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Nonfatal firearm injuries: utilization and expenditures for children pre- and postinjury

Des Plaines, IL – Children who experience nonfatal firearm injuries have substantial/marked increases in health care encounters, health care expenditures, and disability in the year after the injury compared to the year prior to the injury. This is the conclusion of a study titled Nonfatal firearm injuries: Utilization and expenditures for children pre- and postinjury, to be published in the August issue of Academic Emergency Medicine (AEM), the peer-reviewed journal of the Society for Academic Emergency Medicine (SAEM).

The study also found that public health programs and policies that reduce the incidence of childhood firearm injury could lead to decreased health care utilization and substantially lower health care expenditures among children in the United States. Future research is needed to further assess the full extent of individual and societal costs of childhood firearm injuries.

The lead author of the study is Christian D. Pulcini, MD, MEd, MPH, of the Department of Surgery & Pediatrics at the University of Vermont Medical Center, Children’s Hospital, Larner College of Medicine at the University of Vermont in Burlington.

Details and results of the study are discussed with Dr. Pulcini in a recent AEM podcast.
Commenting on the study is Megan L. Ranney, MD, MPH, FACEP. Dr. Ranney is a professor of emergency medicine and Associate Dean of Strategy and Innovation at Brown University, as well as co-founder of AFFIRM at Aspen, a non-profit program dedicated to creating non-partisan public health solutions to firearm injury. Her federally funded research focuses on the use of technology to identify and prevent violence and related behavioral health problems.

"This study is a critically important addition to our understanding of the short- and long-term impacts of firearm injury on pediatric patients. The increased health care utilization and costs for children who survive a gunshot wound, alone, should drive attention to this problem. But even more concerning is that these metrics represent just the tip of the ripple effect caused by a pediatric gunshot wound; we all know that health care services are only the first stop on a child’s recovery from an injury."

Also remarking on the research is Lois Lee, MD, MPH, a physician in the Division of Emergency Medicine at Boston Children’s Hospital and an associate professor of pediatrics and emergency medicine at Harvard Medical School. She also serves as president of the Injury Free Coalition for Kids, where she focuses on injury prevention.

“The study importantly focuses on children covered by Medicaid and the Children’s Health Insurance Program (CHIP) and their health care utilization and expenditures following firearm injuries. Although the majority (85.6%) were healthy with low prior health care expenditures, one year after a nonfatal firearm injury there were statistically significant increases in health care utilization, expenditures and disability.”

Presented at the American College of Emergency Physicians National Meeting as a virtual poster, October 2020.

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