Risks of gun-carrying and use among adolescents

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Presentation for the virtual annual meeting of the American Society of Adolescent Psychiatry, May 4, 2020

Funding Sources

- *Pathways to Desistance Study*
  - **Office of Juvenile Justice and Delinquency Prevention (2007-MU-FX-0002)**
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  - **and the Arizona Governor's Justice Commission**

- *Psychological and Socio-contextual factors in gun carrying and firearm violence*
  - **National Institute of Child Health and Human Development (HD086761-01)**

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Gun violence can refer to a variety of acts

Different Types of Youth Gun Violence

- Accidental gun injury
- Use of guns for suicide
- Mass shootings
- Gun violence by young people related to crime

Adolescent gun violence occurs in a broader context of the United States gun culture

The Context of the Problem

- There are over 300 million civilian-owned guns in America
  - about one for every man, woman, and child in the nation
  - 40 – 45% of the entire global stock of civilian firearms
- For people under the age of 19 in the U.S., firearms are the second most common cause of death
  - Motor vehicles: about 4,000; Firearms: about 3,000
  - About half are homicide; about 40% are suicides
- Individuals under the age of 21 are not allowed by federal law to own a handgun legally; illegal to own a long gun under age 18
- Adolescents report ready access to firearms
  - 40% of high school males, 70% of male juvenile offenders report that they could easily acquire a firearm illegally
  - about 5% of high school youths reported carrying gun in the past month

Implications

- Limited policy options, since most adolescents get guns illegally
    - Limiting straw purchases
    - Safe storage practices
    - Increased street enforcement
- Importance of prevention and intervention strategies to address reasons for carrying and use

So what do we know about the processes of adolescent gun violence in terms of intentionally harming others?

General Explanations for Gun Carrying and Use in Young People

- Antisocial characterisics
- Self protection
- Social influence

Antisocial Characteristics and Gun Carrying and Use

Several factors consistently associated concurrently with gun carrying and use in cross-sectional and longitudinal studies

- History of delinquency and violent behavior
- Tolerant attitudes toward violence
- Psychopathic (callous, impulsive) traits

- Guns may be “tools of the trade” for drug dealing or allow for a show of possible force

Self Protection and Gun Carrying and Use

- Reporting violent victimization/witnessing victimization are associated statistically with reports of gun carrying
- Large proportion of interviewed adolescents identify high risk community conditions and/or prior victimization as reason for gun carrying
- Emergency room patients who are treated for firearm-related injuries are at heightened risk of future violent behavior (including firearm carrying), in addition to future firearm-related injuries

Social Influence and Gun Carrying and Use

- Adolescent gun carrying is higher among adolescents who live in homes that contain handguns (1 in 3 handguns are kept loaded and unlocked)
- Adolescent gun carrying and use are higher in adolescents who affiliate with delinquent peers or street gangs where gun possession is normative
- Adolescents who report that peers carry guns are more likely to report that they carry

Limitations of the Research

- Limited body of studies
- Sampling issues
- Generally retrospective reports
- Unclear whether we are seeing risk markers or risk factors
  - Neighborhood effect or a peer effect
  - Attitudes → gun carrying OR gun carrying → attitudes?

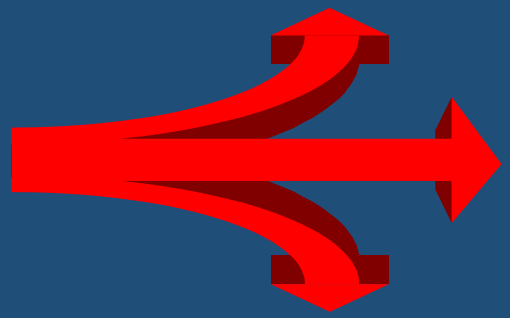
Knowledge base could be expanded by examining longitudinal data

Advantages of Longitudinal Analyses

- Enriches description
  - Multiple observations over time exposes patterns
  - Provide ideas about developmental change

- Control for potential confounders
  - Intra-individual versus inter-individual analyses
  - Can see what changes with what else (“time-varying covariates”)

Examples from the Pathways to Desistance Study



Working Group Members

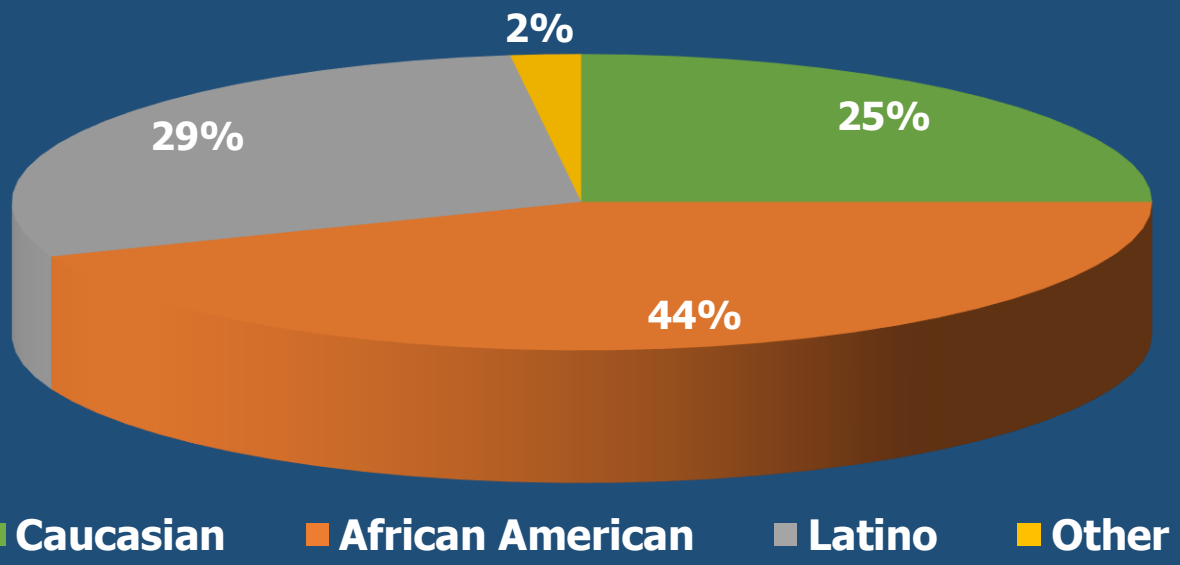
- Edward Mulvey
- Laurence Steinberg
- Elizabeth Cauffman
- Laurie Chassin
- George Knight
- Sandra Losoya
- Carol Schubert
- Jeffrey Fagan
- Robert Brame
- Alex Piquero

Pathways Study Design

- Two sites: Philadelphia and Phoenix
- Enroll serious adolescent offenders
  - 1,354 felony offenders, aged 14 -18
  - Females and adult transfer cases
- Regular interviews over seven years
  - Initial interviews
  - Time point interviews (background characteristics, psychological mediators, family context, relationships, community context, life changes)
  - Release interviews
- Other sources of information
  - Collateral interviews
  - Official records

Who are these adolescents?

- At Enrollment
  - 16 years old on average
  - 86% male
  - Average of two prior court appearances
    - ✓32% had no prior petitions to court
    - ✓Most of priors were for a person crime
- Ethnically diverse



Living situation calendar

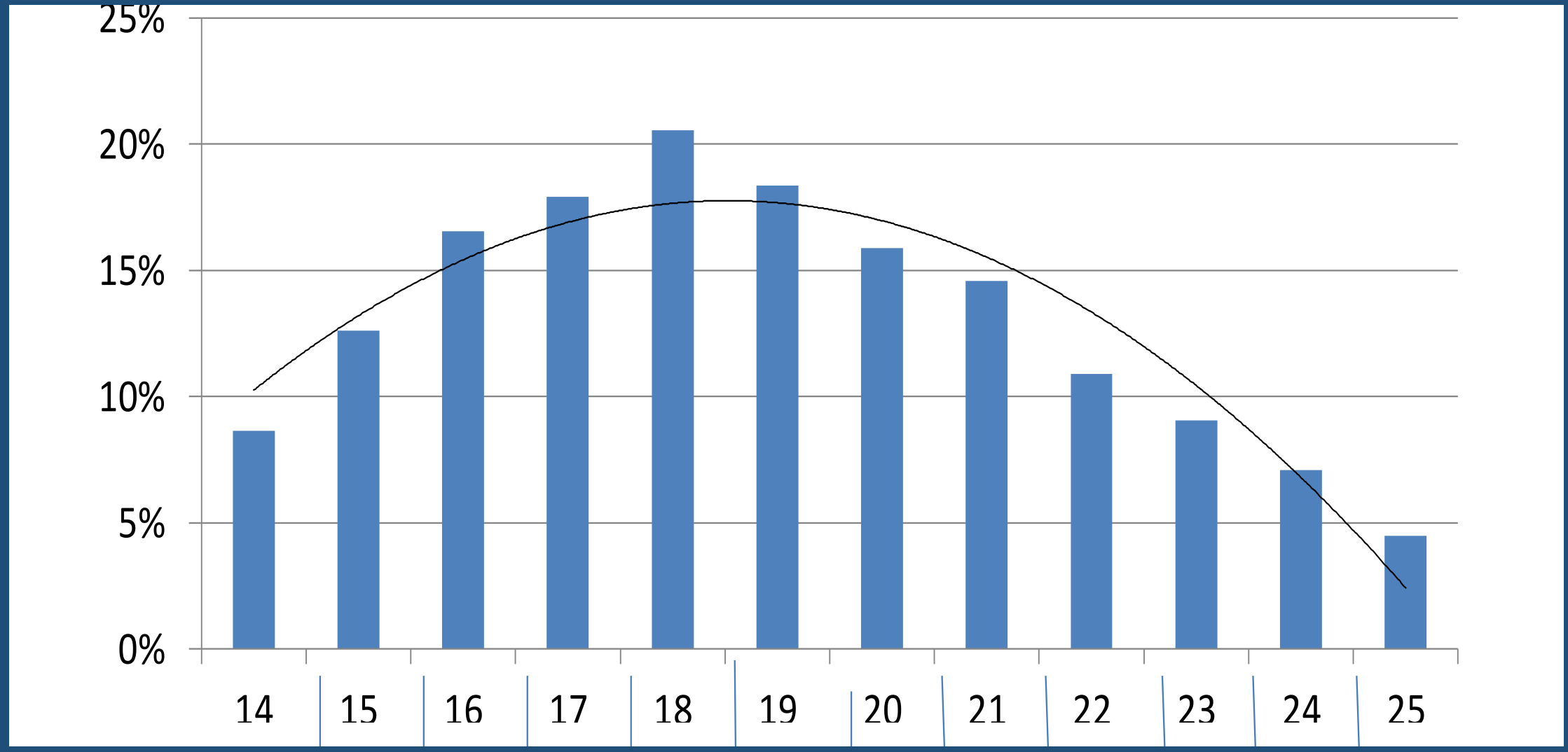
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Subject 1	900 West Huntington	St Gabe's Hall	900 West Huntington	St Gabe's Hall	Vision Quest	Youth Forestry Camp
Subject 2	2429 W. Augusta	Madison Street Jail	1808 S. Wilmot	1808 S. Wilmot	1808 S. Wilmot	Tucson Prison
Subject 3	5050 Master	4th and Norris	4th and Norris	4th and Norris	House of Corrections	House of Corrections

Gun Violence Exposure of Pathways Sample (during the study period)

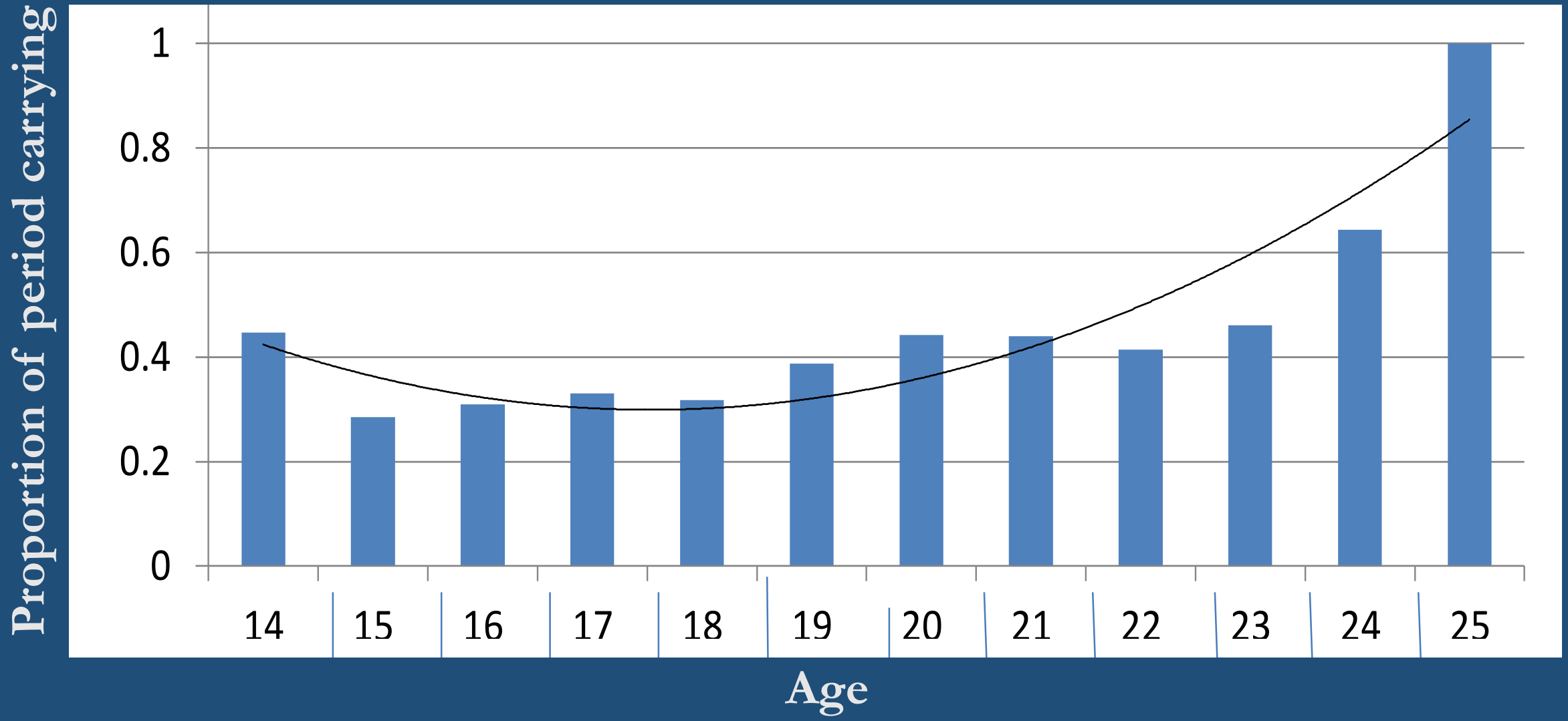
- 45 % had carried a gun during the study period
- Almost 60% were exposed to gun violence
- Almost 90% were exposed to serious non-gun violence at least once

Adolescents have “spells” of carrying that vary with age

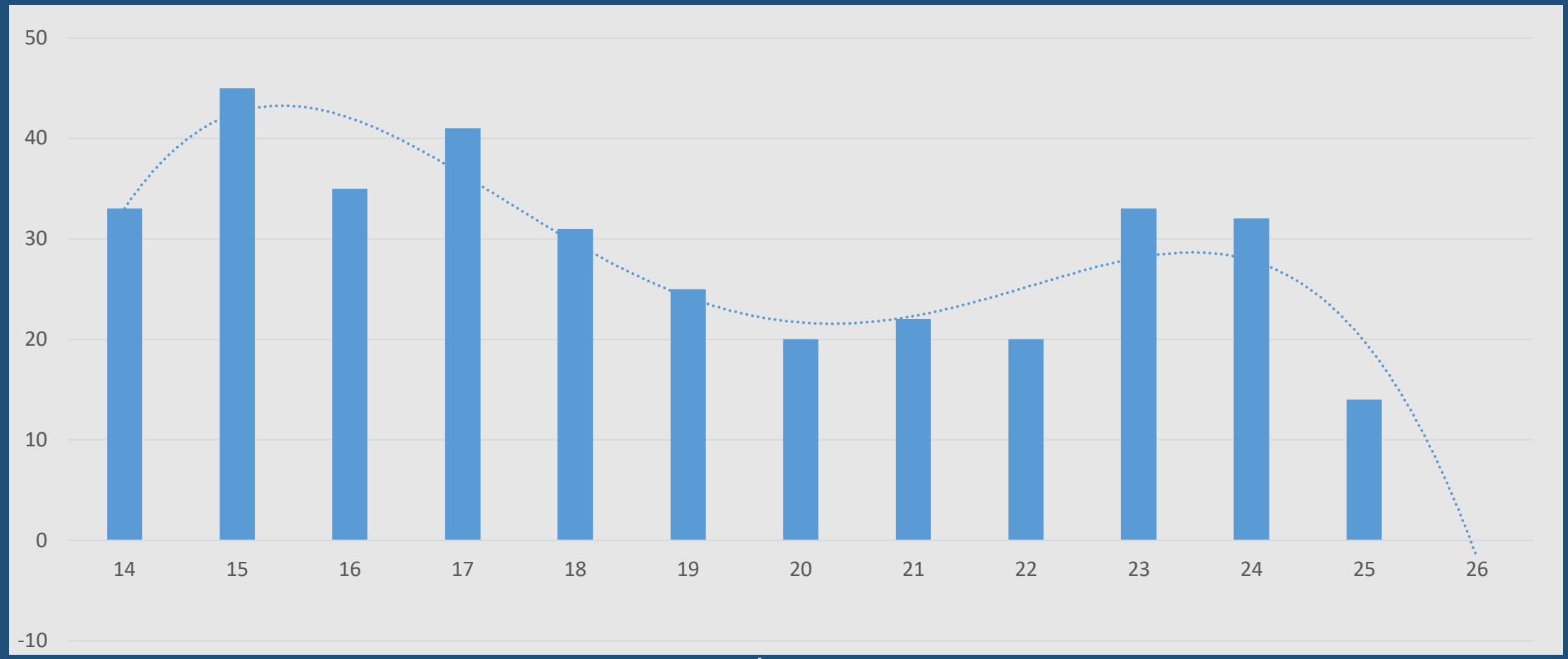
Percent of males reporting gun carrying by age



Proportion of recall period in a carrying spell for those who report carrying



Percent of males endorsing "gun use" of those reporting carrying at that age



Low number of responses at ages 14, 25 AND 26

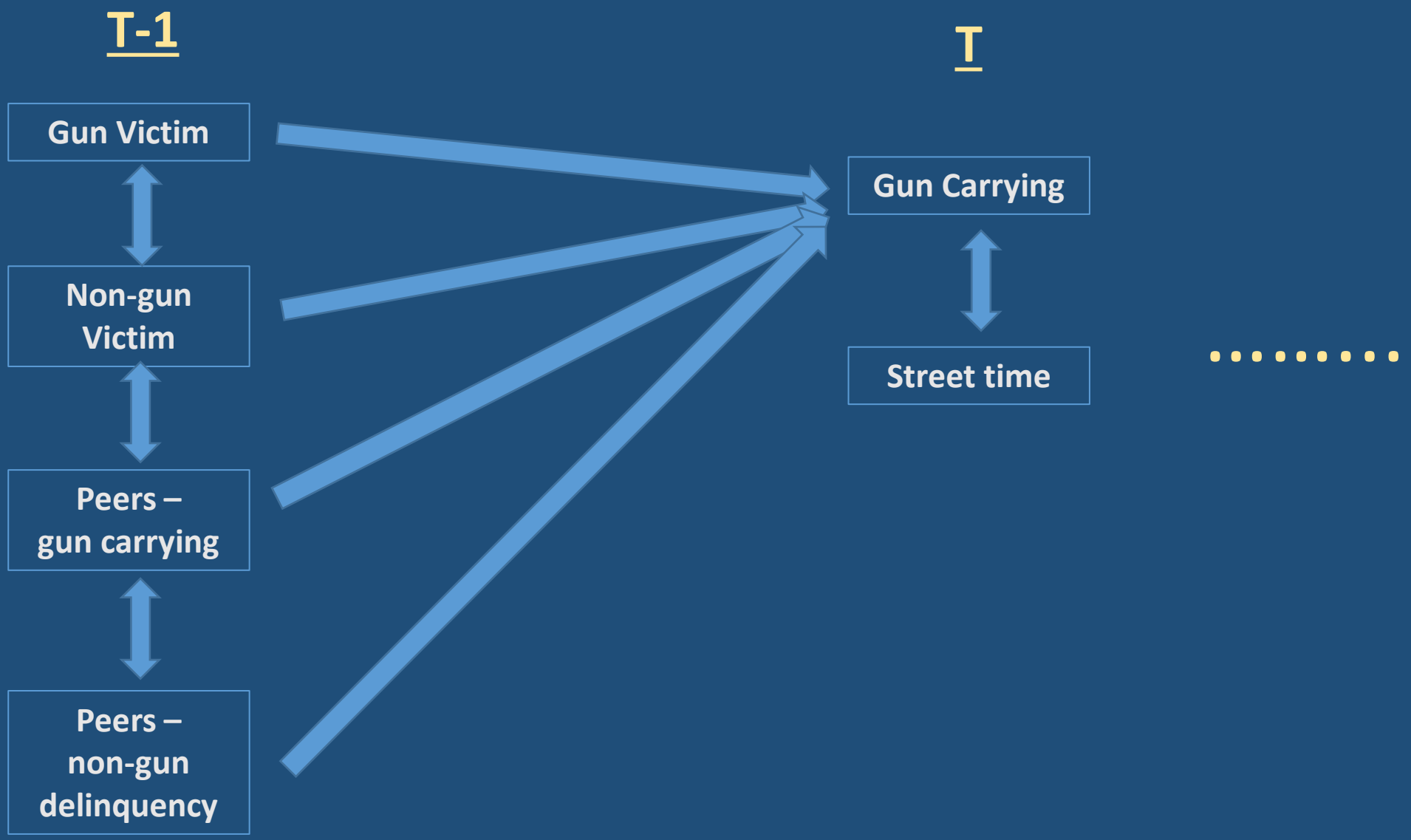
Take-aways from these analyses

- *Younger adolescents*
  - More likely to carry
  - More likely to shoot when they do carry
  - Immaturity as an explanation??

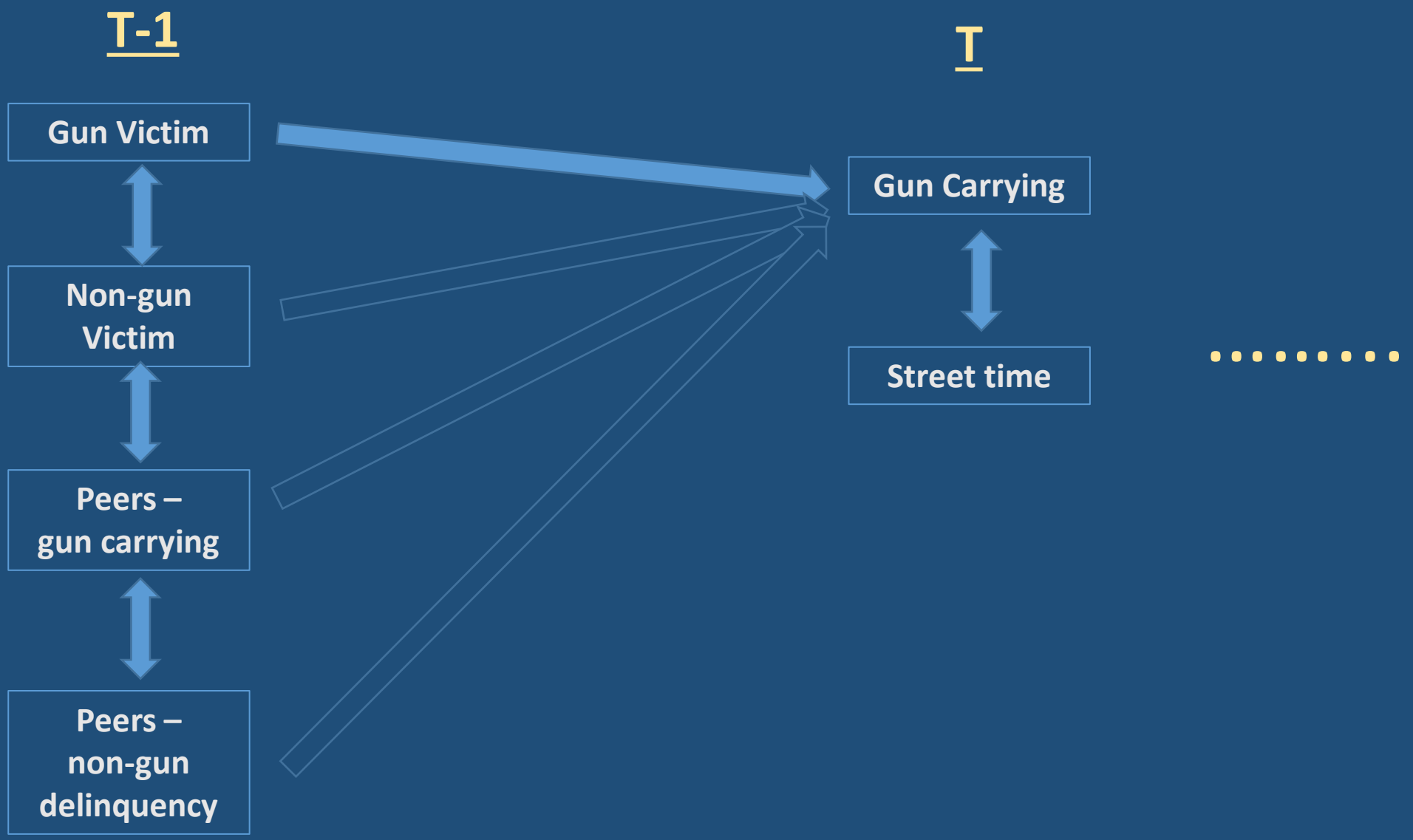
- *Older adolescents*
  - Less likely to carry, but will carry more regularly when they do
  - Less likely to shoot when they carry
  - More instrumental purposes??

Gun victimization experiences do affect gun carrying

Analyses from T-1 to T across ten time points



Results from T-1 to T across ten time points



Findings

- Odds of gun carrying increased by approximately 43% in recall periods when exposed to gun violence victimization
- No increase in gun carrying from non-gun victimization, peer gun carrying, or peer non-gun delinquency
- Gun-carrying linked specifically to gun victimization, not attributable to the other factors tested or the stable characteristics of the adolescent

Drug dealing significantly raises the chances of gun carrying

Overview of Analysis

- *The Question*:
  - Is the link between guns and drug dealing a “crime facilitation” effect or a “weapons” effect?
  - Implications for how to reduce gun carrying
- *The Data:*
  - Examined all cases of adolescents who reported gun carrying (n=479)
  - Used data at the monthly level (84 months of data observations)
  - Drug dealing and gun carrying by month
  - Looked at “spells” of drug dealing and gun carrying
- *The Analysis:*
  - Intra-individual analysis
  - Test for carrying a gun; control for age, gang involvement, physical aggression, neighborhood disadvantage, exposure to violence, and time spent on the street as time varying covariates

Characterizing a "spell"

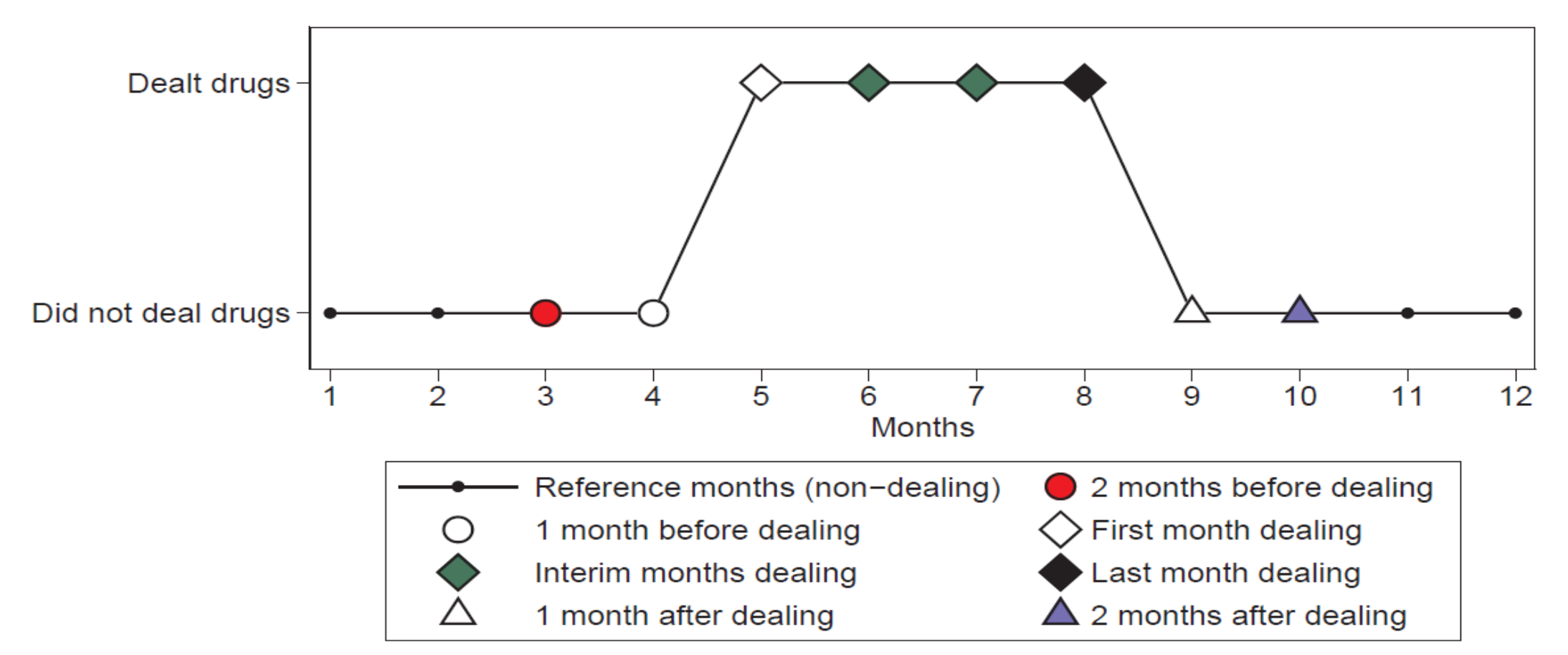


Figure 1. **A hypothetical case in which an individual dealt drugs from months 5 to 8.**

Likelihood of gun carrying during types of months

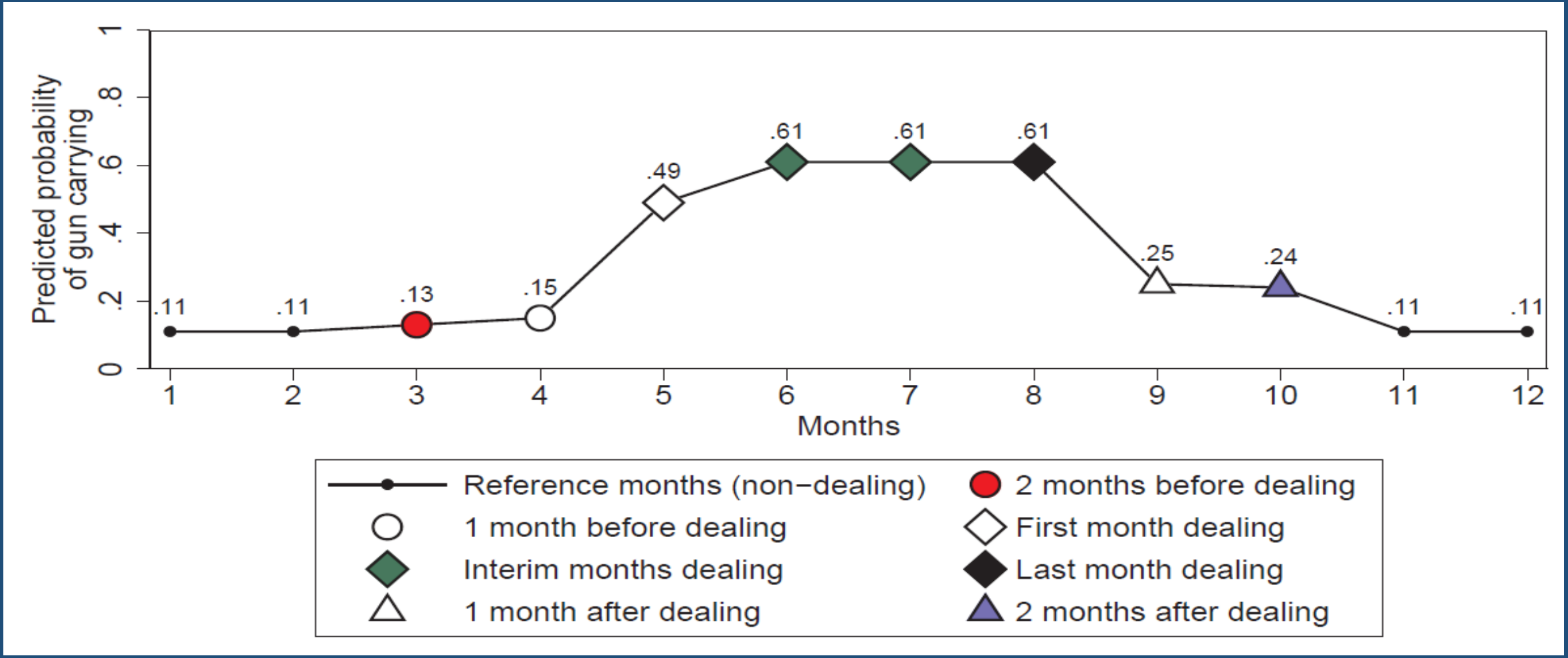


Figure 2. Predicted probabilities of gun carrying for a hypothetical case in which an individual dealt drugs from months 5 to 8.

