

Unload, Lock-Up, Store Separate- Firearm Safe Storage



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Unload, Lock-up, Store Separate-Firearm Safe Storage

Kiesha Fraser Doh, MD

SAFE Kids Conference

May 2nd, 2022

(Epidemiology Slides adapted from Dr. Sofia Chaudhary)



Objectives

- The participant will be able to discuss the epidemiology of pediatric firearm injuries in recent years.
- The learner will understand the different types Child Access Protection Laws and there safe storage Implications
- The participant will be able to discuss with caregivers ways to store firearms safely.





Unload, Lock-up, Store Separate Ammunition-Firearm Safe Storage

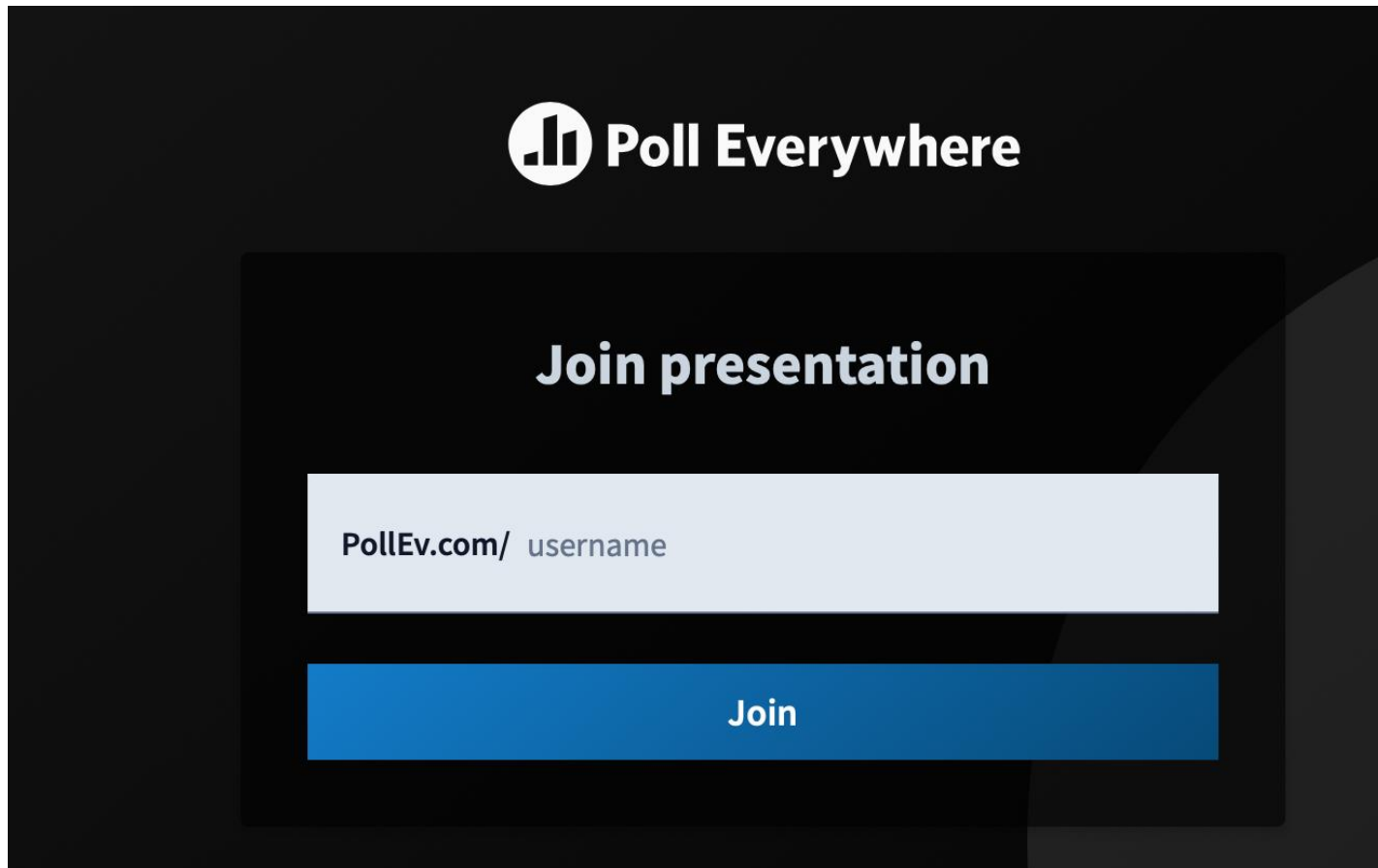
Pediatric Firearm Epidemiology



Poll Everywhere

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**Do you own a firearm or where you raised
with a firearm in the home?**

Yes

No

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If you have a firearm have you ever been taught how to safely secure your firearm?

Yes

No

Yes but I do not own a firearm

No and I do not own a firearm

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Rank the number the top 5 current causes of death in children as of 2020?

