

Identifying Risk Factors for Firearm Violence in Pediatric Patients

Speakers: Dr. Megan Attridge & Dr. Samaa Kemal
Date: January 8, 2025



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Samantha Nicholson, MPH	ICAAP Staff	No
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Sarah Parvinian	CME Reviewer	No

Upcoming Firearm Safety Webinars



FEBRUARY 5

Talking to Pediatric Patients
About Firearm Safety

Speaker: Dr. Ann Marie Thomas

MARCH 12

How Pediatricians Can
Reduce Firearm Suicides

Speaker: Dr. Jennifer Hoffmann

Today's Speakers



Samaa Kemal MD,
MPH, FAAP



Megan Attridge MD,
MS, FAAP

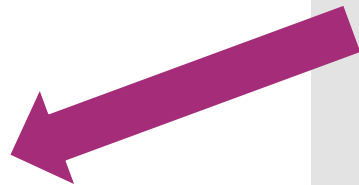
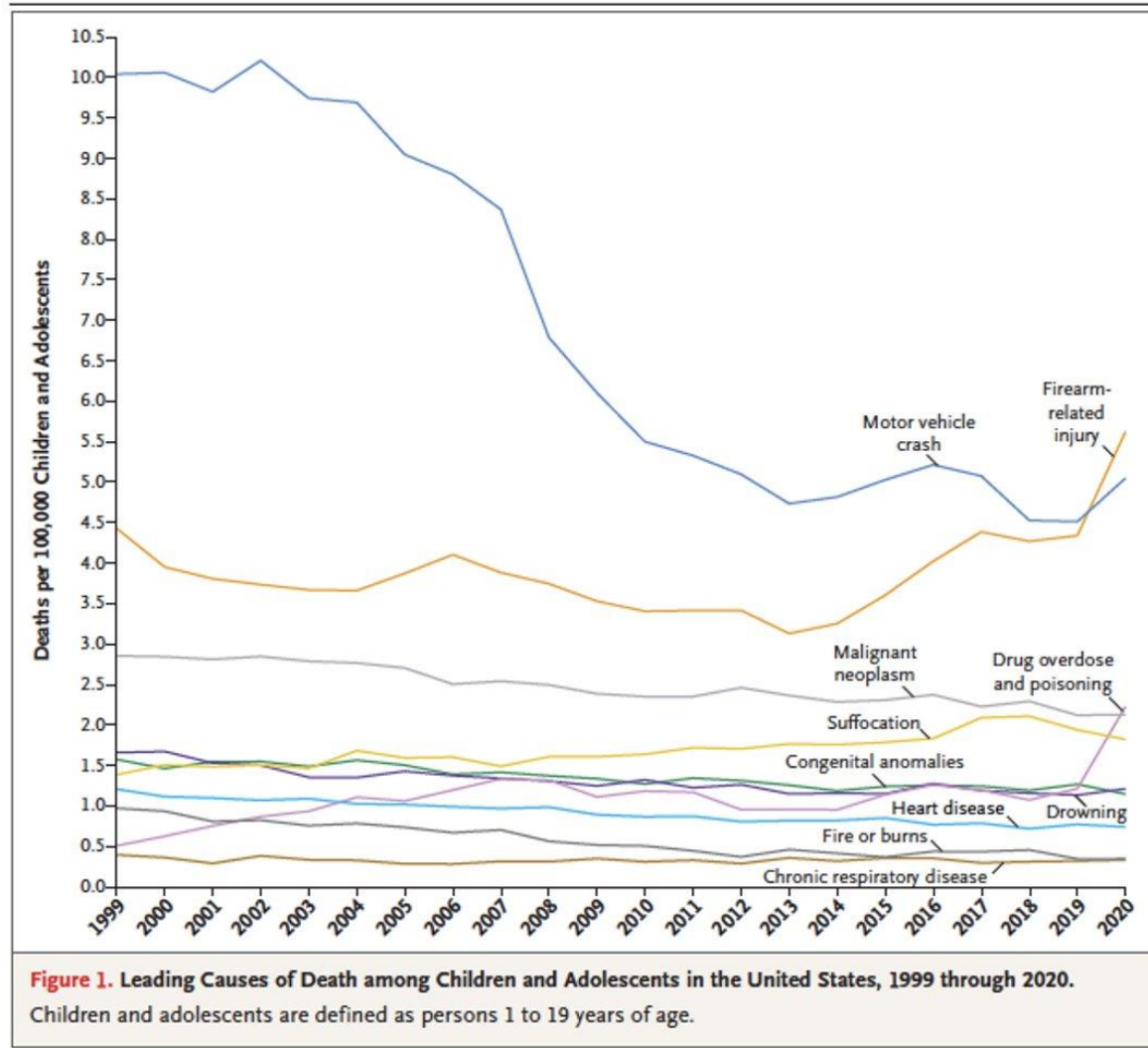
Learning Objectives



