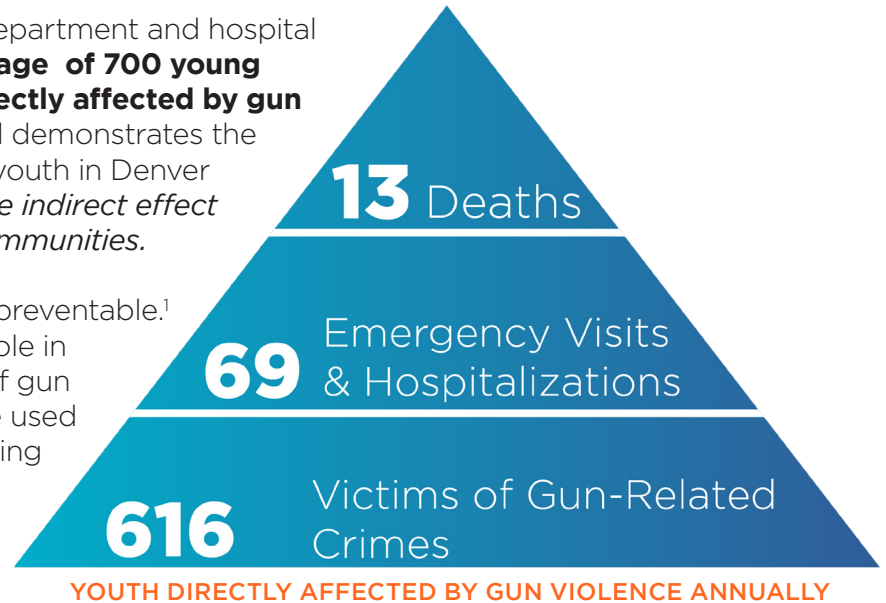
## **Denver Public Health Commitment to Equity in Data**

Denver Public Health aspires to present data humbly, recognizing numbers never tell the whole story. We strive to work with individuals and communities to learn and share their stories to improve collective understanding. Knowing that people across life circumstances have inequitable opportunities to achieve optimal health, we commit to pair numbers and stories to inform policy and systems change to improve health for all.

# Introduction

According to death records, emergency department and hospital discharge data and crime reports, **an average of 700 young people less than 25 years of age\* are directly affected by gun violence in Denver annually.** This pyramid demonstrates the average direct impact of gun violence on youth in Denver each year.<sup>A B C</sup> *This does not account for the indirect effect on other youth, their families, and their communities.*

Deaths and injuries from gun violence are preventable.<sup>1</sup> While law enforcement will always play a role in addressing and responding to the threat of gun violence, a **public health approach** can be used to prevent a young person from experiencing gun violence.



The public health approach to prevent gun violence follows these steps:

- Define the problem and understand root causes by analyzing multiple data sources.
- Develop and implement effective strategies to prevent the problem.
- Bring prevention efforts to scale using cross-sector partnerships.
- Evaluate efforts in order to ensure effectiveness.

In an effort to share data about gun violence affecting young people and inform potential solutions, this report:

- Describes the health and social impact gun violence has on Denver youth and the community;
- Examines factors that contribute to the youth gun violence problem in Denver; and
- Presents ideas for how to protect Denver youth from gun violence.

\* This report describes the extent and impact of gun violence on youth defined as young people less than 25 years of age (ages 0-24).

<sup>1</sup> Vernick JS, O'Brien M, Hepburn LM, et al. (2003). Unintentional and undetermined firearm related deaths: a preventable death analysis for three safety devices. *Injury Prevention*. 2003;9:307-311.

# Youth gun violence in Denver

We examined data on causes of death, emergency room and hospital visits and crime reports to better understand the burden of gun violence on youth and the Denver community.<sup>2</sup> Evidence from community engagement activities provided information about how gun violence impacts the lives of young people.