Drug Overdose and
Poisoning

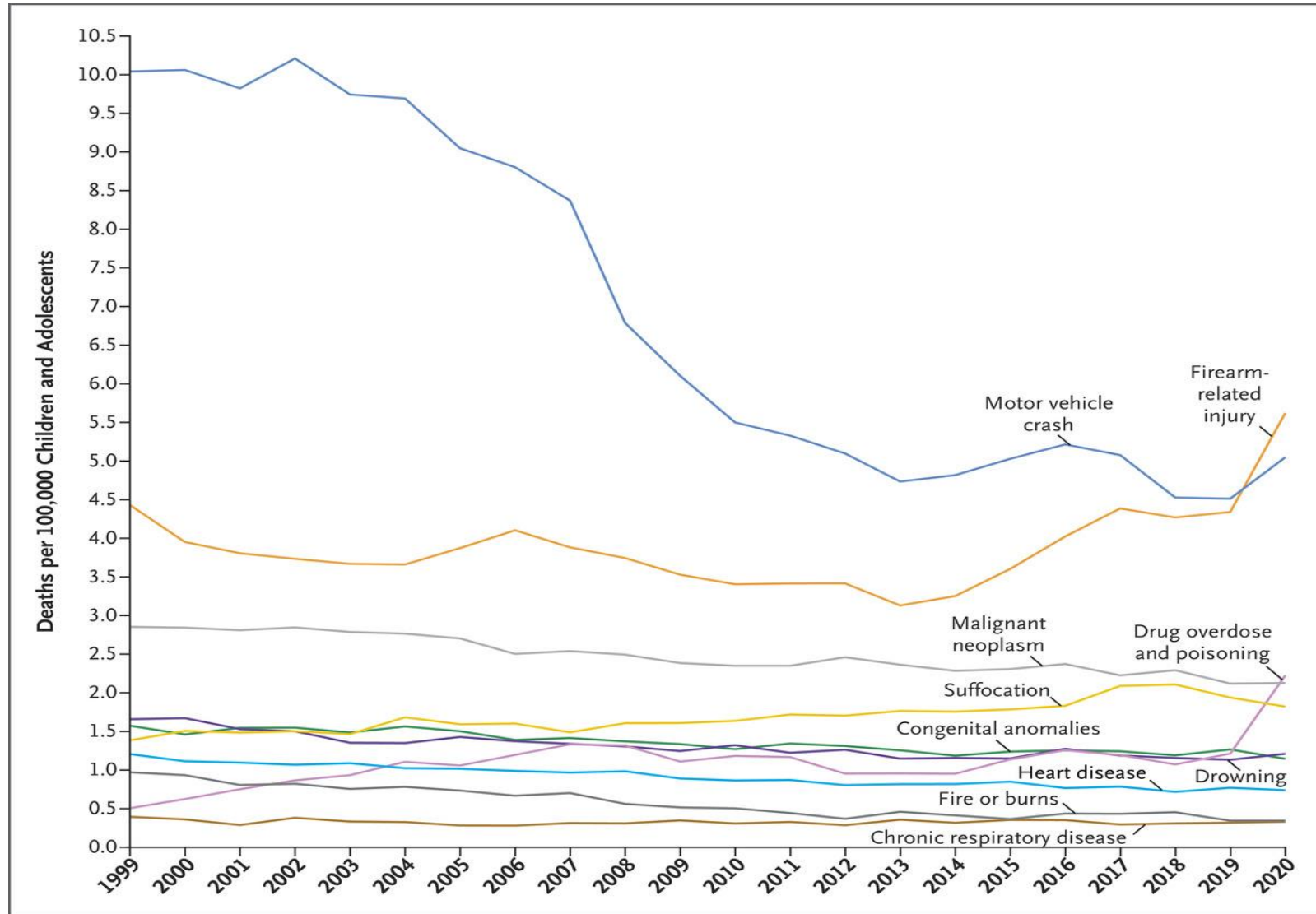
Motor Vehicle

Cancer

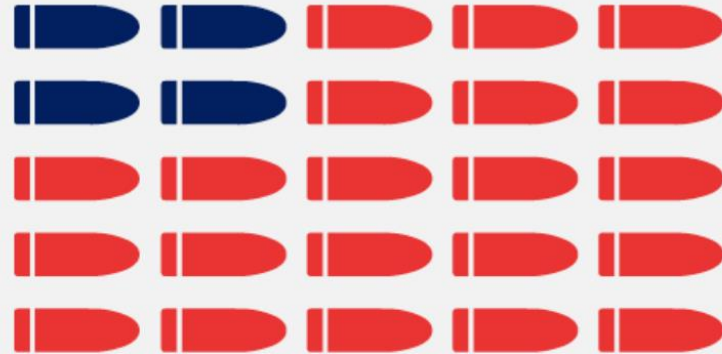
Firearms

Suffocation (includes
sleep-related fatalities)