At the conclusion of this activity, participants will be able to:

1. Describe the influences of social determinants of health and adverse childhood experiences in firearm injury risk.
2. Explain how a pediatric health care clinician can identify patients and families who might benefit from safe storage screening.
3. Use best practices from the American Academy of Pediatrics, including the *Connected Kids: Safe, Strong, Secure* primary care violence prevention protocol and *ASK* to address safety concerns with families.
4. Illustrate how to screen patients and families who may be at higher risk for firearm violence, including suicide.

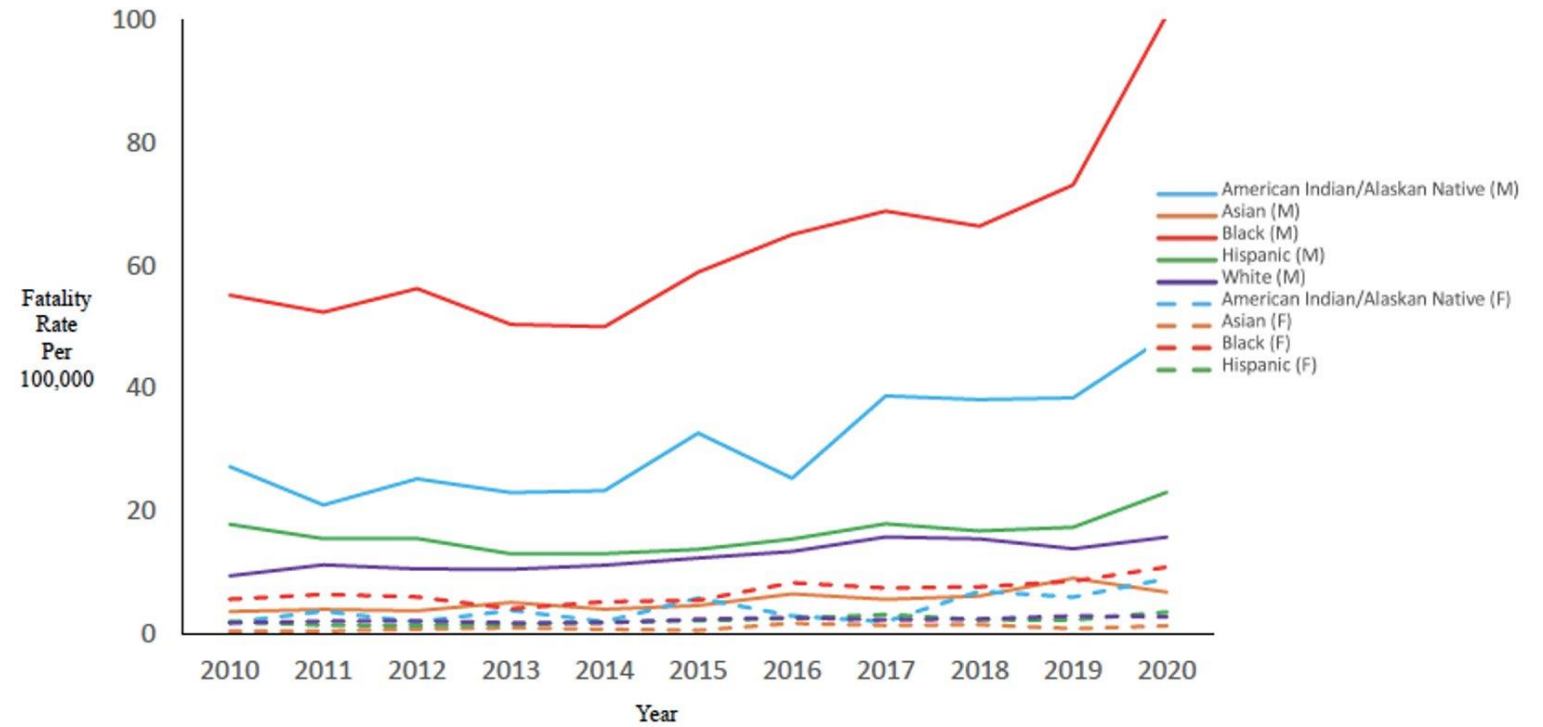
Epidemiology

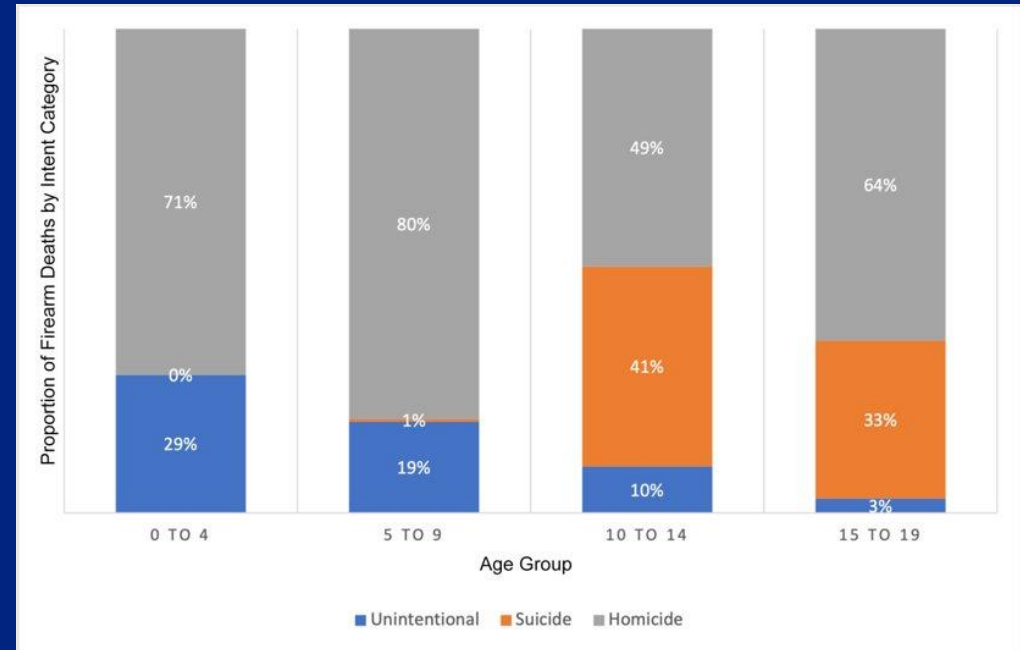
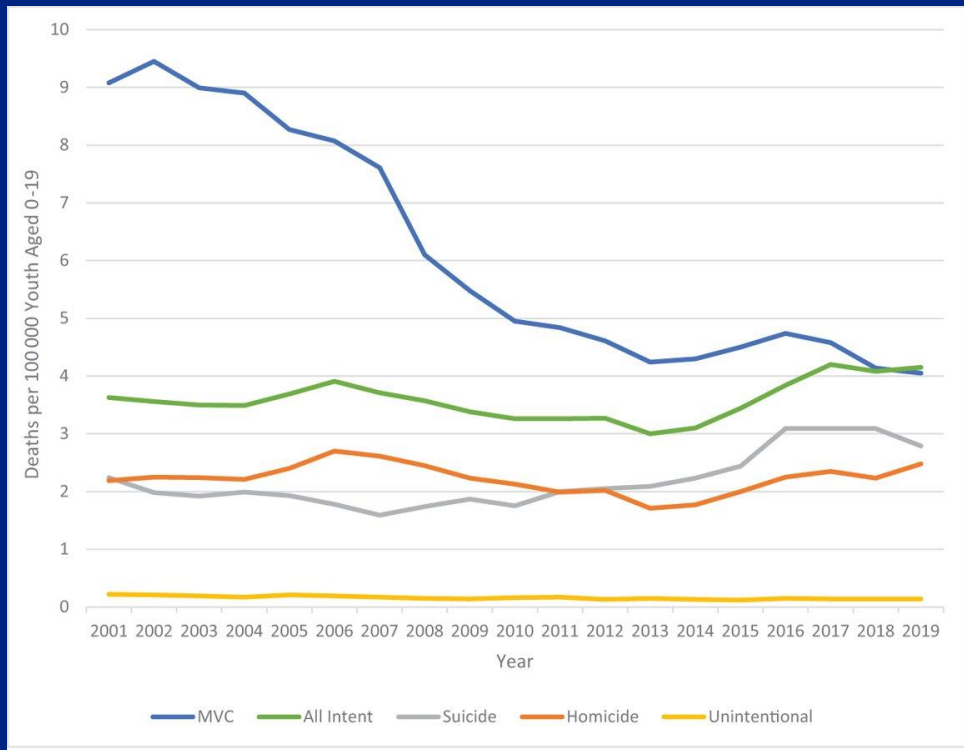


