Gun Violence, Public Safety and Public Health

Terry L. Williams, MPH
Objectives

• Defining “Mass Shooting”
• Prevalence of Gun Violence within Chicago
• Effects and Levels of Trauma
• Role of Public Health
• Levels of Trauma
• Action-based Approaches
• Suggested Solutions
What is Gun Violence (Firearm Violence)?

• A firearm injury is a gunshot wound or penetrating injury from a weapon that uses a powder charge to fire a projectile. Weapons that use a powder charge include handguns, rifles, and shotguns.

Source 1 – Centers for Disease Control and Prevention. (n.d)
POLL

Who has had direct experience with gun violence incidents?
What is a mass shooting?

- The National Center for the Analysis of Violent Crime provides a close definition with the term “mass murder,” which is defined as “a number of murders (three or more) occurring during the same incident, with no distinctive time period between murder”.  

- In response to the Sandy Hook Elementary school shooting, President Obama mandated a definition for “mass killing” with the Investigative Assistance for Violent Crimes Act of 2012, which defined this phrase as “3 or more killings” during an incident, excluding the death of the perpetrator.

There have been at least 309 mass shootings in the U.S in 2022, according to the Gun Violence Archive. As of June 8, there had been 27 shootings at schools this year, according to Education Week, which has been tracking school shootings since 2018.

6 dead, dozens wounded in shooting at Highland Park Fourth of July parade; 22-year-old ‘person of interest’ identified, being sought

The shooter appeared to have fired “a high-powered rifle” from a rooftop, police said. “This doesn’t happen here,” said a witness who ran to safety with his family. “It shouldn’t happen anywhere.”

By Lynn Sweet, Manny Ramos and Elvia Malagón | Updated Jul 4, 2022, 5:38pm CDT
### Mass Shootings

<table>
<thead>
<tr>
<th>City</th>
<th># Killed</th>
<th># Injured</th>
<th># Killed &amp; Injured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago</td>
<td>92</td>
<td>719</td>
<td>811</td>
</tr>
<tr>
<td>Philadelphia</td>
<td>39</td>
<td>328</td>
<td>367</td>
</tr>
<tr>
<td>New York City</td>
<td>22</td>
<td>229</td>
<td>251</td>
</tr>
<tr>
<td>Baltimore</td>
<td>193</td>
<td>220</td>
<td>27</td>
</tr>
<tr>
<td>Houston</td>
<td>59</td>
<td>155</td>
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<tr>
<td>Washington</td>
<td>162</td>
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<tr>
<td>New Orleans</td>
<td>126</td>
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<td>23</td>
</tr>
<tr>
<td>St. Louis</td>
<td>37</td>
<td>106</td>
<td>143</td>
</tr>
<tr>
<td>Atlanta</td>
<td>12</td>
<td>120</td>
<td>132</td>
</tr>
<tr>
<td>Detroit</td>
<td>24</td>
<td>101</td>
<td>125</td>
</tr>
</tbody>
</table>

Data from Sept. 29, 2018 - May 24, 2020

Chart: Carol Thompson/CBS Chicago • Source: Gun Violence Archive • Get the data • Created with Datamapper

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**Chicago mass shooting leaves 4 injured, police say**

The Chicago drive-by mass shooting happened on Saturday afternoon, according to police.

**Two mass shootings hours apart on South and West sides of Chicago, 14-year-old boy among the wounded**

By Sun-Times Media Wire | Published June 9, 2022 | News | Sun-Times Media Wire

**Loop mass shooting: 5 shot, 2 fatally, during argument**

By Jasmin Lin and FOX 32 Digital Staff | Published July 1, 2022 5:45AM | Mass Shootings | FOX 32 Chicago

Source 6 – Mignot, S. L. (2022, May 27)
- Gun assaults has wounded or kill 60,000 people in the USA each year, mostly young African-American and Hispanic men.\(^7\)
- The direct and indirect health effects of gun violence are felt by both the involved in gun violence but also by entire neighborhoods living with **chronic and persistent gun violence**.\(^7\)

Source 7 – Riley, et al. (2017)
Social Ecological Model

- **Individual**
  - Physical and Psychological
- **Interpersonal**
  - Life Expectancy, Injury, Mortality
- **Community**
- **Institutional**
- **Society / Public Policy**
Psychological Effects

Adverse childhood experiences (ACEs)

• There has been significant research addressing the linkage between youth homicide and injury from firearms, however there is still more research to be done on the psychological harm of exposure to gun violence.\(^8\)

• Schools, CBOs, parents, and stakeholders must understand the traumatic impact of gun violence for children may not correlate to direct experiences but may by simply seeing or hearing it in their neighborhoods.\(^9\)
Serotonin and Dopamine Levels

• Serotonin is an important chemical that is believed to help regulate mood and social behavior, appetite and digestion, sleep, and memory.\(^{10}\)

• When the serotonin and dopamine levels function as they should, it allows individuals to cope in difficult situations and excel in positive endeavors.\(^{10}\)

• 90% of serotonin comes from Gastrointestinal Tract (GI tract). ‘Your Gut Feeling.’\(^{11}\)

Role of Public Health

• Systematically collecting data on the scope of the violence at local, national and international levels

• Implementing promising interventions, determining cost effectiveness, and widely disseminating information

• Exploring ways to prevent violence

• Investigating why violence occurs, including those factors that may be modifiable

Source 12 – Mercy, et al. (1993)
Youth Engagement

“Research Activism for Youth Voice”

• Elevate youth voice by directly engaging them in the research and implementation process by supporting their efforts to promote health equity related to gun violence.