Current Causes of Death in Children/Teens-2020



United States vs Other High-Income Countries

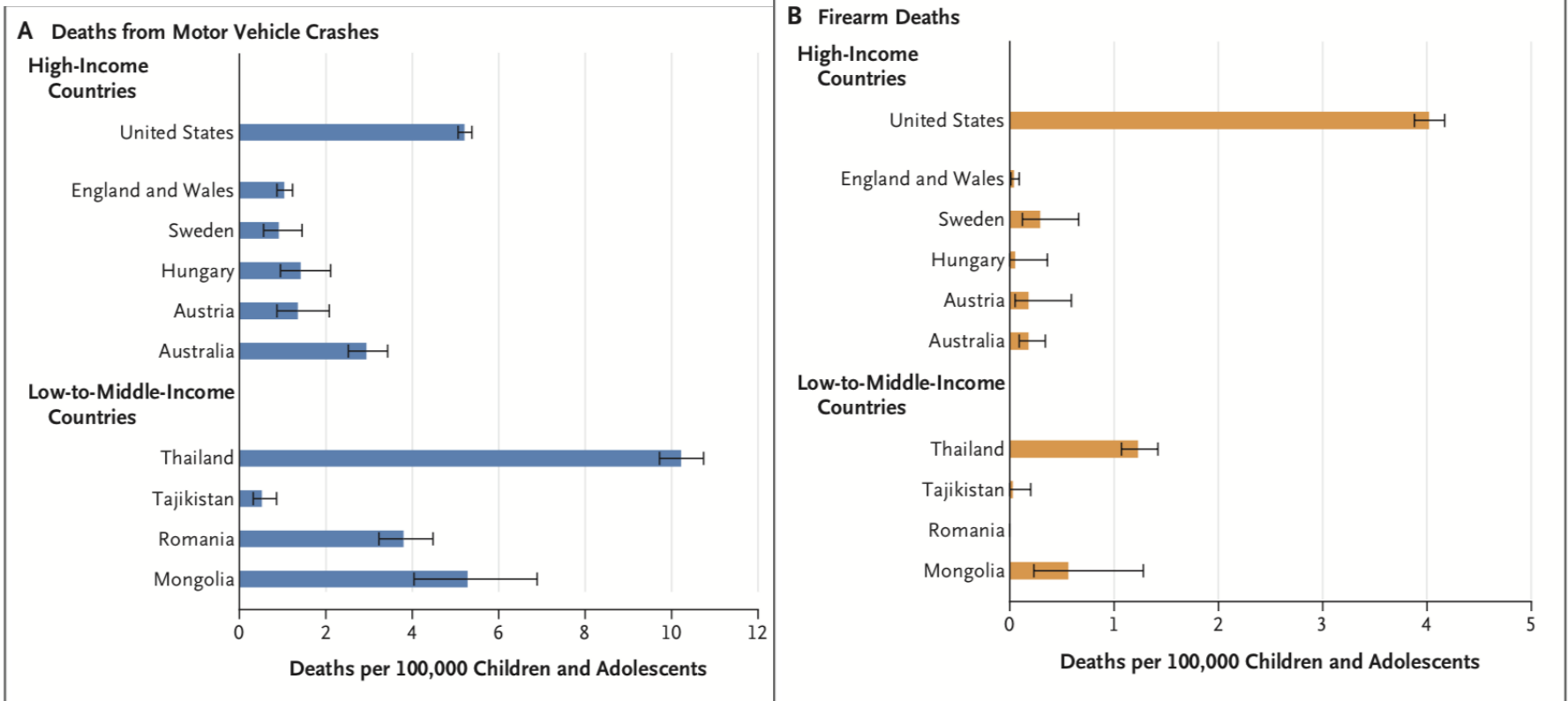


**THE US GUN HOMICIDE RATE
IS 25 TIMES THAT OF OTHER
HIGH-INCOME COUNTRIES**

Source: Grinshteyn E, Hemenway D. Violent death rates in the US compared to those of the other high-income countries, 2015. *Preventive Medicine*. 2019.



Global Comparison of Cars vs Guns



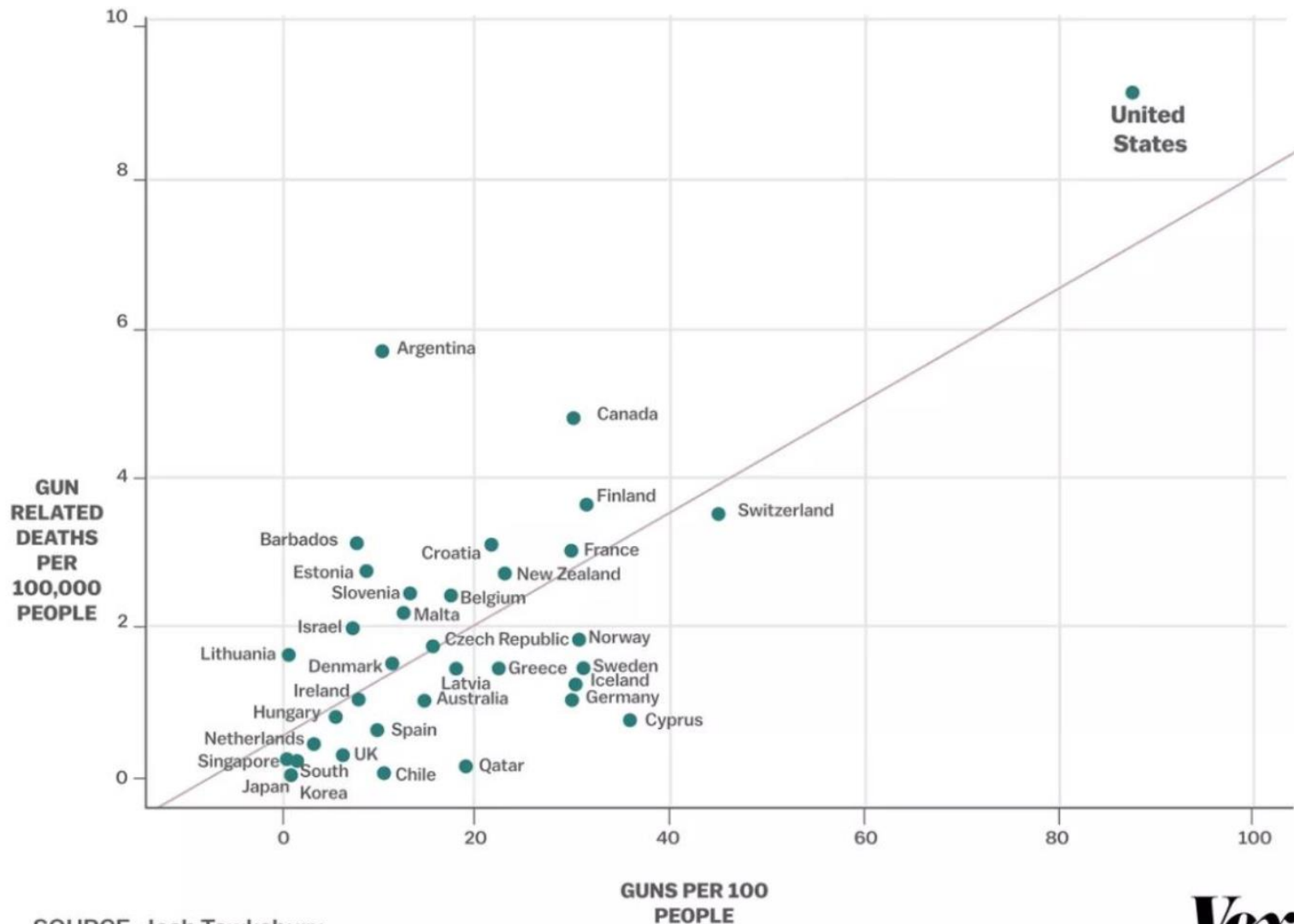
Global Comparison of Mortality for the Two Leading Causes of Child and Adolescent Death in the United States in 2016.

