Reducing Firearm Injury & Death: What Clinicians Can Do

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Why Firearms Curriculums for Healthcare Providers?

- Firearms injury and death are public health problems
- Physicians feel counseling is within clinical responsibilities
- Patients say generally appropriate
- Physicians often report needing more information
- Lethal means safety saves lives
BulletPoints Learning Objectives

- Identify risk for firearm-related harm and ways to engage with patients to reduce that risk
- Understand how to have culturally appropriate and respectful conversations with patients and their families to reduce risk
- Describe available interventions for patients at risk of firearm-related harm
Americans make up 4.25% of the world’s population, but own 46% of privately owned firearms.
Household Firearm Ownership in the United States, 2017

- Owns a gun: 30%
- Lives in a home with gun; does not own: 11%
- Does not own a gun: 57%
- Unknown: >40% of Americans live in homes with guns
MVCs versus Firearms Deaths in American Youths

Legend:
- All Intents Firearm
- All Intents Motor vehicle, overall

CDC WISQARS data
Epidemiology of Firearm Violence and Injury
Socioemotional consequences

Image adapted from the Violence Policy Center
What You Can Do

Assess risk and talk with patients about risk and access to firearms when it’s clinically relevant.
Lethal Means Safety

One of the most effective ways to reduce suicide risk is to put time and distance between the at-risk person and lethal means.
There are no state or federal statutes that prohibit clinicians from talking with patients about access to firearms.
What do patients think?

A majority report conversations about firearm safety appropriate and especially when someone in the home is at increased risk.

- 66% of respondents
- 54% of gun owning respondents
- 90% for thoughts of suicide
- 84% when children or teens in home

Betz et al. 2016; Pallin et al. 2019
The 3A's

**Approach**
- Informed
- Respectful
- Harm Reduction Focused
- Individualized

**Assess**
- Risk Factors
- Ideation or Threats
- Access to Guns
- Willingness to Collaborate

**Act**
- Extreme Risk Protection Order
- Temporary Transfer
- Safe Storage
- Mental Health Hold
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(Risk Scale: HIGH to LOW)
Be informed

- Understand who owns guns and why, be aware of implicit biases
- Know the safest way to store guns and other appropriate recommendations
- Be aware of relevant policies in your area
- Use appropriate language
Be informed: Language matters

- “Reducing access”
- “Temporary”
- “During time of crises” or “risk”
- When possible, “voluntary and collaborative”
Be respectful and take a harm reduction approach

- Keep personal politics out of the conversation
- Put this in context of risk and safety, not right or wrong
- Remember that acceptable recommendations that reduce risk are more effective than unacceptable ones that eliminate risk
Individualize your approach

- Who’s in the home
- Who’s at risk
- What type of risk
- Reasons for ownership
I ask all caregivers about things that pose a risk to their families: water heaters, pools, medications, firearms. What steps do you take to reduce access to firearms for those who shouldn’t have it?
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Youth and Firearms

- Males ages 10-19 at highest risk of unintentional firearm injury and death
- Most firearm suicides and mass shootings by teens are with family member’s gun
- Youths have access in the home more often than parents/caregivers think
- ~1/3 firearm owners living with youths store all firearms in the safest way

CDC WISQARS, Solnick et al 2019, Baxley & Miller 2006, Azrael et al 2018
Alcohol and Firearms

- 1/3 of people who died by suicide tested positive for the presence of alcohol
- Alcohol intoxication more strongly associated with firearm suicide than less lethal methods
- Alcohol-related conviction + handgun purchase > 2x the risk of suicide (90% by firearm)
- Alcohol-related conviction + handgun purchase > 3x the risk of arrest for violent crime including IPV

Dementia and Firearms

- 35-60% of people with dementia (PWD) live in homes with firearms
- Dementia can increase risk of suicide, homicide, and unintentional injury
- Conversations about gun access can mirror those about driving or cooking

Betz et al. 2018
Intimate Partner Violence and Firearms

- ~50% of female homicides are from intimate partner violence
- When an abusive partner has firearm access, victim’s risk of death $\uparrow 5x$
- Firearms also used to coerce, threaten, terrorize
- DV = precipitating factor for many mass shootings

Sorenson & Schut 2018; Zeoli et al 2016; Campbell et al 2003; Wintemute et al. 2003; Petrosky et al. 2020; Geller et al 2021
Mental Illness

- About 4% of mass shooters thought to have psychotic disorders (higher for women)
  - Others commonly have symptoms of:
    - Depression
    - Autism spectrum disorder
    - Personality disorders