Likelihood of gun carrying with different types of drug dealing

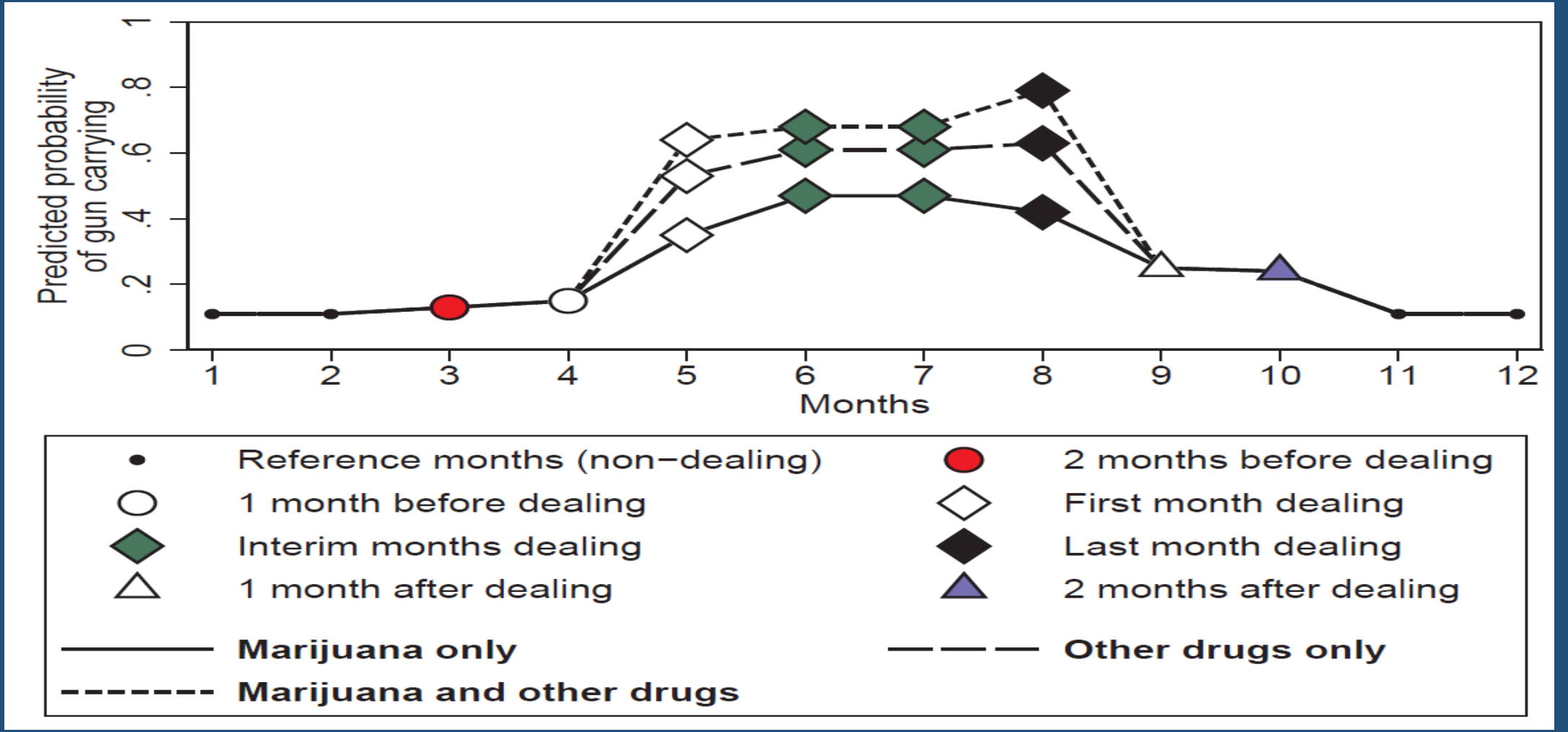


Figure 1. **Predicted probabilities of gun carrying for three hypothetical individuals who deal drugs (marijuana only, other drugs only, or marijuana and other drugs) from months 5 to 8.**

General Points

- Several general explanations for gun carrying, but limited research on each one
- Longitudinal analyses offer considerable promise
- Carrying happens in “spells”; utility in promoting ending gun carrying

Clinical Implications

- Victimization (particularly victimization by gun violence) puts an adolescent at heightened risk for carrying a gun
  - not a research artifact or a “rationalization” for gun carrying
  - possibly productive clinical issue, even in adolescents with many risk factors

- Drug dealing is a strong facilitator of gun carrying; reducing drug dealing should reduce carrying as well, but not the other way around

Thank you!

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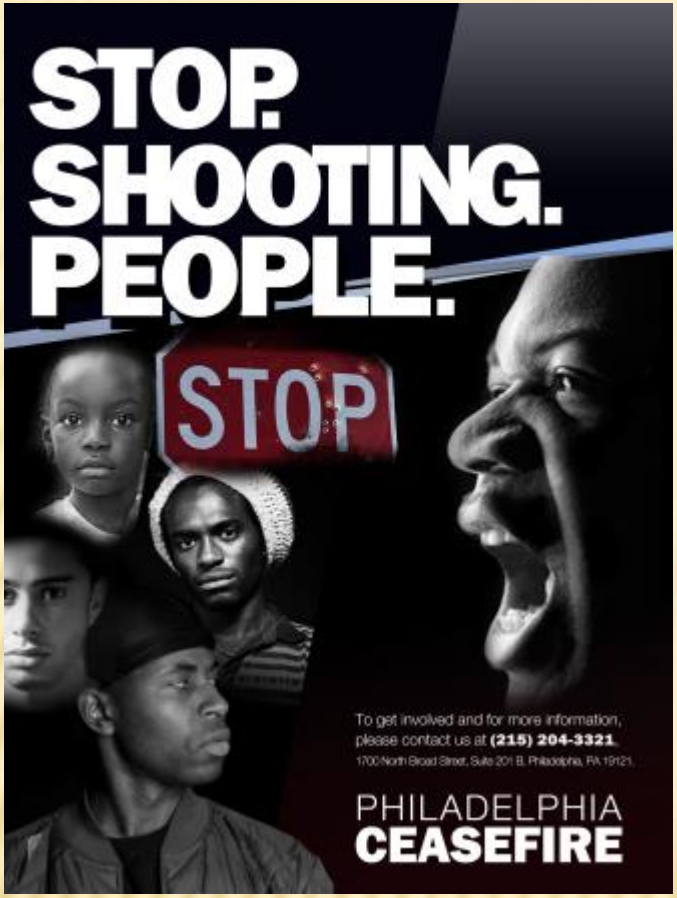


Philadelphia ends 2019
with 356 homicides
the most since 2007

Where do we go from here?

Katz School of Medicine at Temple University
Marla Davis Bellamy, JD, MGA

SINCE JANUARY 2020

JUNE 2020

REV. JOSEPH LOWERY

CIVIL RIGHTS LEADER

PHILA SHOOTINGS 2020

YOUTH VIOLENCE

.

What is Youth Violence?

- According to the CDC, youth violence is when young people aged 10-24 years intentionally use physical force or power to threaten or harm others.
- A young person can be involved with youth violence as a victim, offender, or a witness.

Why Focus on Youth Violence?

- More youth die from homicide each year than from cancer, heart disease, birth defects, flu and pneumonia, respiratory diseases, stroke and diabetes combined.

Youth Homicide is a Public Health Issue

In 2014, 4,300 young people ages 10 to 24 were victims of homicide—an average of 12 each day.

Among 10 to 24 year-olds, homicide is the leading cause of death for African Americans; the second leading cause of death for Hispanics

EVIDENCED BASED APPROACH

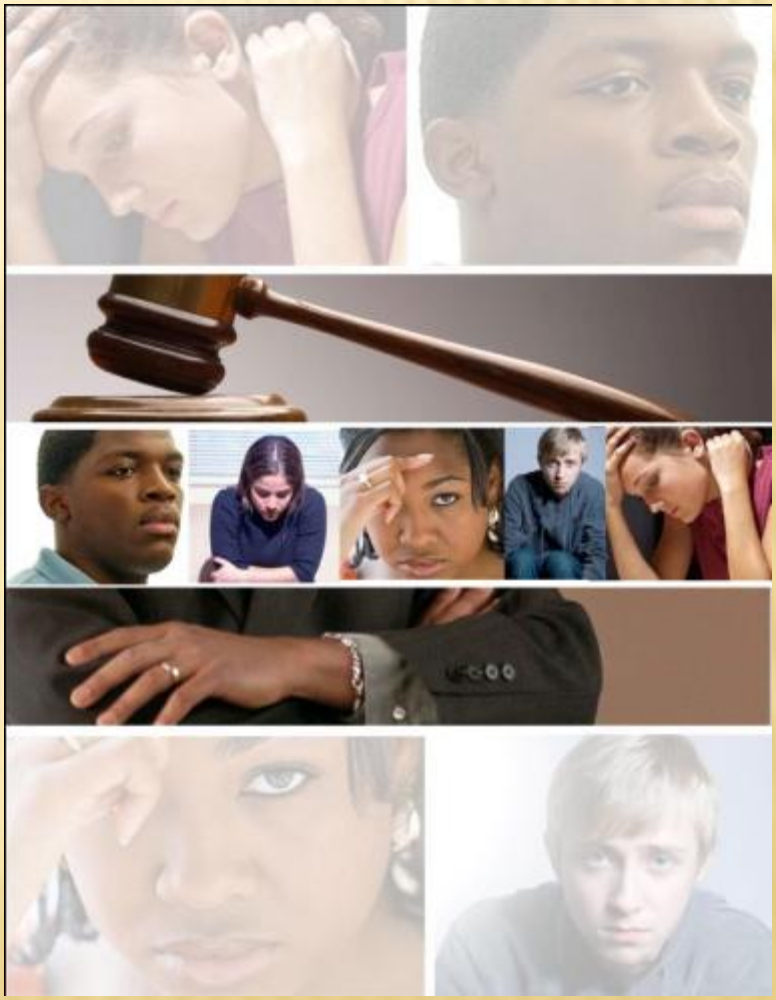
- The Cure Violence Health Model has been successfully replicated around the world. If you are in a community with serious violence, the Cure Violence Health Model will help to significantly reduce homicides & shootings.
  - There are 52 sites in 23 cities across the US
  - Internationally there are 8 countries and 5 continents replicating the model

HOW DOES IT WORK?

- Hire credible messengers from the target community
- Saturate area with flyers and posters
- Respond to neighborhood shootings
- Follow-up with patients seriously injured
- Manage case load of 15-20 high risk clients
- Conduct 5 home visits/ phone calls
- Conduct mediations

THE RIGHT PROGRAM CLIENTS

- Must be a resident of the target area
- Between the ages of
- 14 and older
- Have a prior history of offending and arrests
- Be a member of a gang
- Have been in prison
- Recent victim of a shooting
- Involved in high risk street activity



PROGRAM IN ACTION

- Notification of shootings, stabbings
- Team member is informed via text of the location
- Street team members go to the scene & hospital
- Interrupters work to prevent violence by mediating conflicts (10 conflicts per month)
- Prayer Rally- 7/28 @ 3pm Zion Baptist Church, 3600 N. Broad St.

IS IT WORKING??

- Results show that CeaseFire was associated with a statistically significant reduction in shootings in Police Service Areas (PSAs) 221, 222 and 393). The reduction was equivalent to 2.4 shootings per month per 10,000 residents.

- Calendar Year 2012 the 22nd Police District saw a 21% decrease in homicides and a 11% decrease in shootings

Hom 2011	Shoot 2011	Hom 2012	Shoot 2012	Hom 2013	Shoot 2013
46	187	36	165	29	136

THE PROBLEM

- THE MOST VULNERABLE PEOPLE ARE OFTEN DISCONNECTED FROM:
- ☐SERVICES
- ☐SUPPORTIVE ENVIRONMENTS
- ☐HOPE

BRING TOGETHER SERVICE PROVIDERS

Bring together service providers

- ☐Meet weekly to discuss the situations people were struggling with
- ☐Work together to remove barriers and to connect the most vulnerable to needed help
- ☐Replicate the CHELSEA HUB

WHO SHOULD BE AT THE TABLE

- Elder Services
- Housing Support
- Law Enforcement
- Probation (Youth & Adult)
- High-Risk Serving Agencies
- Correctional Facilities (Youth & Adult)Youth Serving Agencies
- Mental Health Providers

Risk Factors Generate Calls for Service

Alcohol	Drugs	Gambling
Mental Health	Cognitive Impairment	Physical Health
Suicide	Self-Harm	Criminal Involvement
Crime Victimization	Physical Violence	Emotional Violence
Sexual Violence	Elderly Abuse	Supervision
Basic Needs	Missing School	Parenting
Housing	Poverty	Negative Peers
Antisocial/ Negative Behavior	Unemployment	Missing/Runaway
Threat to Public Health and Safety	Gangs	Social Environment

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SHELTERFORCE

Health

Connecting the City's Social Services to Help At-Risk Populations

A four-year-old Massachusetts program called the Chelsea Hub helps vulnerable populations by increasing communication among a range of local groups.

By **Amanda Abrams** - July 17, 2019

The Chelsea Hub in Massachusetts works with families and individuals who may need services from more than one community agency. Photo courtesy of the Chelsea Police Department

In Chelsea, Massachusetts, police, medical

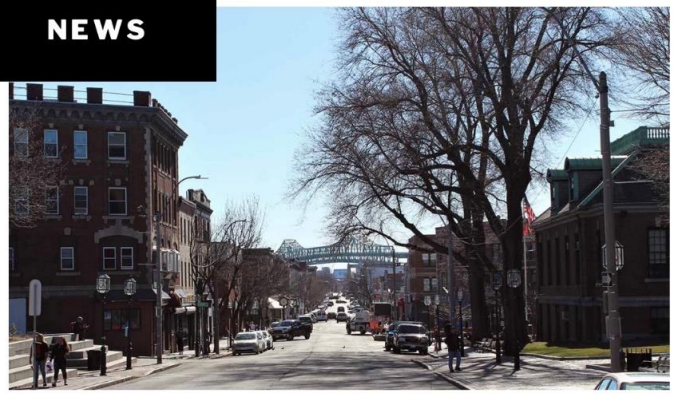
Public Health Post

THE PUBLIC'S HEALTH

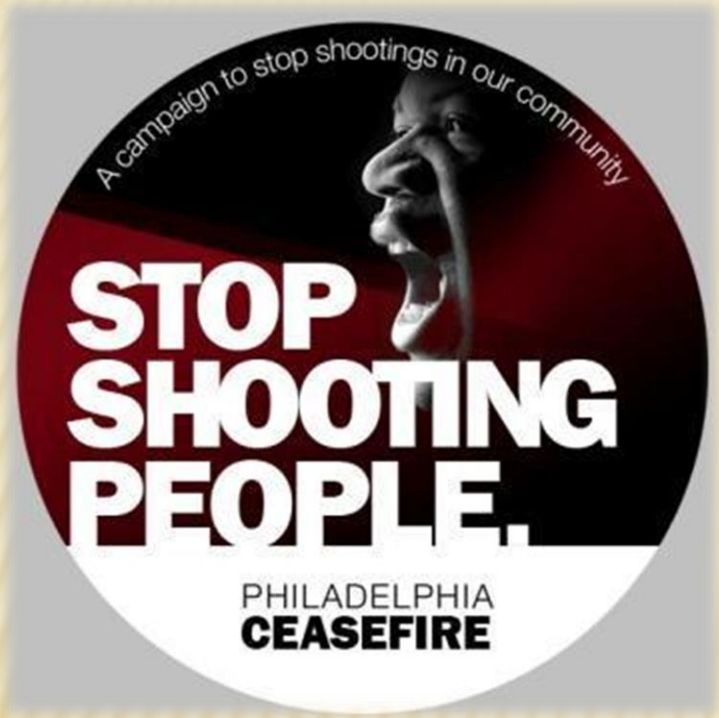
Chelsea Police Create a Culture of Health

By Jacqueline Rocheleau
May 2, 2018

NEWS



Take a sharp right onto Fourth Street off of Boston's Tobin Bridge going north, and you'll immediately find yourself in Chelsea, sandwiched between a tight row of houses. If you drive up a few streets to Broadway you'll soon see people crowding the



How Can You Help??

Get Involved

Community service referrals

Email:
marladb@temple.edu
215-204-3321-office
www.philaceasefire.com

Leveraging the Pushes and Pulls of Gang Disengagement to Advance Gun Violence Reduction

Caterina G. Roman, PhD
@CaterinaGRoman

Shots Fired: Gun Violence & Mental Health

The American Society for Adolescent Psychiatry eConference 2020

Outline

- The context of street violence
  - High numbers of shootings in urban areas
  - Street crews/gangs
  - Witnessing violence and the collateral consequences
- The code of the street
  - Snapshot of local stats from my studies
  - Cycle of street violence
- Recent study to examine why youth leave or disengage from gangs
  - Why youth left their street crews/gangs
- Implications for prevention and intervention

Acknowledgements

- Department of Justice
  - OJJDP Grant: grant number 2011-JV-FX-0105
- Nicole Johnson, Temple University grad student

19 shootings, 28 victims, 5 dead as Philly weekend violence escalates

by Stephanie Farr and Harold Brubaker, Updated: June 17, 2019

PHILADELPHIA (CBS) –
A full week of gunfire, communities under siege and a continuation of gun violence.

PHILADELPHIA (CBS) – Bloodshed in the City of Brotherly Love continued as the start of the weekend saw four people die and multiple injured in a span of just a little more than 12 hours. Police continue to investigate deadly shootings across the city.

WHYY

Nov. 12, 2018

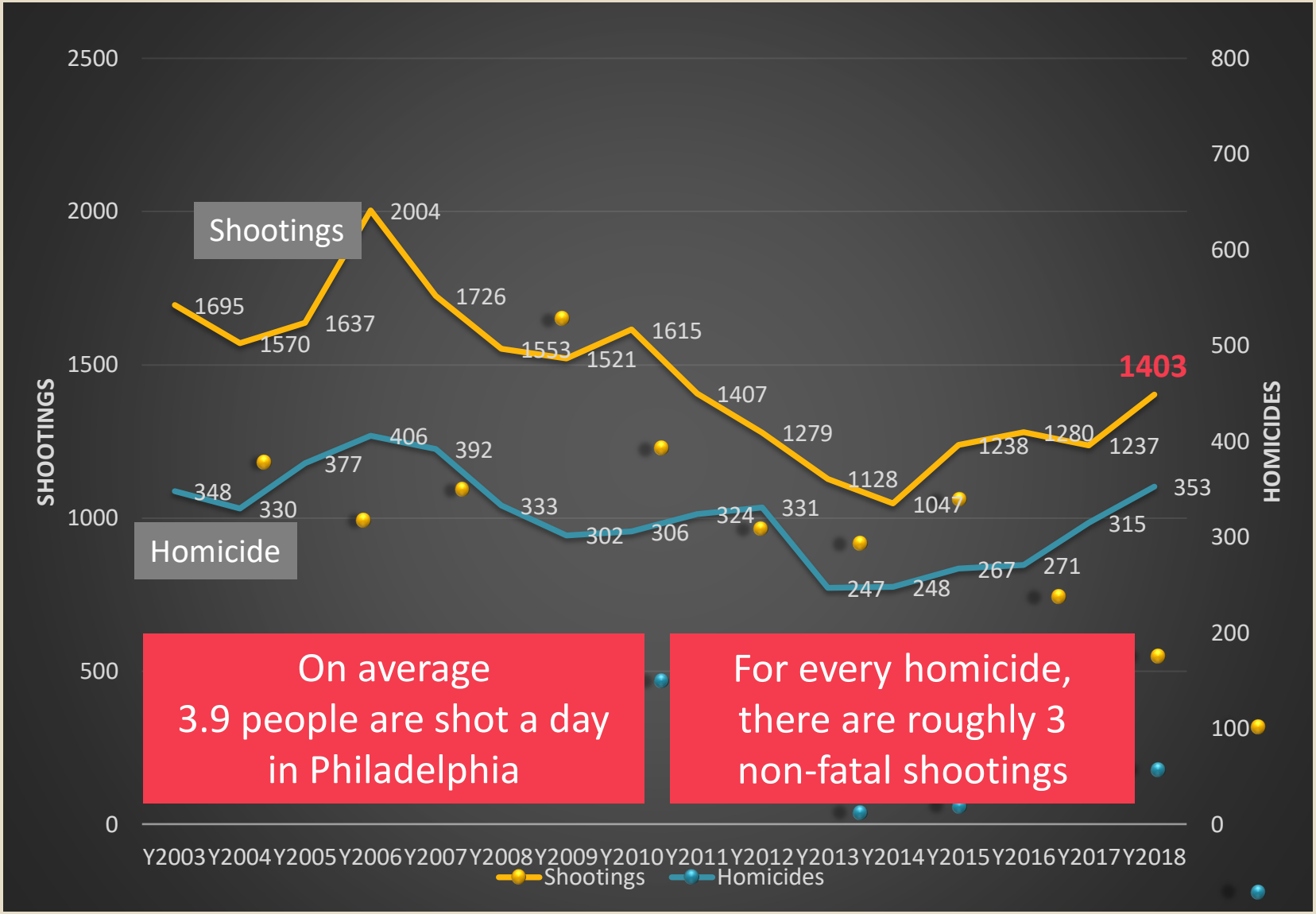
More than one out of every 10 gunshot victims in Philadelphia is a teenager. Each year, that translates into about 150 teens wounded by gunfire. And on average, about two dozen of them die from those injuries.

City records obtained from the Philadelphia Police Department show that the grim toll of gun violence on teens has budged up and down incrementally, but the numbers have stayed stubbornly in the same range for years.

"numbers have stayed stubbornly in the same range for years…"

(Photo courtesy of Melina Mara/Reuters)

Philadelphia Criminal Shootings and Homicides 2003-2018



Data Source: Philadelphia Police Department; Analysis: Temple CJ Dept.

The Forgotten Statistics – Nonfatal Shootings

- Every day in the US, 210 individuals survive gunshot injuries
- Every day 17 children and teens survive gunshot injuries

Source: www.bradyunited.org

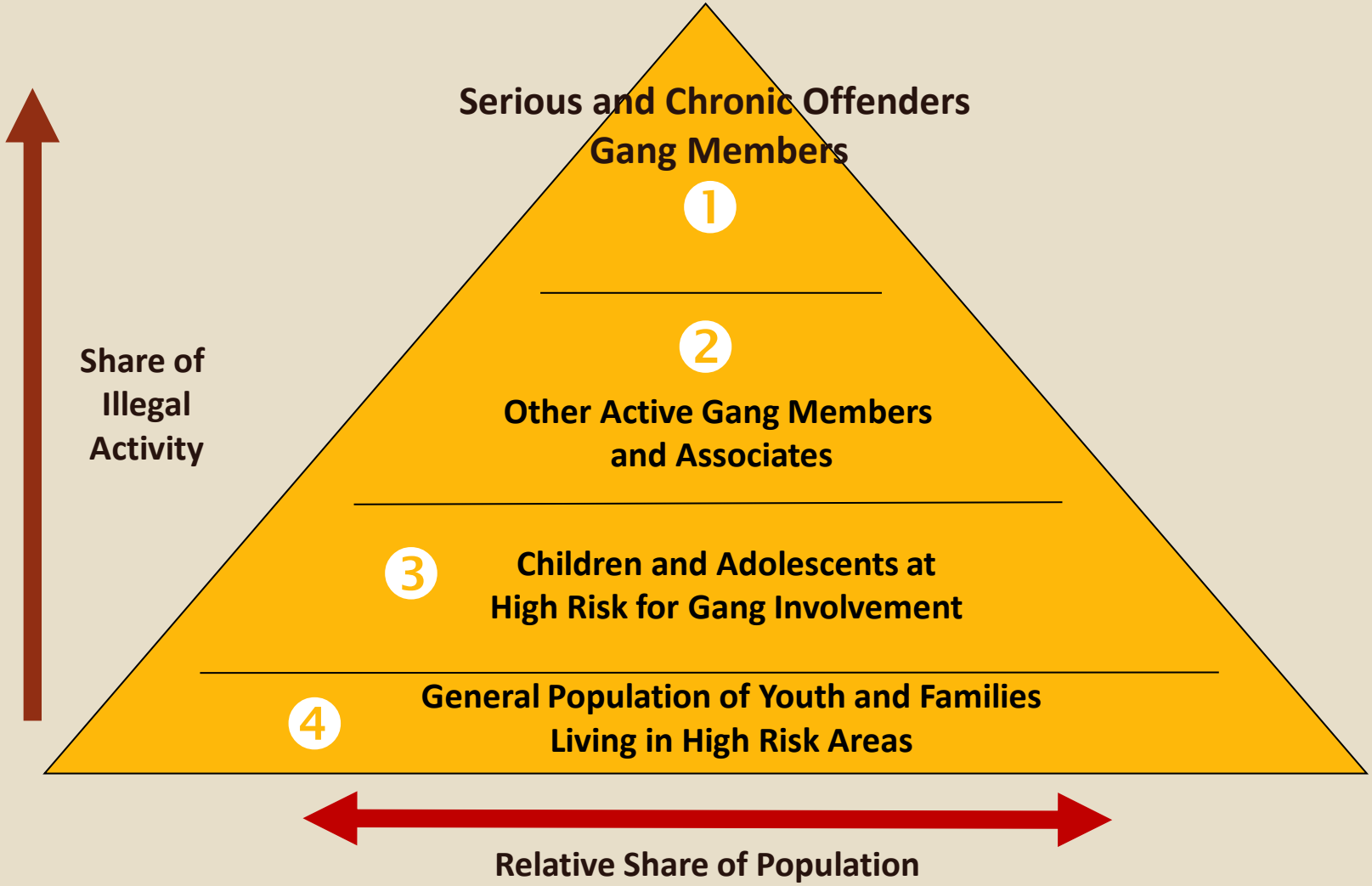
Putting Gun Violence in Context

- Deep poverty, concentrated poverty
  - Phila at the top in homicide rate of 10 largest cities
    - Street violence – excludes domestic violence, tends to occur on street, public places
  - Phila – highest deep poverty rate of 10 largest cities; increases in concentrated poverty while other big cities decline
  - 20 yr gap in life expectancy between N. Phila and Society Hill
- Mass incarceration
  - Phila leads 10 largest cities with 7 per 1,000 behind bars
  - PA is 1 of only 4 states: corrections spending > higher education
- School to prison PL; crumbling of educational infrastructure
  - 1,600 Phila school-based arrests 2013–2014 school year

Putting Gun Violence in Context - Gangs

- Gangs:
  - 7-9% of all young males report gang membership at some point on self-report surveys
  - According to National Youth Gang Survey (USDOJ-funded survey) ~850,000 gang members in 2012- almost all male
  - There are 28 million males age 10-24 in U.S.
    - From police statistics, it is estimated that roughly 2 percent of all males are gang members at any one time

Putting Gun Violence in Context - Gangs



Putting Gun Violence in Context (continued)
Fear and Mental Health

- 2017 PA High School Youth Risk Behavior Survey (YRBS):
  - 23% were in a physical fight one or more times during the 12 months before the survey
  - 6% did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the 30 days before the survey)
  - 17% carried a weapon such as a gun, knife, or club, on at least 1 day during the 30 days before survey
  - 30% felt sad or hopeless 2 weeks in row

Source: CDC Lookup Tables: https://nccd.cdc.gov/youthonline/app/Results.aspx?LID=PA

Witnessing Violence
Roman & Cahill, 2015 (Phila & DC)

Witnessing Violence and Police Activity in Neighborhood Street Group Member Sample, Ages 14-25 N=229	
	% Respondents Saying "See a lot"
Do you see the following in your neighborhood?	Total
Someone you know being shot or stabbed	35%
People being arrested*	55%
People you know being arrested	49%

Collateral Consequences: Witnesses

- Youth who witness community violence are:
  - at a significantly higher risk for developmental and mental health problems
  - more likely to become aggressive and violent
  - at risk for acute stress & PTSD
  - more likely to join gangs
  - more likely to support the street code of violence

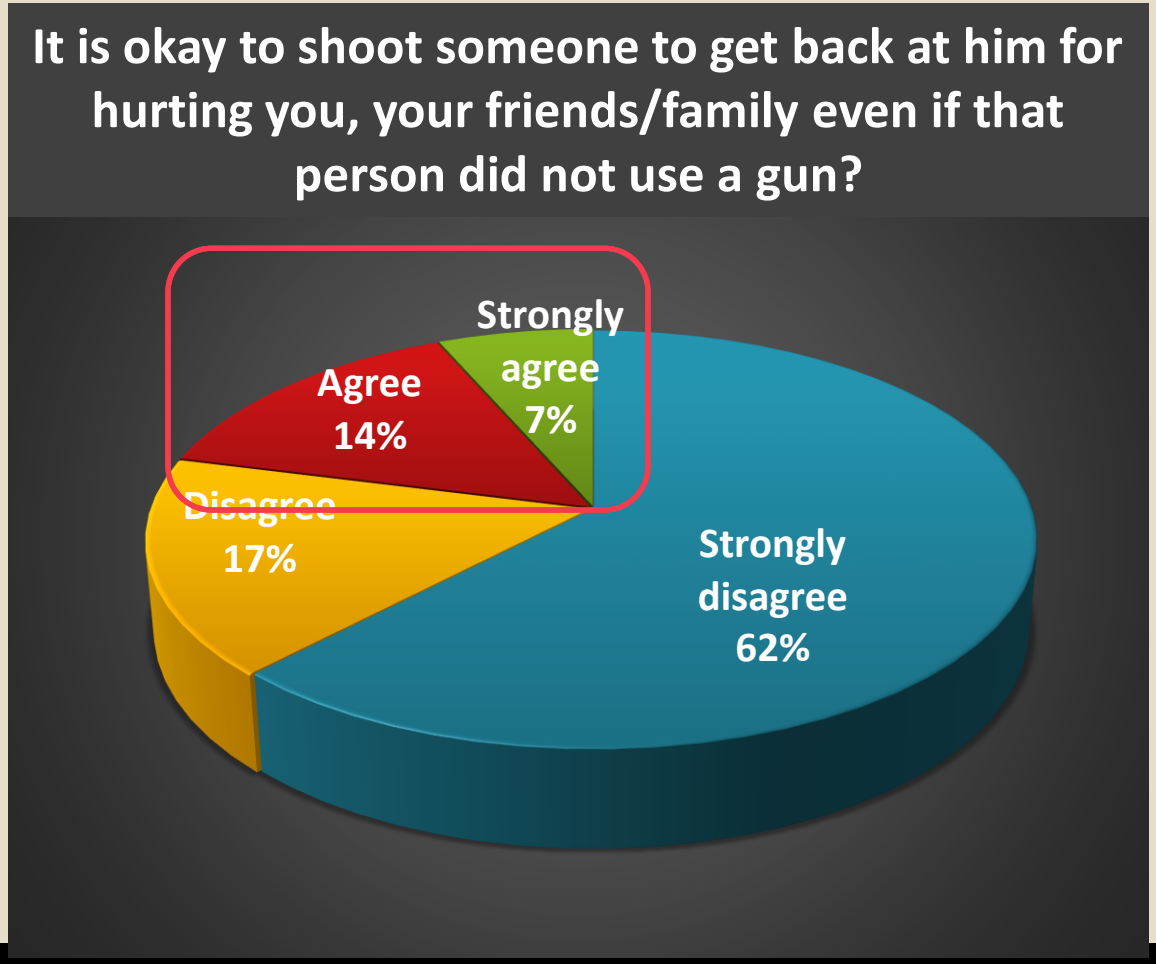
Code of the Street: Values that Support Shooting

Elijah Anderson (1999) "Code of the Street"

- Cultural response or adaption that arises from despair and alienation
- Profound lack of faith in traditional systems
- The role of respect is central
- Display nerve by initiating physical and verbal attacks
  - Set of informal rules governing interpersonal public behavior, including violence
- The social structure of the inner city (lack of opportunities, drugs, violence) and the culture of the inner city reinforce one another.