(Cunningham R, et al, NEJM 2018)



Children's Healthcare of Atlanta

Gun Ownership vs. Gun Deaths



SOURCE: Josh Tewksbury

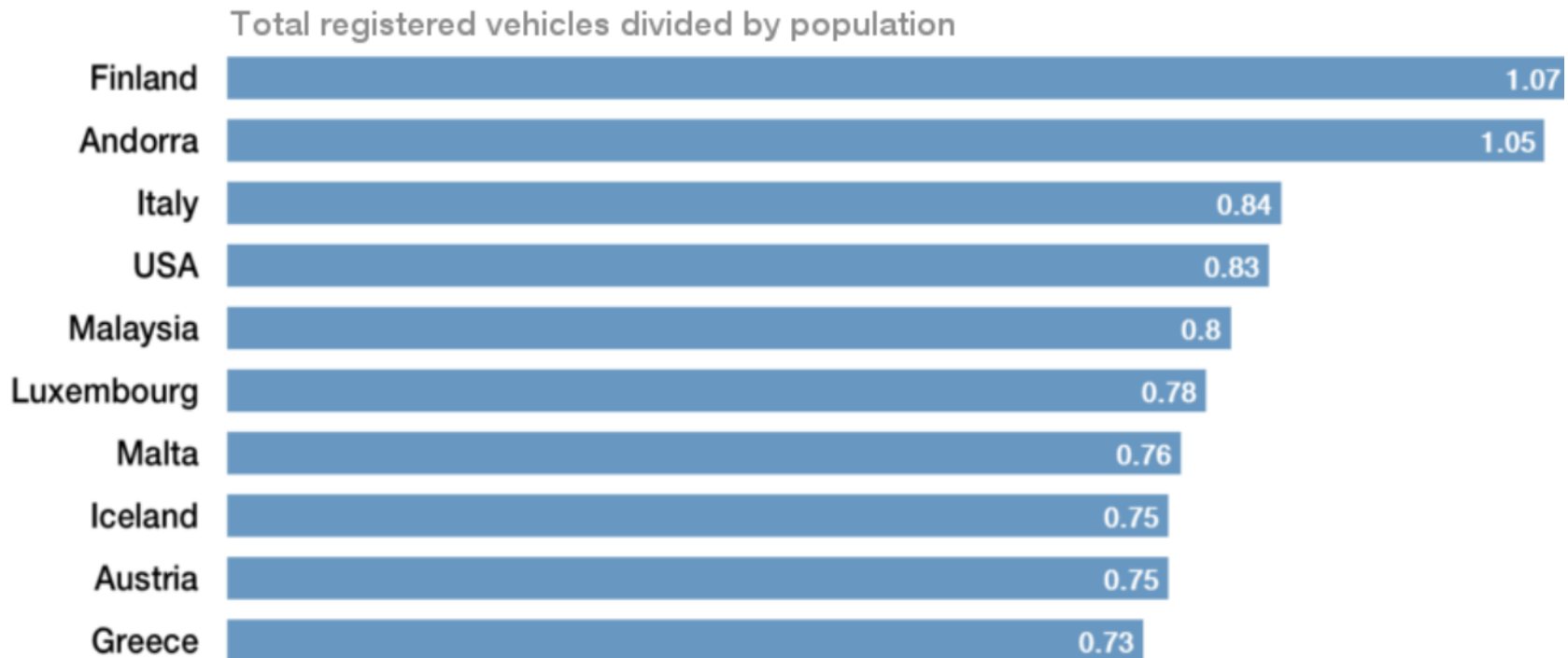
Vox



Children's Healthcare of Atlanta

Numbers do not tell the whole story

These countries have the most vehicles per person

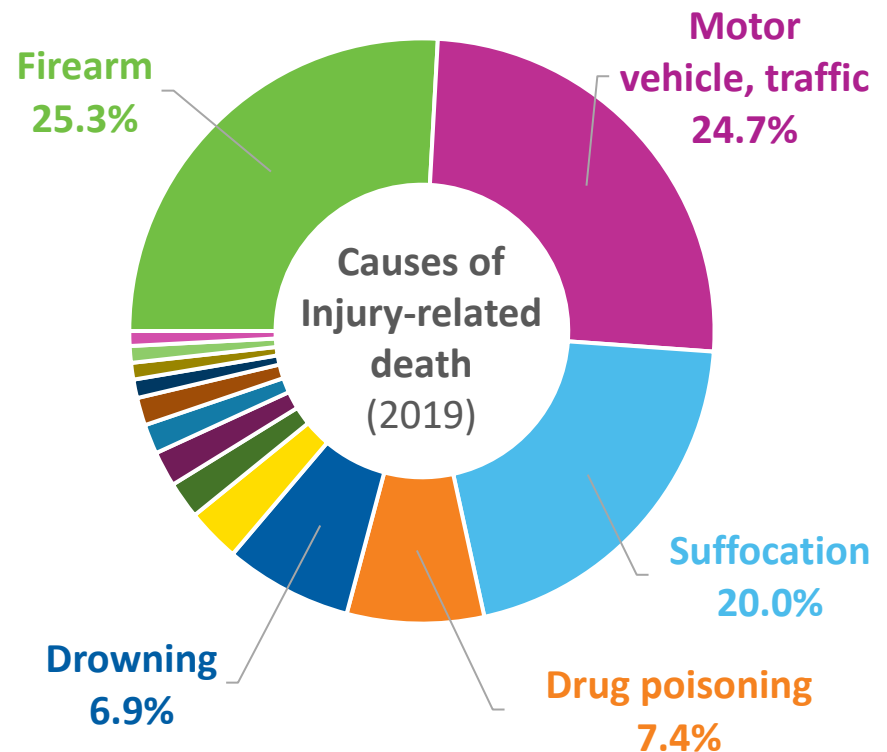


Source: WHO

Firearm epidemiology

Firearm injuries are the **leading** cause of pediatric death

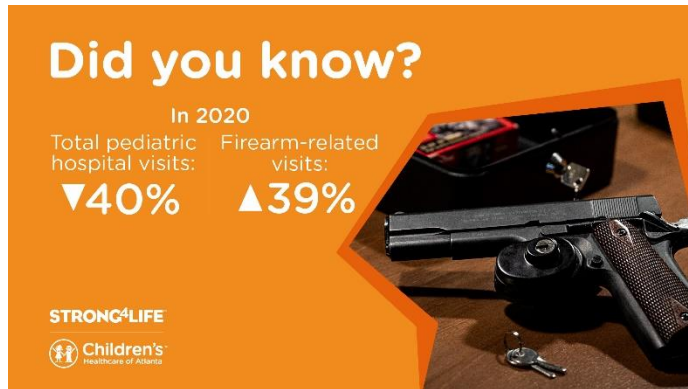
- More than 6.5K **injuries**/year
- More than 1.7K **deaths**/year
 - 58% homicide
 - 35% suicide
 - 4% unintentional



Cunningham R, J Behav Health, 2019; CDC, WISQARS, 2021; Cunningham R, NEJM, 2018; Fowler K, Pediatrics, 2017. NCHS Vital Statistics System for numbers of deaths. Bureau of Census for population estimates.