Racial & Ethnic Trends

Figure

Figure 1a. Firearm Fatality Rates by Race, Ethnicity, and Sex, 15-19 Years Old, United States 2010-2020

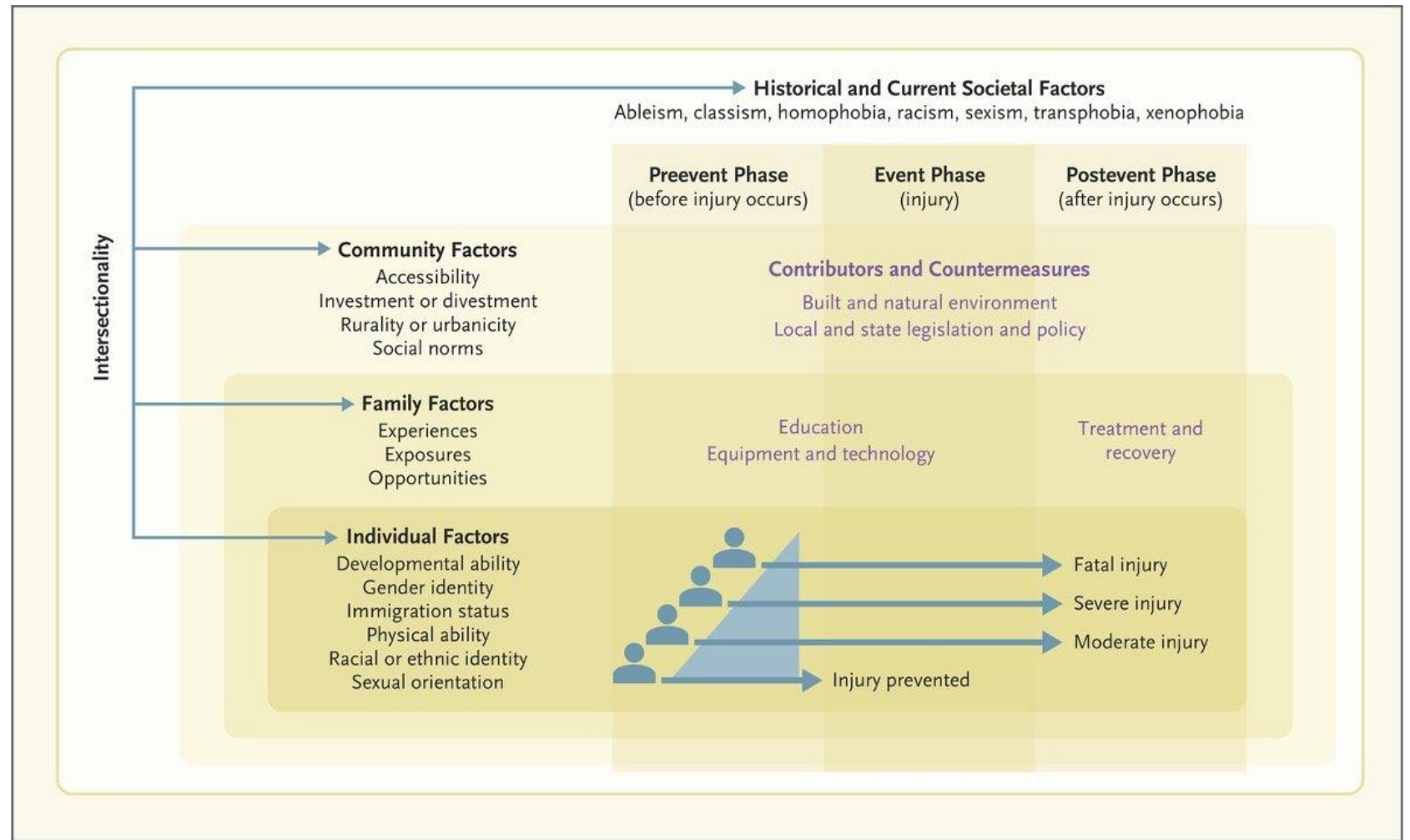




Youth Firearm Mortality Trends by Intent



Injury Equity Framework





All Intent

Assault

Self-Harm

Unintentional

All Intent: Individual



- Male
- Teens
- Racial disparities
- Lower socioeconomic status
- Firearm carriage
- Prior violence victimization