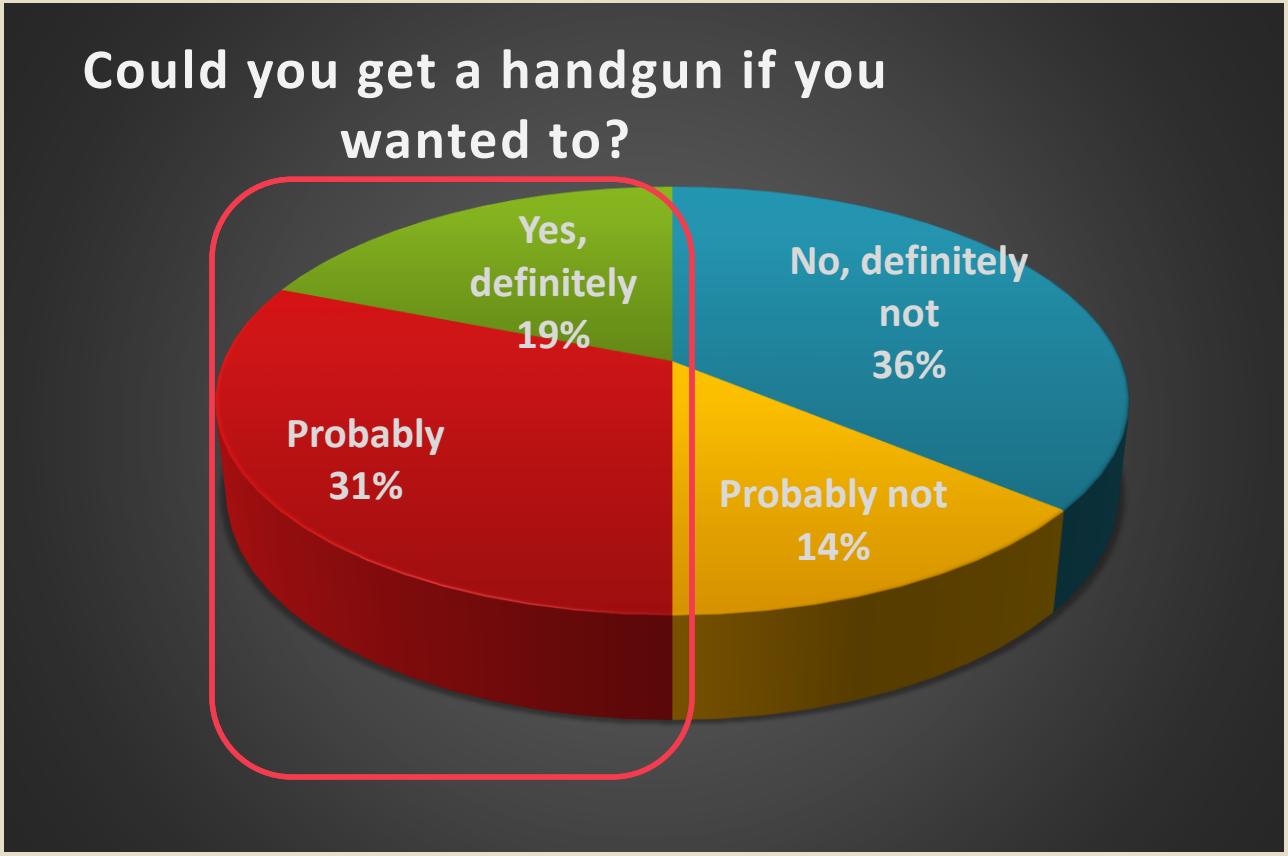
The Challenges of Street Culture - Retaliation

2016 data from a Phila area high school in high-violence neighborhood (9th and 10th graders) n=214



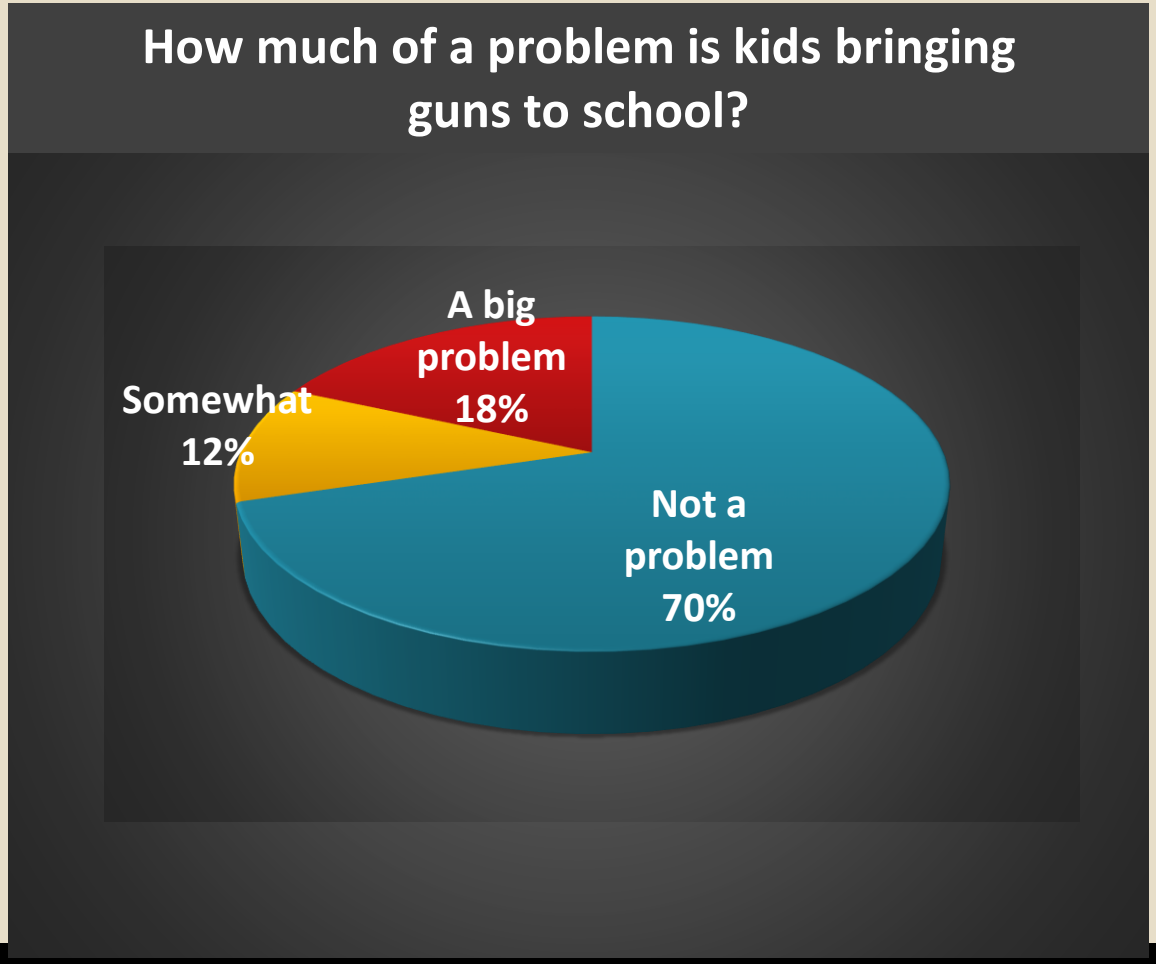
The Challenges of Street Culture - Access to Guns

2016 data from a Phila area high school in high-violence neighborhood (9th and 10th graders) n=214



The Challenges of Street Culture- Guns

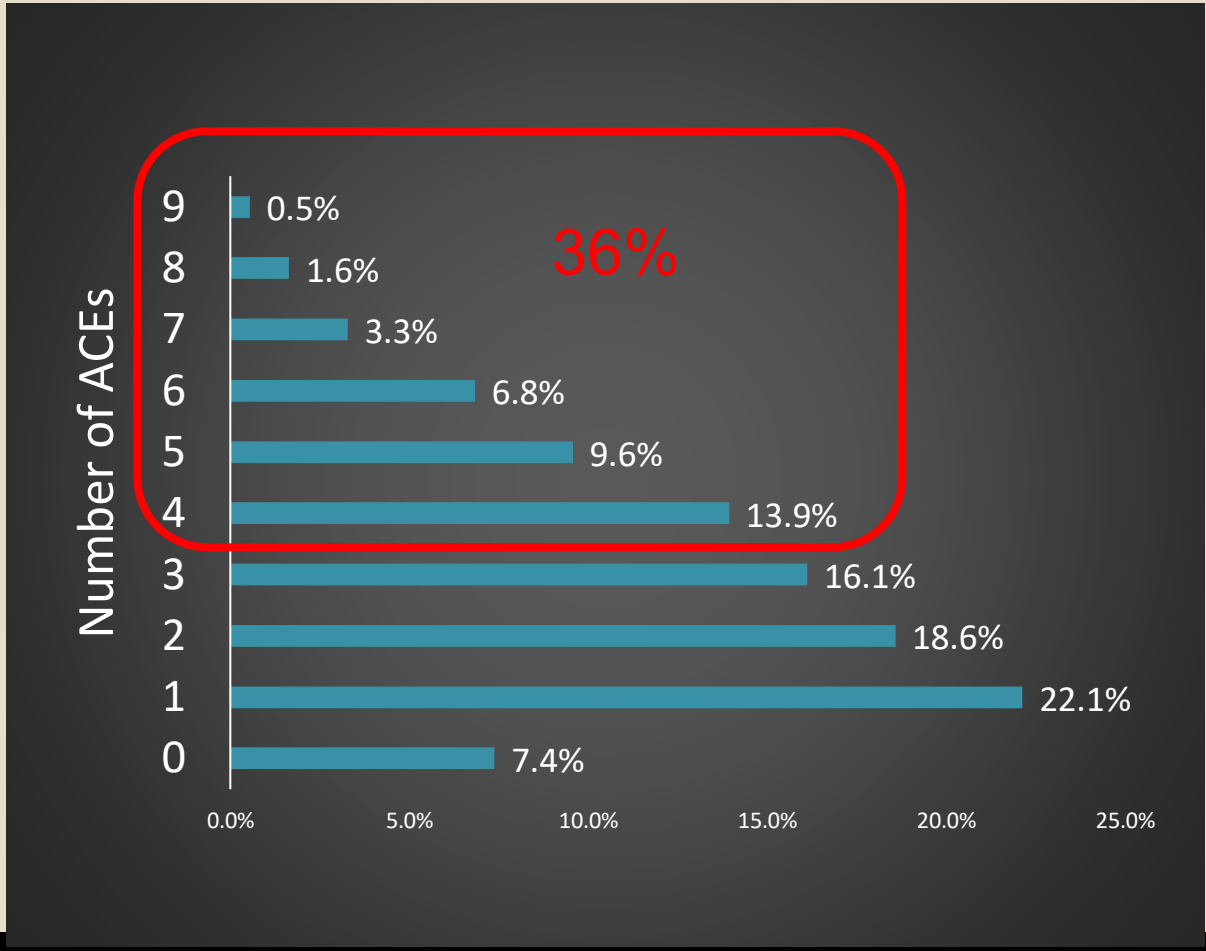
2016 data from a Phila area high school in high-violence neighborhood (9th through 12th graders) n=377



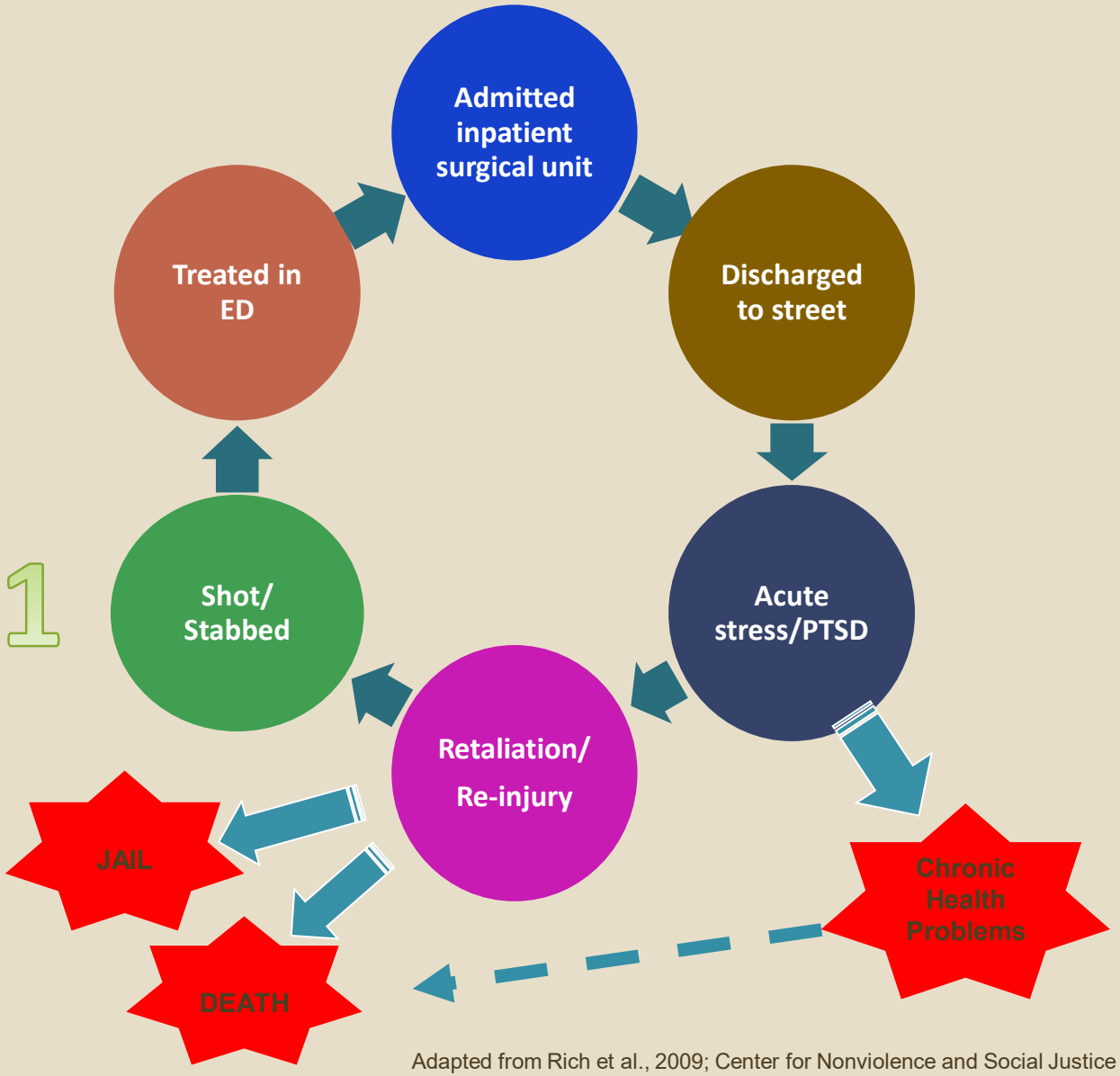
The Challenges of Street Culture – Adverse Childhood Experiences

2016 data from a Phila area high school in high-violence neighborhood (9th through 12th graders) n=366

- physical abuse
- emotional abuse
- physical neglect
- emotional neglect
- mental illness of a household member
- problematic drinking/ alcoholism of a hhold member
- illegal street or prescription drug use by a household member
- divorce or separation of a parent
- domestic violence towards a parent
- Incarceration of household member



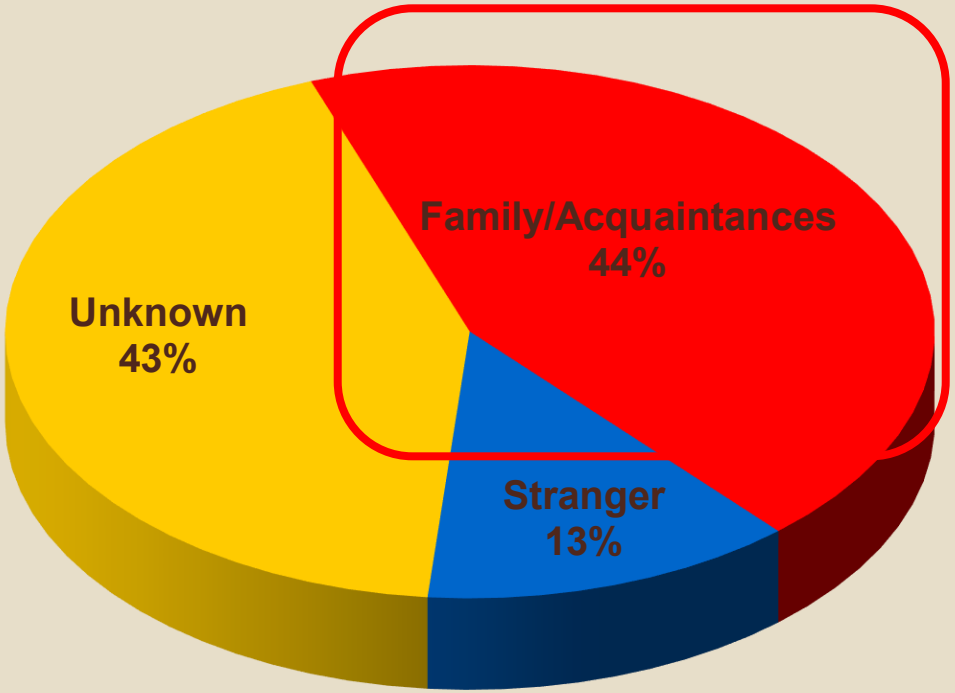
The Cycle of Street Violence and Trauma



Adapted from Rich et al., 2009; Center for Nonviolence and Social Justice

Violent incidents involve people – victims and offenders - who know each other

National data on homicide



Source: U.S. Department of Justice

What are the solutions?

The Evidence on Violence Reduction Programs

- The Blueprints Program: Center for the Study and Prevention of Violence at UC-Boulder
- Reviewed over 600 programs
  - 11 were identified as “model” programs
    - proven scientifically to be effective in reducing youth aggression, violence, other delinquent behavior, and substance abuse
- An additional 21 designated as “promising”
- That means 570 were not effective/didn’t meet criteria

What can we learn from program failures?

Why do so few proven programs exist that can reduce violence?

Can we disrupt the norms that support the code of the street?

The code is shared values, supported through social networks…

Can we study peer networks embedded in larger network to learn about the individual and group factors that keep youth attached to anti-social peers…

Anti-Social Peers and Networks

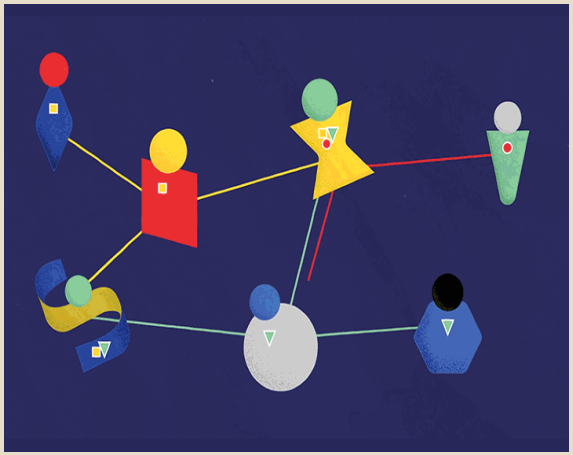
Having anti-social peers is most salient risk factor for engaging in violence, experiencing street victimization, and joining gangs

Anti-social peers represent *bonds* –can these bonds be broken or replaced by pro-social relations?

Social bonds have historic sociological significance, but few studies of delinquency have been conducted using a social network framework

Key Questions for Connect Survey

- Why do youth leave street groups?
- What types relations are present among youth in street groups and how do they change over time?
  - Who? How strong are the ties?
  - Are ties prosocial or anti-social?
- Which types of relations influence leaving the group and leaving life of crime?
- Can pro-social networks facilitate the "maturation" of youth out of delinquency
  - "matured out of the group"



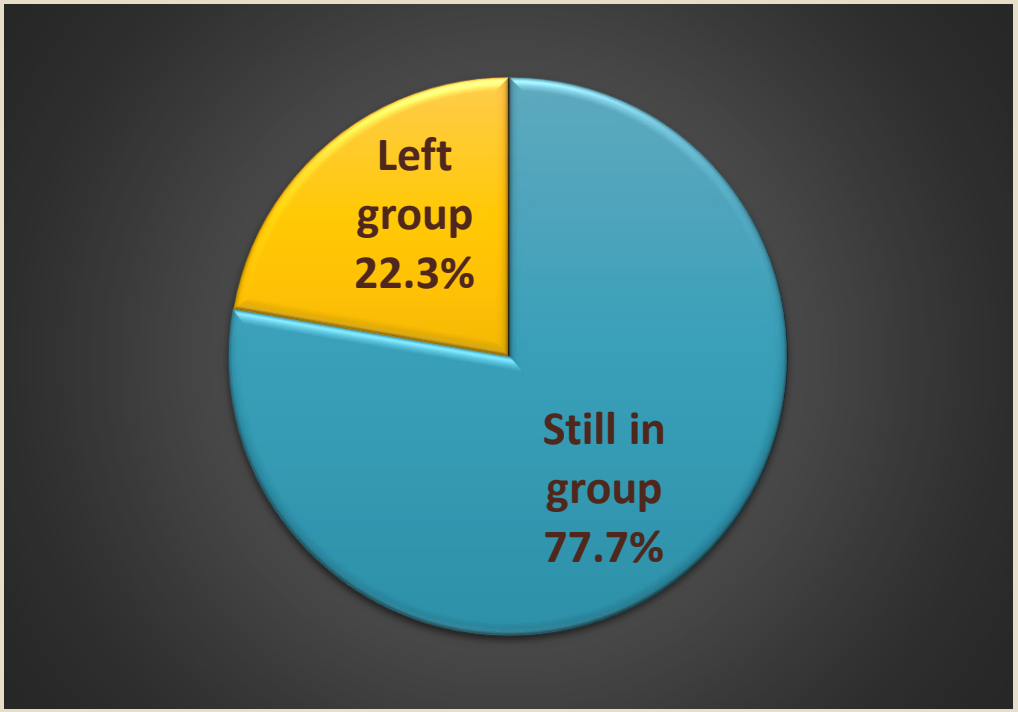
Connect Survey Study (2013-2016)

- Two cities - Phila & DC
- Recruited gang youth ages 14-25 through local community-based agencies working with street groups/gangs
- Longitudinal multi-method design surveyed youth 3 times over 18 months
  - Quantitative survey with all & qualitative, indepth interviews with those who left group (desisted)
  - Began wave 1 in May 2013

The connect survey
Philly. Washington, DC.

Wave	Total Sample by Wave
1	229
2	113
3	88

51 Respondents Left Group (Desisted) by Time 3 (~14 months)



Why did these individuals leave the group?

Atheoretical Framework of Push and Pull Factors

Popular Push-Pull Framework does not capture aspects of bonds or peers:

- Push factors "make persistence in that social environment unappealing;" they are viewed as 'pushing' the individual away from the gang"
- Pull factors, alternatively, are "circumstances or situations that attract individuals to alternative routes…toward new activities and pathways"

Push and Pull Factors: *why did you leave group?*

Pushes	Pulls ("pulled out")
RELATED TO GANG AS GROUP/STAYING IS UNAPPEALING	ATTRACTED TO ALTERNATIVES
Grew out of gang lifestyle/got tired of it	Familial responsibilities (e.g. having a child)
Criminal justice system involvement	Pro-social attachments
Police harassment or pressure	Responsibilities
Personal or vicarious victimization	Making new friends who you like better
Gang fell apart	Moved

PRO-SOCIAL ATTACHMENTS

Note: When survey item is asked, respondents can choose multiple categories; surveys usually offer 11-17 pre-ordained "reasons"

Reasons for Leaving Gangs

Roman, Decker & Pyrooz, 2017. Journal of Crime and Justice, 40, 316-336

Took Connect Survey results and compared it to 2 other studies focusing on gangs and disengagement →

(1) Connect Survey
- Interviewed convenience sample of gang members aged 14-25
- 51 of 229 respondents left gang during the study period

(2) Google Ideas study
- Interviewed active gang members, non-gang members, former gang members in 4 cities

(3) G.R.E.A.T. II study
- Longitudinal evaluation of representative sample of middle school students assigned to an educational curriculum
- 473 person-pooled instances of gang leaving

Table 1: 3 Studies Examining **Pushes and Pulls for Leaving the Gang-** Study Characteristics

Study Characteristics	Connect Survey (Roman et al.)	Google Ideas (Decker and Pyrooz)	G.R.E.A.T. (Carson et al.)
Location	Philadelphia & Washington DC	Fresno, Los Angeles, Phoenix, & St. Louis	Albuquerque, Chicago, Greeley, Nashville, Portland, Philadelphia, & Dallas-Fort Worth
Sample	51 former gang members	260 former gang members	473 person-pooled former gang members
Operationalization of former gang membership	Self-reported leaving "peer group" at wave 2 or 3	Self-reported ever in gang, but no longer active	Prior self-reported active and no longer active
Mean age of sample	19.3 yrs at baseline interview	30 yrs	12.5 yrs at baseline interview

Table 1: 3 Studies Examining **Pushes and Pulls for Leaving the Gang –** Push Reasons

Push Reasons for Leaving	Connect Survey (Roman et al.)	Google Ideas (Decker and Pyrooz)	G.R.E.A.T. (Carson et al.)
Disillusionment (all)	88.9%	85%	55.4%
Grew out of lifestyle	75.6%	85%	---
Just felt like it	---	---	42.3%
It wasn't what I thought	42.2%	---	21.8%
Bored	51.1%	---	---
Something happened I didn't like	40.0%	---	---
CJ involvement	22.2%	49%	---
Police harassment/pressure	26.7%	38%	23.9%
Victimization (all)	31.1%	42%	40.6%
Personal	22.2%	---	18.0%
Vicarious	26.7%	---	31.1% friend 16.7% family
Forced out by gang	11.1%	---	---
Gang fell apart	---	24%	---

Table 1: 3 Studies Examining **Pushes and Pulls for Leaving the Gang–** Pull reasons

Pull Reasons for Leaving	Connect Survey (Roman et al.)	Google Ideas (Decker and Pyrooz)	G.R.E.A.T. (Carson et al.)
Familial responsibilities	37.8%	57%	---
Family left gang	---	17%	---
Job responsibilities	42.2%	49%	---
Made new friends	57.8%	---	30.2%
Moved (home or school)	28.9%	34%	13.5%
Significant other or adult	40.0%	34%	34.8%

Table 1: 3 Studies Examining **Pushes and Pulls for Leaving the Gang–** SUMMARY

Summary of Pushes and Pulls	Connect Survey (Roman et al.)	Google Ideas (Decker and Pyrooz)	G.R.E.A.T. (Carson et al.)
Total pushes (mean)	3.18	2.33	0.83
Total pulls (mean)	2.10	1.86	0.64
% pushes only	4.4%	14%	15.9%
% pulls only	8.9%	5.0%	33.2%
% pushes and pulls	84.4%	78%	43.8%

- Over 3/4 of gang members in two studies reported *both* push and pull factors in reasons for leaving.
- Disillusionment with the gang (e.g. “it wasn’t what I thought it would be,” “the gang did something I didn’t like,” “I grew out of the lifestyle”) most salient factor
- Pro-social networks (pulls) appear to work in concert with pushes

Compared Against Qualitative Connect Survey Results (n=28)

From Community Risk to Resilience through Bonds

Risk

- Poverty
- Exposure to community violence
- Criminal activity:
  - gangs
  - drugs

Resilience

- Social connections:
  - church
  - athletics
  - other activities
- School attachment
- Adult role-modeling
- Peer Mentoring

Implications: Strategies for Intervention

Program Types
Neighborhood-based Comprehensive Case Management- Programs that build relationships to pro-social mentors – e.g. Cure Violence
Mentoring/Counseling Programs with Cognitive Behavioral-like Components – e.g. Becoming a Man (B.A.M.); READI-Chicago
Hospital Interventions – e.g. Healing Hurt People (Philadelphia) or Cure Violence
Jobs-based Programs – e.g. Operation Build, JobCorps, YouthBuild
Fatherhood Programs – e.g. InsideOut Dad® program
Family-based Therapeutic Interventions – e.g. FFT and MST
Focused Deterrence/Group Violence Intervention (GVI) – law enforcement threat (but link to pro-social pulls)

Relationship-based programs- Cure Violence

Retrieved from: https://www.ngoadvisor.net/ong/cure-violence

Neighborhood-based comprehensive case management program that addresses the multiple needs of individuals but simultaneously work to change community norms supporting violence

Evidence-based – evaluations show effectiveness in reducing aggregate gun violence

Mentoring/Counseling Programs (B.A.M.)

B.A.M. leverages pushes (disillusionment) and pulls (prosocial bonding)

Targeted towards at-risk youth

Evidence from Chicago RCT shows support for reducing non-violent and violent arrests

Retrieved from https://news.uchicago.edu/story/how-crime-lab-uses-research-impact-public-policy

Jobs-based Programs

Provide opportunities through job training, placement, related services

Not necessarily targeted to gang members

Evaluation results are promising for job-related outcomes

Relationship-based Fatherhood Programs

Retrieved from: https://www.arkansasonline.com/news/2019/oct/31/inmates-taught-family-skills-in-county--1/

Fatherhood programs like the InsideOut Dad® program promote family bonding (pull)

Does not target gang members specifically

Have been successful in increasing family-related outcomes

Retrieved from: https://www.richmond.com/news/local/crime/city-jail-inmates-complete-fatherhood-program/article_151eac5a-d41d-5367-b331-d9561d302183.html

Hospital Interventions

Interventions like Cure Violence's Hospital Intervention, Healing Hurt People (Philadelphia, Chicago) can link individuals to long-term opportunity provision (pull)

Targets victims of violent injury (push);

Potentially promising results

Relationship-based – Therapeutic (MST and FFT)

Can leverage disillusionment (push); strengthen bonding with family (pulls)

Targeted to at-risk youth; currently being evaluated with gang members

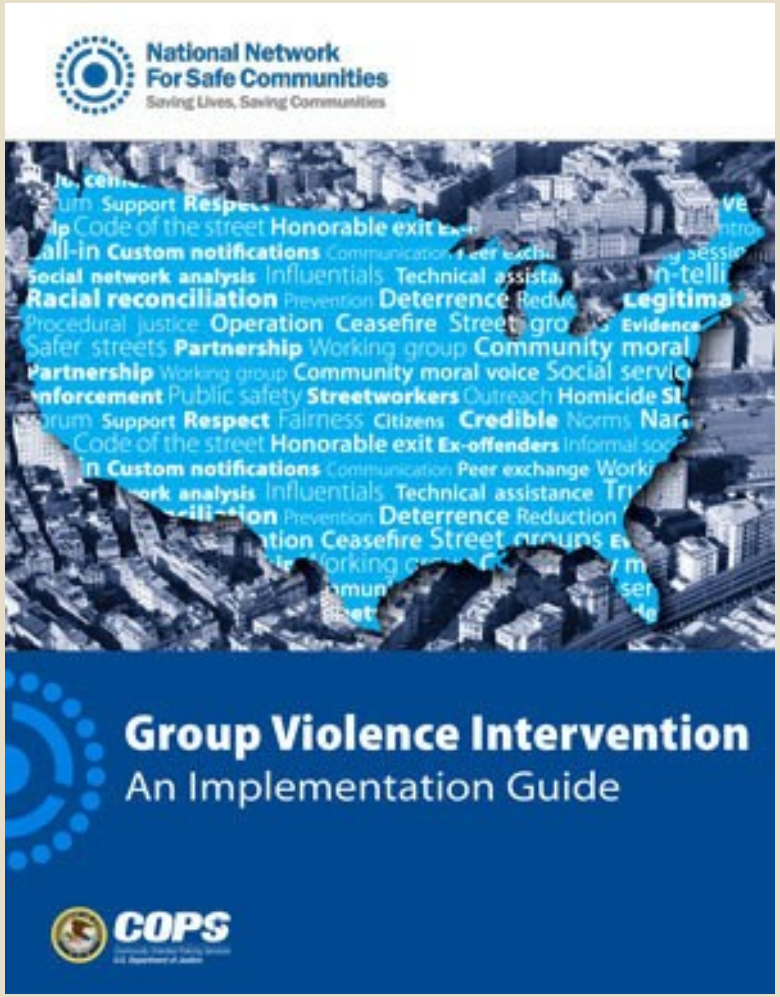
Has been successful with at-risk youth

Focused Deterrence/GVI

Leverages pushes (police and prosecution pressure) and pulls (social services opportunities)

Targeted towards groups

Evaluations show FD/GVI can reduce aggregate violence



Summary

- Important to leverage our knowledge of the reasons why youth leave gangs
  - There are many reasons youth leave, but for most youth, capitalizing on pro-social opportunities may have a big effect
- Which types of relationships influence leaving the group?
  - All kinds of pro-social relations, even new ones
- Can existing networks facilitate the “maturation” of youth out of delinquency?
  - Yes! Use networks to leverage and facilitate maturation

Stop/Interrupt the Spread of Violence by Building Resiliency

The scale of the solution has to be equal to the scale of the problem.

Dollars invested in public health-based prevention/prevention is currently trivial compared to dollars invested in law enforcement.

Thank you!