## Mortality

Guns are a leading cause of death among youth in Denver, contributing to both homicides and suicides. It's important to note that, while guns are not the most common method used to attempt suicide, they are the most lethal: 85-90% of self-injuries using a gun prove fatal while the lethality of other methods ranges from 2% to 70%.<sup>3</sup>



In just six years (2012-2017), Denver youth experienced:<sup>A</sup>

74 total deaths due to gun violence, with **rates highest among those ages 15 to 24**

- 27 suicides using a gun
- 47 homicides due to guns

Young men had almost seven times the risk of being killed by a gun than young women. The overall rate of deaths caused by guns in Denver was 6.3 per 100,000 during this time period, which is similar to the national rate over the same time period.<sup>4 D</sup>

## Injury

**For every young person killed by gun, almost seven young people are injured severely enough to require medical attention.<sup>B</sup>**

Over a seven year period (2012-2018), Denver youth experienced:

- 311 emergency department visits
- 175 hospitalizations for gun-related injuries

Injuries caused by gun-related violence account for only 0.05% of total emergency department visits and only 0.2% of total hospitalizations; however, it is important to note how often youth are the ones involved in these gun-related visits. Young people account for nearly half (47%) of the total gun-related emergency department visits, and 32% of the total gun-related hospitalizations annually.

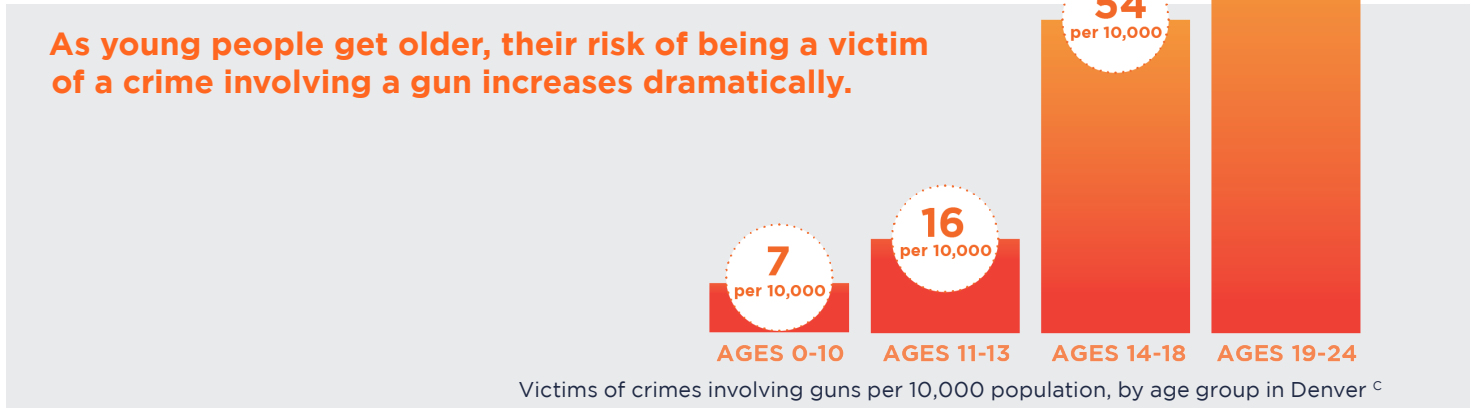
<sup>2</sup> Primary data sources (endnotes A-C) are listed on page 10.

<sup>3</sup> Miller, M. et al. (2012) Suicide Mortality in the United States: The Importance of Attending to Method in Understanding Population-Level Disparities in the Burden of Suicide. *Annual Review of Public Health* 2012 33:1, 393-408.

<sup>4</sup> Cunningham, et al. (2018). The Major Causes of Death in Children and Adolescents in the United States. *The New England Journal of Medicine*. 379:25, 2468-75.

## Victims of Crimes Involving Guns

From 2014 through 2018 in Denver, 3,080 (3 in every 1,000) young people were victims of crimes involving guns.<sup>c</sup> This means **an average of 616 young people are victims of a crime involving a gun every year.**



## The Ongoing Impact of Gun Violence: Beyond the Direct Victims

When a gun is used to harm a young person in Denver, the impacts go beyond the effects on the injured individual.