All Intent: Interpersonal



- Adverse childhood experiences
- Living with < 2 parents
- Limited caregiver supervision
- Firearm access and peer possession



All Intent: Community



- Firearm ownership at the state level
- Community violence
- Higher disadvantage



All Intent

Assault

Self-Harm

Unintentional



Assault: Individual



- Racial, sex, socioeconomic disparities persist
- Firearm carriage
- Use of alcohol or illicit drugs
- Criminal justice involvement
- Prior violence victimization and exposures
- Mental health

RESEARCH

Open Access



Gun carrying among freshmen and sophomores in Chicago, New York City and Los Angeles public schools: the Youth Risk Behavior Survey, 2007-2013

Samaa Kemal^{1*}, Karen Sheehan² and Joe Feinglass³

Review

> [Pediatr Clin North Am.](#) 2023 Dec;70(6):1201-1215. doi: 10.1016/j.pcl.2023.06.011.

Epub 2023 Aug 8.

Mental Health and Violence in Children and Adolescents

[Samaa Kemal](#)¹, [Adaobi Nwabuo](#)², [Jennifer Hoffmann](#)³

Affiliations + expand

PMID: 37865440 DOI: [10.1016/j.pcl.2023.06.011](#)

Assault: Interpersonal



- Presence of firearm in the home
- Social networks
 - Peer firearm ownership or carriage
 - Social media
- Caregiver factors
 - Substance use
 - Separated or divorced parents
 - Poor parental supervision

Journal of Community Health (2024) 49:993–1000
<https://doi.org/10.1007/s10900-024-01356-3>

ORIGINAL PAPER



Exploring Firearm Access, Carriage, and Possession among Justice-Involved Youth

Samaa Kemal^{1,2} · Lauren Jones-Robinson² · Kevin Rak³ · Cassandra Otoo³ · Leonardo Barrera⁴ · Karen Sheehan^{1,2,3}

Assault: Community



- Structural racism & neighborhood disadvantage
- Community violence
- High densities of alcohol outlets & drug availability
- Urban greening & tree cover may be protective

All Intent

```
graph TD; A[All Intent] --- B[Assault]; A --- C[Self-Harm]; A --- D[Unintentional];
```

Assault

Self-Harm

Unintentional

Self Harm: Individual



- More common among AIAN & white children with higher socioeconomic status
- Adolescence
- Behavioral health diagnosis
- May occur in the absence of known diagnosis or prior attempts
- Less likely to be preceded by a known mental health diagnosis

Self Harm: Interpersonal



- Firearms in the home
 - Firearm storage patterns
- Limiting youth access to firearms is protective

Self Harm: Community



- Living in rural areas
- Living in the south
- County-level poverty concentration
- County-level mental health workforce shortages