No problem withstands sustained, focused effort that learns and improves over time.
-Bill Gates

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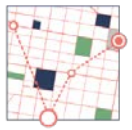
Shots Fired
Gun Violence & Youth Mental Health



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Therese S. Richmond PhD, RN, FAAN
Andrea B. Laporte Professor
Associate Dean for Research & Innovation

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STOP IT.
Preventing Injury
& Violence

FIX IT.
Right Place
Right Time

LIVE ON.
Restoring Lives
& Communities

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In Purple America Each Year…

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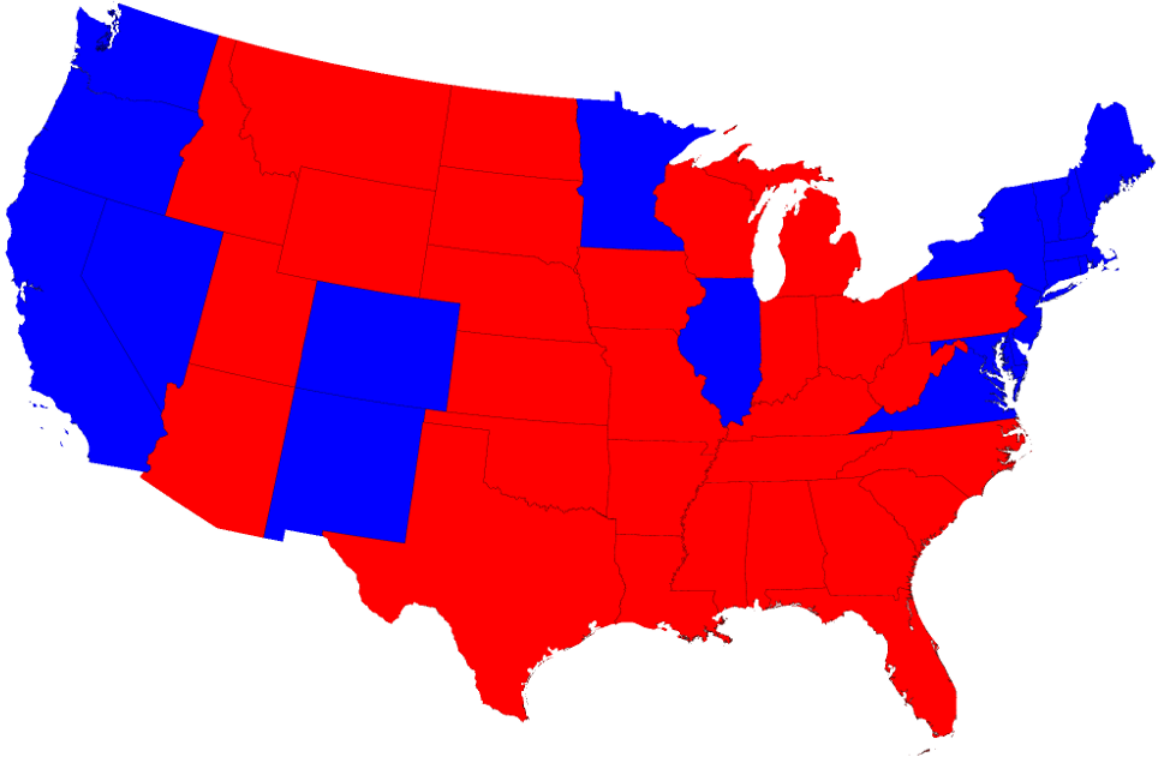
In Red & Blue America Each Year…

- Guns - a contentious issue
- Nasty & polarized
- Argue 2nd amendment rights
- Few viable solutions



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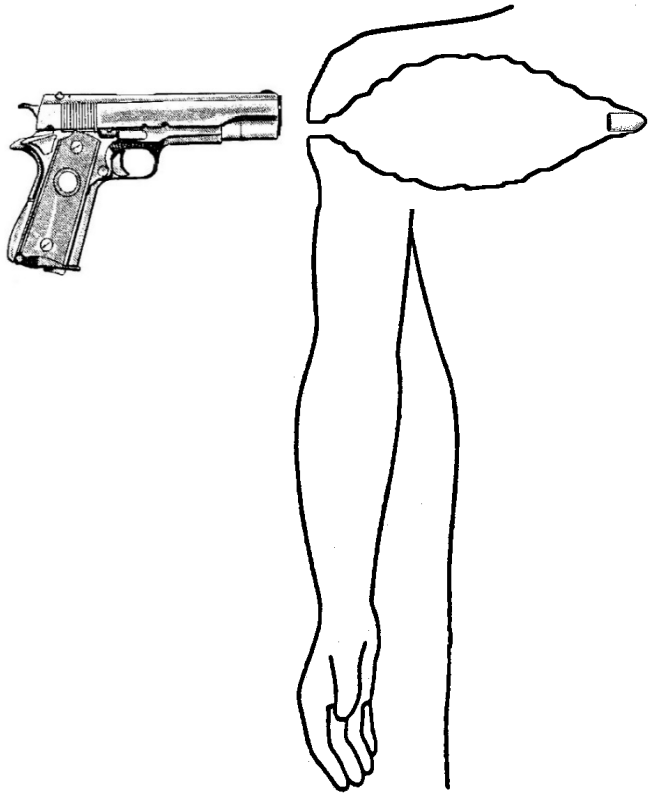
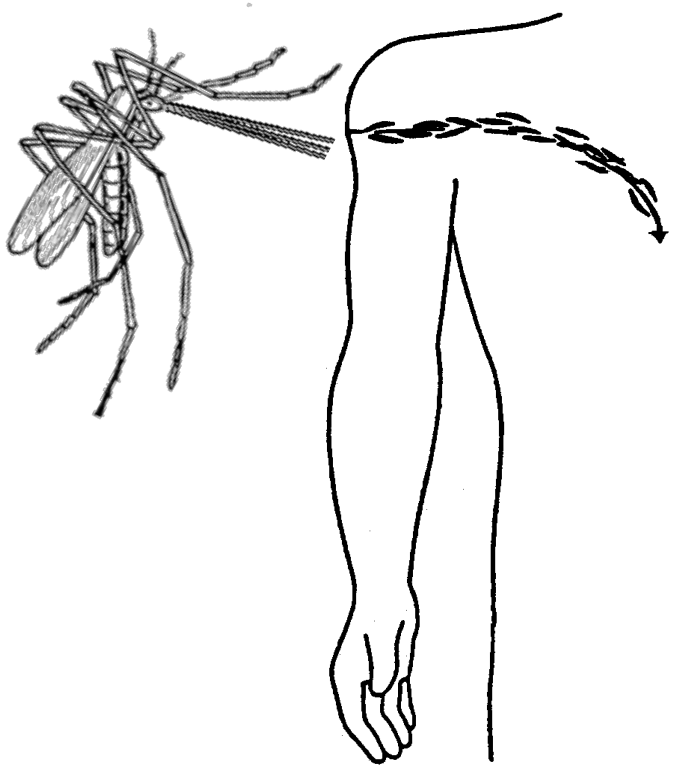
Recast the Conversation





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Shots Fired
Mass Shootings

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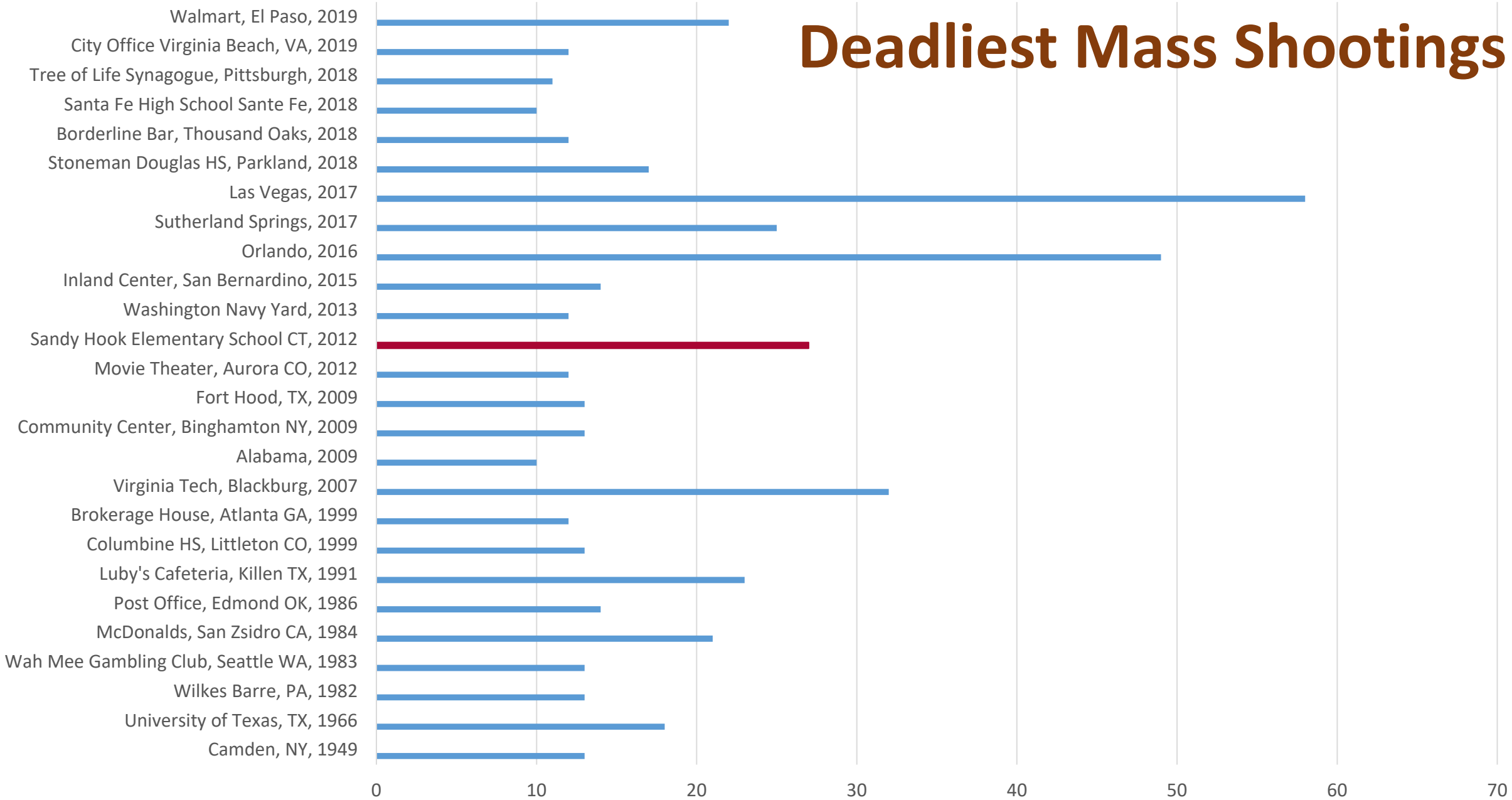
Deadliest Mass Shootings



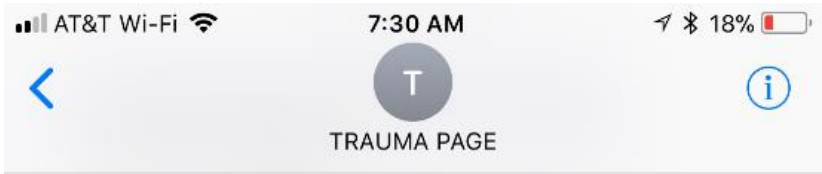
https://www.cnn.com/2019/08/19/us/mass-shootings-fast-facts/index.html

October, 2006

17 killed in mass shooting at high school in Parkland, Florida

NEWS

by Elizabeth Chuck, Alex Johnson and Corky Siemaszko / Feb.14.2018 / 3:18 PM EST / Updated Feb.15.2018 / 10:20 AM EST



Tue, Feb 13, 7:37 PM

Trauma Alert GSW ETA: now walk in, male

Trauma Alert GSW ETA: now drop off by PPD

Wed, Feb 14, 1:21 AM

Trauma Response ETA: now

Wed, Feb 14, 8:34 PM

Trauma Alert GSW ETA: 3-5min gsw, male #1

Trauma Alert GSW ETA: 3-5min gsw #2

Trauma Alert GSW ETA: 3-5min gsw #3, male

Wed, Feb 14, 11:17 PM

Trauma Alert GSW ETA: now

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Shots Fired
The Daily Toll

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Death by Tornado[1]

1680–2000

~20,000 deaths in ~300yrs

(10 deaths in 2018 year)

Death by Gun[2]

1979–2017

1,272,575 deaths in 39 years

(39,740 deaths in 2018)

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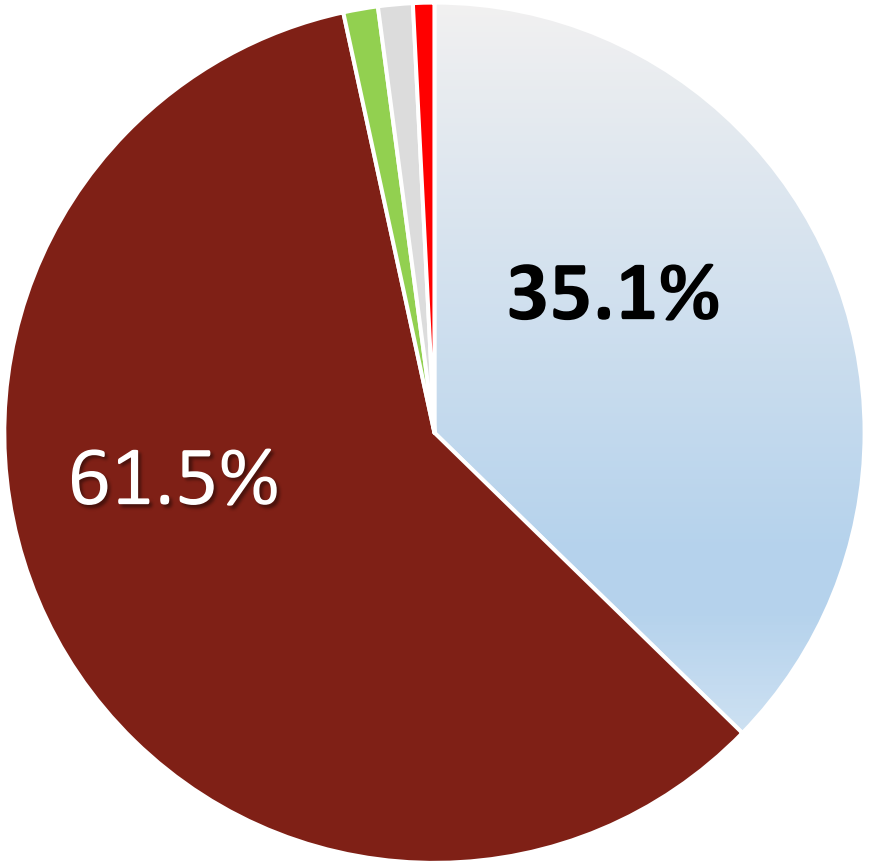
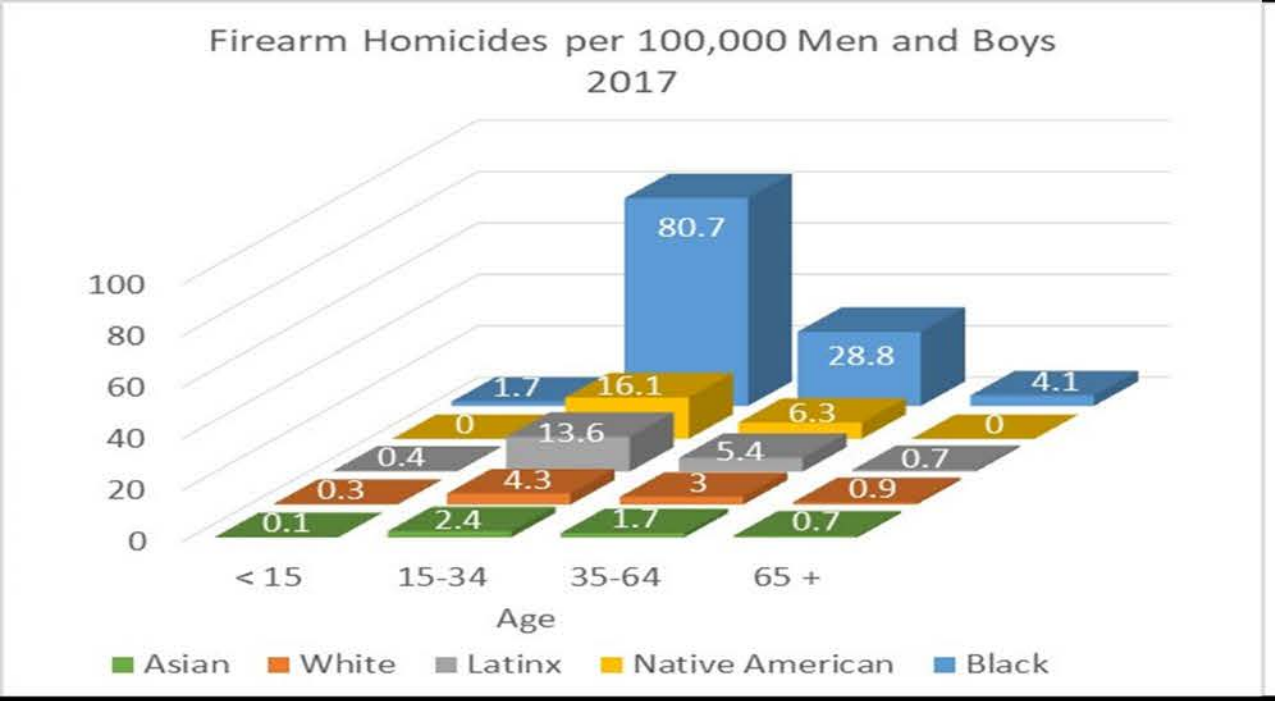
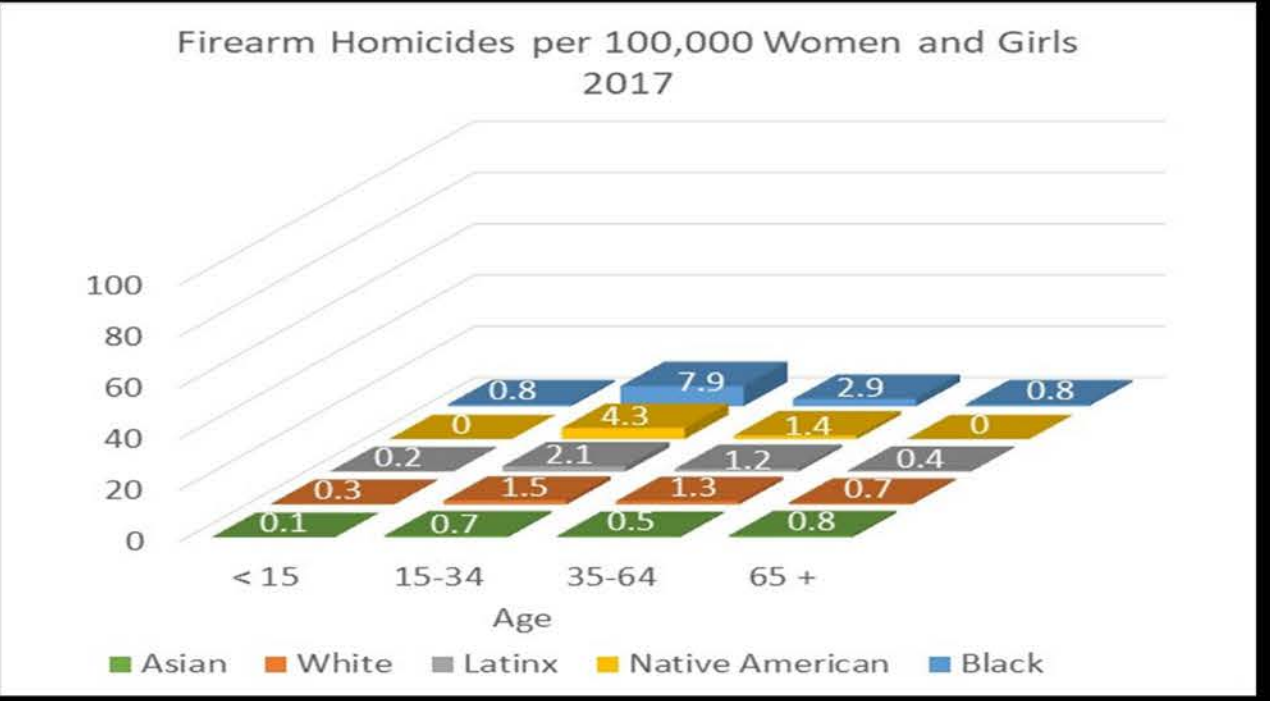
Firearm Deaths



CDC WISQARS, 2018

Homicide Suicide Legal intervention Unintentional Undetermined


Firearm Homicides per 100,000 Men and Boys
2017
100
80
60
40
20
0
80.7
28.8
16.1
13.6
6.3
5.4
4.3
4.1
1.7
0.4
0.3
0.1
2.4
1.7
0.9
0.7
0
0
0.7
3
< 15
15-34
35-64
65 +
Age
Asian
White
Latinx
Native American
Black


Firearm Homicides per 100,000 Women and Girls
2017
100
80
60
40
20
0
7.9
2.9
0.8
0.8
4.3
1.4
0
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Age
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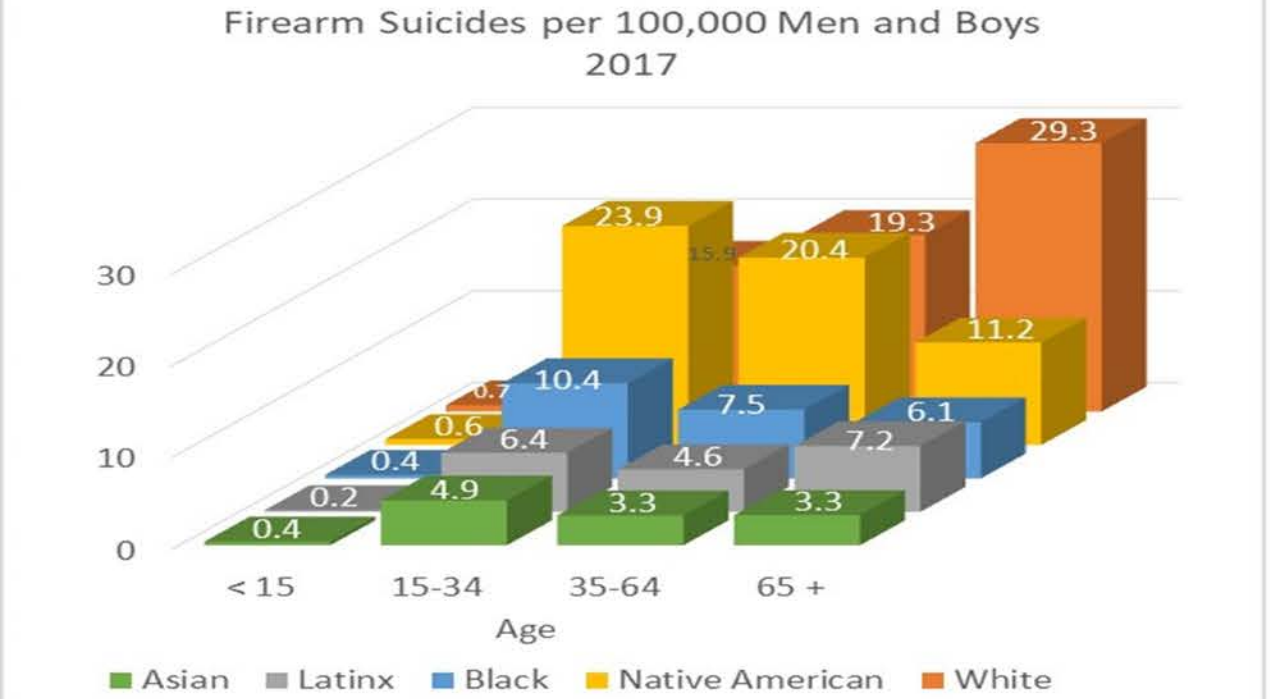
Latinx
Native American
Black


Firearm Suicides per 100,000 Men and Boys
2017
30
20
10
0
29.3
23.9
19.3
20.4
11.2
10.4
7.5
6.1
6.4
7.2
4.6
4.9
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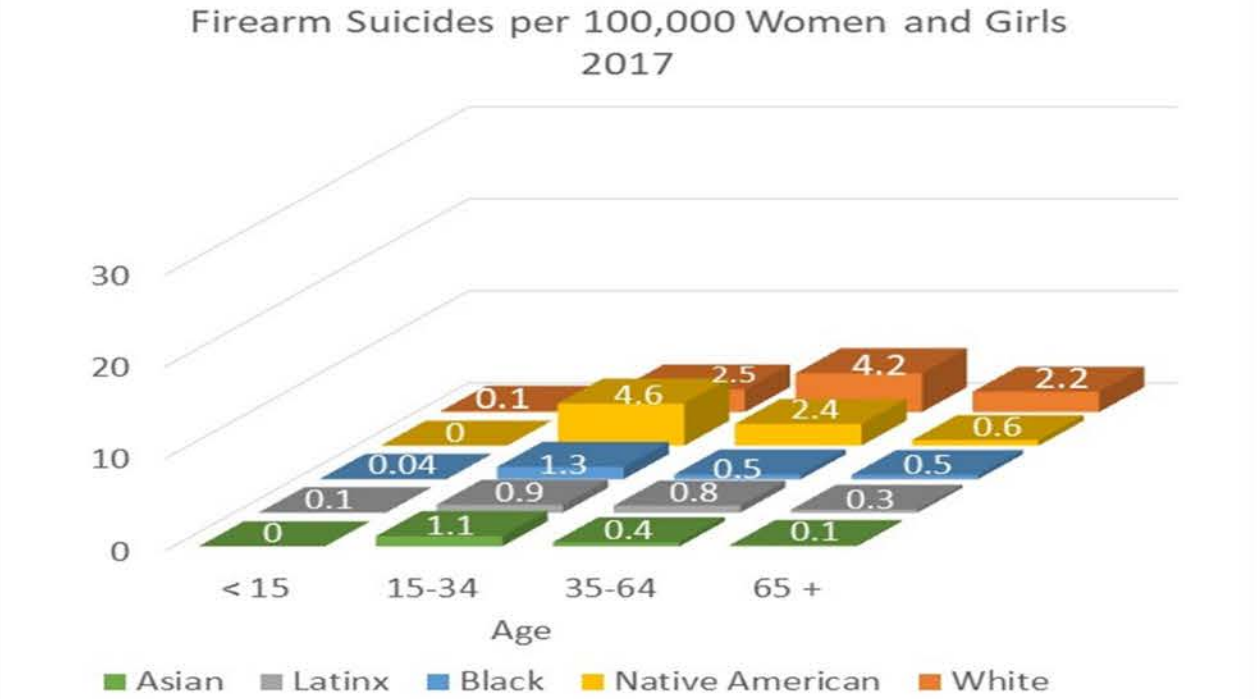
65 +
Age
Asian
Latinx
Black
Native American
White


Firearm Suicides per 100,000 Women and Girls
2017
30
20
10
0
4.2
2.5
2.2
4.6
2.4
0.6
0.1
0
0.04
1.3
0.5
0.5
0.1
0.9
0.8
0.3
0
1.1
0.4
0.1
< 15
15-34
35-64
65 +
Age
Asian
Latinx
Black
Native American
White

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Geospatial Disparity of Urban Firearm Violence

- Purpose: describe variability by race, income and place
- Firearm assault rates by census block groups (Phila) for victim residence & shooting location, stratified by race and block group income
- Results:
  - Firearm assault rate 5 times higher for Blacks vs. Whites (95%CI 4.5-5.6)
  - Relative risk 15.8 times higher for Black residents in highest income block groups compared to White residents in high income block groups (95%CI 10.7-23.2)
  - Shooting events tend to occur in low-income areas in concentrated hot-spot locations with high proportions of Black residents.

Beard et al., (2017). *American Journal of Public Health, 107*, 371-373.

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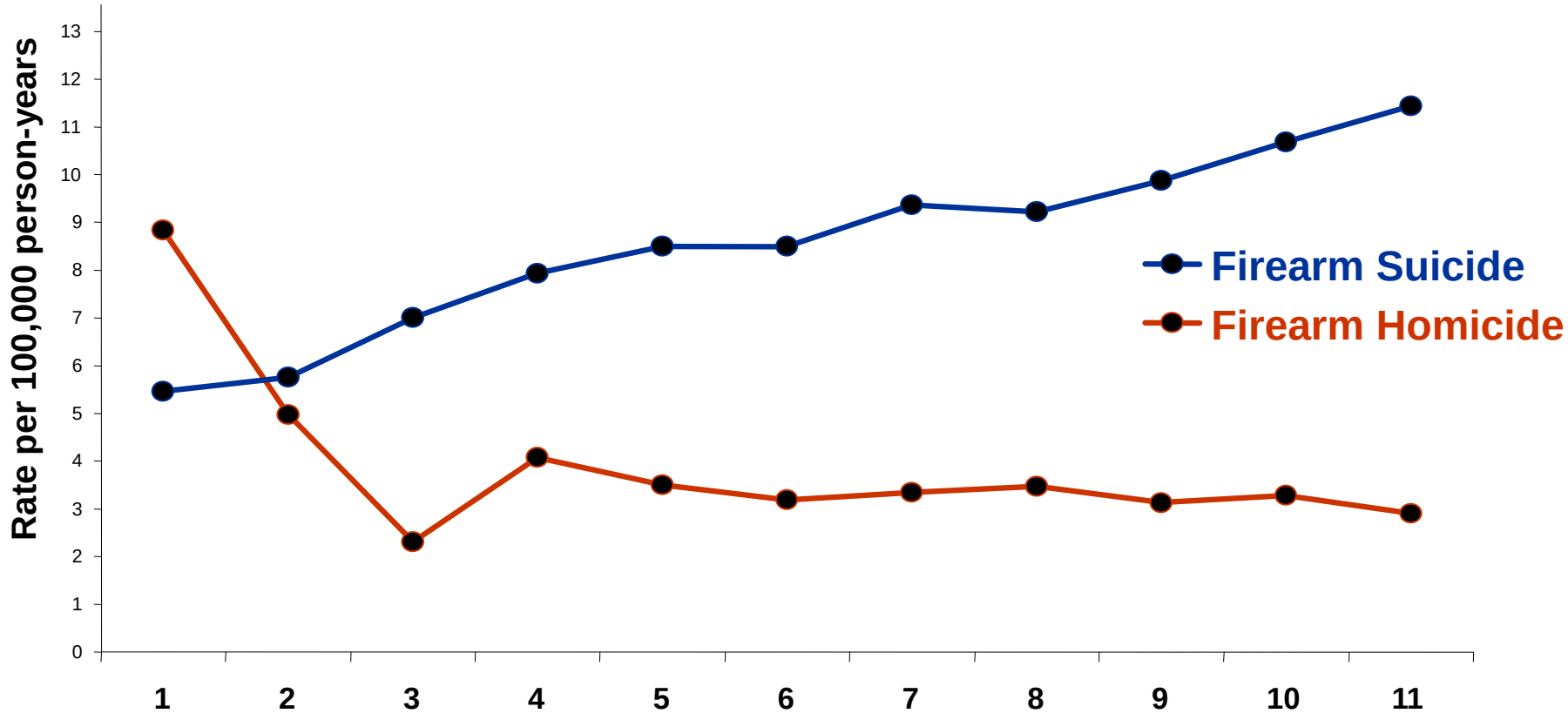
AJPH
A PUBLICATION OF THE AMERICAN PUBLIC HEALTH ASSOCIATION

Urban–Rural Shifts in Intentional Firearm Death: Different Causes, Same Results

Charles C. Branas, PhD, Michael L. Nance, MD, Michael R. Elliott, PhD, Therese S. Richmond, PhD, and C. William Schwab, MD



Big Cities ⟷ **Small Towns**

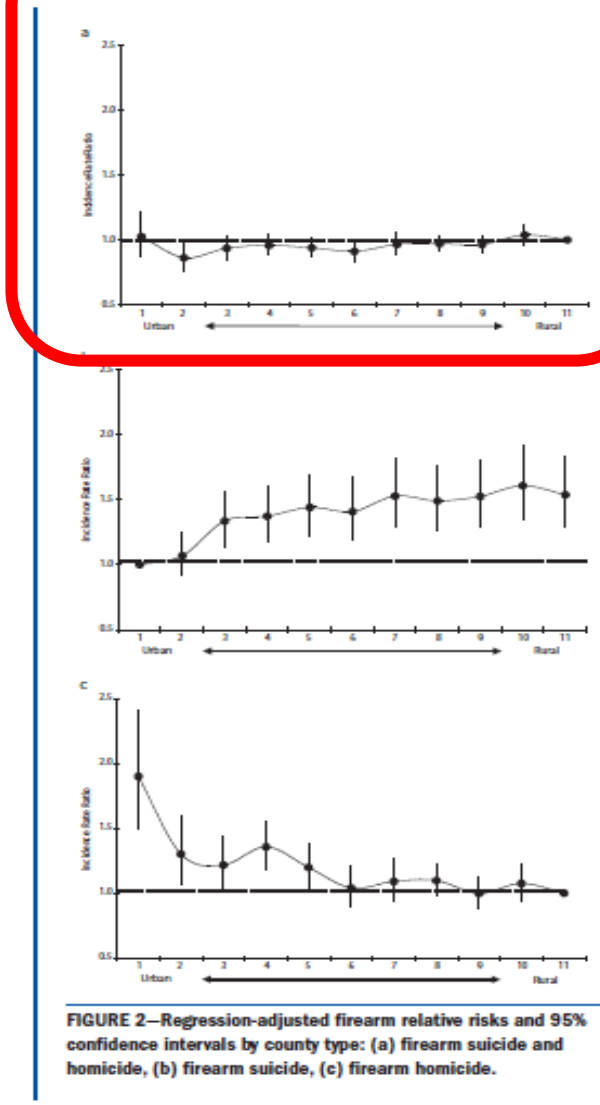


FIGURE 2—Regression-adjusted firearm relative risks and 95% confidence intervals by county type: (a) firearm suicide and homicide, (b) firearm suicide, (c) firearm homicide.