• Leveraging community-based research to stimulate community action and (policy-making) that addresses the root causes of health.

• 25 Youth from the Roseland Neighborhood of Chicago
  - 69.6% Male
  - Ages 14 to 24 (average age = 16.7)
  -100% Black or African American
Concerns Survey

• Youth brainstormed community concerns related to gun violence
• CGVRC mentors and students turned it into a 55-item survey
• Youth completed

*Gun Violence and Community Health Concerns Survey*

**Instructions:** In this survey, we would like to ask you about a variety of health issues and your opinions

- In the first column, circle the number that shows how important each issue is to you.
- In the second column, circle the number that shows how satisfied you are with your community’s efforts to address the issue.

<table>
<thead>
<tr>
<th>Importance of the Issue</th>
<th>CGVRC</th>
<th>Satisfaction with the community’s efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teenaging local teenagers in the Roseland neighborhood of Chicago</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
<tr>
<td>2. Black-owned businesses in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>3. Employment opportunities in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>4. Poverty reduction efforts in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>5. Public safety in Roseland</td>
<td>1 2 3 4</td>
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<tr>
<td>6. Crime in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>7. Inadequate in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>8. Community violence in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>9. Police violence in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>10. Gang activity in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>11. Gun Recovery in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>12. Teenaged local teenagers in the Roseland neighborhood of Chicago</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>13. Inadequate schools in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>14. Inadequate neighborhood in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>15. Inadequate neighborhood in Roseland</td>
<td>1 2 3 4</td>
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<tr>
<td>16. Inadequate in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>17. The availability of tobacco in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>18. Illegal drugs in Roseland (cocaine, heroin, etc.)</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>19. Access to healthcare for people in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>20. Inadequate schools for people in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>21. Mental health services for people in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>22. Inadequate in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>23. Availability of housing in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>24. Inadequate schools in Roseland</td>
<td>1 2 3 4</td>
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<tr>
<td>25. Inadequate in Roseland</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
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<tr>
<td>26. The use of Roseland parks for illegal activity</td>
<td>1 2 3 4</td>
<td>1 2 3 4</td>
</tr>
</tbody>
</table>
Concerns Survey Results

Top 20 Youth Concerns
(55 were generated and ranked)

1. Poverty reduction efforts in Roseland
2. Community violence in Roseland
3. Guns/ firearms in Roseland
4. Gang activity in Roseland
5. Crime in Roseland
6. Availability of good food in Roseland
7. COVID-19
8. The criminal justice system’s impact on Roseland
9. Stress among Roseland residents
10. Mental health services for people in Roseland
### Concerns Survey Results

#### Top 20 Youth Concerns (55 were generated and ranked)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Concern</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Poverty reduction efforts in Roseland</td>
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<td>7.</td>
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<td>8.</td>
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<td>9.</td>
<td>Stress among Roseland residents</td>
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<tr>
<td>10.</td>
<td>Mental health services for people in Roseland</td>
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#### Social Determinants of Public Health

- Economic Stability
- Neighborhood and Built Environment
- Social and Community Context
- Health Care Access and Quality
Effects of social media on mental health

• Cyber-bullying / victimization

• Electronic dating aggression/cyber-stalking

• Cyber-suicide

• Gang violence

Source 13 – Patton, et al. (2014)
Promising Action-based Interventions

- **Behavioral Threat Assessments to identify Leakage**
  - Leakage is the communication to a third party of an intent to do harm to a target. Third parties are typically other people, but the means of communication could vary widely, from planned or spontaneous utterances to various means of communication, including social media.\(^\text{12}\)

- **Red Flag Laws**
  - Allow groups to petition courts to remove weapons from people deemed a threat to themselves or others.
  - Prevents people convicted of domestic abuse from owning a gun to include dating partners rather than just spouses and former spouses.
  - Expands background checks on people between the ages of 18 and 21 seeking to buy a gun.

Source 14 – Meloy, & O’Toole, M. E. (2011)
Health Care Access and Quality

It should **NOT** be more accessible to purchase an AR-15 then to schedule an appointment with a mental health professional.
Interdisciplinary Approach

- **COMMUNITY RESIDENTS**
  - Leveraging the impact and power residents have on community decisions.

- **COMMUNITY-BASED ORGANIZATIONS**
  - Galvanizing CBOs together as a united front.

- **ELECTED OFFICIALS**
  - Intentional community-based initiatives supported and sponsored by elected officials.

- **POLICE**
  - Repurposing and revitalizing the roles of police from an authentic community-based response.

- **EXTERIOR COMMUNITY RESOURCES**
  - Supporting a framework for outside resources and funding to have the most impact.
Suggested Solutions

• Invest in youth to overcome ACE’s and increase opportunity

• Understand gun culture and the psychological aspect behind violence

• Build community capacity & foster communication

• Support & empower the community

• To move forward, seek missing voices (i.e. youth)
References