In both the 2014 Denver Community Health Assessment and the 2017 Denver Youth Health Assessment, young people identified violence as a key concern.<sup>5,6</sup> Youth surveyed in 2017 stated that feeling safe at home, school, and in their communities is crucial to being successful. Young people said that violence – especially gun and gang violence – stands in their way of being healthy.

Young men attending a 2018 focus group at a community drop-in center in Denver expressed concerns and fear about the violence in their neighborhood. In addition to bullying, fighting and masculinity, they spoke about shootings that had occurred in their communities. They felt their way to avoid danger was to stay inside.<sup>7</sup>

Scientific studies in other communities have evaluated indirect effects of gun violence. Parents, siblings, relatives, friends, and children of those affected by gun-violence experience emotional trauma related to each individual shooting. Trauma has a significant influence on the development, health and well-being of individuals who directly experience or witness violence.<sup>8</sup> Secondary trauma experienced by people exposed to violence results in a break-down of social networks, social relationships and positive social norms across a community or whole population. Several studies have reported diminished emotional empathy among youth exposed to high levels of real-life violence, suggesting some level of desensitization.<sup>9</sup>

<sup>5</sup> Denver Public Health and Denver Department of Public Health and Environment. (2014). 2014 Health of Denver Report. Available at - <https://tinyurl.com/denvercha2014>

<sup>6</sup> Denver Public Health and Denver Department of Public Health and Environment. (2017). 2017 Denver Youth Health Assessment. Available at - <https://tinyurl.com/yha2017>

<sup>7</sup> Mile High Youth Thrive and Denver Public Health. (2019). Preventing Youth Violence in Denver: A Call to Action. Available at - <https://tinyurl.com/DPHYVP>

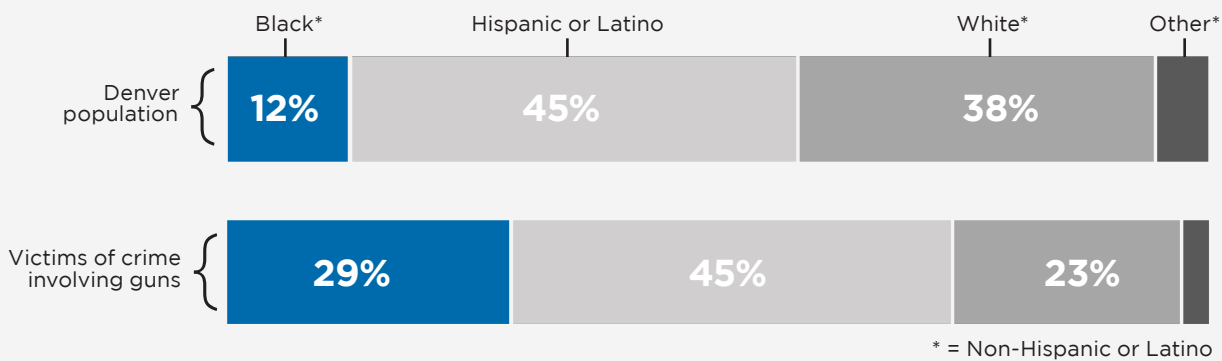
<sup>8</sup> McGee ZT, et al. (2017). A multivariate analysis of gun violence among urban youth: The impact of direct victimization, indirect victimization, and victimization among peers. Cogent Social Sciences. 3:1. Available at - <https://tinyurl.com/yx9ro33n>

<sup>9</sup> Mrug, S. et al. (2015). Emotional and Physiological Desensitization to Real-Life and Movie Violence. Journal of Youth and Adolescence. 44:5, 1092-108.