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Shots Fired
Mental Health Impact

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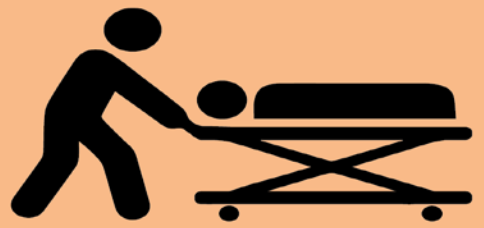
Center

JAMA Surgery | Original Investigation

Contributors to Postinjury Mental Health in Urban Black Men With Serious Injuries

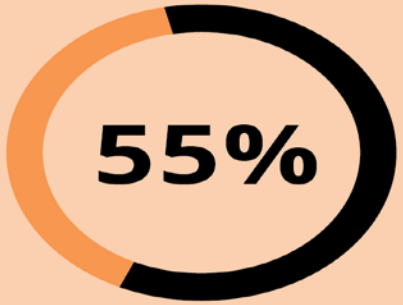
Therese S. Richmond, PhD, CRNP; Douglas J. Wiebe, PhD; Patrick M. Reilly, MD; John Rich, MD, MPH; Justine Shults, PhD; Nancy Kassam-Adams, PhD

JAMA Surg. doi:10.1001/jamasurg.2019.1622
Published online June 5, 2019.



623

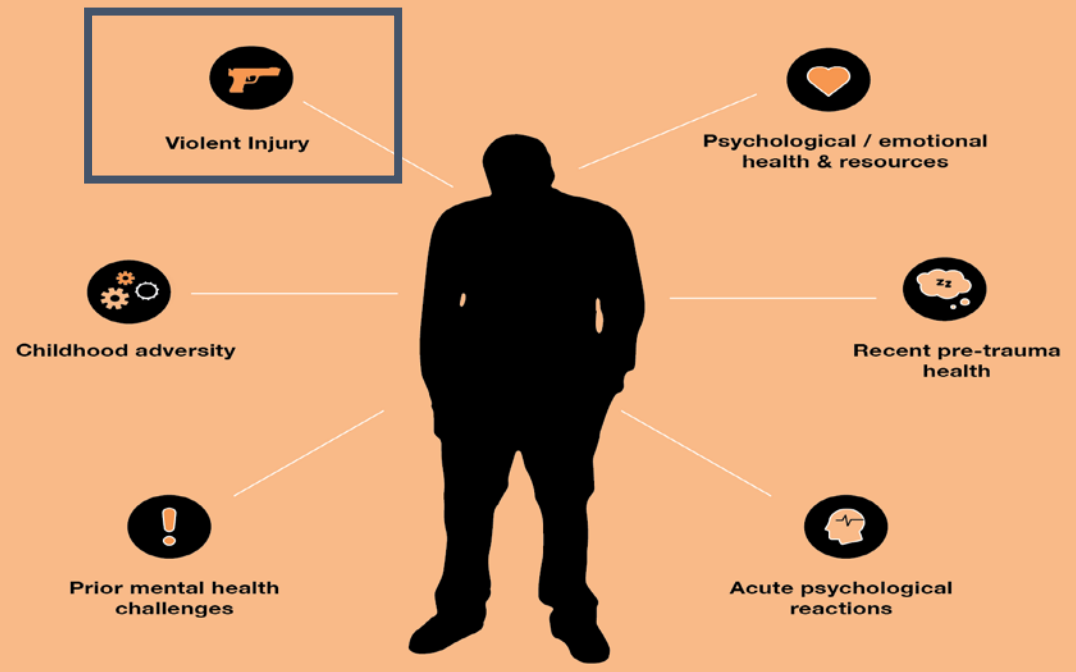
Number of men consecutively enrolled from Level 1 trauma center



of the 623 men were violently injured

45%

of these patients met criteria for mental health diagnosis at three months



Violent injury, childhood adversity and neighborhood disadvantage, and poorer pre-injury health are factors in identifying injured urban black men at highest risk for poor post-injury mental health outcomes.

Emotional responses to unintentional and intentional traumatic injuries among urban black men: A qualitative study

Injury, Int. J. Care Injured 49 (2018) 983–989

Tammy Jiang[a], Jessica L. Webster[b], Andrew Robinson[b], Nancy Kassam-Adams[c], Therese S. Richmond[d,*]

Not knowing who did it. Who did this? And is it somebody that's right next to me every day? Is it somebody I work with? Is it somebody who lives next door to us?

Everything has changed for me…how I view the world, the way I think. My trust issues for people in general has led to fear of strangers and people I don't know. Even people I do know or once trusted. I distance myself. I'm not social anymore with anybody.

‘Sharing things with people that I don’t even know’: help-seeking for psychological symptoms in injured Black men in Philadelphia

ETHNICITY & HEALTH, 2018
https://doi.org/10.1080/13557858.2018.1455811

Sara F. Jacoby, John A. Rich, Jessica L. Webster & Therese S. Richmond

I don’t want to end up in a strait jacket.
Or someone telling me I’m crazy….
That I’m a harm to myself or others.
Because I’m not.

I don’t know who to talk to.
Tell me which way to go.
How to get counseling.

They would look at me and say
I’m crazy or stupid or…
just like I don’t matter.

They just don’t have compassion for people.
It’s just poor service.

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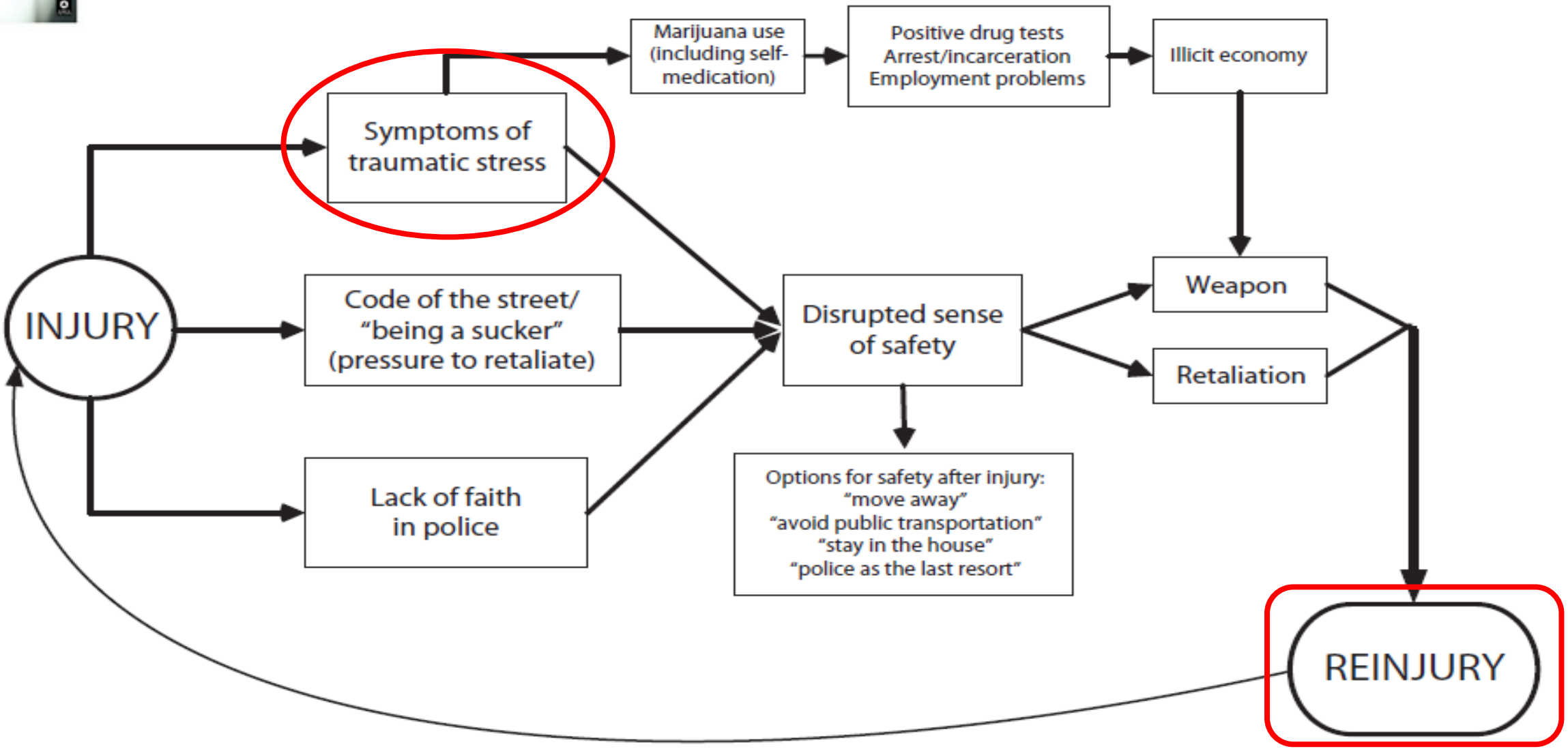
Pathways to Recurrent Trauma Among Young Black Men: Traumatic Stress, Substance Use, and the "Code of the Street"

John A. Rich, MD, MPH, and Courtney M. Grey, BS



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Shots Fired

Injured But Not Shot

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Youth

- Scoping review - 31 studies
- Disproportionate focus on mass shootings (45%)
- Largely retrospective or cross-sectional
- Firearm injury exposure linked to
  - High rates of PTSD
  - High rates of future injury
- Limited evidence on best practices to prevent mental health & behavioral sequelae

What are the long-term consequences of youth exposure to firearm injury, and how do we prevent them? A scoping review

Megan Ranney[1,2,3] · Rebecca Karb[1] · Peter Ehrlich[4] · Kira Bromwich[1] · Rebecca Cunningham[5,6] · Rinad S. Beidas[7,8,9] · for the FACTS Consortium

J Behav Med (2019) 42:724–740
https://doi.org/10.1007/s10865-019-00035-2

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A Tale of Two Cities

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Youth Well-Being

J Community Health
DOI 10.1007/s10900-011-9391-5

ORIGINAL PAPER

Community Violence Exposure and Positive Youth Development in Urban Youth

Catherine C. McDonald · Janet A. Deatrick · Nancy Kassam-Adams · Therese S. Richmond

Table 1 Community violence exposure percentages by type

Type of CVE	*n* (%)
Total CVE	102 (97%)
Hearing about	103 (95%)
Hearing about stranger	102 (93%)
Hearing about familiar	102 (93%)
Witnessing	95 (87%)
Witnessed stranger	84 (77%)
Witnessed familiar	85 (78%)
Direct victimization	58 (54%)
Never been victimized	50 (46%)
Victimized once	17 (16%)
Repeated victimization (≥2 times)	41 (38%)

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Constant Vigilance

S3: Yes. They was like, actually like shooting past me. One was standing down the street and the other one was standing up the street and they was actually like firing back and forth. Like it was fires shot back and forth. I was shocked. I had the trash in my hand 'cause I was putting it out, and I was just shocked. I couldn't move or nothing 'cause I couldn't believe that it was happening.

S1: The swimming pool area is fine. Um, in the summertime a lot of kids go there just to swim, to cool off. Um, the basketball part for the most part is all right. Um, just late at night, is when the games going on, little fights break out, just a few times, a couple shootings happened, um. The playground, it's fun for the little kids… . And the football field, it's just it helps the kids out. That's where they go to stop being around the bad people they hang with and everything… . It's pretty good.

YOUTH'S STRATEGIES FOR STAYING SAFE AND COPING WITH THE STRESS OF LIVING IN VIOLENT COMMUNITIES

Anne Teitelman and Catherine C. McDonald
University of Pennsylvania, School of Nursing

Douglas J. Wiebe
University of Pennsylvania, School of Medicine

Nicole Thomas and Terry Guerra
Philadelphia Area Research Community Coalition

Nancy Kassam-Adams
Children's Hospital of Philadelphia, Center for Injury Research & Prevention

Therese S. Richmond
University of Pennsylvania, School of Nursing

Penn Nursing

Six injured in shooting at Philadelphia rec league basketball game

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Indirect Violence Exposure & Mental Health

- Sample: 1548 urban public charter schools/community based youth (11-19; 77% ≤14 y)
- Exposure
  - Witnessed shooting/stabbing/beating - 41.7%
  - Witnessed murder - 18.3%
  - Experienced murder of someone close - 53.8%
- Outcomes
  - Positive screen for depression - 21.2%
  - Positive screen for lifetime PTSD - 45.7%
  - Positive screen for current PTSD - 26.9%
- Poor mental health outcomes
  - Female
  - Free/reduced lunch program
  - # of violence exposures

Gollub et al., 2019). PLoS One, 14(11), e022499.

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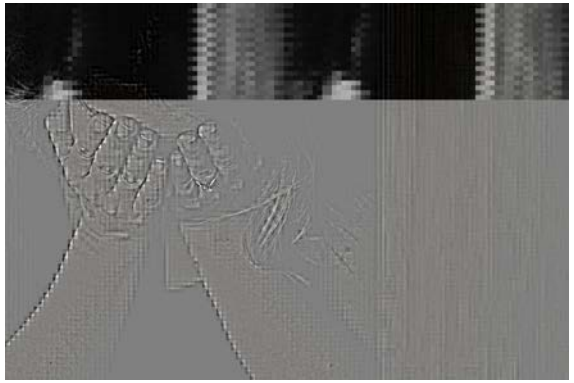
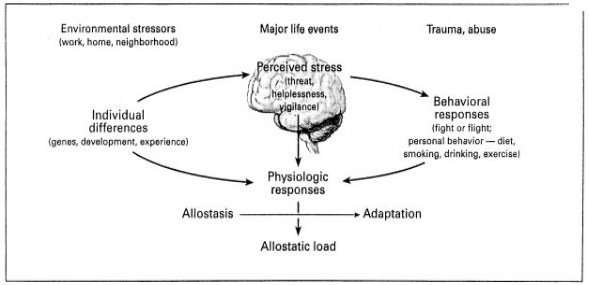
Impact on Youth

Increased risk of violent offending[1]

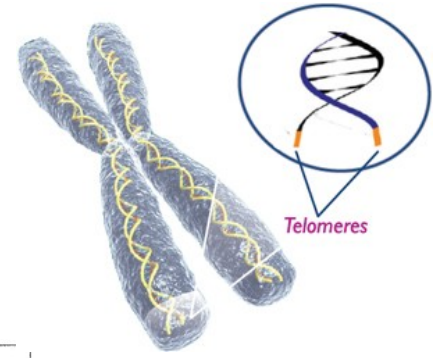
Poorer Academic Performance[2]



Increased depression, suicidal ideation, suicide attempts[3]



Increased Allostatic Load[4]



Shorter telomeres[3]

[1]Nofziger & Kurtz. (2005). *J of Research in Crime & Delinquency.* [2]Mathews et al., (2009). *Behaviour Research & Therapy;* [3]Lambert et al. (2008). *J Adolescent Health*. [4]Theall et al. (2016). *JAMA Pediatrics*

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Resource Distribution

In 2012, at the entrance of a West Philadelphia high school, an armed officer asked the poet Denice Frohman if she had a weapon on her. Standing before firearms and metal detectors, Frohman held up her weapon: a book.

When 'Do You Have Weapons?' Is Heard More Often In Schools Than 'Do You Have Dreams?'

The Huffington Post | By Cate Matthews

Posted: 06/24/2014 5:44 pm EDT | Updated: 06/26/2014 1:59 pm EDT

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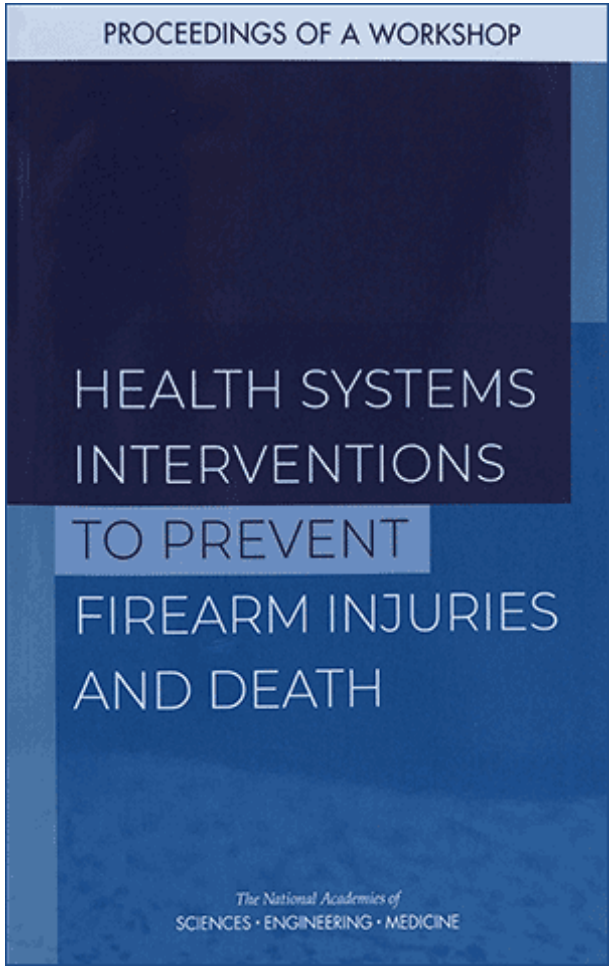
STOP IT.
Preventing Injury & Violence

FIX IT.
Right Place Right Time

LIVE ON.
Restoring Lives & Communities



Charge

- 2-day public workshop that examined research needed to enable health care systems to be more effective in preventing firearm injury & death
- Focused on the evidence & best practices by health systems & health care professionals in preventing gun injuries

http://nationalacademies.org/hmd/Reports/2019/health-systems-interventions-prevent-firearm-injuries-death.aspx

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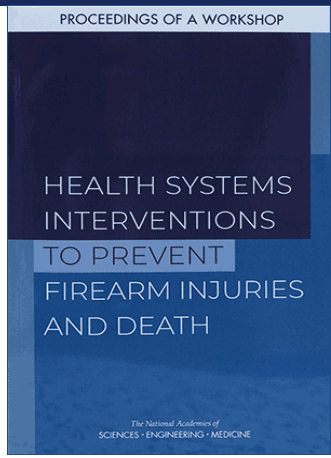

Health Care Systems

- Diagnose the gun violence burden in your system
- Screen & identify people at high risk & connect with comprehensive resources –continually evaluate & refine
  - Depression
  - Suicidal ideation
  - IPV
  - Previous violent or self-inflicted injuries
- Counsel on access to lethal means for high risk patients
- Consider temporary removal of gun for high risk patients (extreme risk protection orders)
- Remove implied stigma of being a 'gun owner'
- Counsel for safe storage of guns

NASEM. *Health System Interventions to Prevent Firearm Injuries & Death*. 2019; Betz et al. *Psychiatry Research*, 2019.

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Establish, Resource & Evaluate State of the Art Risk Stratification

Right person, right time, right place, right intervention

Table 2. Rules for Calculation of the SaFETy Score

Mnemonic	Category	Question/Scale Levels	SaFETy Contribution
S	**S**erious Fighting	**In the past 6 mo, including today, how often did you get into a serious physical fight?**	
		0 (never)	0
		1 (once)	1
		2 (twice)	1
		3 (3–5 times)	1
		4+ (6 or more times)	4
F	**F**riend Weapon Carrying	**How many of your friends have carried a knife, razor, or gun?**	
		1 (none)	0
		2 (some)	0
		3+ (many, most, or all)	1
E	Community **E**nvironment	**In the past 6 mo, how often have you heard guns being shot?**	
		0 (never)	0
		1 (once or twice)	0
		2 (a few times)	0
		3 (many times)	1
T	Firearm **T**hreats	**How often, in the past 6 mo, including today, has someone pulled a gun on you?**	
		0 (never)	0
		1 (once)	3
		2+ (twice or more)	4

SaFETy = Serious fighting, Friend weapon carrying, community Environment, and firearm Threats.

SaFETy Score

Goldstick et al., Annals of Internal Medicine, 2017

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Upstream Determinants

- Hopelessness & serious violence
- Sample
  - Mobile Youth Survey: Youth (10-19 years)
  - Living in 13 extremely impoverished urban neighborhoods in Mobile, AL
  - 725 Black Youth (51% boys)
  - Age 13 in 1998 followed through 2006
- Higher probability for violence with a weapon in late adolescence
  - Higher for boys than girls
  - Associated with increasing hopelessness for both boys & girls

Stoddard et al., (2011). Social connections, trajectories of hopelessness, and serious violence in impoverished youth. *J Youth & Adolescence.*

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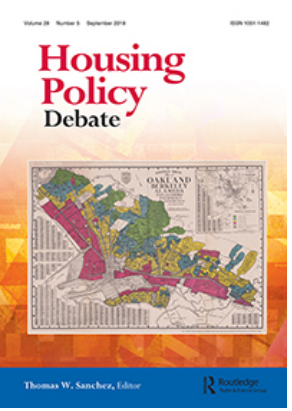

The Effect of Microneighborhood Conditions on Adult Educational Attainment in a Subsidized Housing Intervention

Laura Tach[a], Sara Jacoby[b], Douglas J. Wiebe[c], Terry Guerra[d] and Therese S. Richmond[b]

HOUSING POLICY DEBATE, 2016
http://dx.doi.org/10.1080/10511482.2015.1107118

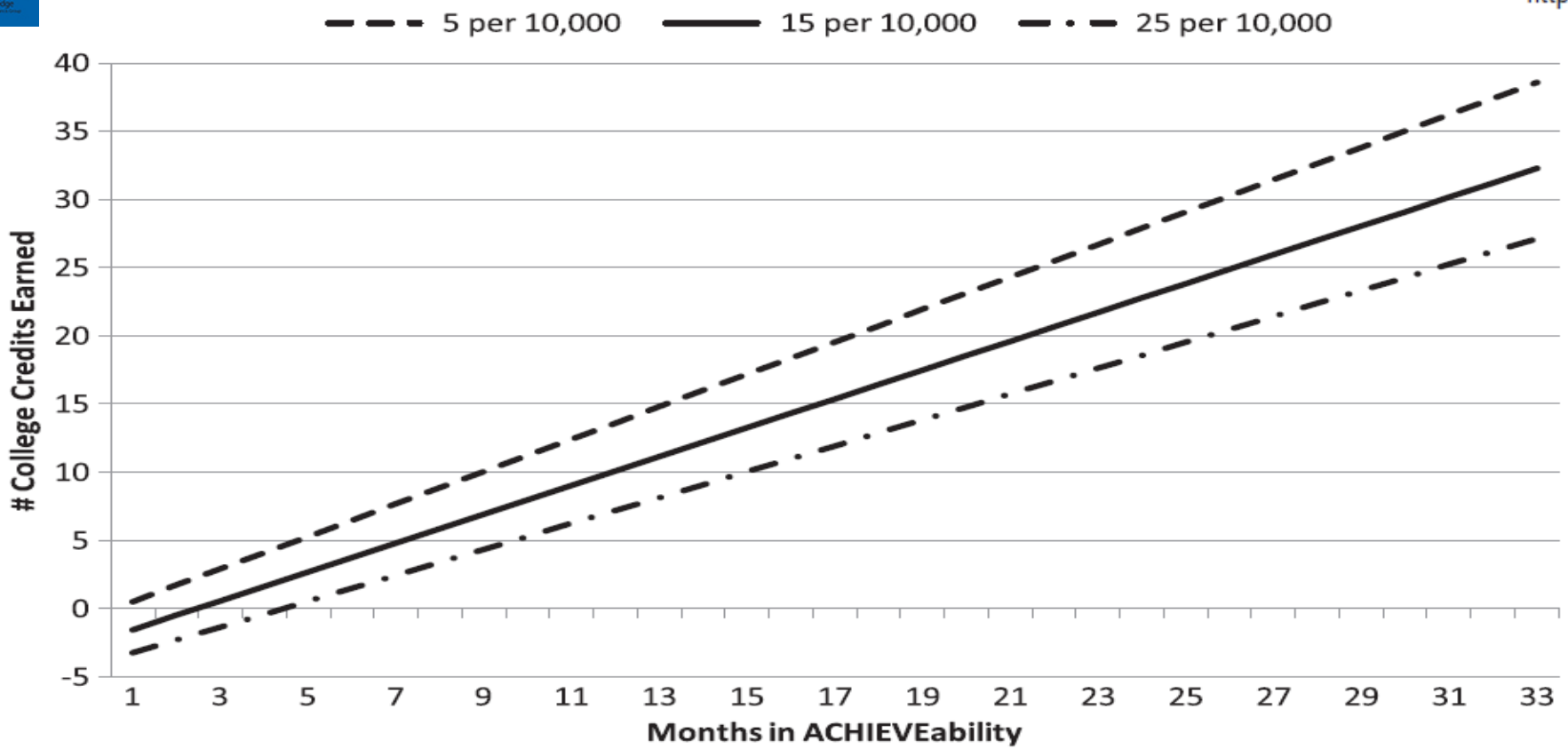

Figure 3. College credits earned in ACHIEVEability by block group: violent crime rate.
Table 3 with participant controls centered at baseline means.

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But the University of Pennsylvania researchers interpret their study differently. Sure, it would help to move subsidized housing units to wealthier, safer neighborhoods. But that's not practical, and would only make bad neighborhoods worse, says Therese Richmond, a professor of nursing and one of the report's authors. She says a better policy solution would be to focus on improving what she and her colleagues call microneighborhoods.

"There is a potential that we can change people's lives block, by block, by block," says Richmond. "The microneighborhood liberates people to say, 'Hey, we can do something within a small space,' so it empowers people who live within these environments."

Neighborhoods Can Shape Success—Down to the Level of a City Block

A small but intriguing study done in West Philadelphia points to the importance of what researchers call microenvironments.

ALEXIA FERNÁNDEZ CAMPBELL | MAY 23, 2016 | BUSINESS

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Gun Violence & Elementary School Achievement

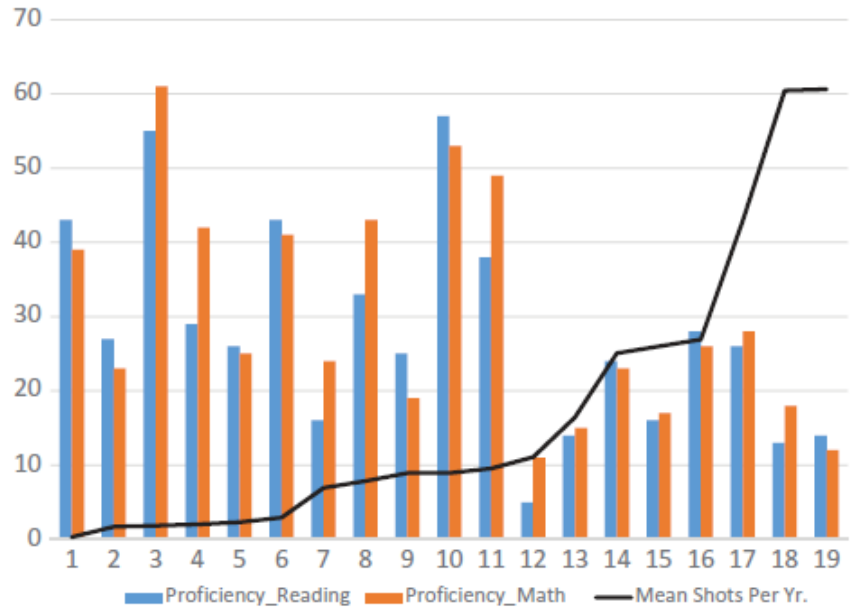

Figure 3. Third-grade English Language Arts and math proficiency and annual gunshots per school catchment area.

Table 2. Results from Linear Regression Models Measuring the Association between Mean Gun Shots per Year and Proportion of Third Graders Failing English Language Arts and/or Math. $N = 19$ schools.

Outcome	β	*p* value	R^2
English Language Arts failure	0.53	0.02	0.28
Math failure	0.51	0.03	0.26

Note. Bootstrap analysis with 1,000 resampling calculations

Bergen-Cico et al., (2018). Social Work in Public Health, 7-8, 439-448.

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Shots Fired
Breaking Down Silos

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"I believe this paper represents the first shot across the bow in the very important subject…I have difficulty with the language…the psychological jargon seems almost surreal to me when I try to relate it to my everyday practice."

Fred Rogers MD
Respondent

"For the seat-of-the pants trauma surgeons who have difficulty with the psychobabble, we can handle trauma jargon so we can handle psych jargon I am sure…If I have been able to educate my trauma surgeon colleagues at HUP, I am sure that there is hope for the rest of the world."

Terry Richmond

Richmond TS et al. (1998). A prospective study of predictors of disability at 3 months following non-central nervous system trauma. *J Trauma, 44*, 635-643.

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The Changing Landscape

"We are remiss if we do not address acute psychological responses with the same steely resolve that we address airway, breathing, and circulation. No longer can psychological assessment be viewed as a 'nice add-on.' It must be integrated into the very essence of trauma care if we are to improve the outcomes of survivors of serious injury."

Richmond TS. (2005). Editorial commentary. *J Trauma, 59*, 1335.

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Trauma-Informed Care for Violent Injury

- Four Pillars
  - Knowledge of the effect of trauma
  - Recognition of the signs & symptoms of trauma
  - Avoidance of re-traumatization
  - Development of appropriate policies & procedures for care/referral

Fischer et al., (2019). Ann Emerg Med, 73(2), 193-202.

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- Purpose: To assess knowledge, opinion, & behaviors of trauma informed care
- 232 nurses in 5 Level I or II pediatric trauma centers
- Less than competent
  - elicit details of traumatic event (89%)
  - Assess child or family distress or emotional needs (67%)

Table 4 Nurses' report of specific trauma-informed practices performed in the past 6 months (N = 232).

Specific trauma-informed practice	Have done this in past 6 months (*N*, %)
1. Ask the child questions to assess his/her symptoms of distress	127 (55%)
2. Ask parents questions to assess their symptoms of distress	116 (50%)
3. Teach parents what to say to their child after a difficult/painful/scary experience	90 (39%)
4. Provide information to parents about emotional or behavioral reactions that indicate that the child may need help	91 (39%)
5. Teach parent or child specific ways to cope with upsetting experiences	107 (46%)
6. Teach parent or child ways to manage pain and anxiety during procedures	174 (75%)
7. Encourage parents to make use of their own social support system (family, friends, church, etc.)	185 (80%)

Kassam Adams et al., (2015). J Pediatric Nursing, 30, 478-484.

Trauma Providers' Knowledge, Views, and Practice of Trauma-Informed Care

Marta M. Bruce, BSN, RN ■ Nancy Kassam-Adams, PhD ■ Mary Rogers, MSN, RN, NEA-BC ■ Karen M. Anderson, MSN, RN, PMHCNS-BC ■ Kerstin Prignitz Sluys, PhD, APRN ■ Therese S. Richmond, PhD, CRNP, FAAN

Volume 25 | Number 2 | March-April 2018

- Purpose: Examine provider knowledge, attitudes, and practices regarding TIC
- Web-based survey
- Sample (n=147)
  - Nurses (65%)
  - Therapists (18%)
  - Physicians (17%)

Results

- Knowledge
  - People have traumatic stress reactions (94%)
  - Most people cope well on their own (33%)
  - Unaware that psych response & injury severity unrelated (51%)
- Less than competent
  - Educating patients about common traumatic symptoms (33%)
  - Eliciting details of traumatic event without re-traumatizing (25%)

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Trauma Providers' Knowledge, Views, and Practice of Trauma-Informed Care

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Volume 25 | Number 2 | March-April 2018

- Self-perceived competence
  - Major contributor to delivery of TIC
    - OR:1.28 (95%CI: 1.16-1.43)

- Barriers
  - Time constraints
  - Need for training
  - Confusing information about TIC
  - Worry about upsetting or further traumatizing patients

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Universal precautions means

Observing "Universal Precautions" means you consider all human blood and certain human fluids infectious for all blood borne pathogens.

Universal Precautions means

Observing "Universal Precautions" means you consider all individuals to have experienced trauma in the distant or recent past.

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For more information on firearm violence visit
http://www.penninjuryscience.org

FACTS
FIREARM SAFETY AMONG CHILDREN AND TEENS

https://www.icpsr.umich.edu/icpsrweb/content/facts/index.html

College Suicide and Violence: The Perfect Storm of Increased Firearm Access Amidst Growing Liability Concerns

William Connor Darby, M.D.