COVID-19 and the gun violence pandemic

- **Gun sales** ↑
- More kids at home with ↑ **access** to unlocked guns
- Rise in **mental health issues**, ↑ in **domestic violence**
- **Unintentional** firearm injuries ↑
- **Homicides** involving children ↑



Brauer J, Small Arms Analytics, September 2020; Duncan T, Annals of Surgery, 2020; Sokol R, J Behav Med, 2021.

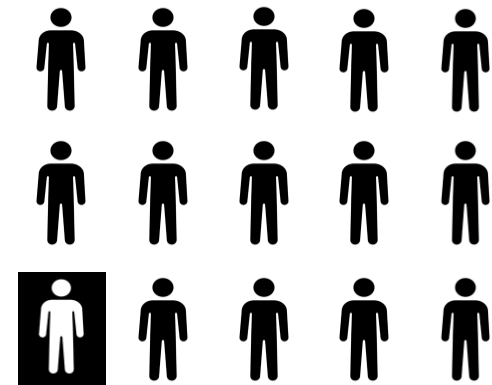


Firearm mortality risk factors

- Males
- Adolescents/teens (13 to 17)
- Living in low-income areas
- Blacks
- Homicide vs. suicide
- Urban vs. rural

Black children and teens are **14x** more likely than white children and teens of the same age to die by gun homicide.

CDC WISQARS, "Fatal Injury Reports 2014-2018"



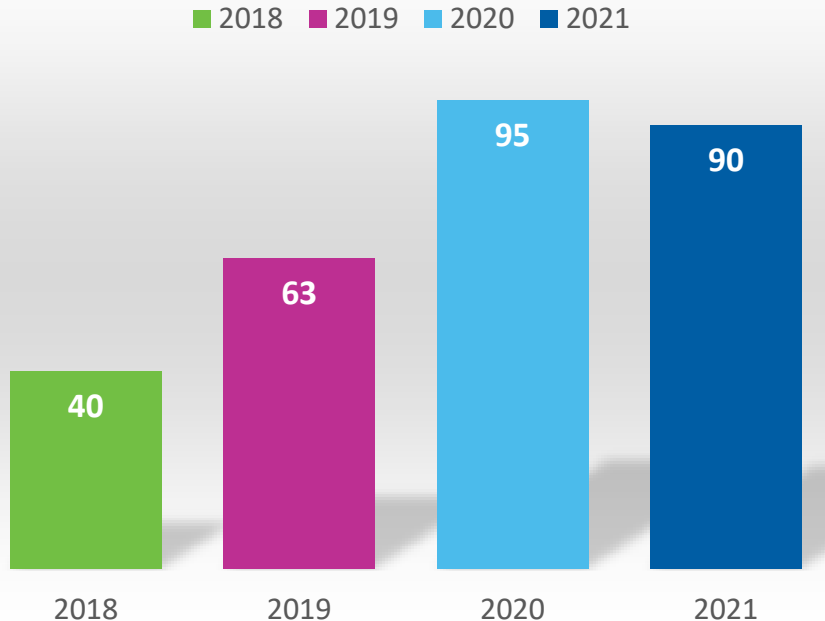
Cunningham R, NEJM, 2018; Fowler K, Pediatrics, 2017; Monteaux M, Acad Emerg Med 2016.



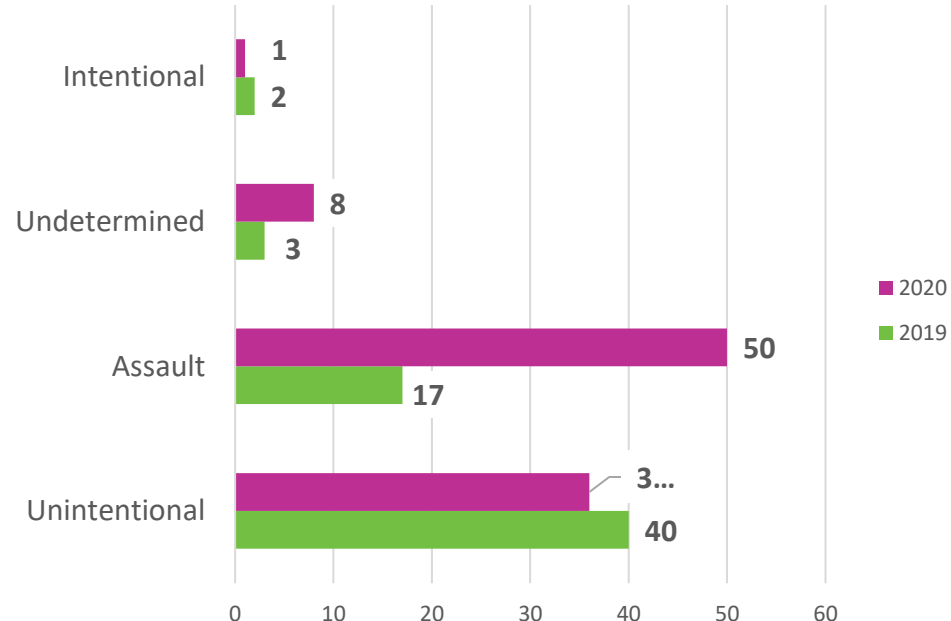
Firearm stats at Children's

- In 2020, majority due to assault but ~ 40% unintentional

Firearm Injuries over the last 4 years



Firearm Injuries by Intent





Unload, Lock-up, Store Separate- Firearm Safe Storage

Firearm Access in Children



Gun access in the home

- **4.6 million kids** live in a home with a **loaded/unlocked** gun
- **Playing** with a gun at home is the most frequent cause of unintentional death
- Most suicides involve a gun **in the home** of the victim, family or friend
- Pediatric firearm-related suicide:
 - Impulsive
 - Fatality-firearm (90%) vs. cutting/drugs (3%)



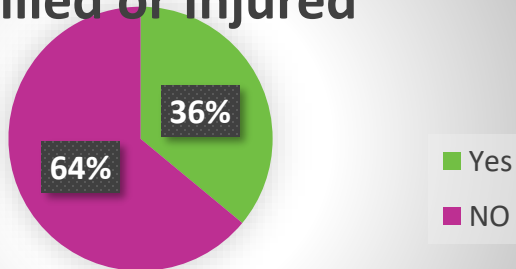
Azrael D, J Urban Health 2018; Fowler K, Pediatrics 2017; Parikh K , Hospital Pediatrics 2017; Kellerman A, NEJM 1992.



