



October 29, 2023



Trauma and Acute-Care Surgeon and Medical Director of Atrium's Hospital-Based Violence Intervention Program "Project BOOST"

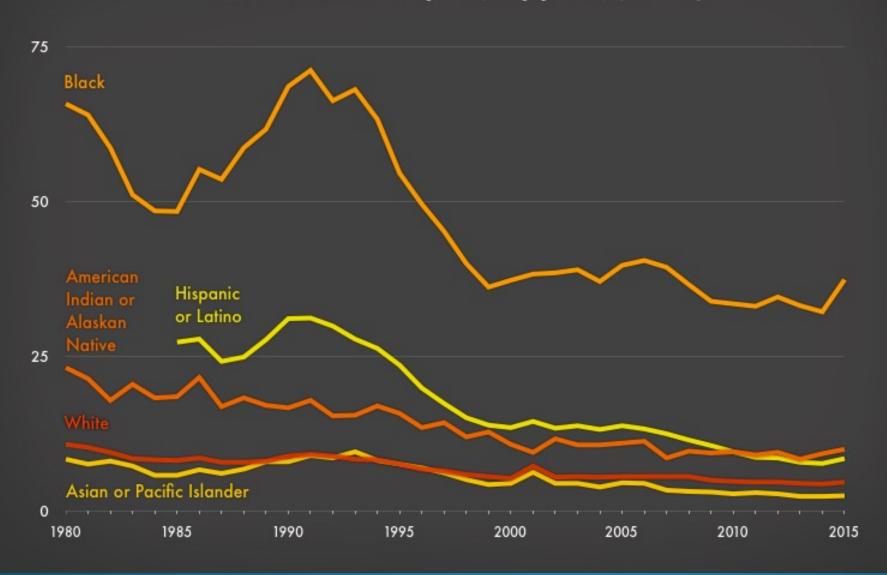


### Violence as a Public Health Problem

Violence in America is a <u>diseαse</u> of young and poor, men of color, with the handgun serving as the most common disease vector. While we seem to have made some progress conquering this disease over the past 50-60 years, much work remains to be done...

#### Changes in male homicide rates by race 1980-2015

Number of homicides of males per 100,000 population, 1980 - 2015



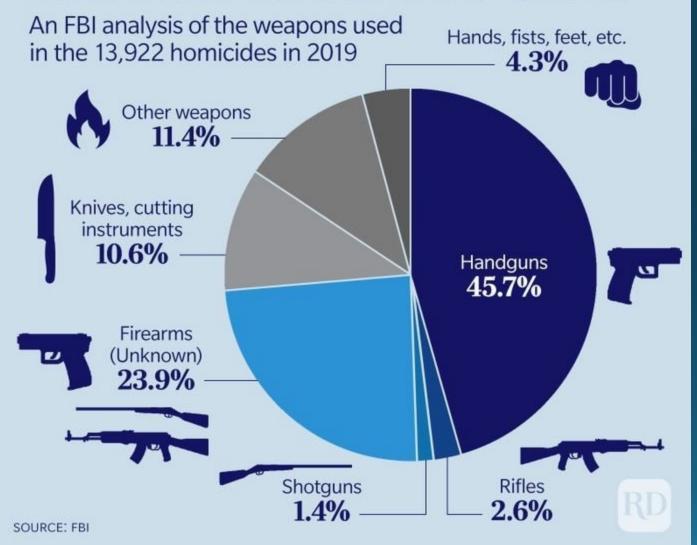
## **GUN VIOLENCE** ARCHIVE 2023

**Evidence Based Research - since 2013** 

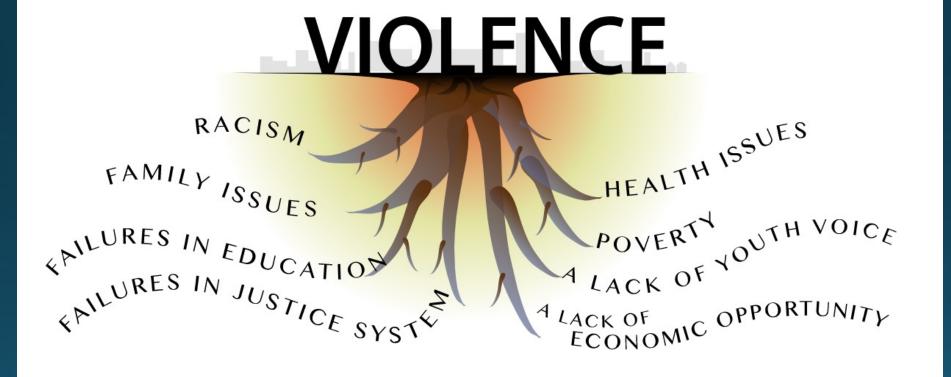
GVA - Seven Year Review	2016	2017	2018	2019	2020	2021	2022
Deaths - Willful, Malicious, Accidental	15,139	15,742	14,943	15,509	19,558	21,009	20,200
Suicides by Gun	22,938	23,854	24,432	23,941	24,292	26,328	Pending
Injuries - Willful, Malicious, Accidental	30,586	31,358	28,285	30,199	39,542	40,603	38,550
Children [aged 0-11] Killed or Injured	665	734	665	696	1,001	1,065	995
Teens [aged 12-17] Killed or Injured	3,154	3,296	2,883	3,129	4,159	4,645	5,157
Mass Shooting	383	348	336	417	610	690	647
Murder-Suicide	549	608	623	632	570	594	670
Defensive Use [DGU]	1,993	2,118	1,889	1,619	1,513	1,295	1,178
Unintentional Shooting	2,235	2,065	1,696	1,912	2,336	2,027	1,626