# Gun violence affects some Denver communities more than others

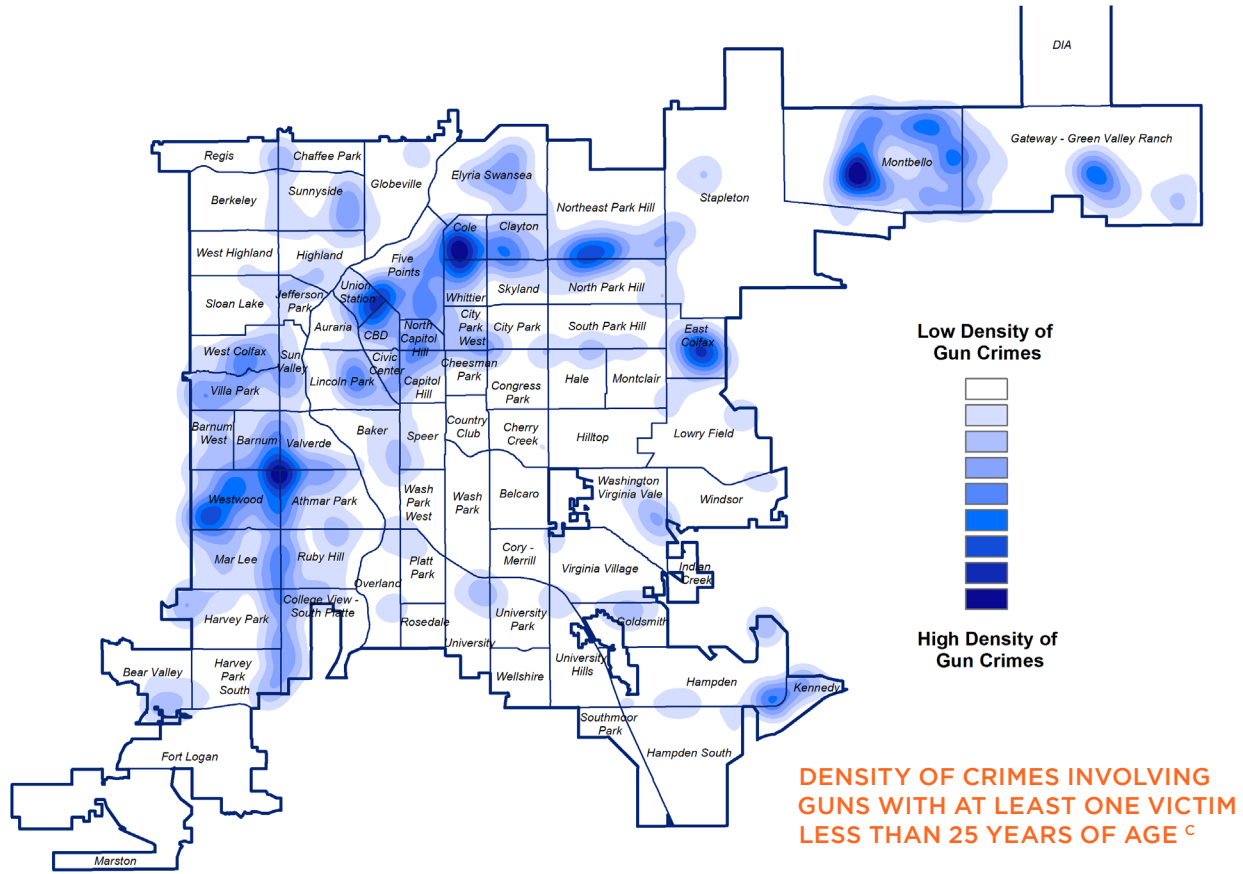
From 2012 to 2017, there were more Hispanic youth killed by guns in Denver than Black non-Hispanic or white non-Hispanic youth. The rate of Black or African American youth killed (taking into account their representation in the population) was more than five times higher than that of white youth.<sup>A</sup>

When we look at the race/ethnicity of the young people who are victims of crime involving guns, especially as compared to their populations, a stark difference is clear. Denver Black or African American youth are victims of crimes involving guns (29%) disproportionate to the size of their population (12%).<sup>C</sup>



As seen above, different populations experience different levels of gun violence.