All Intent

Assault

Self-Harm

Unintentional



Unintentional: Individual

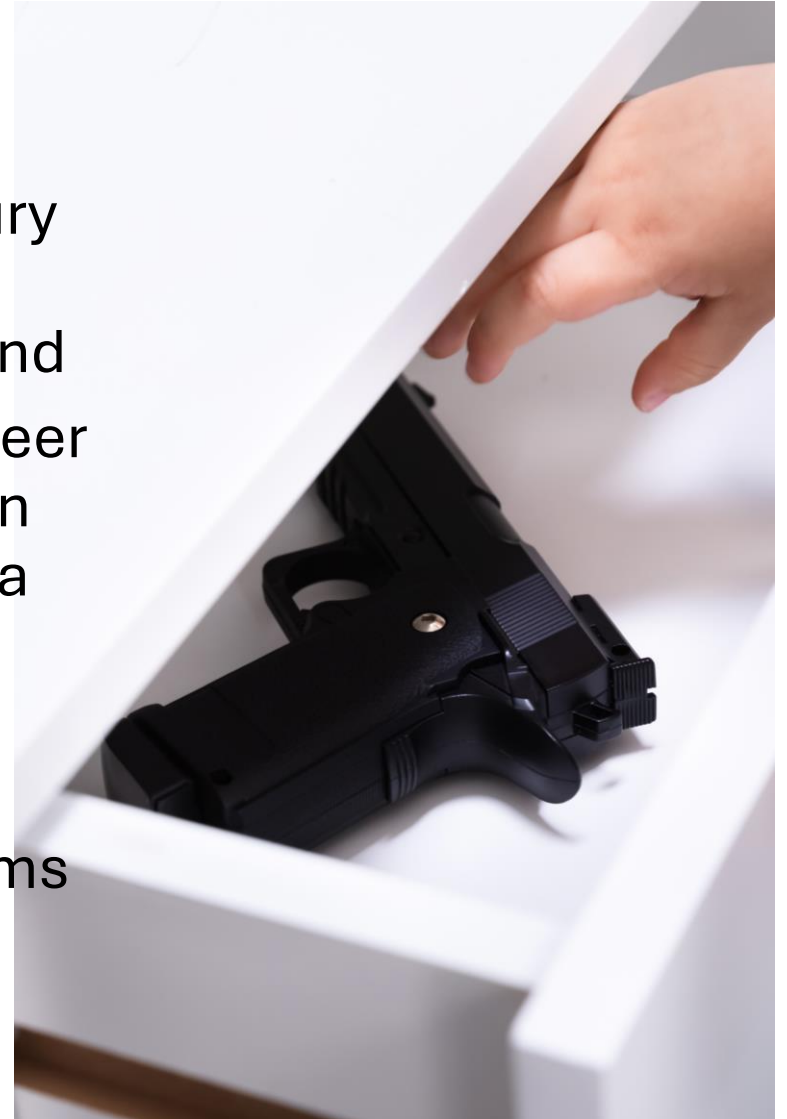


- Younger age groups
- Different racial and ethnic disparities



Unintentional: Interpersonal

- Firearm access
 - Most firearms involved in unintentional firearm injury kept in the home of the victim, a relative, or a friend
 - More likely fatal when a peer was the shooter and when the shooting occurred at a residence
 - Parents generally underestimate children's risk for injury when firearms are in the home



Unintentional: Community



- County-level poverty
- States with more firearms
- More common in non-urban counties



Safety:

Guns present in or around the home: Yes,

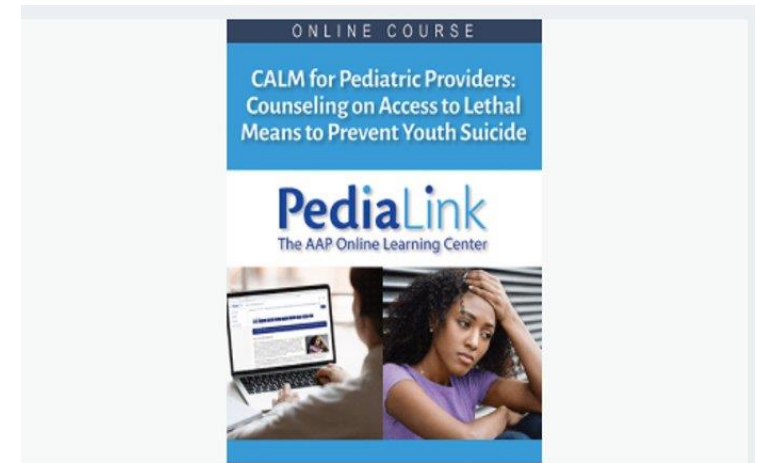
Are guns stored locked? {Guns stored locked:22664}

Are guns stored unloaded? {Guns stored unloaded:22665} Yes

Are guns stored separate from ammunition? {Guns stored separate from ammunition:22667} No

The family was counseled on safe gun storage practices. Family Unsure

Gun lock: {Lock:22665}



Online Only

[CALM for Pediatric Providers: Counseling on Access to Lethal Means to Prevent Youth Suicide](#)

🕒 Expires: July 27th, 2025

📖 CME/MOC

What Can You Do? *Screen, Counsel and Intervene*

What Can You Do? Screen, Counsel and Intervene



SAFE STORAGE = SAFER KIDS

BE SMART

The safest home for a child is one without firearms. Consider storing firearms outside the home.