Director UCLA Forensic Psychiatry Fellowship Program

President, American Society for Adolescent Psychiatry

Outline

1. Firearms and Suicide
2. Concealed Carry Weapon Laws and College Campuses: Review of State Statutes and Relevant Cases
3. Increased Responsibility for Universities to Prevent Student Suicide and Violence based on Case Law that Colleges have a special relationship duty to protect
   - Suicide: *Dzung Duy Nguyen v Massachusetts Institute of Technology*, 96 NE 3d 128 (Mass 2018)
   - Violence: *Regents of University of California v Superior Court*, 413 P 3d 656 (Cal 2018)
4. Implications for College Students with Mental Illness

1. Firearms and Suicide

Suicide in the US

Swanson JW, Bonnie RJ, Appelbaum PS. Getting Serious About Reducing Suicide: More "How" and Less "Why". *JAMA*. 2015;314(21):2229–2230

- From 2005 and 2012, age-adjusted mortality rates declined for all 10 leading causes of death in the US—except for suicide
- The rate of suicide increased
  - **10.9** per 100,000 in 2005
  - **12.6** per 100, 000 in 2012
- Suicide accounted for 41,149 deaths in 2013
- In 2013, suicide was the second leading cause of death in 15- to 34-year-olds, claiming 11,226 lives

Suicide in Adolescents/Young Adults

- According to CDC 2015:
  - Suicide is the second leading cause of death for age group 25-34 and the third leading cause of death for age group 15-24
- Per CDC 2016:
  - Homicide was the third leading cause of death for age group 10–24 (14.9% of deaths), and the fifth leading cause for age group 25–44 (6.5% of deaths).
  - Suicide was the second leading cause of death for age group 10–24 (17.3% of deaths) and the third leading cause for age group 25–44 (10.6% of deaths).

Suicide in University Students: Statistics from *Nguyen v. Mass. Inst. Tech*

- Estimated that **1,100 university students die by suicide every year** Jed Foundation
- **6% of undergraduate and 4% of graduate students reported seriously considering suicide within the past twelve months** according to an Internet-based survey of 26,000 undergraduate and graduate students The National Research Consortium of Counseling Centers in Higher Education
- **10.3 % of students reported that they had "seriously considered" suicide within the previous twelve months**, and 1.5% of students had attempted to commit suicide within the previous twelve months according to survey of over 63,000 students at ninety-two colleges and universities in 2017 The American College Health Association's National College Health Assessment

Firearms and Suicide

Swanson JW, Bonnie RJ, Appelbaum PS. Getting Serious About Reducing Suicide: More "How" and Less "Why". *JAMA.* 2015;314(21):2229–2230

- 51% of completed suicides in 2013 were from firearms
- The average case-fatality rate for intentional self-injury using means other than firearms is only 4%
- The case-fatality rate for intentional self-injury with a gun is 84%

  VERSUS

  - 69% for suffocation/hanging
  - 31% for falls
- Together suffocation/hanging and falls account for fewer than half the number of suicides than guns

Increased Access to Firearms Associated with Significant Increased Suicide Risk

- Strong empirical evidence supports the scientific consensus that access to firearms is associated with a significantly increased suicide risk and that reducing gun access for people at risk will reduce suicide

1. Anglemyer A, Horvath T, Rutherford G. The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis. Ann Intern Med. 2014;160(2):101-110.
2. Reisch T, Steffen T, Habenstein A, Tschacher W. Change in suicide rates in Switzerland before and after firearm restriction resulting from the 2003 "Army XXI" reform. Am J Psychiatry. 2013;170(9):977-984.

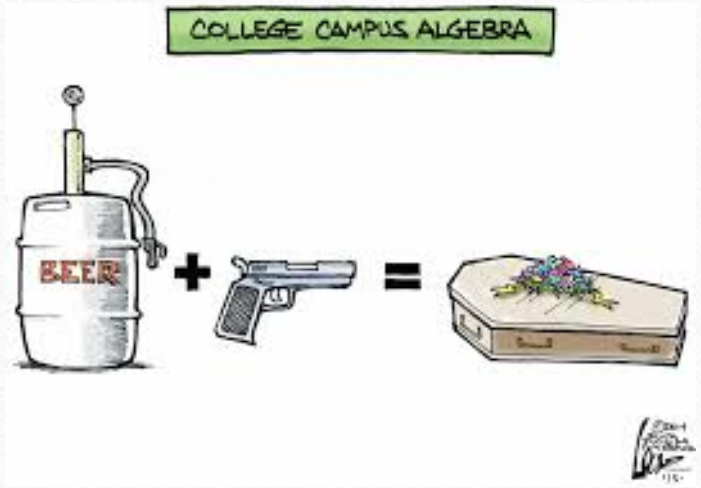
Anglemyer A, Horvath T, Rutherford G. The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis. Ann Intern Med. 2014;160(2):101-110

- Systematic review and meta-analysis of all studies that compared the odds of suicide or homicide victimization between persons with and without reported firearm access
- Strong evidence for increased odds of suicide among persons with access to firearms compared with those without access (OR, 3.24 [CI, 2.41 to 4.40])
- Moderate evidence for increased odds of homicide victimization among persons with access to firearms compared with those without access (OR, 2.00 [CI, 1.56 to 3.02])

Reisch T, Steffen T, Habenstein A, Tschacher W. Change in suicide rates in Switzerland before and after firearm restriction resulting from the 2003 "Army XXI" reform. Am J Psychiatry. 2013;170(9):977-984.

- A study from Switzerland found that suicides among young males decreased by about 10% nationwide in a single year as a direct result of an Army reform that halved the number of Swiss soldiers storing guns at home
- The researchers calculated that 78% of those who were deterred from suicide by lack of access to a gun survived
- Only 22% died anyway because they substituted some other means of suicide

2. Concealed Carry Weapon Laws and College Campuses



Concealed Carry Weapon Laws and College Campuses

- All 50 states allow citizens to carry concealed weapons if they meet certain state requirements

States that Ban Concealed Weapons on Campus

- 16 states ban carrying a concealed weapon on a college campus:
  - California, Florida, Illinois, Louisiana, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, North Carolina, North Dakota, South Carolina and Wyoming

States that Permit Individual Universities to Decide to Ban or Allow

- 23 states permit each college or university to decide individually whether to ban or allow concealed carry weapons on campuses:
  - Alabama, Alaska, Arizona, Connecticut, Delaware, Hawaii, Indiana, Iowa, Kentucky, Maine, Maryland, Minnesota, Montana, New Hampshire, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Dakota, Vermont, Virginia, Washington and West Virginia.

States that Allow Carrying of Concealed Weapons on Campus

- 10 states now have provisions allowing the carrying of concealed weapons on public postsecondary campuses:
  - Arkansas, Colorado, Georgia, Idaho, Kansas, Mississippi, Oregon, Texas, Utah and Wisconsin
- Tennessee allows faculty members with licenses to carry weapons on campus but the law does not extend to students or the general public

States that Allow Carrying of Concealed Weapons on Campus

- Utah is the only state to have statute specifically naming public colleges and universities as public entities that do not have the authority to ban concealed carry
  - Thus, all 10 public institutions in Utah allow concealed weapons on their property
- Recently passed Kansas legislation creates a provision that colleges and universities cannot prohibit concealed carry unless a building has "adequate security measures”


State or Municipal Building
EXEMPT
Possession of Weapons
of Any Type,
Including All Firearms,
in University of Kansas
Buildings is
Strictly Prohibited.
State or Municipal Building
2013 HB 2052 EXEMPT

States that Allow Carrying of Concealed Weapons on Campus

- Wisconsin legislation creates a provision that colleges and universities must allow concealed carry on campus grounds
  - Campuses can, however, prohibit weapons from campus buildings if signs are posted at every entrance explicitly stating that weapons are prohibited
- Legislation passed in Mississippi in 2011 creates an exception to allow concealed carry on college campuses for those who have taken a voluntary course on safe handling and use of firearms by a certified instructor.

Relevant Court Case Decisions

- Recent court cases have also overturned some long-standing systemwide bans of concealed carry on state college and university campuses
- In March 2012, the Colorado Supreme Court ruled that the University of Colorado's policy banning guns from campus violates the state's concealed carry law

Relevant Court Case Decisions

- In 2011 the Oregon Court of Appeals overturned the Oregon University System's ban of guns on campuses, allowing those with permits to carry concealed guns on the grounds of these public colleges
  - Oregon's State Board of Higher Education retained its authority to have internal policies for certain areas of campus, and adopted a new policy in 2012 that bans guns in campus buildings
- In both Oregon and Colorado cases, it was ruled that state law dictates that only the legislature can regulate the use, sale and possession of firearms, and therefore these university systems had overstepped their authority in issuing the bans

3. Increased Responsibility for Universities to Prevent Student Suicide and Violence

- Suicide: Dzung Duy Nguyen v Massachusetts Institute of Technology, 96 NE 3d 128 (Mass 2018)
- Violence: Regents of University of California v Superior Court, 413 P 3d 656 (Cal 2018)


MCMXVI
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FACTS OF THE CASE: Nguyen v MIT

- Han Duy Nguyen was a 25-year-old graduate student pursuing a Ph.D. in marketing at the Sloan School of Management of MIT
- In May, 2007, after his first academic year at MIT and two years before his death, Nguyen contacted Sloan's Ph.D. program coordinator for assistance with test-taking problems "difficulty with taking exams, to the extent that [he was] failing classes"
- In June 2007 he was referred to MIT Mental Health and met with a MIT psychologist in July 2007
- During the first session, the psychologist provided Nguyen with test-anxiety resources and offered to work with him while noting he denied SI
- On the psychologist's second session with Nguyen, she performed a more comprehensive intake evaluation in which Nguyen denied current SI but reported he was receiving current treatment from an outside psychiatrist at MGH for a long history of depression including two previous suicide attempts in the distant past (multiple years prior)

FACTS: Dzung Duy Nguyen v MIT

- Nguyen was irritated that the head of his PhD program was informed of his referral to MIT Mental Health, that the psychologist went beyond the narrow scope of addressing his testing problems, and that he did not get a quick fix with his problems
- He declined further follow-up with the MIT psychologist and in September of 2007 contacted an assistant dean in the student support office for help with his test-taking
- Nguyen disclosed to the assistant dean that he had a "long history of depression dating back to high school," and treatment by "several ... therapists during college." He also "acknowledged two suicide attempts in the past and frequent suicidal thoughts"
- Nguyen, however, stated that he "did not identify a specific plan [to commit suicide] ... and [was] not imminently suicidal."
- Although perceiving that Nguyen was not an imminent threat, the dean "strongly encouraged" Nguyen to visit MIT Mental Health

FACTS: Dzung Duy Nguyen v MIT

- But after his recent disappointing experience with the MIT psychologist, Nguyen was resistant and stated that his current psychiatrist at MGH was already aware of his prior suicidal ideation and he planned to see another outside therapist
- He declined further engagement with MIT Mental Health
- During his 3 years at MIT, he sought treatment from nine mental health professionals unaffiliated with the university who collectively recorded over ninety in-person visits
- None noted active suicidality and no mental health professional believed that he presented an imminent threat for suicide

FACTS: Nguyen v MIT

- Given ongoing academic struggles and poor exam performance, in January 2009 Nguyen's advisors/professors encouraged him to drop the PhD and pursue a Masters and non-academic employment
- Nguyen was insulted and insisted on continuing in the PhD program as it was his dream to be a professor
- Following an inappropriate email that Nguyen sent related to his research, Nguyen's advisor "read him the riot act" on June 2, 2009 and reiterated that this was a sign that Nguyen "should think about getting a [M]aster's degree and pursuing a nonacademic job."
- Minutes later, Nguyen went to the roof of his laboratory building and jumped to his death
- Nguyen's family filed a wrongful death action against MIT

Supreme Judicial Court of MA Decision:

What Triggers a University Duty to Protect Students from Self-Harm?

- **RULING**: Universities have a **special relationship** with a student and a corresponding duty to take reasonable measures to prevent his or her suicide in the following circumstances:

1. Where a university has **actual knowledge of a student's suicide attempt** that occurred while enrolled at the university or recently before matriculation
2. Or knowledge of a **student's stated plans or intentions to commit suicide** the university has a duty to take reasonable measures under the circumstances to protect the student from self-harm

Supreme Judicial Court of MA Decision:

What Satisfies a University Duty to Protect Students from Self-Harm?

"Reasonable measures by the university to satisfy a triggered duty"

1. Initiating a suicide prevention protocol if the university has one
2. Contact the appropriate officials at the university empowered to assist the student in obtaining clinical care from medical professionals or, if the student refuses such care, to notify the student's emergency contact
3. In emergency situations, contacting police, fire, or emergency medical personnel

"By taking the reasonable measures under the circumstances presented, a university satisfies its duty."


UCLA

Regents of the University of California v. Katherine Rosen: Facts of Case

- Damon Thompson transferred to UCLA in fall of 2008
- At the end of the fall quarter, he wrote a history professor complaining of other students making offensive remarks that negatively affected his final exam performance
- Later, Thompson sent a 3-page letter to the Dean of Students complaining of mistreatment in his dorm room including unwanted sexual harassment, being called stupid, sexual rumors being spread about him, these comments/teasing disrupting his sleep, residents eavesdropping on his phone calls
- He warned that if the university failed to discipline the responsible parties, the matter would likely "escalate into a more serious situation," and he would "end up acting in a manner that will incur undesirable consequences"

Rosen: Facts of the Case

- January of 2009, Thompson complained to professors that students were trying to distract him with offensive comments. He was flagged by the UCLA Campus Response team (advises campus members about the well-being of particular students). Professors and Assist. Dean of Students attempted to intervene by encouraging him to obtain UCLA mental health services
- In February of 2009, Thompson claimed that he had heard derogatory comments from other students and gun clicking noises through the walls in his dorm room that supported his belief they were plotting to shoot him. He was transported to a hospital for a psychiatric evaluation, was diagnosed with possible schizophrenia, started on low dose antipsychotic medication, and began receiving mental treatment through UCLA

Rosen: Facts of the Case

- Over the next several months, university personnel monitored Thompson, who continued to accuse other students of insulting him and engaged in other erratic behavior, including repeatedly shoving a student for making too much noise in June of 2009 which led to him being expelled from campus housing
- Immediately after the fall semester began in 2009, Thompson complained to his chemistry professor and teaching assistant that other students in his chemistry laboratory were calling him stupid and interfering with his experiments. Rosen was identified as one of a number of students that Thompson believed was calling him stupid

Rosen: Facts of the Case

- On October 7, 2009 Thompson identified a specific student (not Rosen) as one of his tormentors which prompted the professor to inform school administrators that then led to notifying the Response Team members and UCLA mental health personnel. Thompson did not appear for a scheduled session with his psychologist that afternoon. The next morning, UCLA administration and Response Team discussed Thompson and decided to investigate whether he was having similar difficulties in other classes.
- On October 8, 2009, Thompson suddenly stabbed Rosen in the chemistry laboratory with a kitchen knife while she was placing items in a lab drawer
- Rosen survived the attack, but sustained serious, life-threatening injuries. She sued the university and several of its employees for negligence, arguing they failed to protect her from Thompson's foreseeable violent conduct

"It's just a simple Rorschach ink-blot test, Mr. Bromwell, so just calm down and tell me what each one suggests to you."

Rosen's Complaint

- Rosen argued that universities have a special relationship with their students that gives rise to a duty to protect them from foreseeable acts of violence in the classroom
- The complaint further alleged defendants had a duty of care because they knew of Thompson's "dangerous and violent propensities"
- And that they breached this duty by failing to adopt reasonable measures to protect Rosen (i.e., failing to warn or protect her or to otherwise control Thompson's foreseeable violent conduct)

California Supreme Court Decision:

What Triggers/Satisfies a University Duty to Protect Students from Harm?

- **RULING**: Universities have a **special relationship** with their students and a corresponding duty to protect them from foreseeable violence during curricular activities
- Unlike the Nguyen v MIT decision, this new role was not limited and defined
- That is, the CA supreme court did not explicitly define what triggers "foreseeable violence" and how a university would discharge a "duty to protect"
- Deciding on a "case-by-case" basis likely to lead to unintended consequences

California Supreme Court Majority Opinion

"We emphasize that a duty of care is not the equivalent of liability. Nor should our holding be read to create an impossible requirement that colleges prevent violence on their campuses. Colleges are not the ultimate insurers of all student safety. We simply hold that they have a **duty to act with reasonable care when aware of a foreseeable threat of violence in a curricular setting. Reasonable care will vary under the circumstances of each case.** Moreover, some assaults may be unavoidable despite a college's best efforts to prevent them. Courts and juries should be cautioned to avoid judging liability based on hindsight."

Comparing the Summaries of the Two Cases

UC Regents v Rosen

- California Supreme Court
- Violence (duty to protect against serious harm to others)
- University Duty Based on Special Relationship

Nguyen v MIT

- Supreme Judicial Court of Massachusetts
- Suicide (duty to prevent suicide or serious self-harm)
- University Duty Based on Special Relationship

Comparing/Contrasting

UC Regents v Rosen

- Duty to protect them from foreseeable violence during curricular activities (no concrete circumstances specified to trigger duty)
- Psychologist was statutorily immune but university potentially liable
- No concrete guidelines to discharge duty

Nguyen v MIT

- Duty to take reasonable measures to prevent his or her suicide in only certain concrete circumstances that trigger duty
- Distinguish that universities are "non-clinicians" and held to lower standard
- Clear, concrete guidelines on how to satisfy duty


I could kill for a good cup of coffee right now.
Patient has Latte Homicidal Tendencies
Reynolds
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Revisiting Tarasoff: A Familiar Hindsight Bias Problem for Californians

- 1974 Tarasoff I established unprecedented mandatory duty to warn when a doctor/psychotherapist "determines, or should determine" a patient presents danger arising from a medical/psychological condition
  - Psychotherapists concerned about violating confidentiality and liability
  - Police worried about far-reaching liability for releasing potentially violent individuals

Revisiting Tarasoff: A Familiar Hindsight Bias Problem for Californians

- 1976 Tarasoff II removed police liability, erased "duty to warn" and changed to "duty to protect" again triggered if the therapist "determines" or "should determine" that a patient presents a danger
  - Mental health practitioners/organizations argued that this made therapists unreasonably liable for largely unpredictable acts of harm
  - With an ambiguous trigger and no steps specified to obtain full-immunity from liability, therapists worry of hindsight bias
  - The "should determine" standard was problematic and applied to not predicting future negligent driving accidents (i.e., not intentional violence driven by mental illness) and facing strict liability standards for not using "reasonable care to protect the intended victim against such danger"

Revisiting Tarasoff: A Familiar Hindsight Bias Problem for Californians

- 1986 California Legislature enacted Section 43.92 of the Civil Code: "*Tarasoff* immunity statute" as legislative remedy
  - It provided steps for a therapist to obtain freedom from liability when a patient posed a serious danger to a third party by warning potential victim(s) and police
  - Limited duty to protect and potential liability.
  - Eliminated "determines or should determine" danger as the trigger
  - Changed the triggering of a duty to concrete circumstances of when "a serious threat to an identifiable victim(s)" was communicated

Revisiting Problems from Tarasoff?

Universities now with greater liability than therapists in CA

Rosen

- Duty to Protect based on special relationship of universities-student
- Trigger: "foreseeable violence"

Tarasoff

- Duty to Protect based on special relationship of therapists-patients
- Trigger: "determine, or should determine(s)" patient was dangerous

Revisiting Problems from Tarasoff?

Universities now with greater liability than therapists in CA

Rosen

- CA Supreme Court (2018): "We simply hold that they have a duty to act with reasonable care when aware of a foreseeable threat of violence in a curricular setting. Reasonable care will vary under the circumstances of each case."

Tarasoff

- CA Supreme Court (Tarasoff II, 1976): "incurs an obligation to use reasonable care to protect the intended victim against such danger. The discharge of this duty may require the therapist to take one or more of various steps, depending upon the nature of the case."

Revisiting Problems from Tarasoff?

Universities now with greater liability than therapists in CA

Rosen

- By leaving it up to case-by-case basis leaves open to similar problems and unintended consequences as Tarasoff prior to the immunity statute despite saying “Courts and juries should be cautioned to avoid judging liability based on hindsight”

Tarasoff

- 1986 Legislative remedy to problems/unintended consequences of leaving to courts to decide on case-by-case basis providing concrete steps for full immunity i.e., warn victim(s) and police and limiting liability duty to concrete trigger: “if the patient has communicated to the psychotherapist a serious threat of physical violence against a reasonably identifiable victim or victims"

A Missed Opportunity to Learn from Historical Problems with Tarasoff and Psychotherapists?

- Problems in how the case was argued to the California Supreme Court
- UC Regents attorneys argued that universities should be covered under the limitations of liability for psychotherapists under CA Civil Code section 43.92 (i.e., for situations in which "a serious threat of physical violence against a reasonably identifiable victim" was communicated)
- California Supreme Court rejected this argument as Universities are obviously not psychotherapists and thus not covered by this statute

A Missed Opportunity to Learn from Historical Problems with Tarasoff and Psychotherapists?

UC Regents attorneys failed to argue persuasively that

- The duty was being borne from a similar but different "special relationship" between a university and its students as psychotherapists-patients
- Moreover, Universities as non-clinicians should be held to an equal or lower standard as psychotherapists covered by 43.92 (e.g., Nguyen v MIT recognized Universities as non-clinicians are not expected to discern suicidal plans or intentions to commit suicide and thus provided concrete trigger for duty)
- Also, they did not highlight the parallel historical problems of liability for psychotherapists with Tarasoff I and II that required a legislative remedy (43.92)

A Missed Opportunity to Learn from Historical Problems with Tarasoff and Psychotherapists?

- APA and CPA amicus briefs submitted focused on the UCLA treating psychologist and how Tarasoff duty not triggered because Damon Thompson never communicated an imminent threat of serious violence to her
- APA and CPA narrowed its focus to the psychotherapist and stayed out of the issue of liability for the UC Regents since not directly a psychiatric issue
- Foreseeability standard created seems likely to cause many of the same problems of Tarasoff II with its "should determine" standard
- A major problem created with this missed opportunity is if unreasonable liability is found for universities it can seriously affect mental health treatment offered at universities
- Missed opportunity to not raise the argument that liability for UC Regents may repeat the problems of Tarasoff II that required the legislative remedy with the limitations specified under 43.92

A Missed Opportunity to Learn from Historical Problems with Tarasoff and Psychotherapists?

- In the oral arguments before the California Supreme Court the attorneys for UC were asked if the court were to find potential university liability would the attorneys have a recommendation for how such a duty could be worded (e.g., defining the trigger and how to satisfy the duty)
- The attorneys took the risky step of making no such recommendation
- That of course did not allow them to suggest limitations to the duty like what 43.92 achieved and like Nguyen v MIT achieved
- A major problem created with this missed opportunity is if unreasonable liability is found for universities it can seriously affect mental health treatment offered at universities

Court of Appeal of CA, Second Appellate District, Division Seven (12/3/18) Opinion on Remand from Supreme Court: Regents v. Rosen

Following the CA Supreme Court holding that colleges and universities have a "duty to use reasonable care to protect their students from foreseeable acts of violence in the classroom or during curricular activities," Rosen was remanded back to Court of Appeal to determine:

(1) the standard of care governing a university's duty to protect its students from foreseeable acts of violence is the ordinary reasonable person standard;

(2) triable issues of fact exist whether the defendants breached their duty of care to Rosen; and

(3) although Civil Code section 43.92 precludes liability against the UCLA psychologist, the remaining defendants are not statutorily immune from suit.

Court of Appeal of CA: Regents v. Rosen

The Appellate Court held that

(1) the standard of care governing a university's duty to protect its students from foreseeable acts of violence is the ordinary reasonable person standard;

(2) triable issues of fact exist whether the defendants breached their duty of care to Rosen; and

(3) although Civil Code section 43.92 precludes liability against the UCLA psychologist, the remaining defendants are not statutorily immune from suit

Court of Appeals: Regents v. Rosen

- The Appellate Court opined that the Civil Code section 43.92 was in fact was an immunity statute designed to limit liability for failure to warn and protect because of excessive findings of liability for psychotherapists by the courts.
- This was very positive since from what we can see nobody presented this argument to the California Supreme Court allowing contrary assertions by the plaintiff to go unchallenged
- The Court also said the California immunity statute for psychotherapists in civil code 43.92 did apply to the psychologist in this case restating that this was the opinion of both the justices in the majority opinion and the dissenting opinion.
- That was useful since in the California Supreme Court decision it was stated that the only reason did not open up the question of removing this immunity liked the plaintiffs wanted is that the plaintiffs had not brought it up in their petition for their appeal to the California Supreme Court

4. Implications for College Students with Mental Illness

- A number of states permit concealed firearms on campus in age groups where suicide/homicide are two of the top leading causes of death
- Access to firearms increases risk for suicide and homicide
- Universities face greater liability concerns for not "taking reasonable measures to protect and control their students" from "foreseeable" harm (suicide or violence)
- There is already precedent for college students being forced to take leaves of absence, not allowed to live in dormitories, and in some cases not even allowed to enter campus if they report suicidal ideation (Appelbaum 2006)

Implications for College Mental Health

- Increased vigilance by universities to anticipate rare events (suicide and homicide) will likely result more false positives, meaning that many students will be misidentified for preventive actions
- Despite presumed ADA protections, universities are incentivized to screen out students with mental illness to avoid future liability
- Universities are incentivized to have more aggressive interventions to demonstrate that they are taking reasonable measures to protect and control their students
- Given that these courts have ruled they have a **special relationship**, this may take the form of aggressive policies on students with mental illness to discourage them from continuing or even expelling them
- Students may be discouraged to seek out mental health services or from discussing suicidal or violent ideations with anyone out of fear of reactionary consequences

Implications for College Mental Health

- Colleges may even dissolve mental health services/resources to reduce the likelihood of learning about students' suicidal or violent ideations so that they do not trigger a duty to protect (although the CA Supreme Court argued against this possibility due to "market forces")
- Mental health professionals are more adept at foreseeing subtler sings of danger to self driven from mental illness but paradoxically in CA therapists may be statutorily immune in situations where university officials who are non-clinicians face greater liability
- Thus, provisions in the law that spell out what specifically triggers a Tarasoff duty to protect for psychotherapists in California does not carry over to universities that have a more ambiguous duty which can likely be interpreted to mean that universities "should have known" someone were to be violent even if it would not trigger Tarasoff duty for mental health professionals

Implications for College Students with Mental Illness in Open Carry States

- There may be an even greater incentive to gut mental health services, screen out/discourage/expel students with mental illness in states where concealed firearms are allowed on college campuses
- Specifically, colleges may enforce harsher policies for students that present suicide risk in states that permit concealed firearms on campus
- A number of states permit concealed firearms on campus in age groups where suicide/homicide are two of the top leading causes of death
- Access to firearms increases risk for suicide and homicide
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- There is already precedent for college students being forced to take leaves of absence, not allowed to live in dormitories, and in some cases not even allowed to enter campus if they report suicidal ideation (Appelbaum 2006)

Appelbaum PS: Responsibility for Suicide or Violence on Campus. *Psychiatric Services* 2019

- Taken together, the Rosen (UCLA) and Nguyen (MIT) state supreme court opinions suggest universities will need to be more vigilant to students who are potentially suicidal or violent
- "Regarding students with the potential for violence, in the wake of horrific acts on campuses, most notably the massacre at Virginia Tech in 2008, administrators are already sensitive to such students. Heightening the risk of liability will increase pressure on them to act quickly—perhaps based on inadequate evidence—to remove such people from the campus."
- "Efforts to anticipate rare acts such as suicide and homicide inevitably result in overprediction, meaning that many of the targets of preventive actions will be misidentified."

The Future of College Mental Health: Don't Ask Don't Tell Policies

- Universities are incentivized screen out students with mental illness to avoid future liability
- Universities are incentivized to have more aggressive interventions to demonstrate that they are taking reasonable measures to protect and control their students given that these courts have ruled they have a **special relationship**, this may take the form of aggressive policies on students with mental illness to discourage them from continuing or even expelling them
- Students will be discouraged to seek out mental health services
- Students will be discouraged from discussing suicidal or violent ideations with anyone in the college

The Future of College Mental Health: Don't Ask, Don't Tell Policies

- There may be an even greater incentive to gut mental health services, screen out/discourage/expel students with mental illness in states where concealed firearms are allowed on college campuses
- Specifically, colleges may enforce harsher policies for students that present suicide risk in states that permit concealed firearms on campus

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FIREARM SAFETY PROMOTION IN PEDIATRIC PRIMARY CARE AS A UNIVERSAL SUICIDE PREVENTION STRATEGY

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Departments of Psychiatry; Medical Ethics & Health Policy; Medicine
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ARCHlab
ACCELERATING RESEARCH-TO-PRACTICE IN COMMUNITY HEALTH

FACTS
FIREARM SAFETY AMONG CHILDREN AND TEENS

PENN CENTER FOR MENTAL HEALTH

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I'd love to hear from you!

@rsbeidas

I am an implementation scientist. The goal of my work is to reduce the know-do gap and to improve the quality of health services to improve lives.

Health systems are one (of many) viable place to implement evidence-based safe firearm storage programs as a universal suicide prevention strategy.

We all want to keep youth safe. This is our shared mission.

Agenda

WHY DOES THIS MATTER?

Rate of youth suicide (ages 10-19) is increasing (CDC, 2018)

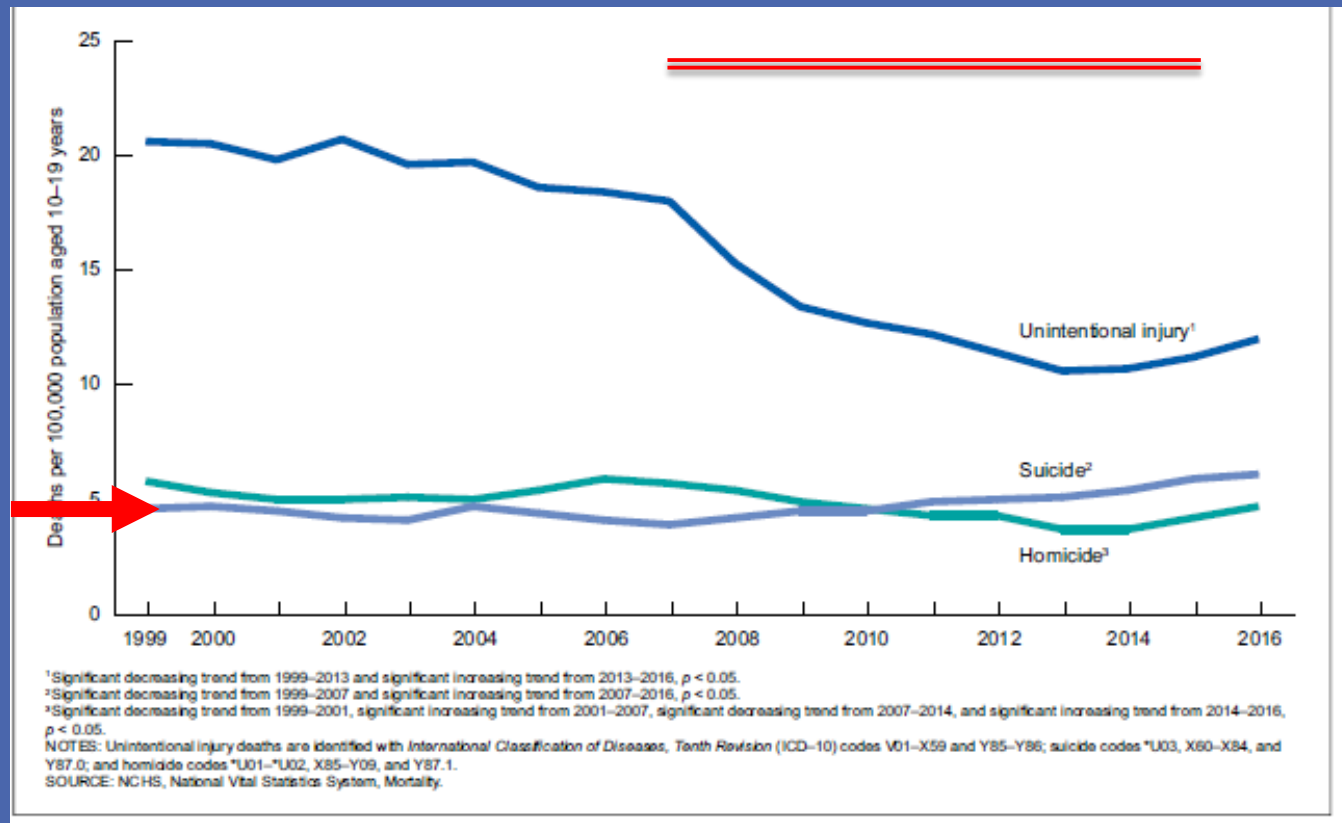


Figure 2. Injury death rates for children and adolescents aged 10–19 years, by intent: United States, 1999–2016

From 2007 to 2016, the suicide rate increased 56% from 3.9 to 6.1 per 100,000 youth.