Gun violence also happens differently in different communities. The map to the right highlights higher concentrations of crimes involving guns where youth were victims.<sup>C</sup> This is displayed not to blame these communities for their circumstances, but instead to acknowledge inequities in a way that can support action.



To effectively understand and address these inequities we must look at both what is happening in affected neighborhoods and the complex factors that shape these neighborhoods. These factors—such as the housing market, the market economy, educational opportunity, community development and design, justice, and immigration—define the circumstances in which people live. These same factors have created discriminatory actions, institutional policies and practices that serve individuals and communities inequitably. Such policies and practices, in turn, have resulted in neighborhoods with high levels of concentrated disadvantage (generally understood as a combination of poverty, unemployment, and low-wage jobs).<sup>10</sup>

People who live in neighborhoods of concentrated disadvantage are more likely to witness or experience violence than those who live in neighborhoods without concentrated disadvantage. Because African American and Latino residents are more likely to live in such neighborhoods, they are more likely to experience and be the victims of violence.<sup>11</sup>

By addressing the systemic factors that contribute to gun violence (and drive all forms of violence), we can improve community environments and create a foundation for health and safety in all of Denver’s neighborhoods.<sup>12</sup>

<sup>10</sup> Davis, R. et al. (2017). What? Why? How? Answers to Frequently Asked Questions about the Adverse Community Experiences and Resilience Framework. Prevention Institute, Oakland CA. Available at - <https://tinyurl.com/FAQ-ACE-R>

<sup>11</sup> Silverman, C et al. (2011). The Consequences of Structural Racism, Concentrated Poverty and Violence on Young Men and Boys of Color. Thelton E. Henderson Center for Social Justice at the University of California, Berkeley Law School. Available at - <https://tinyurl.com/BerkeleyLaw-Violence>

<sup>12</sup> Fujie Parks, et al. (2017). A Health Equity and Multisector Approach to Preventing Domestic Violence. Prevention Institute, Oakland CA. Available at - <https://tinyurl.com/PreventDV>

# Opportunities to change the story

In addition to addressing the systemic contributors that shape young people's environments, we can improve factors that influence a young person's life experience and minimize their chances of being a victim of gun violence.

According to the Centers for Disease Control and Prevention, certain risk factors increase a young person's chances of experiencing violence. Some of these include low neighborhood support and connectedness, economic stress, harmful norms around masculinity and femininity, and high density of liquor stores.



Along with addressing the underlying risk factors for violence, enhancing protective factors can increase the likelihood that youth will thrive. Factors that protect young people from negative experiences like gun violence include: a connection to a caring adult; positive relationships with peers who engage in healthy activities; family support; and community connectedness. These protective factors increase the likelihood that youth will experience positive health outcomes by buffering against harmful external factors or helping to change the way a young person responds to risky or challenging situations.<sup>13</sup>

These factors also lessen the likelihood a young person will experience any type of violence, not just gun violence.<sup>14</sup> By addressing these shared risk and protective factors, we can reduce not only gun violence but also suicide, bullying, relationship violence, fighting, and other types of violence.

<sup>13</sup> Wilkins, N. et al. (2014). Connecting the Dots: An Overview of the Links among Multiple Forms of Violence. Centers for Disease Control and Prevention. Available at - <https://tinyurl.com/LinksViolence>

<sup>14</sup> Center for Disease Control and Prevention. (2018). Youth Violence: Risk and Protective Factors. Available at - <https://tinyurl.com/CDCriskprotectivefactors>



## Learning from other cities

We can learn from other cities that are taking a public health approach to address the risk and protective factors associated with violence.