BE SAFE

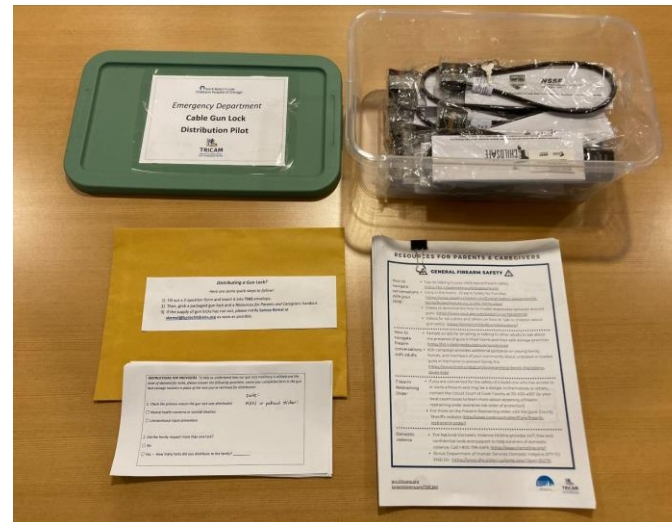
Always store firearms locked, unloaded, and separate from ammunition.

BE PROACTIVE

Ask other parents about the presence and storage of firearms in their home before your child spends time there.



Learn more about safe storage, violence prevention, and parenting supports by visiting the Strengthening Chicago's Youth website at www.scy-chicago.org or The American Academy of Pediatrics parenting website www.healthychildren.org



Screening for Firearm Access Tips for Clinicians

Ann & Robert H. Lurie
Children's Hospital of Chicago

The goal of this tip sheet is to provide scripting examples to improve provider comfort in communicating with families about firearm access. With the right approach, we can ask these sensitive questions in a non-judgmental way maintaining an environment of trust and collaboration while focusing on the shared goal of keeping children safe.

"Given [patient's name] level of distress, I want to talk over steps you can take at home to help keep them safe. One routine precaution I'd like to discuss is making sure [patient's name] has limited access to medications and no access to guns at home."

Lethal means restriction counseling is an important part of care for all patients at risk of harming themselves. Ground the conversation in keeping their child safe and help normalize questioning as a routine part of care.

The safest home for children is one without firearms but, within this context, it's important that families do not feel like you are trying to take their guns away from them. This is one way of approaching this topic by grounding it in the acute and (hopefully) temporary nature of their child's condition.

"If you have guns at home, what some parents do when their child is struggling is temporarily store them away from home - for example, at a relative's house or a gun shop. What do you think about an option like that?"

"If you're not comfortable storing your gun(s) outside of your home, let's talk about ways to make sure any guns are stored safely within your home so that your child cannot access them."

If firearms are within the home, it's important they are stored securely (i.e., locked, unloaded and stored separately from ammunition which should also be stored securely).

It's important that children are asked directly about their access to guns in the home. Even if a caregiver does not think they have access, studies have shown many children know where guns are stored and how to access them.

"When kids are struggling in the ways you've described, I always ask about their access to firearms. How easily are you able to get hold of a gun at home, or anywhere else?"

"Given that injury is the leading cause of death for kids, I would like to review a couple practical ways to keep your home safer. Are all medications in your home locked up? If there are any firearms in your home, how are they stored?"

"We have a program here where we can provide free cable gun locks to families to help keep kids safe from accidentally accessing a gun. Would you like one for your household?"

This approach helps normalize routine anticipatory guidance around injury prevention and provides the opportunity to talk about safe firearm storage (i.e., all firearms stored locked, unloaded and separate from ammunition).



Additional Resources



For further training on lethal means counseling, [click here](https://www.aap.org) to search the AAP website for the training entitled "CALM for Pediatric Provider: Counseling on Access to Lethal Means to Prevent Youth Suicide". Above tips adapted from this training course. Module takes about 30 minutes.

For more in-depth training on culturally informed lethal means counseling, another online educational module is offered through the University of Washington ([click here](https://www.uw.edu)). It is estimated to take approximately 3 hours to complete and is offered through October 31, 2022.

Social Media Graphics

Firearm Safety for Families

Studies show children are naturally curious, even about a firearm they've been warned not to touch.

Kids are safer when: Firearms are in a lockbox or safe, unloaded. Ammunition is locked away separately.