Source. https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_04.pdf

Firearms are among the most common and most lethal suicide method in youth, especially in males (CDC, 2018).

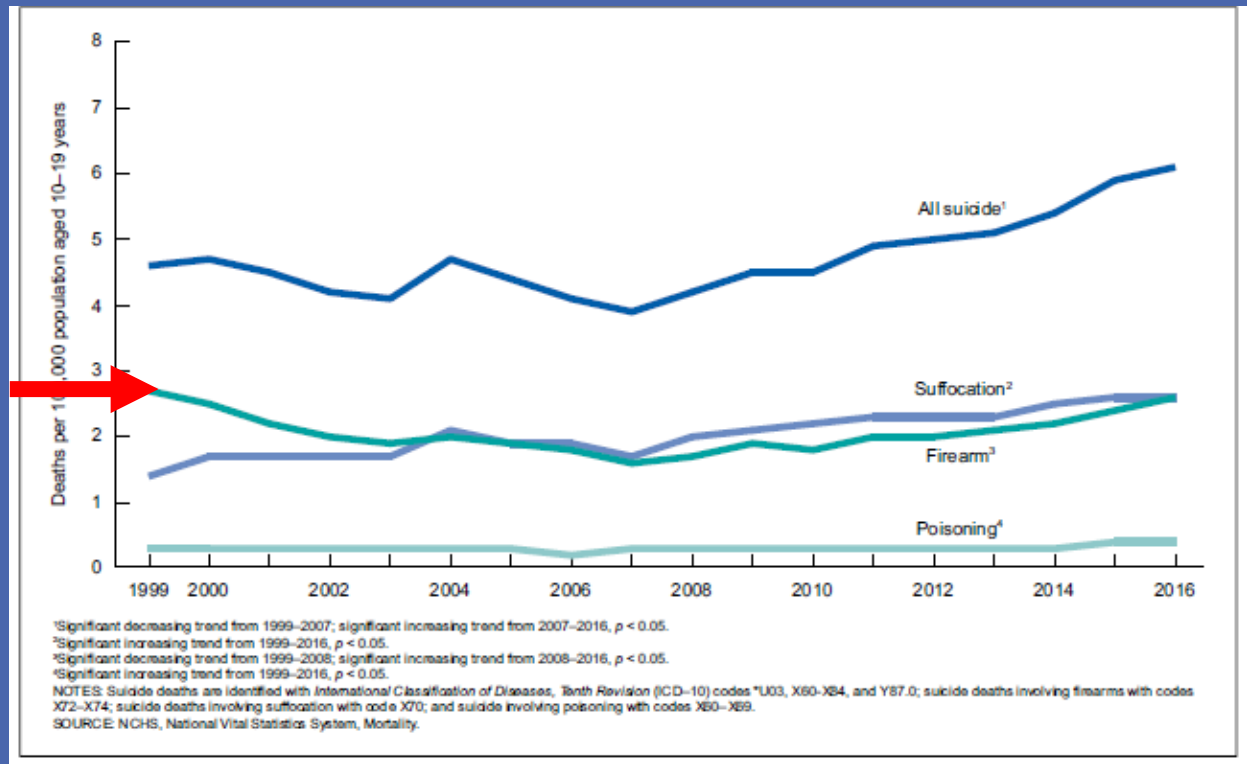
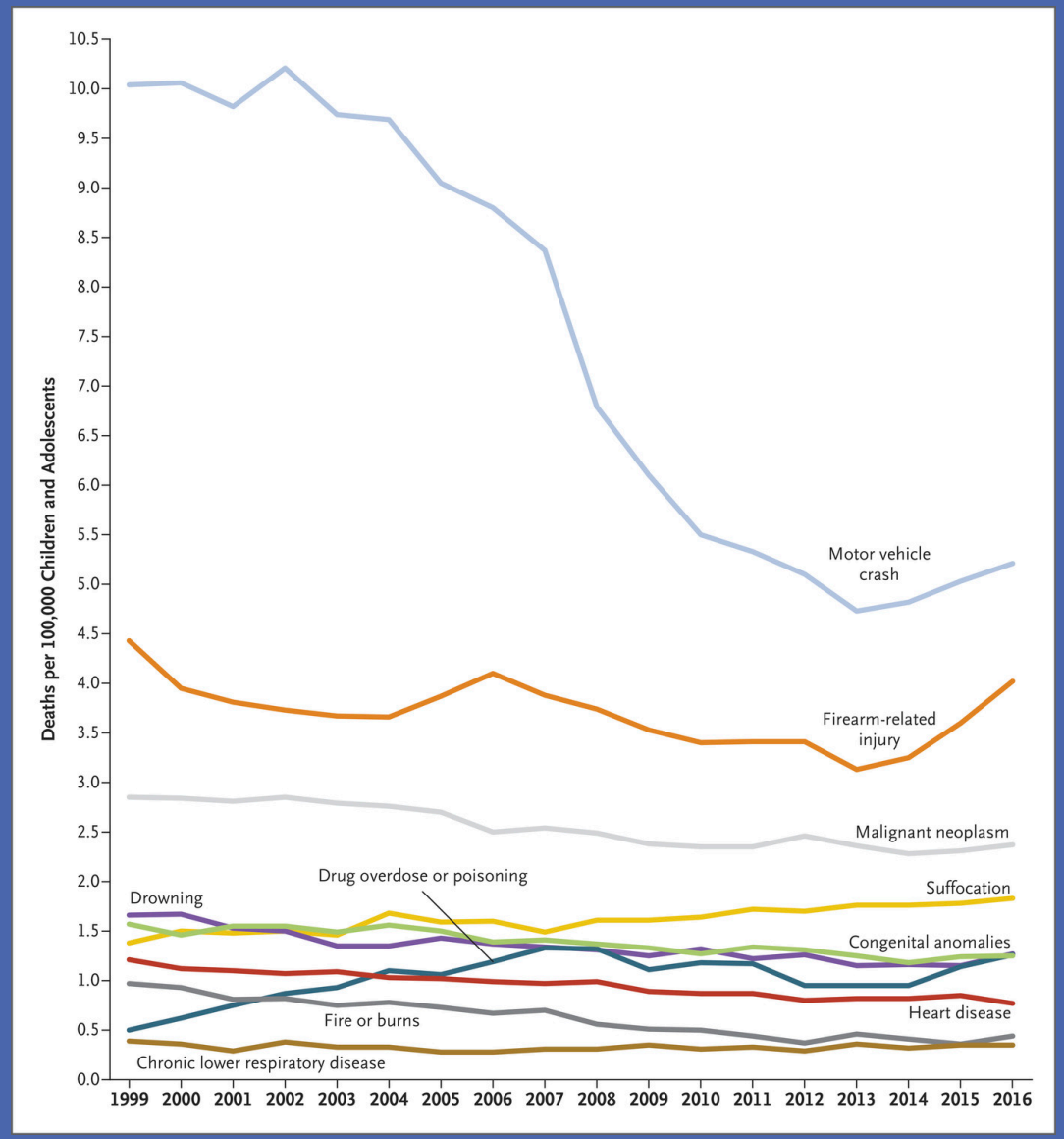


Figure 5. Suicide death rates for children and adolescents aged 10–19 years for leading methods: United States, 1999–2016

In 2016, the rate of suicide deaths was 6.1 per 100,000. Firearms are responsible for half these deaths.

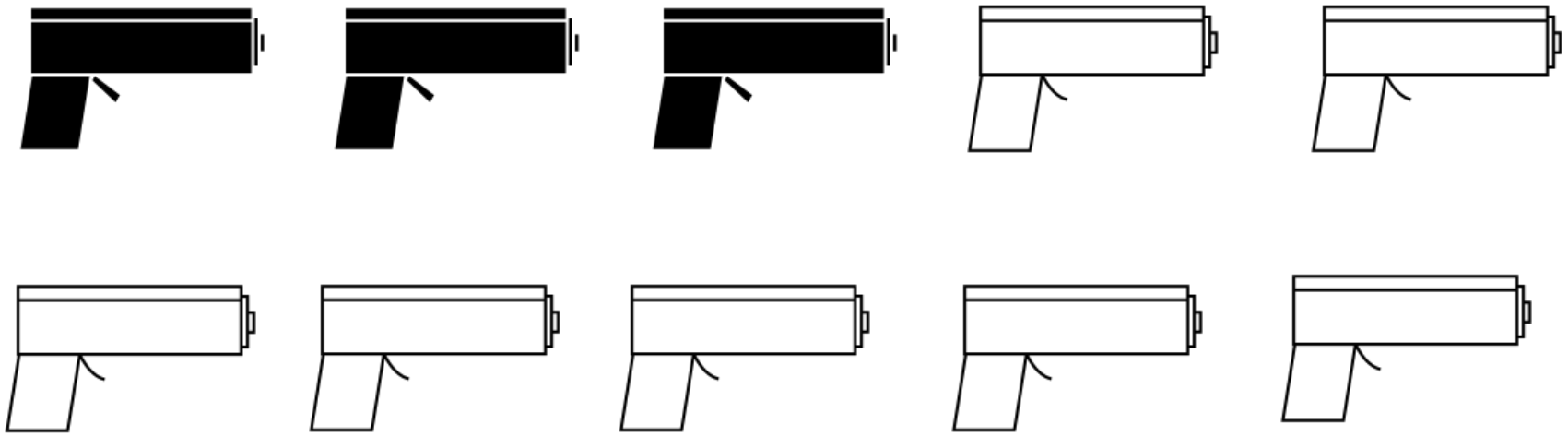
More generally, firearms are the second leading cause of death in youth (Cunningham et al 2018).



Firearms were responsible for 15% of youth mortality in 2016.

Source. NEJM 2018

Three in 10 families store their guns in the safest manner (unloaded and locked)

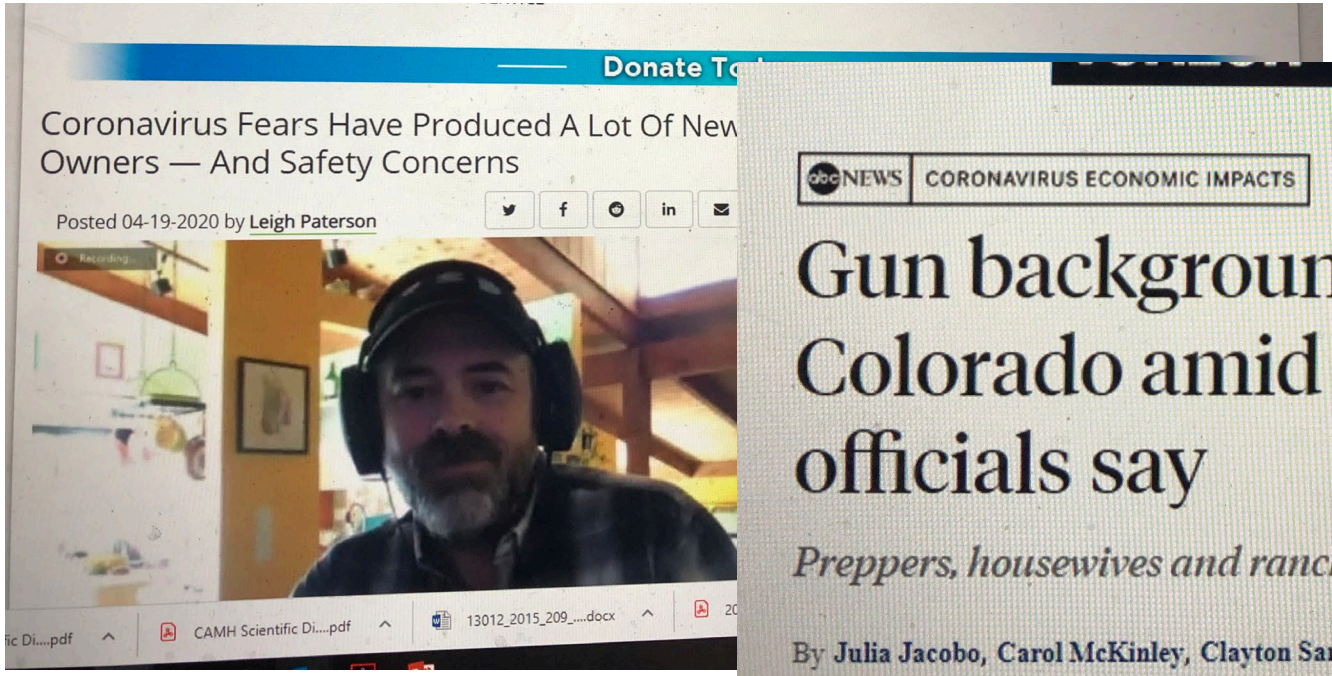


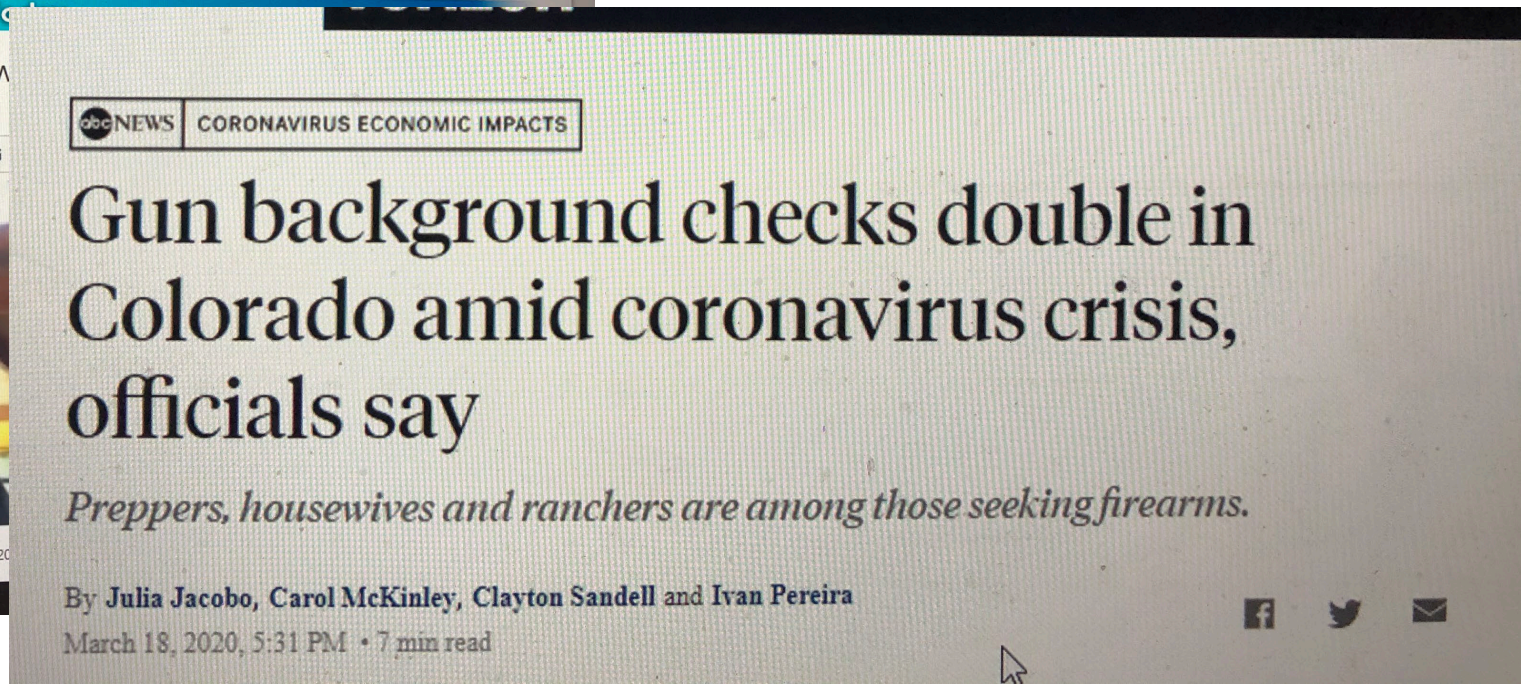
Source. Azrael et al., 2018. *J Urban Health*.

Even a modest increase in safe firearm storage could prevent up to 32% of firearm deaths in youth, including suicide

Source. Monuteaux et al 2019. *JAMA Pediatrics.*

In the wake of COVID-19, many families purchased new firearms without backgrounds in safety, making this work even more important.





Where could we reach the most youth if we wanted to intervene to increase safe firearm storage as a universal suicide prevention strategy?

Primary care - the first line of defense for our health systems

There is an evidence-based practice for pediatric primary care: *Safety Check*

ARTICLE

Is Office-Based Counseling About Media Use, Timeouts, and Firearm Storage Effective? Results From a Cluster-Randomized, Controlled Trial

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Screening → Conversation → Cable Locks

Source. Barkin et al (2008). *Pediatrics*

Our research agenda has focused on the following scientific questions:

What is physician uptake of the three program components?

What are the barriers and facilitators to use of the program?

How does the program need to be adapted to make it more acceptable?

Open Access Protocol

BMJ Open

Developing implementation strategies for firearm safety promotion in paediatric primary care for suicide prevention in two large US health systems: a study protocol for a mixed-methods implementation study

Courtney Benjamin Wolk,[1] Shari Jager-Hyman,[1] Steven C Marcus,[2] Brian K Ahmedani,[3] John E Zeber,[4] Joel A Fein,[5,6] Gregory K Brown,[1] Adina Lieberman,[1] Rinad S Beidas[1]

WHAT IS PHYSICIAN UPTAKE OF THE THREE PROGRAM COMPONENTS?

Acceptability and Use of Evidence-Based Practices for Firearm Storage in Pediatric Primary Care

Rinad S. Beidas, PhD; Shari Jager-Hyman, PhD; Emily M. Becker-Haimes, PhD; Courtney Benjamin Wolk, PhD; Brian K. Ahmedani, PhD; John E. Zeber, PhD; Joel A. Fein, MD; Gregory K. Brown, PhD; Courtney A. Gregor, BA; Adina Lieberman, MPH; Steven C. Marcus, PhD

Academic Pediatrics (2019).

Henry Ford Health System

~ 50 primary care practices

~ 1 million lives served annually

12% under 18

38% ethnic minorities

Henry Ford Health System

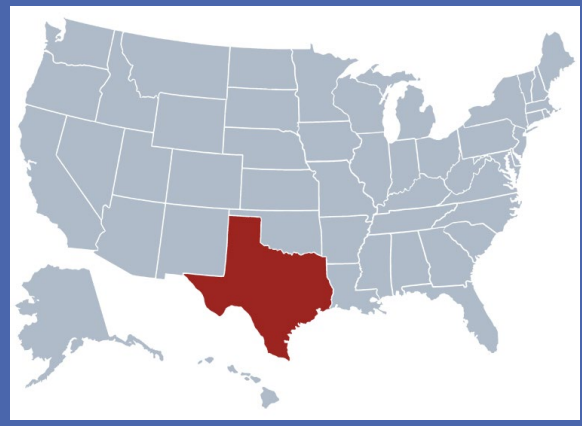
Baylor, Scott, & White Health

~ 60 primary care practices

~ 630,000 lives served annually

20% under 18

Rural and urban practices



Baylor Scott & White HEALTH

Physician Survey

Screening → Counseling → Firearm locks

_____ would be an acceptable suicide prevention strategy in my practice.

strongly d … agree (6)

Universal vs. high risk youth

How often do you _____?

never (0) sometimes (2) always (4)

Source. Eckert et al (2006). *J of School Psych*

Sample Characteristics

71 clinics (86%)

103 physicians (50%)

40 leaders of practices(70%)

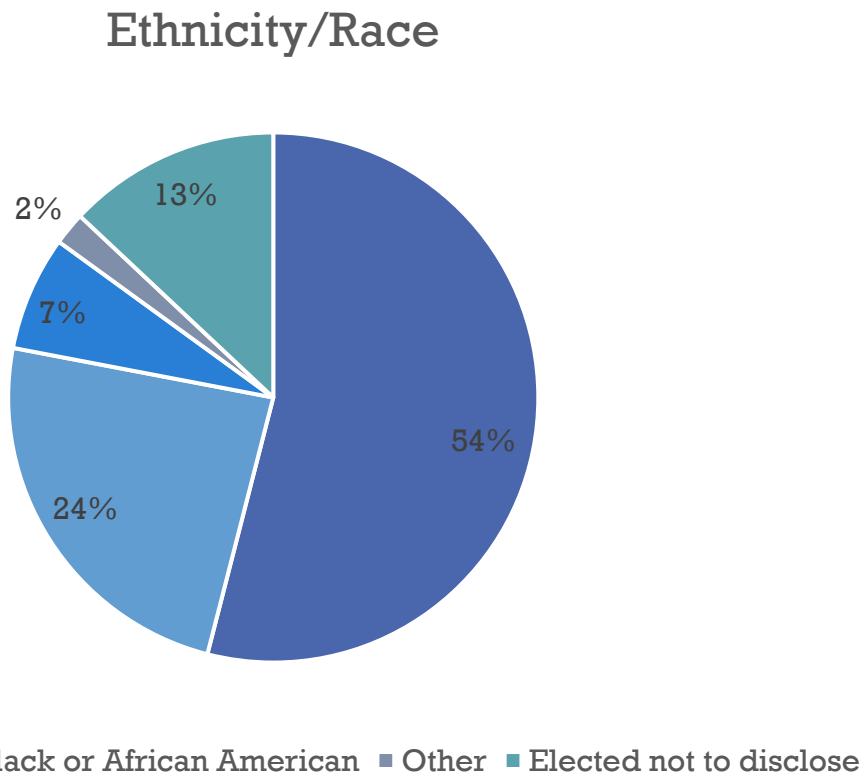
60% female (n = 62)

M age = 44.1 years

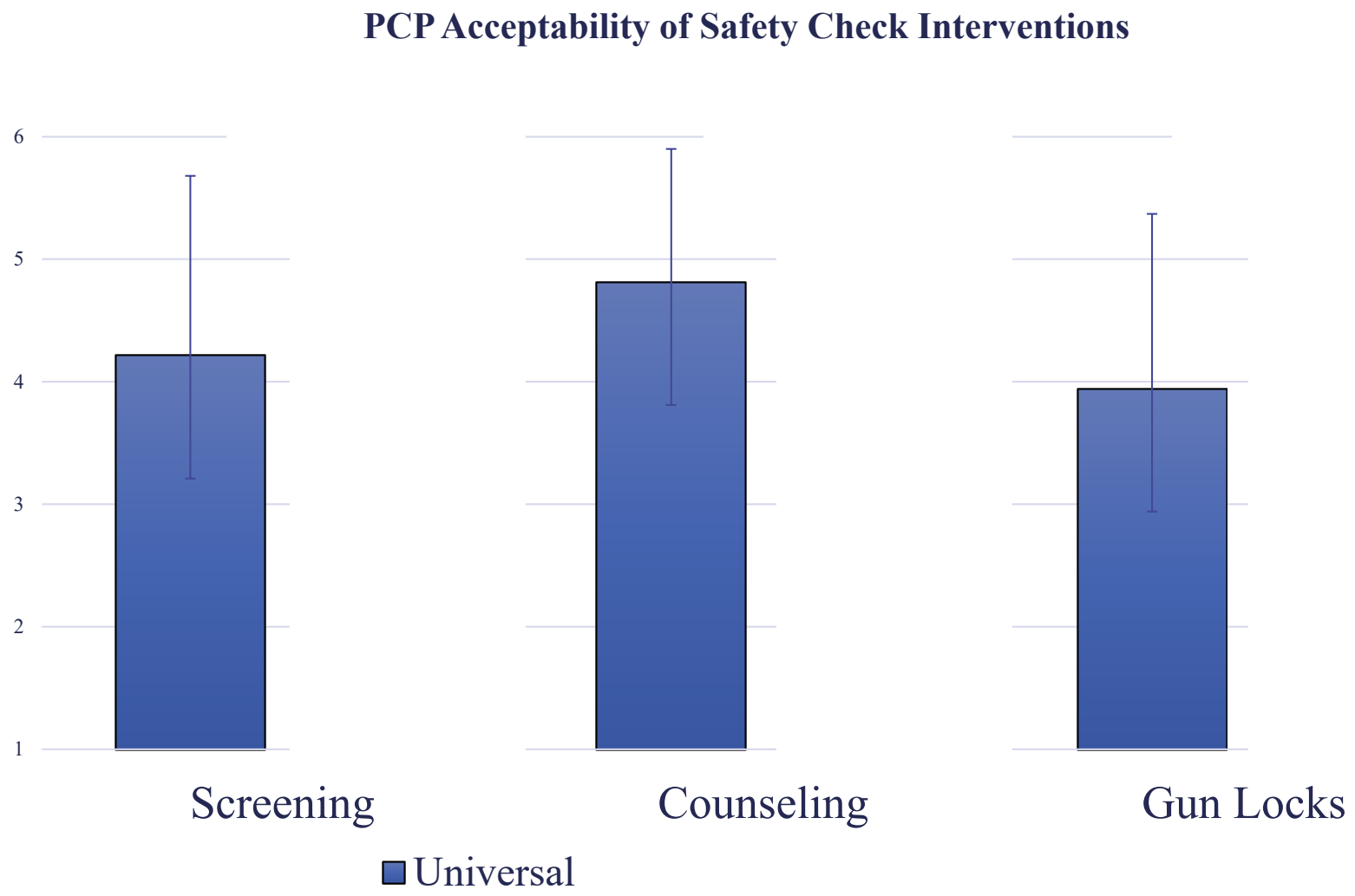
M years practicing = 11.3 years

31% have a firearm in the home (n = 32)

13% youth suicide by firearm in practice

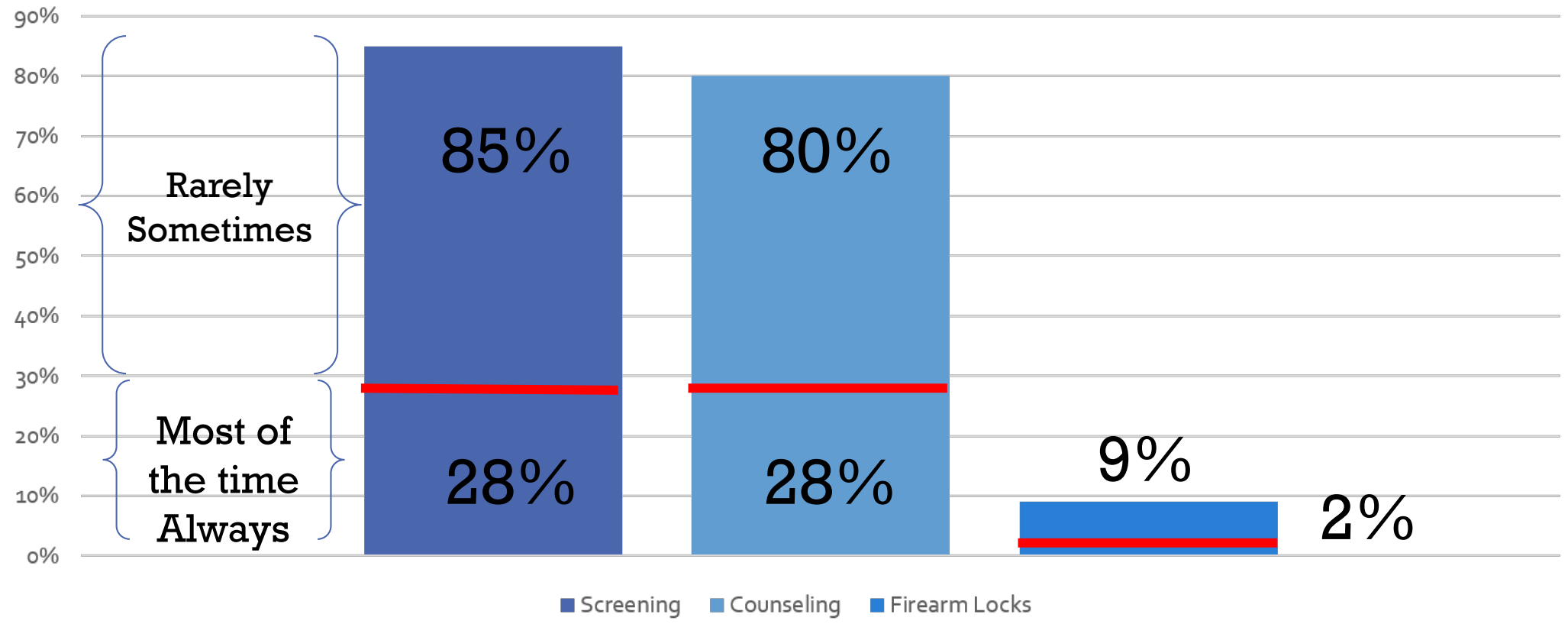


Physician Acceptability



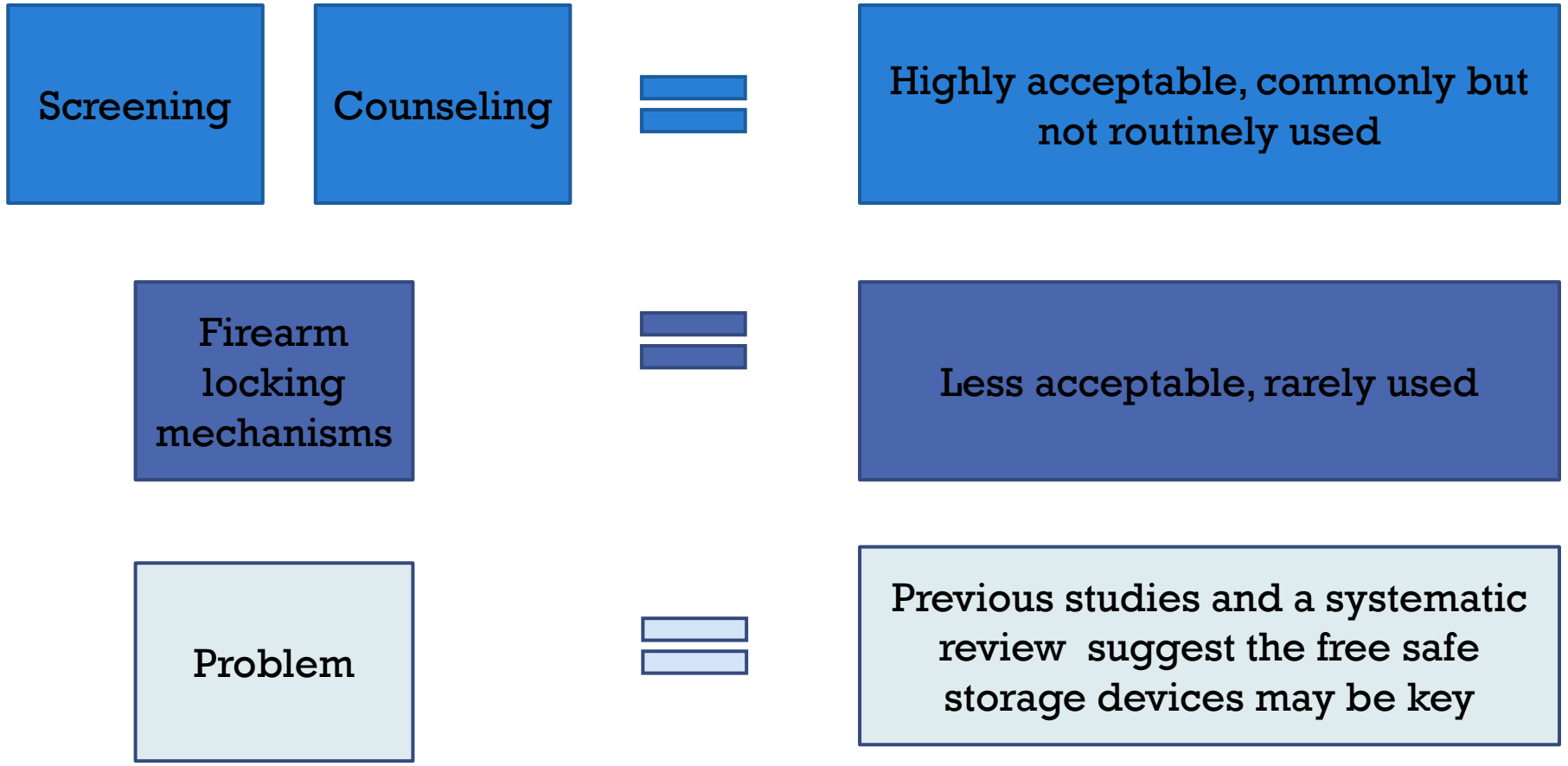
Source. Beidas et al (2018). *Academic Pediatrics*

What is physician use of each of the three program components?



Source. Beidas et al (2018). *Academic Pediatrics*

The state of affairs



Source. Barkin et al., (2008). *Pediatrics*; Carbone et al., (2005); *Archives of Peds & Adol Med*; Grossman et al., (2000) *Pediatrics*; Rowhani-Rahbar et al., (2016) *Epid Rev*

WHAT ARE THE BARRIERS AND FACILITATORS TO USE OF THE PROGRAM?