Rural Youth Exposure to Firearm Violence

- Survey of youth at Iowa FFA conference
 - Unlocked or loaded-→ 62% of rifles/shotguns/58% of handguns stored unlocked
 - 94% right to use firearms for hunting and shooting sports legal
 - 89% believed in firearm safety course/background check
 - 61% believed there should be safe storage laws

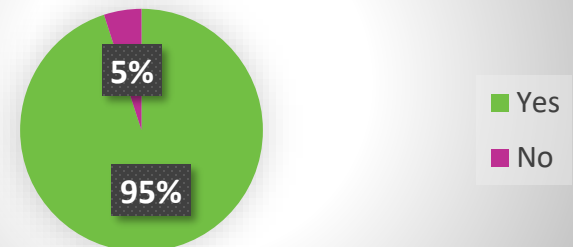
Killed or Injured



Personally Know of Someone....

Jennison, Injury Epidemiology 2020 and Western Journal of EM 2020

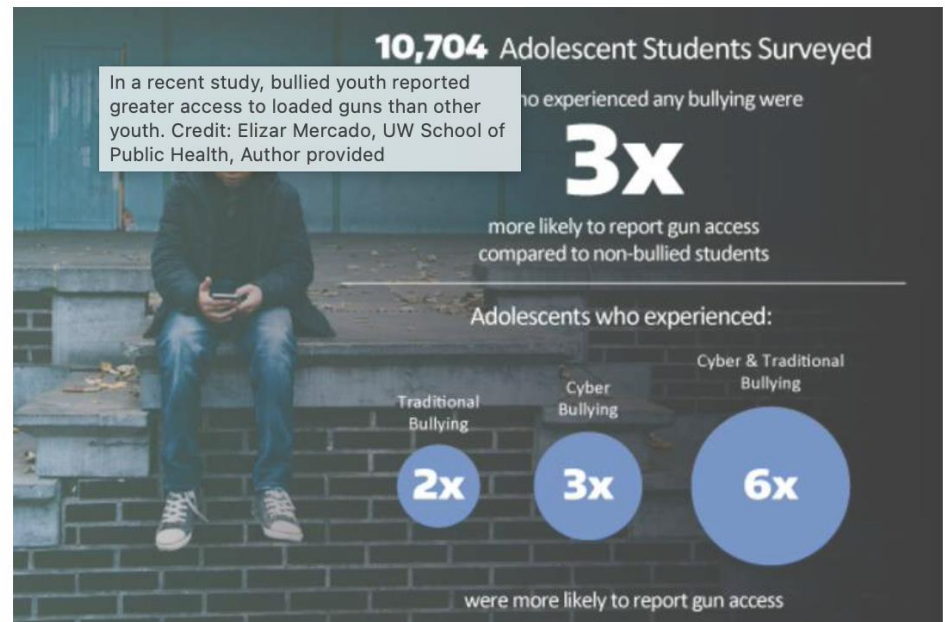
Threatened with Firearm



Personally Seen Someone...

Gun Access

- Study of Colorado youth showed increased:
 - perceived access rural vs urban youth
 - Increased access increases thoughts of considering suicide
 - Suicide attempts



Firearm access stats in Georgia

- Firearms are the **#1 cause** of pediatric death
- Gun ownership rate = 49.2%
- 1 in 3 homes with children have a gun

Gun-owning parents in metro-Atlanta:

- >50% do not store gun locked **and** unloaded
- 23% would **trust** their **child with a loaded gun**
- 75% believed child could **distinguish real vs. fake gun**




CBS news; Parker K Pew Research Center 2017; Fraser Doh K, Clin Pediatr, 2020; Farah MM, Pediatrics, 1999.






Name all of the reasons why someone may own a gun?

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What are the reasons for gun ownership?

Protection



63%

Hunting



40%

Recreation or Sports



11%



Line of
duty-5%

Increased risk for firearm access at home

The odds of a gun in the home being loaded and unlocked is higher when:

- Being used for protection.
- It is a handgun vs. a long gun.
- The owner is female vs. male.



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Gun-owning parents in metro-Atlanta:

- **>50%** do not store gun locked **and** unloaded
- **23%** would **trust** their **child** with a **loaded** gun
- **75%** believed child could **distinguish** real vs. fake gun

CBS news; Parker K Pew Research Center 2017; Fraser Doh K, Clin Pediatr, 2020; Farah MM, Pediatrics, 1999.



When is a good time to discuss gun safety?



Situations to Discuss Gun Safety

- *Risk factors (patient or family members)*
 - ADHD*
 - Mental Illness*
 - Mood Disorders-i.e Depression*
 - Hx of violence in family*
 - Hx of Criminal Behavior*
 - Bullying*
 - Substance Abuse*
 - Dementia*
- *ER/Inpatient: Trauma, ingestion, accidents, suicide attempt*
- *Discharge planning*





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Federal Gun Laws



Minimum Age Requirements for Gun Ownership



What age can you own a gun?



