Kids' firearm-related injuries differ: Younger kids are more likely to be injured accidentally

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The reasons that children with firearm-related injuries are rushed to the nation's emergency departments differs by the intent of the person discharging the weapon, with younger kids more likely to be injured by accident and older youths more likely to be victims of an assault, according to retrospective, cross-sectional analyses presented during the American Academy of Pediatrics National Conference & Exhibition. Efforts to protect children from firearm-related injuries should factor in these differences in intent as legislation and policies are drafted, suggests a study team led by Children's National Health System.

Researchers led by Shilpa J. Patel, M.D., MPH, Children's assistant professor of pediatrics and emergency medicine, reviewed data aggregated in the Nationwide Emergency Department Sample from 2009 to 2013 looking for emergency department visits to treat firearm-related injuries suffered by children and adolescents 21 and younger. They excluded emergency department visits for firearm-related injuries attributed to air, pellet, BB or paintball guns.

Firearm-related injuries are a leading cause of injury and death for U.S. children. Some 111,839 children and youth were treated in emergency departments for firearm-related injuries, or 22,367 per year when averaged over the five-year study period. Nearly 63 percent of these youths were injured by accident; 30.4 percent were victims of assault; 1.4 percent used a firearm to injure themselves. Of note:

- 89.3 percent were male
- Their mean age was 18 (67.3 percent 18 to 21; 27.9 percent 13 to 17; 4.8 percent younger than 12)
- 53.1 percent were discharged from the emergency department

- 30 percent had injuries grave enough to trigger hospital admission and
- 6.1 percent died from their injuries.

"Children younger than 12 were more likely to be shot by accident. By contrast, we found that the odds of experiencing firearm-related injuries due to assault were higher for youths aged 18 to 21," Dr. Patel says. "Physicians can play a powerful role in preventing pediatric firearm-related injuries by routinely screening for firearm access and speaking with families about safe firearm storage and violence prevention," she adds.

Provided by Children's National Medical Center