Since its creation in 2013 the Office of Safe and Healthy Neighborhoods in Louisville, Kentucky has advanced a holistic approach in coordinating the efforts of many city agencies and partner organizations towards reducing the prevalence of homicides, shootings and assaults among youth. In 2015 the Office published phase two of **Louisville's Blueprint for Safe and Healthy Neighborhoods**, which focuses on building communities, education, employment and economic development, health and social wellness and juvenile and criminal justice.<sup>15</sup> By early 2017 city leaders were reporting reductions in crime, including a 13 percent reduction in aggravated assaults, 16 percent reduction in burglaries and 29 percent drop in robberies in high-crime areas.<sup>16</sup> By mid-2018 the city reported that violent crime overall was down by almost 9 percent from 2017, homicides had decreased by 30 percent, and nonfatal shootings had decreased by 9 percent.<sup>17</sup>

In 2005, Oakland, California launched the **Oakland Unite** initiative to address violence prevention. The program was funded by voter-supported city taxes and linked together social services, nonprofits, police, employment, schools, criminal justice, faith-based agencies and community members. The program demonstrated lower recidivism rates and reduced individual interactions with the justice system among high-risk populations.<sup>18</sup> From 2012 to 2017 Oakland saw a 50 percent decline in shootings and a 42 percent drop in homicides—72 homicides in 2017 was the second lowest number reported since 1985.<sup>19</sup> In 2017 the Oakland City Council created the Office of Violence Prevention to build upon Oakland Unite with aims to reduce homicides, domestic violence and commercial exploitation of children; the initiative includes dedicated resources within the fire and police departments.<sup>20</sup> In 2018 the decline in homicides continued, with a final total of 68—the lowest total in almost two decades.<sup>21</sup>



<sup>15</sup> Smith, A. (2015). Louisville's Blueprint for Safe and Healthy Neighborhoods: Phase II. Available at - <https://tinyurl.com/LBlueprint2>

<sup>16</sup> City of Louisville KY. (2017). Violence reduction strategy showing progress. Available at - <https://tinyurl.com/LouisvilleKYProgress>

<sup>17</sup> Fischer, G. (2018). Our steps to slow violent crime in Louisville are working, mayor says. Courier Journal. Available at - <https://tinyurl.com/CourierJournal-Violence>

<sup>18</sup> Resource Development Associates. (2014). Oakland Unite Violence Prevention Programs Retrospective Evaluation 2005-2013. Available at - <https://tinyurl.com/OaklandUniteRetrospective>

<sup>19</sup> City of Oakland. (2018). Mayor Schaaf, OPD, Department of Violence Prevention and Community Address Steady Decline in Violent Crime. Available at - <https://tinyurl.com/OaklandPressRelease>

<sup>20</sup> Parr, R. (2017). Oakland creates Department of Violence Prevention. East Bay Times. Available at - <https://tinyurl.com/OaklandViolencePrevention>

<sup>21</sup> Hurd, R. (2019). 2018 Review: Oakland murders dip to lowest level since 1999; major crimes fall regionally. Mercury News. Available at - <https://tinyurl.com/2018reviewOakland>






## Local initiatives to reduce gun violence

In Denver, many agencies, organizations, and individuals are working to reduce youth gun violence.

**Denver Health's At-risk Intervention and Mentoring (AIM)** program, started in 2010, aims to reduce the chances of repeat injuries among high-risk and violence-affected youth and prevent retaliatory violence.<sup>22</sup> AIM provides one-on-one mentoring to at-risk and gang-affected youth aged 14-27 who present to the emergency department (ED) after a traumatic injury. This hospital-based approach capitalizes on the “teachable moment” when youth feel vulnerable to future violence. AIM fosters long-term change by connecting clients with needed resources and supporting positive behaviors.

The **Mile High Youth Thrive** coalition, comprised of public health agencies, city agencies, community partners, researchers, and other violence prevention advocates was formed in 2015 to address youth violence in Denver. The group's scope includes intentional injury, fights and threats, bullying, gang violence, dating and sexual violence, and human trafficking and exploitation. The coalition is unique in bringing together partners addressing a wide range of violence-related issues and promoting efforts addressing their shared risk and protective factors.