- Federally licenses dealers **CAN** sell to > 21 y/o (shotgun, rifles and handguns)
- Shotguns and rifles **CAN** be sold to 18-20 y/o, NO handguns by federally licensed dealer
- No gun sells under 18 y/o
- Unlicensed persons cannot sell to minor
- No federal minimum age for possession of long gun

Minimum age requirements Impact



- Crime Control Act of 1994- banned handgun purchase under 18 y/o unintentional injuries and suicide death rates fell
- 17% of incarcerated offenders would have been prohibited from buying a gun if state's minimum purchase age was 21
- 2019-28,568 young people between the ages of 10 and 21 were arrested for weapons offenses-made up 26% of all arrests for weapons offenses that year
- **18-20-year old's** comprise just 4% of the US population, but account for 17% of known homicide offenders.

Gius, Social Science Journal, 2015, Vittes, Injury Prevention 2013, 2019 Federal Bureau of Investigation



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Child Access Protection Laws



Child Access Protection Laws

Recklessness Laws

-laws related to providing firearms to a minor

- 9 states
- Georgia weakest

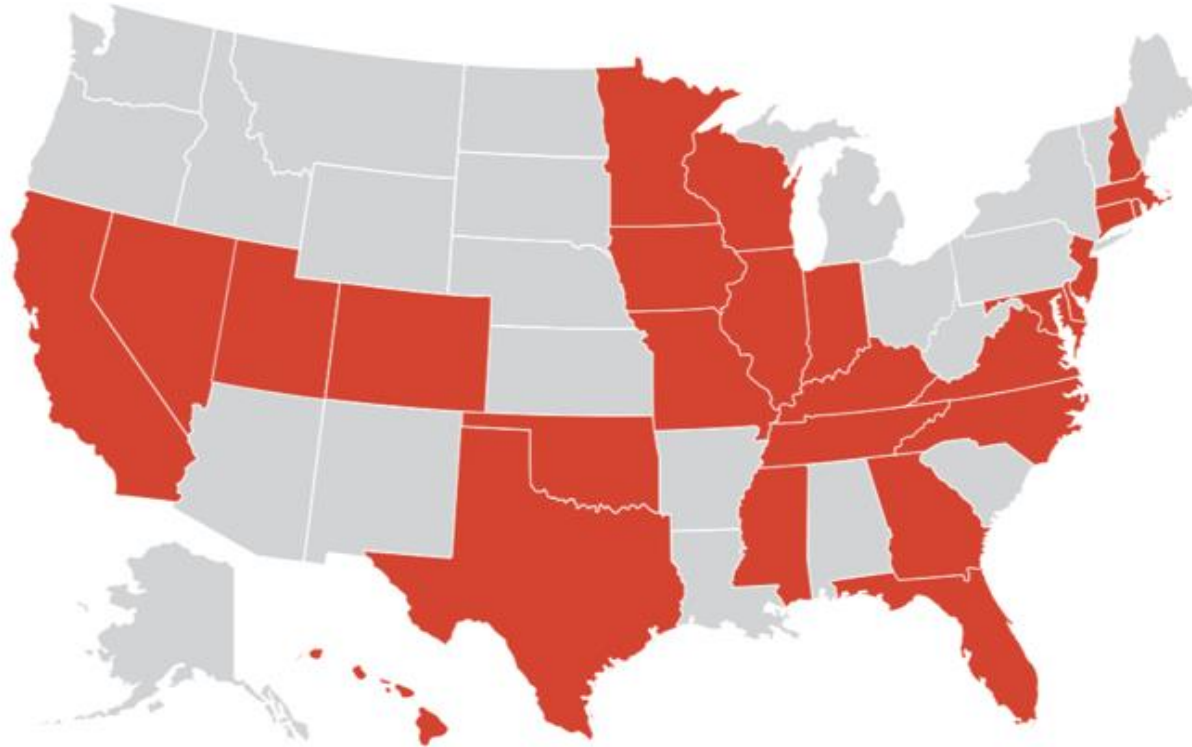
Negligence

-laws related to unsafe firearm storage

- 16 states
- California Strongest

NO Federal CAP LAW

Child Access Laws



Child access prevention laws hold gun owners accountable for the safe storage of firearms. 27 states and DC have enacted some form of CAP law.

■ States that have enacted CAP laws

Georgia-Child Access Law

- Prohibits parents/legal guardians from allowing persons <18 to possess a handgun.
- Parent/legal guardian of minor-->**criminally liable** knows of **minor's unlawful possession of a handgun** and fails to stop it
- **Prohibits parent/legal guardian** from intentionally, knowingly, or recklessly furnishing, or permitting a minor to **possess, a handgun if aware intent to commit felony**
- Prohibits giving a firearm to minor convicted of a forcible felony or misdemeanor
- **Georgia law does not penalize a person who negligently stores a firearm, even if a minor gains access to it**

Child Access Prevention (CAP) Law-Impact on Suicide

- Restrictions to those 21 y/o decreased overall suicide by 18.1% and 35.5% in adolescents
- States demonstrated higher suicide rates after lowering minimum age of gun ownership; CAP laws associated with → 8.3% decrease in suicides in children 14-17



Raifman, BMJ, 2020, Giffordslawcenter.org

Child Access Prevention (CAP) Law-Impact on Suicide

- State laws requiring locks for all handguns associated with 20% reduction in firearm suicides and reduced by 12% in states with CAP laws
- States with criminal liability associated with 54% reduction in self-inflicted injuries States with safety locks associated with a 10% reduction in firearm suicides



Azad, JAMA Pediatrics, 2020, Hamilton, J Trauma Acute Care Surg 2018, Kivisto, J Am Acad Child Adoles Psychiatry, 2020

Child Access Prevention Laws-Impact on Homicide or Assault

- States with strong firearm laws are associated with lower firearm homicide rates
- Laws that strengthen background checks and requiring permits lower homicide rates- although other sweeping reviews have differed
- Decrease youth firearm carriage
- Raising minimum age not associated with lower rates of homicide
- Negligence laws 15% decreased rate of firearm homicides



Fleegler, JAMA, 2013, Lee, JAMA Internal Med, 2017, Zeoli, J Behavior Med, 2019, Xuan, JAMA Pediatrics, 2015, Azad, JAMA Pediatrics, 2020)

Child Access Prevention Laws-Impact on Unintentional Injury

- 12 states where CAP law in place for 1 year found unintentional firearm deaths fell by 23% for children under 15 y/o
- Most restrictive states laws imposing penalties on adults 59% reduction in unintentional deaths
- Unintentional injury is lower for children in states in which violation of law is felony



Giffords.org, Azad, JAMA Pediatrics, 2020, Hepburn, J. Trauma, Critical Care, 2006, Cummings, JAMA, 1997)



Unload, Lock-up, Store Separate-Firearm Safe Storage

Firearm Safety Training



Training of future pediatric leaders

Pediatric resident firearm-related anticipatory guidance

Advice given to families

50%: Store guns unloaded & separate from ammunition

14%: Store guns in locked safe or box

Resident comfort with providing anticipatory guidance

69.6% Comfortable on counseling on risks of firearm ownership

15.4% Confident in ability to counsel families in use of trigger locks, storage devices

22.1% Got didactic education on gun safety, **all interested in receiving education**



How often do physicians screen for lethal means?