JAMA Network Open

Original Investigation | Pediatrics

Stakeholder Perspectives on Implementing a Firearm Safety Intervention in Pediatric Primary Care as a Universal Suicide Prevention Strategy A Qualitative Study

Courtney Benjamin Wolk, PhD; Amelia E. Van Pelt, MPH; Shari Jager-Hyman, PhD; Brian K. Ahmedani, PhD; John E. Zeber, PhD; Joel A. Fein, MD, MPH; Gregory K. Brown, PhD; Courtney A. Gregor, BA; Adina Lieberman, MPH; Rinad S. Beidas, PhD

Qualitative Approach

70 semi-structured interviews with 9 stakeholder groups

Wecollected gun ownership information from three of our stakeholder groups

Parents (58%)	Physicians (14%)	Nurses and nurse practitioners
Leaders of primary care (29%)	Leaders of behavioral health	Leaders of quality improvement
Third party payers	Leaders of national bodies (AAP)	Firearm experts

Interview

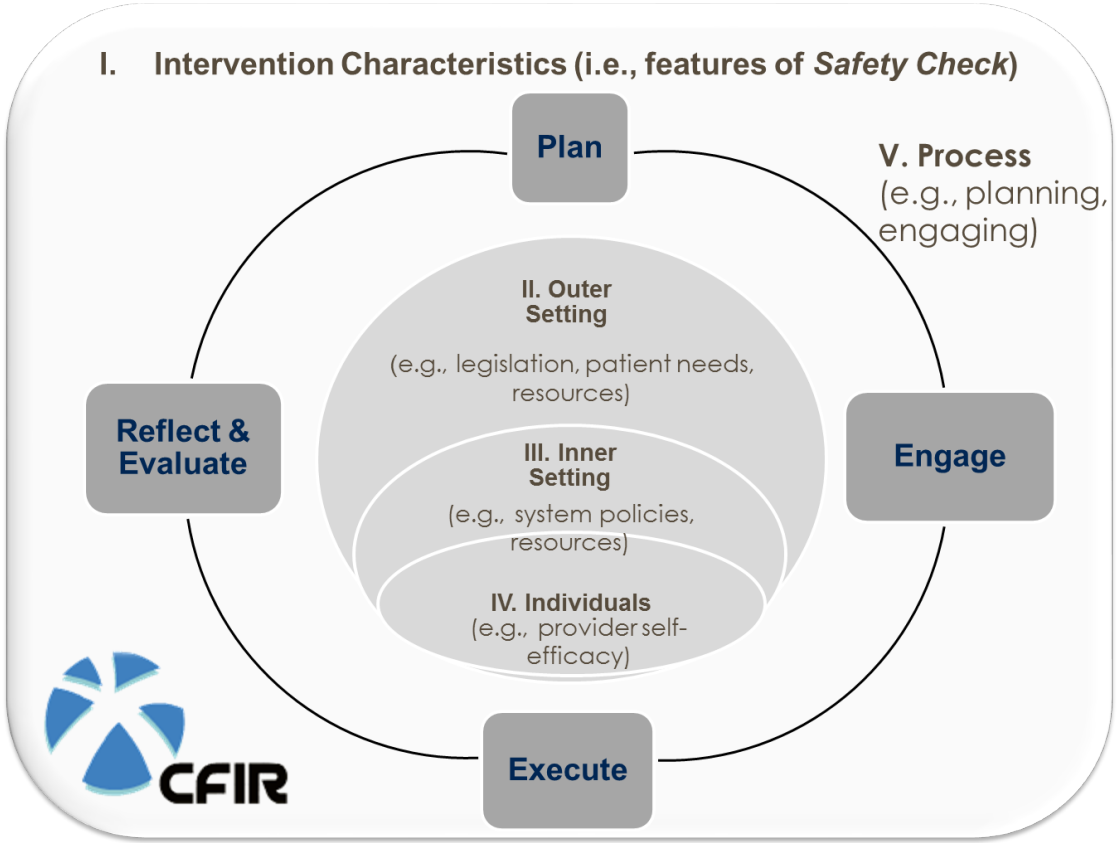
Role of pediatric primary care in suicide prevention

Firearm culture in the communities served by health systems

Acceptability and feasibility of the three intervention components

Barriers and facilitators to implementation

Perspectives on whom should implement the components

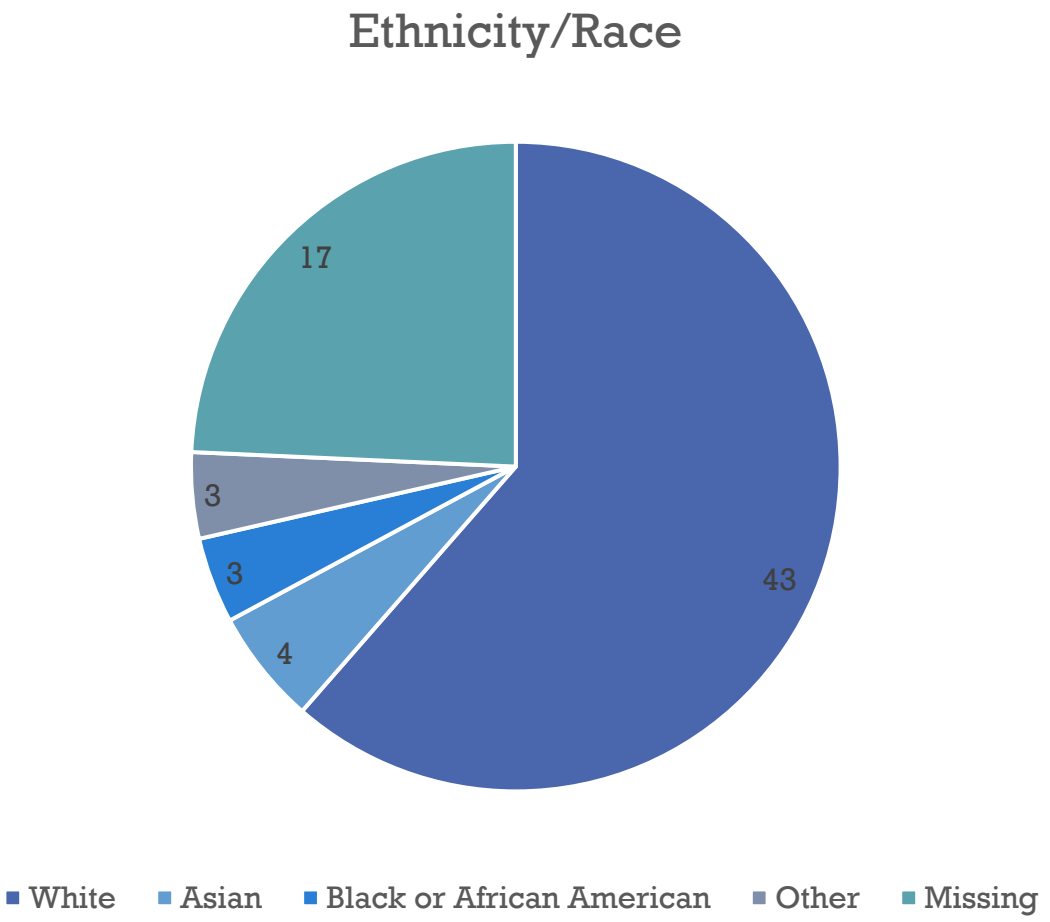


Source. Damschroder et al., 2008. *Impl Sci.*

Sample Characteristics (N = 70)

56% male (n = 39)

M age = 47 years



Outer setting themes

Firearm culture

Politically divisive topic that can raise concerns around Second Amendment rights and illegal ownership.

Recent high-profile gun-related incidents are making it easier for clinicians to initiate these questions.

Inner setting themes

The need for system buy-in and alignment with priorities

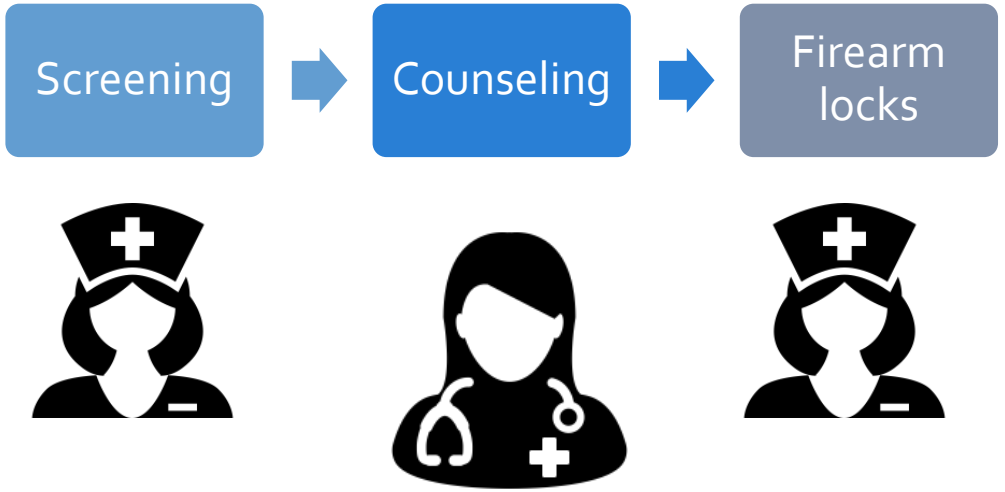
Leader of Primary Care Practice: I think the [health system] is really good about standardizing things, and rolling it out…but at that top level, if that level is not sold on it, then nothing will happen.

Characteristics of individuals involved

Knowledge

Self-efficacy

The need for a non-judgmental stance



Intervention characteristics

High acceptability and feasibility around screening and counseling; suggestions to use the electronic health record for screening and providing written resources for safe storage recommendations.

Concerns about financing, storing, and distributing firearm locks; as well as liability. Suggestions about referring patients to get free locks in the community.

Leader of primary care practice: "It has to be something very concise, very to-the-point that does take, you know, ideally no more than a minute, so we can implement it

Other themes

Barriers

Facilitators

Leader of primary care practice : "If you really want things done, you put it there [electronic health record] and then it's easy to track whether or not they did it."

What do health system stakeholders think they need to implement the program?

Creating a plan for whom on the medical team will be responsible for implementing each component
Changing the clinic or health system policies to encourage the implementation of the program
Integrating the program into the electronic health record
Training providers how to implement
Making changes to the workflow to make it easier to implement the program
Sharing information with providers and caregivers about the importance of the program and the problem it addresses
Marketing strategies targeting leadership and providers
Identifying and preparing provider and leader champions
Identifying sources of funding to support implementation
Adapting the program

Themes reinforced by firearm experts

Intervention characteristics

Lack of trust

Public health platform is a disguise for firearm control

Partnership

Partner with firearm safety instructors who are more credible

The huge thing is that people are worried about being put into a database.

Why don't we try to find a way where we get on the same side of this issue, leverage our training and safety infrastructure, make sure it's consistent with the message you're trying to deliver, and see if in some small geography, we can lever it and study it."

Source. Jager-Hyman et al, 2019, *J Beh Med*

HOW DOES THE PROGRAM NEED TO BE ADAPTED TO MAKE IT MORE ACCEPTABLE?

Source. FACTS Primary prevention pilot (PI: Beidas); Beidas, Rivara, Rowhani-Rahbar (in press), *Pediatrics*

How does the program need to be adapted to make it more acceptable?

Stakeholder interviews

Behavioral science literature

Best practices from primary care

Proposed Adaptations
Make changes to make the program more acceptable (e.g., remove screening)
Offer free cable locks but also offer information about other storage options.
Use strategies from behavior change research to help parents follow through with intentions.
Emphasize shared goal of keeping kids safe.

Source. FACTS Primary prevention pilot (PI: Beidas); Beidas, Rivara, Rowhani-Rahbar (in press), *Pediatrics*

Soliciting perspectives on proposed adaptations

5 interviews with 9 stakeholders

Firearm Safety Organization Members (3)

Military veterans (3)

Mental health provider and gun owner (1)

Law enforcement (2)

New name and new logo!

SAFE (Suicide prevention And Family Education) Firearm

Logo TBD!

Used a naming crowd-sourcing platform to come up with 10 names and then used Amazon Mturk to get the top name n = 384. This was the most preferred name.

Source. FACTS Primary prevention pilot (PI: Beidas)

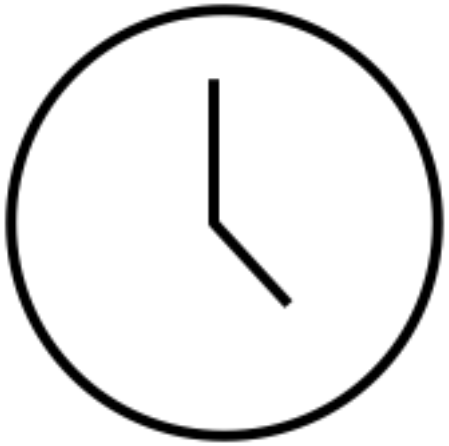
One more round of stakeholder acceptability checking with the new name, logo, and adaptations that will be complete this summer.

Source. FACTS Primary prevention pilot (PI: Beidas)

IMPLICATIONS FOR HEALTH SYSTEMS

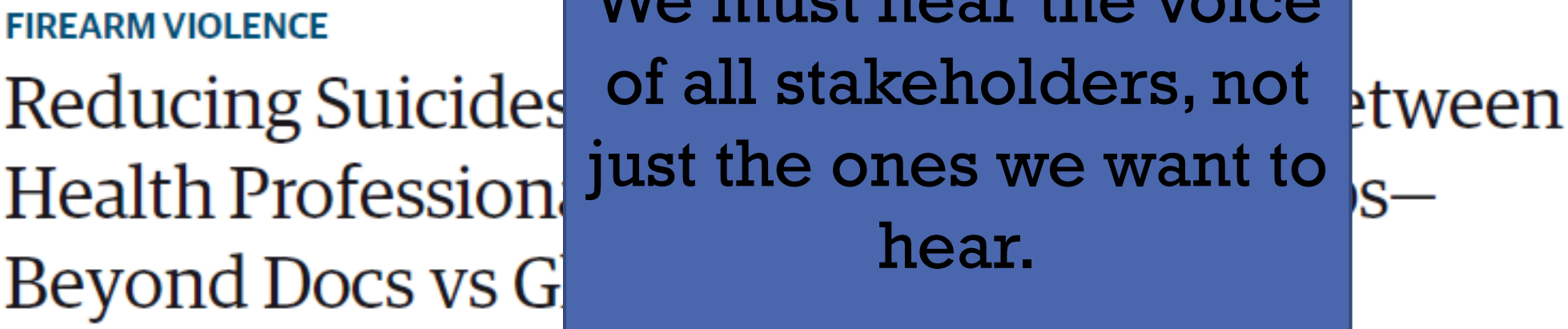
We all want to keep youth safe. This is about firearm safety and not firearm control.

SAFE Firearm is feasible, acceptable, and ready for implementation (with some tweaks) in health systems



What are we waiting for?

We need to partner – this cannot be about docs vs. glocks. Our programs must be highly acceptable to stakeholders, and we must take the time to listen.



We must hear the voice of all stakeholders, not just the ones we want to hear.

Source. Barber et al. (2018) *JAMA Int Med*

Future Directions: There is still much to learn

How best to partner with firearm owners around a shared agenda and build trust?

How to adapt the intervention to optimize effectiveness?

Effectiveness trials with more rigorous endpoints including firearm injury.

Testing implementation strategies of scale-up of intervention

We have thoughtfully developed a set of implementation strategies that are ready to be tested to accompany the adapted program. Our next step is a hybrid effectiveness-implementation trial.

Our main question

Is the less costly and scalable EHR-based ‘nudge’ powerful enough or is more intensive and expensive facilitation needed to overcome implementation barriers in the case of this sensitive intervention?

Hybrid type III effectiveness implementation trial – longitudinal cluster RCT

32 clinics, 151 clinicians, ~40,000 youth

ARCHlab
ACCELERATING RESEARCH-TO-PRACTICE IN COMMUNITY HEALTH

Our Funder: NIH
R21 MH109878

NIH National Institute of Mental Health

Our Partners and Participants

Henry Ford Health System

MHRN Mental Health Research Network

BaylorScott&White Health

FACTS
FIREARM SAFETY AMONG CHILDREN AND TEENS

The Children's Hospital of Philadelphia®

In loving memory of Jeremy Shinefeld

SCHOOL SHOOTINGS AND MASS VIOLENCE:
A Dark History But Brighter Future?

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Los Angeles County Department of Mental Health

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Child & Adolescent Division
UCLA Department of Psychiatry

OBJECTIVES

- Examine link between adolescent MI and firearm violence
- Discuss typologies of adolescent school shooters/mass murderers
- Present novel programs, strategies, and collaborations that better assess and ↓ risk of targeted school violence (TSV)
- Will NOT discuss specific VRAs (e.g., SAVRY)

MENTAL DISORDERS AND VIOLENCE (SWANSON 1990)

- Violent survey respondents had a much higher rate of psychiatric disorders (55.5%) than non-violent respondents (19.6%)

- Highest rates of violence were among those with alcohol abuse or dependence (24.6%) and other drug abuse or dependence disorders (34.7%)

Swanson JW, Holzer CE 3rd, Ganju VK, Jono RT. (1990). Violence and psychiatric disorder in the community: evidence from the Epidemiologic Catchment Area surveys. *Hosp Community Psychiatry* 41(7): 761-70.

PSYCHOTIC DISORDERS AND VIOLENCE (FAZEL 2009)

- Fazel meta-analysis of 20 studies from 1970-2009 (n=18,423) showed that individuals with schizophrenia and other psychoses were more likely to commit violent acts (including murder) than controls

- Much of the increased rates of violence related to co-morbid substance use disorders

Fazel S, Gulati G, Linsell L, Geddes JR, Grann M. (2009). Schizophrenia and violence: systematic review and meta-analysis. *PLoS Med* 6(8): e1000120.

AUTISTIC SPECTRUM DISORDERS (ASDS) AND CRIMINALITY (HASKINS AND SILVA 2006) (1)

- High-fxning ASDs (hfASDs) appear overrepresented in forensic samples, particularly those charged with/convicted of arson and, possibly, stalking ("incompetent suitor")
- Many of these individuals are undiagnosed (67% in one study, 90% in another)
- Schizophrenia and personality disorders were most common co-occurring (possibly erroneous?) diagnoses

Haskins BG, Silva JA. (2006). Asperger's disorder and criminal behavior: forensic-psychiatric considerations. *J Am Acad Psychiatry Law* 34(3): 374-84.

AUTISTIC SPECTRUM DISORDERS (ASDS) AND CRIMINALITY (HASKINS AND SILVA 2006) (1)

- Deficits in "theory of mind" ability
  - lack of empathy
  - difficulty ascertaining when to disengage from social situation
- Abnormal, repetitive, narrow interests
  - Excessive preoccupation with highly-focused internal interests, while ignoring social consequences (including legal sanctions); failure of "top-down" modulation
  - Can lead to "anti-social" compartmentalizing (i.e., individual can fxn as law-abiding citizen in some domains, and have predatory lifestyle in others (e.g., sexual serial killers))

RISK FACTORS FOR JUVENILE OFFENDING (INCL. VIOLENCE)

- Early onset of behavior problems/aggression
- ADHD/Disruptive Behavior Disorders (DBDs)
- Substance use disorders (SUDs)/acute intoxication
- Gang affiliation
- Diversity of offenses (? related to “Criminal Versatility” component of PCL-R/PCL:YV)
- Psychopathy (?)

MASS SHOOTING

Definition: An incident of targeted violence where an offender has killed or unequivocally attempted to kill four or more victims on a public stage (e.g., school, workplace, park) in one or multiple closely related locations within a 24-hour period.

Number/type: 318 mass shootings in the U.S. from 1966-2017 (rampage 36.1%, disgruntled employee 29.8%, school 19.1%, ideologically motivated 14.7%)

SCHOOL SHOOTING

Number/impact:

- 234 shootings at primary and secondary schools in the U.S. from 1999-2018, resulting in the loss of 144 lives
- Over 240,000 students were on school grounds during shooting in the past 20 years
- Significant impact on MH of survivors


BASEBALL

YOUTH VIOLENCE: WHAT WE KNOW AND WHAT WE NEED TO KNOW (BUSHMAN ET AL.) (2016) (1)

- Characteristics of school shooting/shooter
  - Stable, close-knit, low-crime, small rural towns or suburbs
  - Shooter generally white, adolescent male with little history of disciplinary problems
  - Average or better than average intelligence and academic achievement
  - History of being socially marginalized (e.g., “wannabees, gothic, geeks”)

Bushman, et al. (2016). Youth violence: what we know and what we need to know. *Amer Psychol* 71(1): 17-39.

YOUTH VIOLENCE: WHAT WE KNOW AND WHAT WE NEED TO KNOW (BUSHMAN ET AL.) (2016) (2)

- Characteristics of school shooting (cont.)
  - Though may lack documented MH hx, often variety of sxs of early stage onset of MI (e.g., depression and suicidality (61% of perps had severe depression and 78% considered or attempted suicide prior to act))
  - Intense interest in guns prior to shooting
    - 63% had known history of weapons use
    - 68% obtained firearm from home or relative
  - May be way to achieve fame and notoriety
  - Symbolic event directed at school as institution vs. partic. individuals (“theatrical, tragic, pointless”)

PREVALENCE OF MENTAL DISORDERS IN JJ SYSTEM (1)

• Conduct Disorder	50 – 90%
• ADHD	19 – 46%
• Substance Abuse	25 – 50%
• Personality Disorders	02 – 17%
• Mental Retardation	07 – 15%
• Learning Disorders	17 – 53%
• Mood Disorders	32 – 78%
• Anxiety Disorders	06 – 41%
• Psychoses & Autism	01 – 06%

Otto R, Greenstein J, Johnson M, Friedman R. (1992). Prevalence of mental disorders among youth in the juvenile justice system. In J. Cocozza (Ed.), *Responding to the mental health needs of youth in the juvenile system* (pp. 7-48). Seattle: National Coalition for the Mentally Ill in the Criminal Justice System.

PREVALENCE OF MENTAL DISORDERS IN JJ SYSTEM (2)

• Any DSM-III-R D/O	69%
• Conduct Disorder	39%
• ADHD	18%
• SUDs	50%
• Major Dep. Episode	18%
• Dysthymia	14%
• Manic Episode	2%
• Psychosis	1%

Teplin LA, *et al.* (2002). Psychiatric disorders in youth in juvenile detention. *Arch Gen Psychiatry* 59(12): 1133-43.

LIFETIME CRIMINALITY AMONG BOYS WITH ADHD

- Followed boys from age 6-12 → age 38
- ADHD boys more likely to be:
  - arrested (47% vs. 24%)
  - convicted (42% vs. 14%)
  - incarcerated (15% vs. 1%)
- ↑↑ Rates of felonies/aggressive offenses
- ADHD w/o CD=↑ risk of adult criminality

Mannuzza S, *et al*. (2008). Lifetime criminality among boys with attention deficit hyperactivity disorder: a prospective follow-up study into adulthood using official arrest records. *Psychiatry Res* 160(3), 237-46.


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MASS MURDERS AND MENTAL ILLNESS

- Low-frequency (but high-intensity, high-visibility) events
- Typologies/characteristics based on case series/anecdotes
- Different characteristics between adolescent and adult mass murderers

RISK FACTOR DOMAINS FOR MASS MURDER (VERLINDEN 2000) (1)

1. Individual factors: uncontrolled anger, depression, blaming others

2. Family factors: lack of parental supervision, troubled family relationships

3. School/peer factors: social isolation/rejection, antisocial peer group

Verlinden S, Hersen M, Thomas J. (2000). Risk factors in school shootings. *Clin Psychol Rev* 20(1): 3-56.

RISK FACTOR DOMAINS FOR MASS MURDER (VERLINDEN 2000) (2)

4. Societal/environmental factors: access to firearms, fascination with guns/explosives, media exposure (?)

5. Situational/attack-related factors: decline in functioning and recent loss, stress, or humiliation

Verlinden S, Hersen M, Thomas J. (2000). Risk factors in school shootings. *Clin Psychol Rev* 20(1): 3-56.

SPECIFIC RISK FACTORS FOR MASS MURDER (BONDÜ 2011)

1. Mental Disorders(?): unclear, probably psychosis and depression, ASD, Narcis. PD
2. Media consumption
3. Negative experiences: social rejection, bullying
4. Access to weapons

Bondü R, Cornell DG, Scheithauer H. (2011). Student homicidal violence in schools: an international problem. *New Dir Youth Dev* 2011(129): 13-30.

MOTIVATIONS FOR MASS MURDER (KELLEHER 1997)

1. Perverted love (e.g., family killings)
2. Politics and hate (e.g., suicide bomber)
3. Revenge (e.g., disgruntled employee)
4. Sexual homicide (e.g., sadists)
5. Execution (for greed or personal gain)
6. Psychosis (variety of etiologies)
7. Unexplained (e.g., tumor, epilepsy, TBI)

Kelleher MD. (1997). *Flash Point: The American Mass Murderer*. Westport, CT: Praeger.

TYPOLOGIES OF ADOLESC. MASS MURDERERS (BENEDEK 1989)

1. Clearly psychotic individuals (least common)
2. Individuals engaged in severe interpersonal conflict, often w/ family member (also "classroom avenger")
3. Individuals who committed multiple homicides in the course of another crime (e.g., robbery, rape) (most common)

School mass shooters were much more likely to fall into first two categories.

Benedek E, Cornell D, eds. (1989). *Juvenile Homicide*. Washington, D.C.: American Psychiatric Press.

TYPOLOGIES OF ADOLESC. MASS MURDERERS (MELOY 2001)

1. Family annihilator
2. Classroom avenger
3. Criminal opportunist
4. Bifurcated killers (bridge between family annihilation and classroom revenge)
5. Miscellaneous (e.g., sensation seeking, occult beliefs, “pseudocommando” identity (Dietz 1986, Knoll 2010))

Meloy JR, Hempel AG, Mohandie K, Shiva AA, Gray BT. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *J Am Acad Child Adolesc Psychiatry* 40(6): 719-28.

"CLASSROOM AVENGER" (MCGEE 1999)

- White male, age 16, raised in middle class suburban or rural family, no history of MI, IDD, or disability
- Loner, attachment difficulties
- Interested in violence, but no h/o violence
- Spends inordinate amount of time immersed in violent fantasies of revenge
- Incident precipitated by peer rejection or discipline
- Meets criteria for atypical depression, mixed PD

McGee J, DeBernardo C. (1999). Offender and offense characteristics of a nonrandom sample of mass murderers. *Forensic Examiner* 8(5):16-18.

DEMOGRAPHICS OF ADOL. MASS MURDERERS (MELOY 2001) (1)

- 34 mass murderers (27 incidents) from 1958-1999 identified; 14 (52%) incidents after 1994
- All male, 79% Caucasian, mean age 17
- 70% described as "loners"
- 17% had bullied, 43% were bullied
- 37% came from separated or divorced families
- 44% were "fantasizers" (daily preoccupation with fantasy games, books, or hobbies)

Meloy JR, Hempel AG, Mohandie K, Shiva AA, Gray BT. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *J Am Acad Child Adolesc Psychiatry* 40(6): 719-28.

DEMOGRAPHICS OF ADOL. MASS MURDERERS (MELOY 2001) (2)

- 48% preoccupied with war or weapons
- 44% discussed the act with at least one person prior to event
- 58% made threatening statements prior to murders
- 26% acted in pairs

Meloy JR, Hempel AG, Mohandie K, Shiva AA, Gray BT. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *J Am Acad Child Adolesc Psychiatry* 40(6): 719-28.

MH CHARACTERISTICS OF ADOL. MASS MURDERERS (MELOY 2001)

- 42% had a history of violence
- 27% had documented MH history (likely an underestimate)
- 6% had psychotic symptoms
- 63% of school mass murderers had depressive symptoms
- 59% had identified precipitant
- 62% had a history of substance abuse

Meloy JR, Hempel AG, Mohandie K, Shiva AA, Gray BT. (2001). Offender and offense characteristics of a nonrandom sample of adolescent mass murderers. *J Am Acad Child Adolesc Psychiatry* 40(6): 719-28.

MITIGATING RISK OF TARGETED SCHOOL VIOL.

Federal:

- Threat Assessment, Prevention, and Safety Act of 2019 (TAPS Act; H.R. 838)

State (Florida):

- SB 7026 (amends Fl. Statute Sec 790.065)

County (Los Angeles):

- School Threat Assessment and Response Team (START) (est. 2009)

TAPS ACT (2019) (1)

- Aims to standardize and provide a behavioral threat assessment and mgmt. process across the Federal gov't.
- Would provide states training, resources, and support to stand-up community-based, multi-disc. behavioral threat assessment and mgmt. units
- Includes School Safety Programs

TAPS ACT (2019) (2)

- Proposed task force made up of BH and threat ass. and mgmt. professionals to create National Strategy for prevention of targeted violence through behav. threat ass. and mgmt.
- Nat. Strategy would include (among other things): School Safety Program, MH Service Prof. Assessment

FLORIDA SB 7026

- Bans the sale of any firearm to a person under 21 years of age (leaves unclear if an individual 18-20 y/o may purchase a firearm in a private sale)
- Introduced/enacted in response to Parkland shooting on 2/14/18
- Currently being challenged in 11th COA by NRA

LA COUNTY "START" (1)

- School Threat Assessment and Response Team (START)
- Established 2009 in response to U.S. Secret Service's and USDOE's 2002 report "Safe School Initiative" and 2007 VA Tech Review Panel
- Dedicated exclusively to prevention of campus violence

START (2): GOALS

- Develop relevant partnerships to mitigate/eliminate threats
- Assist students of concern in their efforts to complete their education without incident
- Prevent a Columbine, VA Tech, or Parkland type incident
- First of its kind in the country

START (3): GOALS

- MOU among DMH, LAUSD, and LAPD to collaborate on students of concern (FBI added later)
- Assist in providing mental health services, academic assistance, or criminal intervention
- Allows for coordinated effort to assist school threat management teams and enhance intervention strategies

START (4): ACTIVITIES

- Training and consultation
- Early screening and identification
- Assessment and intervention
- Case management and monitoring

START (5): TRAININGS

- Parent presentations
  - Overview of START
  - Relevant research on prevention of violent behavior in youth (e.g., media exposure and brain functioning)
  - Warning signs and dynamics indicating potential for violent behavior
  - Strategies to increase parental awareness of children's behaviors

START (6): TRAININGS

- Staff presentations
  - Overview of targeted school violence (TSV)
  - Review of existing typologies and RFs
  - Lessons learned from past incidents of TSV
  - Motivating factors in TSV
  - Data driven assessment and intervention strategies
  - Case management and monitoring of student of concerns
  - Threat management teams

START (7): STATS

- 272 referrals in FY 2017-2018 (followed 86 on ongoing basis (75% M, 25% F))
- 333 referrals in FY 2018-2019 (followed 165 on ongoing basis (81% M, 19% F))
- 50% Latinx, 19% Caucasian, 11% AA, 20% other

START (8): SUICIDE RISK MITIGATION

Fiscal Year	FY 2017-18		FY 2018-19	
Risk Level	Initial Suicidal Risk Level	Most Recent Suicidal Risk Level	Initial Suicidal Risk Level	Most Recent Suicidal Risk Level
High	7 (12.50%)	0 (0.00%)	24 (14.55%)	9 (5.45%)
Moderate	10 (17.86%)	0 (0.00%)	25 (15.15%)	26 (15.76%)
Low	30 (53.57%)	47 (83.93%)	115 (69.70%)	129 (78.18%)
Early Dropout	9 (16.07%)	9 (16.07%)	1 (0.60%)	1 (0.61%)
Grand Total	56 (100.00%)	56 (100.00%	165 (100.00%)	165 (100.00%)

START (9): VIOLENCE RISK MITIGATION

Fiscal Year	FY 2017-18		FY 2018-19	
Risk Level	Initial Violent Risk Level	Most Recent Violent Risk Level	Initial Violent Risk Level	Most Recent Violent Risk Level
High	8 (14.29%)	0 (0.00%)	17 (10.30%)	9 (5.45%)
Moderate	30 (53.57%)	2 (3.57%)	74 (44.85%)	37 (22.42%)
Low	9 (16.07%)	45 (80.36%)	72 (43.63%)	117 (70.91%)
Pending to finalize Assessment*	0 (0.00%)	0 (0.00%)	1 (0.61%)	1 (0.61%)
Early Drop Out	9 (16.07%)	9 (16.07%)	1 (0.61%)	1 (0.61%)
Grand Total	56 (100.00%)	56 (100.00%)	165 (100.00%)	165 (100.00%)

START (10): EVOLUTION

- Expanded in 2018 to evaluating youth in JH as well as community
- Additional staff added in 2019
- Parents must consent
- MOU pending among entities to limit use of information in criminal proceedings

START (8): CASE VIGNETTE

TAKE HOME POINTS

1. There is fairly compelling data to suggest a link between certain types of mental illness and criminal offending, even violent offending..
2. The link between mental illness and TSV is not entirely clear, based in part on low numbers, only anecdotal reports, etc.
3. There do appear to be effective strategies to significantly reduce the risk of TSV that can be implemented on local, state, and national levels. Just need the political will.

QUESTIONS?