- About 4% of community violence attributable to mental illness alone

- Mental illness stronger risk factor for suicide than violence

Swanson, et al 2004
Mental Illness and Suicide

Lifetime Risk of Suicide

- Schizophrenia
- Major Depressive Disorder
- Bipolar Disorder
- Borderline Personality
- No mental illness

Brian A. Palmer, MD, MS, MPH; V. Shane Pankratz, PhD; John Michael Bostwick, MD 2005. The Lifetime Risk of Suicide in Schizophrenia: A Reexamination

Graham W Mellsop, Margo L Eyeson-Annan, George W Blair-West, Chris H Cantor, Lifetime suicide risk in major depression: sex and age determinants

Frederick K. Goodwin, MD; Bruce Fireman, MA; Gregory E. Simon, MD; Enid M. Hunkele, MA; Janelle Lee, MHA, DrPH; Dennis Revicki, PhD (2003) Suicide Risk in Bipolar Disorder During Treatment With Lithium and Divalproex.


Holmstrom et al 2015
Firearms in the Home

- Homicide rates *>2x higher* among cohabitants of handgun owners
- Homicide rates by intimate partner / spouse *>7x higher* among cohabitants of handgun owners (84% of these victims female)
- No protective effect against homicide by strangers at home

Ideation or Threats
Access to Firearms and Willingness to Collaborate

Lots of patients I see have guns at home. Sometimes when someone is going through a hard time, they store their guns away from home, like with a friend or at a gun range or gun store. This is just temporary, until they’re feeling better. Is this something you’d be willing to consider?
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When no one is at imminent risk, safe storage is the appropriate recommendation.
The safest way to store a firearm:

- Unloaded
- Locked up using a locking device
- Separate from ammunition
- With keys and combinations inaccessible to children and others at risk
Temporary Transfers

Used when removing firearms from the home is the safest option, and the person is willing to collaborate.

- Temporary transfer to family or other trusted person
  - Background check requirements vary
  - In some places, these policies are in flux

- Temporary, voluntary storage at a gun range, store, or with a law enforcement agency*
If a patient at high risk is not willing to collaborate, emergency interventions may be necessary to prevent harm.
Emergency interventions

- If the person needs mental health treatment, consider a mental health hold
- If the person is not willing to relinquish their firearms, consider an Extreme Risk Protection Order for temporary, involuntary removal of guns

These two are not mutually exclusive
Mental Health Holds (5150)

- In emergency situations, mental health holds can bring someone at risk of harming themselves or others into mental health treatment.
- Federal firearm prohibitions do not occur until person committed in court.

An emergency mental health hold or even a hospitalization does not guarantee the person won’t have continued firearm access.
Extreme Risk Protection Orders
Extreme Risk Protection Orders

- Allows family members or police to petition to have a person’s guns removed based on a concern for violence in the near future
- Modelled closely after DVRO
- No criminal activity required
- No mental health evaluation or history required
ERPOs in the US

- 19 states & DC currently have ERPO-type laws in effect
- All but 2 have been implemented since 2016
- Only 2 allow (HI, MD) healthcare providers to petition
HIPAA

- If a patient makes a “serious and imminent threat” of violence, the clinician may disclose PHI that “(1) is necessary to prevent or lessen a serious and imminent threat to the health or safety of the patient or others and (2) is to a person(s) reasonably able to prevent or lessen the threat”

- “HIPAA expressly defers to the professional judgment of health professionals in making determinations about the nature and severity of the threat to health or safety posed by a patient.”
Extreme Risk Protection Orders

Law Enforcement
- Emergency GVRO

Family or LE
- Ex-parte GVRO

Hearing

Order after hearing (1-5 year GVRO)
For every 10-20 risk warrants issued for suicidality, one life is saved

Kivisto & Phalen 2018; Swanson et al. 2017; Swanson et al. 2019
Hospital-based Intervention Programs

- Connect injured individuals to violence intervention specialists, community resources, and natural supports
- Provide extended care, including mental health services, after hospital discharge to support holistic recovery
- Address the determinants associated with violence risk through relationship-based mentoring and culturally humble, individualized case management
- Promote safe reintegration into the community through a gradual transition of support and connection to resources

The Health Alliance for Violence Intervention
Recap

- Firearm violence is a public health problem
- Clinicians are in a unique position to intervene
- The 3A's can help reduce risk in the clinical setting you should:
  - Approach
  - Assess
  - Act
For More Information

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The BulletPoints Project at UC Davis
The BulletPoints Project

Clinical tools for preventing firearm injury
Online Continuing Ed Course

BulletPoints

Continuing Medical Education Course

Preventing Firearm Injury: What Clinicians Can Do
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Questions?
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