Kids are safest when: firearms are stored outside the home.

healthychildren.org
American Academy of Pediatrics

Firearm Safety for Families

Select Platform ▾ Select Language ▾

Download

Ask About Firearms Before a Playdate

If it's not safe, invite their child over to your home instead.

healthychildren.org
American Academy of Pediatrics

Ask About Firearms Before a Playdate

Select Platform ▾ Select Language ▾

Download

What Can You Do? Screen, Counsel and Intervene

AAP Gun Safety Toolkit



Videos



Public Service Announcement: Safe Gun Storage

Select Language ▾

View




Asking About Gun Safety

View

What Can You Do? *Screen, Counsel and Intervene*

STATE-OF-THE-ART REVIEW | NOVEMBER 05 2024

Screening for Adverse Childhood Experiences: A Critical Appraisal

Anna E. Austin, PhD ; Kayla N. Anderson, PhD; Marissa Goodson, MPH; Phyllis Holditch Niolon, PhD; Elizabeth A. Swedo, MD; Andrew Terranella, MD; Sarah Bacon, PhD

Address correspondence to Anna E. Austin, PhD, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 1600 Clifton Rd, Atlanta, GA 30329. E-mail: une1@cdc.gov

Pediatrics (2024) 154 (6): e2024067307.

<https://doi.org/10.1542/peds.2024-067307> **Article history** 

- Should we screen for ACEs?
- Trauma-informed care & assessing violence exposure
- Trauma-focused cognitive behavioral therapy (TF-CBT)

What Can You Do? *Screen, Counsel and Intervene*

Development of the SaFETy Score: A Clinical Screening Tool for Predicting Future Firearm Violence Risk

[Jason E Goldstick](#)¹, [Patrick M Carter](#)², [Maureen A Walton](#)³, [Linda L Dahlberg](#)⁴, [Steven A Sumner](#)⁵, [Marc A Zimmerman](#)⁶, [Rebecca M Cunningham](#)⁷

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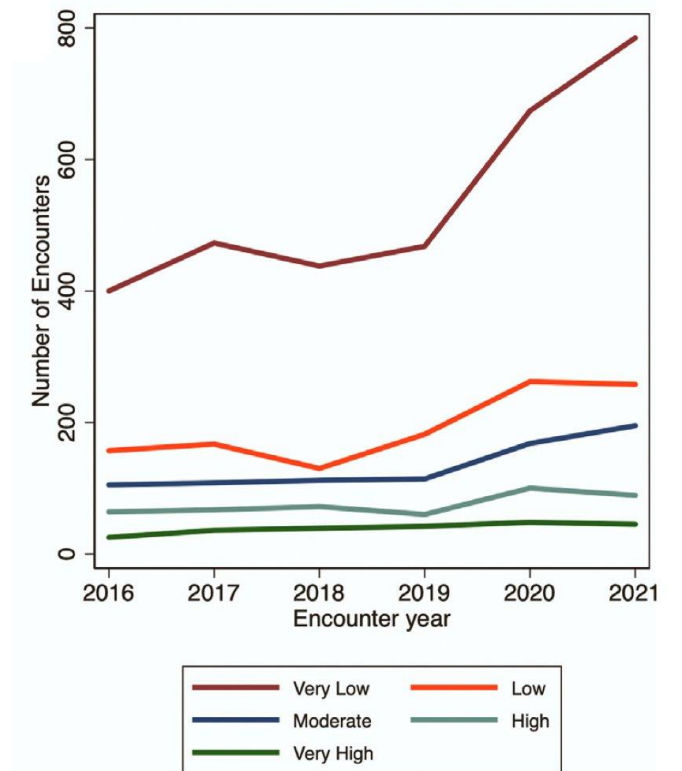
PMCID: PMC5697901 NIHMSID: NIHMS918328 PMID: [28395357](#)

- Screening for future firearm violence risk
- Screening for social needs paired with referral to community-based resources

What Can You Do? *Invest in Communities*



- Higher neighborhood advantage associated with lower firearm violence in children
 - Child Opportunity Index domains
 - Education
 - Health and environment
 - Social and economic
- Neighborhood investment
 - Urban greening
 - Clean up vacant lots
 - Youth employment, mentorship and afterschool programs



What Can You Do? *Strengthen Policy*



Everytown for Gun Safety: A
Gifford's Law Center: A-
Rank: 8th out of 50 states

- Areas for Improvement:
 - Limit trafficking of guns over the border
 - Strengthen Child Access Prevention Law
 - Firearm access restrictions for people convicted of most violent misdemeanors
 - Improve law enforcement repository of firearm sale records

Thank you!



Questions?

Citations & Resources



- https://www.aap.org/en/news-room/campaigns-and-toolkits/gun-safety/?srsltid=AfmBOop3MHoxDTd1D0DqdD4uCjs6_XmunDx5r86vbFt5zlGcF9oWTPdB
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