Firearm Injury Prevention: It Takes All of Us

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Disclosure Information

- In the past 12 months, I have not had a significant financial interest or other relationship with the manufacturer(s) of the product(s) or provider(s) of the service(s) that will be discussed in my presentation.
- This presentation will not include discussion of pharmaceuticals or devices that have not been approved by the FDA or if you will be discussing unapproved or “off-label” uses of pharmaceuticals or devices.
- I was one of the primary authors of the AAP’s policy statement on firearm injury prevention, October 2012
Objectives

- Describe morbidity and mortality of childhood firearm injury
- List risk factors for firearm injury by type (suicide, homicide, unintentional)
- Summarize the AAP 2012 firearm injury prevention recommendations and their evidence basis.
- Give examples of what providers can do in their practices and communities to help diminish firearm injury among children.
Boy, 3, injured himself with gun

A father preparing to clean a handgun left the loaded firearm in the reach of his 3-year-old son, who then shot himself, Mission police said Friday.

The boy was injured about 3:30 p.m. Thursday in thebridge at Westridge apartments at 900 W. 52nd Place in Mission.

Police said their investigation revealed that the boy’s father was preparing to clean his .380 mm handgun and left the loaded firearm unattended where the boy could reach it.

While the father’s back was turned, police said, the boy reached for the gun and pulled it toward himself. The gun fired and the bullet hit the child, who fell to the ground.

Police said the boy was at a hospital and was reported to be in stable condition Friday. The father was not in custody.

Police planned to forward their report on the incident for the Johnson County district attorney’s office to review and determine whether any charges should be filed.

The Police Department issued the following gun safety reminders:

- Treat all firearms as if they are loaded.
- Point muzzle in a safe direction.
- Never leave a gun unattended when handling or cleaning it.
- Lock unloaded guns in a secure location, such as a furniture safe or locked box, or use a trigger lock or chamber lock.
- Unload ammunition and store it in a different location than the gun.

__SHOOTING IN SCHOOL KILLS BOY, WOUNDS HIS MOTHER__

Father charged with murder in Clay county.
US Gun Deaths

87 per Day

60% : Suicide
35% : Homicide
5%: Unintentional

Total in one year: 31,672 (2010)

US Gun Deaths
Children and Teens (<20y)

7.4 per Day

Total in one year: 2,711 (2010)

Of which,
749 were Suicide (28%)
1790 were Homicide (66%)
134 were Unintentional (5%)
38 were Undetermined (1%)

National Vital Statistics report, 2011, CDC
Child and Adolescent Firearm Deaths: 2010

- 1 out of 5 (21%) injury deaths age 1-19, firearm-related
- 1 out of 4 (28%) injury deaths age 15-19, firearm-related

- 2711 Americans under 20 died of a firearm injury.
  - 134 unintentional event
  - 749 suicide
  - 1773 homicide
  - 38 undetermined
  - 17 legal intervention

11. [http://webappa.cdc.gov/cgi-bin/broker.exe](http://webappa.cdc.gov/cgi-bin/broker.exe) (WISQARS,CDC, 2010)

**Firearm-related death rates per 100,000 black and white people 15 through 19 years of age in the United States, 2009.**

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Homicide</th>
<th>Suicide</th>
<th>Unintentional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Males</td>
<td>55.4</td>
<td>49.74</td>
<td>3.39</td>
<td>1.37</td>
</tr>
<tr>
<td>Black Females</td>
<td>5.29</td>
<td>4.78</td>
<td>0.39</td>
<td>0</td>
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<tr>
<td>White Males</td>
<td>13.2</td>
<td>6</td>
<td>6.6</td>
<td>0.43</td>
</tr>
<tr>
<td>White Females</td>
<td>1.96</td>
<td>1.02</td>
<td>0.87</td>
<td>0.02</td>
</tr>
</tbody>
</table>
Compared to other countries, American Children (younger than 15) are:

- 12 times more likely to be killed by a gun
- 17 times more likely to be a gun homicide victim
- 10 times more likely to die of a gun suicide
- 9 times more likely to die of an accidental gun injury.

What We Know

- Children have the ability to fire guns. (Naureckas SM Arch Pediatr Adolesc Med. 995 Dec;149(12):1318-22.)
- Little children are **curious**; Big children are **impulsive**.
- Guns are lethal.
Risk Factors - Gun Storage

Of gun-owning parents:

• Keep firearm unlocked and loaded \(9\%\)
• Keep firearm unlocked, unloaded, stored with ammunition \(4\%\)
• At least one gun unlocked \(43\%\)
• Keep firearm locked, unloaded, and separate from ammunition \(39\%\)

Source: Schuster April 2000

WHO IS STRONG ENOUGH TO FIRE A GUN?