PUBLISHED DATE: October 28, 2023					
Total Number of GV Deaths - ALL Causes <sup>4</sup>	35,497				
Homicide/Murder/Unintentional/DGU <sup>1</sup>	15,631				
Suicide <sup>3</sup>	19,866				

# The Majority of Murders in America Involve Guns



## What Causes Violence?

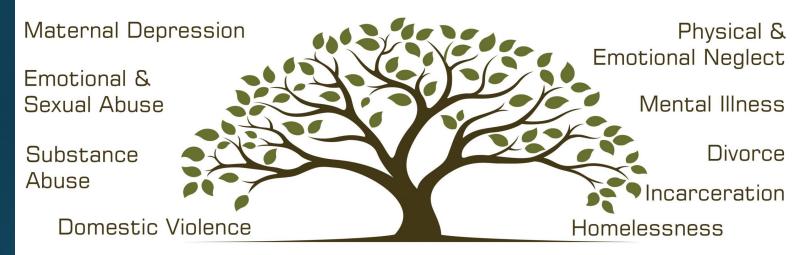


### Violence as a Public Health Problem

- •Treats violence as a <u>diseαse</u> that:
  - Occurs in specific patient populations
  - Can be spread from person to person, community to community, and generation to generation
  - Has specific known causes
  - Has known effective treatments

#### ACES

## The Pair of ACE's ADVERSE CHILDHOOD EXPERIENCES



#### ADVERSE COMMUNITY ENVIRONMENTS



Lack of Opportunity, Economic Mobility & Social Capital

## "Community" Violence in Charlotte



Distinct spatial pattern
described as an "arc" of
communities of color and
concentrated poverty



#### Social Determinants of Health

#### Impact on Violence

#### Social Determinants of Health are Linked to Gun Homicide Rates in the United States

Social Mobility
(ability to climb the socioeconomic ladder)



Trust in Institutions (e.g. government, media, corporations)



19% ↓

Welfare Spending (e.g. unemployment, public assistance programs)



**14%** ↓

Income Gap Between the Rich and Poor



8% 个

Associated Changes in Neighborhood Gun Homicide Rates

#### Where is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States\*

Raj Chetty, Harvard University and NBER Nathaniel Hendren, Harvard University and NBER Patrick Kline, UC-Berkeley and NBER Emmanuel Saez, UC-Berkeley and NBER

June 2014

TABLE II
Intergenerational Mobility in the 50 argest Commuting Zones

Upward Mob. Rank	CZ Name	Population	Absolute Upward Mobility	P(Child in Q5   Parent in Q1)	Pct. Above Poverty Line	Relative Mobility Rank-Rank Slope
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Salt Lake City, Utah	1,426,729	46.2	10.8	77.3	0.264
2	Pittsburgh, Pennsylvania	2,561,364	45.2	9.5	74.9	0.359
3	San Jose, California	2,393,183	44.7	12.9	73.5	0.235
4	Boston, Massachusetts	4,974,945	44.6	10.5	73.7	0.322
5	San Francisco, California	4,642,561	44.4	12.2	72.5	0.250
6	San Diego, California	2,813,833	44.3	10.4	74.3	0.237
7	Manchester, New Hampshire	1,193,391	44.2	10.0	75.0	0.296
8	Minneapolis, Minnesota	2,904,389	44.2	8.5	75.2	0.338
9	Newark, New Jersey	5,822,286	44.1	10.2	73.7	0.350
10	New York, New York	11,781,395	43.8	10.5	72.2	0.330
40	Cleveland, Ohio	2,661,167		5.1	68.7	0.405
41	Nashville, Tennessee	1,246,338		5.7	67.9	0.357
42	New Orleans, Louisiana	1,381,652		5.1	69.5	0.397
43	Cincinnati, Ohio	1,954,800	37.9	5.1	66.4	0.429
44	Columbus, Ohio	1,663,807	37.7	4.9	67.1	0.406
45	Jacksonville, Florida	1,176,696	37.5	4.9	68.9	0.361
46	Detroit, Michigan	5,327,827	37.3	5.5	68.5	0.358
47	Indianapolis, Indiana	1,507,346	37.2	4.9	67.5	0.398
48	Raleigh, North Carolina	1,412,127	36.9	5.0	67.3	0.389
49	Atlanta, Georgia	3,798,017	36.0	4.5	69.4	0.366
50	Charlotte, North Carolina	1,423,942	35.8	4.4	67.0	0.397

Hospitalbased Violence Intervention Programs

Street
Outreach
Programs /
Cure
Violence

Community
Violence
Interventions

Advance Peace / Peacemakers Fellowship

Law enforcement

Group Violence Intervention



## Hospital-Based Violence Intervention

Violent Injury

Hospital: "Window of Opportunity"

Consequences of Trauma

HVIP

Goals























**Future** 



**Health Care** 



Education



Jobs















Psychoeducation 6900











### HVIP @ Atrium (Project BOOST)



#### Atrium's Hospital Violence Intervention Program

#### Who We Serve:

All patients ages 15-25 presenting with intentional injury mechanisms (GSWs, stabbings, assaults, etc.)

#### **Our Approach**



Identify patients at time of initial presentation to CMC Main (ED, In-Patient Admission or Out-Patient Office Visit) Comprehensive evaluation of patients to identify health and social needs Connect clients to tailored resources through referrals on the Community Resource Hub

Provide long-term followup with participants to ensure adherence to plan

Referral Exclusions: selfinflicted injuries, domestic violence, accidents