### Ideas for protecting Denver youth from gun violence:

-  Recognize gun violence as a critical and preventable public health problem.<sup>23</sup>
  - Develop a community-informed, cross-sector strategic plan to increase collaboration, leverage funds, and collectively achieve greater reductions in multiple types of violence affecting young people. This plan would determine how to address the specific systemic factors that contribute to community trauma and resilience in Denver's communities.<sup>24</sup>
-  Expand access to high quality, culturally competent resources that address the impact of trauma on individuals, families, and whole communities.
-  Implement strategies that improve the quality of life for young people like neighborhood economic development and youth employment.
-  Begin violence prevention efforts during early childhood since risks of involvement in gun-related crime increase rapidly as young people age.
-  Promote the use of safe storage (lock boxes) for guns to provide an easy way for families to protect against unsafe use of guns.<sup>25 26</sup>

*Access to firearms is the most important factor influencing youth suicide and homicide. Approximately 90% of youth who complete suicide use a gun found in the home. Evidence shows that distributing safe storage devices (lock boxes, cable locks, trigger locks) through the health care setting increases the safe storage of firearms.<sup>27</sup>*

These recommended actions are based on what public health, criminal justice, social service, and other sectors have learned from decades of violence prevention efforts in urban areas.

<sup>22</sup> Dicker, R. et al. (2017). Violence intervention programs: A primer for developing a comprehensive program for trauma centers. Bulletin of the American College of Surgeons. 102:10, 20-29. Available at - <https://tinyurl.com/ViolenceInterventionPrograms>

<sup>23</sup> Cole, TB; Flanagan, A. Violence—Ubiquitous, Threatening, and Preventable. (1998) JAMA. Available at - <http://tinyurl.com/y5rbx6r5>

<sup>24</sup> Weiss, B. et al. (2013). UNITY Assessment II: Results of an Innovative Initiative to Improve the Urban Response to Youth Violence. UCLA Fielding School of Public Health. Available at - <https://tinyurl.com/UnityAssessmentII>

<sup>25</sup> Rowhani-Rahbar, A. et al. (2016) Effectiveness of Interventions to Promote Safe Firearm Storage. Epidemiologic Reviews; 38: 111-124. Available at - <http://tinyurl.com/y3ur6hff>

<sup>26</sup> Yip, P. et al. (2012). Means restriction for suicide prevention. Lancet; 379: 2393-99. Available at - <https://tinyurl.com/yxf93zpj>

<sup>27</sup> Barkin SL, Finch SA, Ip EH, Scheindlin B, Craig JA, Steffes J, et al. Is office-based counseling about media use, timeouts, and firearm storage effective? Results from a cluster-randomized, controlled trial. Pediatrics 2008; 122(1), e15-e25

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To get involved in Denver Public Health's youth violence prevention efforts, contact Maritza Valenzuela at 303-602-3678 or [Maritza.Valenzuela@dhha.org](mailto:Maritza.Valenzuela@dhha.org).

Young people are encouraged to contact the Denver Public Health Youth Violence Prevention Youth Advisors at [Youth.Advisors@dhha.org](mailto:Youth.Advisors@dhha.org).

Visit our website to learn more about public health approaches to youth violence:  
<https://tinyurl.com/DPHYVP>.

Sign up to receive updates about the Mile High Youth Thrive coalition at  
<https://tinyurl.com/MHYouthThrive>.

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## Presented in Partnership With:



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## Data Sources

<sup>A</sup> Colorado Department of Public Health & Environment Vital Statistics Program 2012-2017

<sup>B</sup> Colorado Hospital Association Discharge Data (CHA) 2012-2018

<sup>C</sup> Denver Police Department Crime Data (DPD) 2014-2018

<sup>D</sup> CDC/NCHS, National Vital Statistics System, mortality data (see <http://www.cdc.gov/nchs/deaths.htm>)



Denver Public Health is an innovative, nationally recognized public health department that collaborates with partners to inform, educate, offer services, and promote policy change to make Denver a healthy community for all people. With many partners, Denver Public Health supports policy and systems change, promotes healthy behaviors, and prevents health problems. The department also provides specialty clinical services to the most vulnerable community members in Denver.