• 25\% of 3 to 4 year olds
• 70\% of 5 to 6 year olds
• 90\% of 7 to 8 year olds

Source: Naureckas et al, 1995
So, What’s New?

- Suicide attempts involving a firearm more often are fatal (90%) compared with other methods. (Elnour AA, Harrison. Inj Prevention, 2008;14(1):39-45)

- Guns in the home are associated with increased risk of suicide, including youth suicide (Brent and others multiple studies)

- The guns in homes of youth suicides and unintentional injuries are significantly less likely to be stored unloaded, locked and separate from ammo than guns in which youth suicides do not occur (Grossman DC, Mueller BA, Riedy C, et al. JAMA 2005;293;707-14.)

Firearms and Suicide Risk

- The presence of a firearm at home increases the risk of suicide even among those without a previous psychiatric diagnosis (Brent DA, et al. 1993)
Youth Suicide.  
Where do the guns come from?

Among suicide completers and attempters: 75% of the guns came from the residence of the victim, friend or relative


Guns and Kids

Evidence Supporting Physician Counseling on Firearms.
What Else We Know

- Parents are receptive of discussion of risk of guns during pediatric visits *(Webster DW., Pediatrics 1992;89:908-14)*


Child-focused Education
Does it Work?

- Gun Safety Programs
  - Ineffective for injury reduction among adults
  - No effect on safe storage
  - No effect on youth accessing for self harm

- Gun Avoidance Programs
  - Examples: Eddie Eagle (NRA), STOP (AAP)
  - A single, small evaluation demonstrates no effect on preschoolers
  - No effect on youth accessing for self harm.

Pediatricians, as part of their anticipatory guidance with families should inquire about guns in the home and offer most effective child protection strategies.

- **Best:** Guns kept out of the environment of children.
- **Good:** Guns in the home should be stored safely: guns separate from ammo., both locked.

**Regulations of guns**
- Child access prevention laws
- Regulation of manufacture, sales. Waiting periods, closure of gun show loophole, background checks
- Restoration of assault weapons ban

**Research in firearm injuries**, including public health surveillance

**Continued physician education**
Child Injury Prevention = Layers of Protection

<table>
<thead>
<tr>
<th>Pool Drowning</th>
<th>Gun Death</th>
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<tbody>
<tr>
<td>Pool fencing</td>
<td>Gun Lock</td>
</tr>
<tr>
<td>Supervision</td>
<td>Supervision</td>
</tr>
<tr>
<td>Teach child</td>
<td>Teach child</td>
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A Perfect Storm

Curious Child*

Unsecured gun

Supervision Lapse

* or depressed/impulsive teen
What Can You Do?: Provider

- ASK your families and advise to: keep guns in the home safety secured: unloaded, locked, ammo locked separately; no access to key by kids

- Encourage families to talk to their family, friends, neighbors about the danger of unsecured guns.

- For children with behavioral or mental health issues of concern: advise removal guns from home. This is SAFETY planning!

How To Ask About Guns?

- “OK, you might think I’m a bit nervous, but I do worry about the safety of my children when I’m not around. So, I’ve got to ask you... Do you have any guns in the house?”

- “Before my child visits, I need you to know he is really curious and can be mischievous. He gets into to everything! So, I’ve got to ask you... Do you have any guns in the house?

- “These cases of kids getting killed or badly injured when they find a gun in the home makes me really worry
Every parent knows.....

It just takes a minute.

Additional Resources

- AAP Policy Statement: Firearm-Related Injuries Affecting the Pediatric Population
  - [http://aappolicy.aappublications.org/cgi/content/full/pediatrics;105/4/888](http://aappolicy.aappublications.org/cgi/content/full/pediatrics;105/4/888)
- “Censorship of the Patient-Physician Relationship” JAMA
  - [http://jama.ama-assn.org/content/306/10/1131.full](http://jama.ama-assn.org/content/306/10/1131.full)
- “Counseling About Firearms: Proposed Legislation is a Threat to Physicians and Their Patients” Pediatrics
  - [http://pediatrics.aappublications.org/cgi/content/full/118/5/2168](http://pediatrics.aappublications.org/cgi/content/full/118/5/2168)
- AAP Connected Kids ([www.aap.org/ConnectedKids/default.htm](http://www.aap.org/ConnectedKids/default.htm))