- 18% documentation of ≥ 1 provider assess lethal means screen
- 8% discussed action plans to reduce access
- 85% of those discharged had no documentation of provider assessed access lethal means

Considerations for talking to families

When parents were asked:

- Pediatrician should ask about guns in the home (66%)
- Pediatrician should advise on safe storage (75%)
 - 71% were gun owners
- Have had a conversation about firearms with pediatrician (13%)

When talking to patient families about firearm safety:

- Remain neutral
- Respect gun ownership
- Focus on child safety

Garbut J, J Peds 2016.



Prevention: Parental education

Firearm safety counseling:

- **Risks** of children/teens having **exposure**
- Discussing with other injury risks
- Counseling + **provision of safe storage device**
- Asking about guns in the home of places child visits



Preventing Injuries: at home, at play and on the way.



Barkin S, Pediatrics, 2008; Simonetti J, Inj Prev 2018; Rowhani-Rahbar, Epidemiol Rev 2016.



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What is the safest way to store a firearm?

A Locked up and unloaded

B Unloaded, locked up with
ammunition stored, separately

C Locked up and ammunition
stored separately

D Loaded, locked up with
ammunition

Unlocked, unloaded with
ammunition

Have you ever counceled anyone (parents, children, guardians) on safe gun storage?

A Yes

B No

C Maybe

How comfortable do you feel giving parents/guardians or caregivers counseling regarding safe firearm storage?

Very Uncomfortable — 1

Uncomfortable 2

Neutral — 3

Comfortable-4

Very Comfortable — 5

Safe firearm storage devices and costs



Trigger Lock

~ \$12



Cable lock

~ \$6



Combination lock box

~ \$20



Push Button lock box

~ \$70



Biometric lock box

~ \$80



Gun Safe

~ \$800 to 1,500+



CABLE LOCK

- Inexpensive
- Through weapon/ blocks barrel or use of ammunition
- Gun must be unloaded
- Dissuade someone from taking weapon
- Distributed by federally licensed dealers with gun purchase
- Often offered free at police departments
 - (Project Child Safe etc.)
- Easy to tamper → won't deter older child or adult
- Not one size fits all (not long enough for shotgun)



TRIGGER LOCK

- Basic form of gun safety
- Inexpensive
- Any gun
- Fits over gun trigger and prevents firing sometimes
- Most typically a 2 piece lock-small bar through trigger guard
- Designed for unloaded guns
- If loaded gun + trigger lock can be fired
- Better deterrent for child than other adults
- Time consuming to remove



LOCKBOX

- ✓ COMBINATION LOCK
- ✓ PUSH BOX LOCK
- ✓ BIOMETRIC LOCK



- Inaccessible to children and other un-authorized users
- Some lock box have a cable lock to secure them/prevent theft
- Keys can be misplaced, stolen, copied
- Biometric-quick access
 - Some biometric locks connect with home alarms
 - Complicated set-up, tech can fail, alternative opening options

GUNSAFE

- Expensive
- Can store all types of guns
- Difficult to access
- May protect from fire
- Heavy
- Insurance discounts and often required to insure gun
- Store other valuables



How to start the conversation

- Culturally appropriate discussion
- Couch it with discussion on car seats, water heaters, helmet safety
- Learn
 - firearm basics
 - become familiar with risk associated
 - Safe firearm practices
- Universal counseling is best for families (assume access)
 - Families want you to ask (84—91%)
 - Remind families to ASK about storage when visiting other homes

Tips on counseling

Bullet Point Project Quick Video

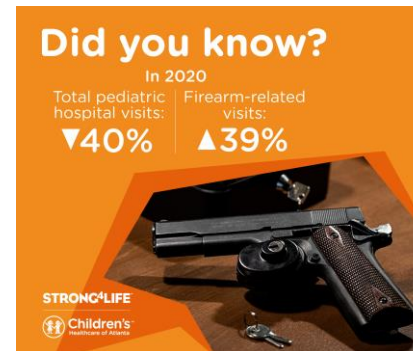
The BulletPoints Project

Clinical tools for
preventing firearm injury

From ASKING SAVES KIDS DAY->>>Georgia Stay SAFE

(2016-2021)

- Flyers at all 3 Campuses
- Tabling/Booths
- Stickers
- Media
- Collaboration



GET INVOLVED-June 19th-June 25th



Take Home Points

- Firearms number one cause of deaths in children and teens
- Safe Storage is important for Children/ADHD/Teens (behavioral health/impulsive)
- Ways to store guns safely-Locked up/Unloaded/Separate
- Child Access Protection laws can be effective-->know your state laws
- Remind parents to ask about the presence unsecured guns



Describe your comfortable level about discussing firearm safety after hearing this presentation?

Very Uncomfortable

Uncomfortable

Neutral

Comfortable

Very Comfortable 5

Training Programs for Health Professionals

The BulletPoints Project

Clinical tools for
preventing firearm injury



<https://youtu.be/tExYuQKaFec>

Hyperlinked Educational Videos

- [Bullet Points Project Counseling Video \(2minutes\)](#)
- [FACTS Parent Counseling Videos \(14 minutes\)](#)
- [FACTS SAFE Storage Education Video \(8 minutes\)](#)
- [Preventing Firearm Related Injury and Death-Targeted Intervention \(38 minutes\)](#)

Questions?

