

Examining the Evidence: A Pediatric Perspective on Firearm Safety Research

Statement of Problem

On December 14, 2012, 20 children and 6 adults were the victims of gun violence at Sandy Hook Elementary in Connecticut. Following this profound tragedy, families, educators, health professionals, and policymakers issued an urgent call for immediate action to prevent this kind of gun violence in the future, particularly to protect the most vulnerable among us: children.

In response to the Sandy Hook tragedy, Children's Hospital of Philadelphia (CHOP) established the [Center for Violence Prevention](#) (CVP), a multidisciplinary effort to reduce the exposure to and impact of violence among children, teens, and families through community-focused research and evidence-based programs. CVP, a PolicyLab partner, has since become a nationwide leader in hospital-based and community-delivered violence prevention interventions.

As of 2018, despite increased attention across the country to the epidemic of gun violence and the dangers firearms pose for youth, firearm-related injury remained the [second-leading cause of death for children](#). Of the youth killed by guns in high-income countries, a staggering [92%](#) are killed in the United States, and the overall rate of firearm fatalities among children has continued to increase. Throughout the country, the rate of firearm-related suicide in children has [steadily risen](#) since 2008, and firearm-related homicide has [increased by 28%](#) between 2014 and 2016.

This public health crisis impacts children and families physically and emotionally, and takes a toll on the vibrancy and economies of the communities it touches. Many policy proposals exist to prevent firearm injuries, but research specifically looking at the impact on child injury and death—including data that could inform solutions to move the needle on this issue—is lacking.

Description

In 2019, PolicyLab and CVP launched a collaboration to bring an evidence-based, child-focused lens to the issue of firearm safety. For our first joint resource, we released an [Evidence to Action brief](#) in fall 2020 to take a deep dive into the existing evidence on gun-related policies and interventions that could have an impact on unintentional firearm injury and death among youth based on the strength of the available data, and offer recommendations for policymakers, providers and others who have an impact on child health.

We recognize that there are many other issues around firearms that profoundly affect the physical and emotional health of children and families. However, in this brief, we limited our focus to unintentional firearm-related injury and death among youth; this is an issue we felt provided a specific opportunity for action, and that has become even more critical as gun sales have [spiked](#) during the COVID-19 pandemic and children are spending more, potentially unsupervised, time at home.

For this project, we conducted both a policy analysis and research review, with a focus on policies and public health approaches that:

- could prevent children from unintentionally firing a gun, a primary cause of firearm injury among young children
- could decrease adolescent gun possession, as older children are more likely to experience unintentional harm due to mistakenly firing a gun at friends or bystanders.

We reviewed research and analysis on policy and public health approaches including: Encouraging safe storage, gun safety design, comprehensive background checks, and more.

We found that while the research we uncovered on many policies was limited, it is clear that some policies—such as Child Access Prevention laws and comprehensive background checks—have enough evidence behind them to warrant immediate action among decision-makers to move them forward. There is also a critical need for more research and funding to determine additional policy strategies and implementation approaches that are effective in preventing child injury and death. For more recommendations for policymakers, providers, health care systems, parents and community organizations, [read the full brief here](#).

In spring 2021, PolicyLab and CVP released an accompanying [policy brief](#) that builds out guidance for research to address evidence gaps and identify which policies work to prevent firearm injury among youth.

Next Steps

In the coming months, we'll look to advance our recommendations and produce additional supportive guidance that could be valuable to leaders working in this space. It is our hope that these resources can guide policymakers looking to make evidence-informed decisions to keep families safe in their communities and across the country.

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Project Leads

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Director

Dr. Matone's research interests include maternal and young child health, as well as family well-being. She focuses on building community and public agency research partnerships to support improvements in policies and programs that serve mothers and infants in under-resourced communities. She is experienced in large-scale program evaluation, mixed-methods research designs, and use of administrative data for observational study designs in areas of child and caregiver health.

Dr. Matone is a senior fellow at the University of Pennsylvania's Leonard Davis Institute of Health Economics, a faculty affiliate at The Field Center, and a board member of the Pennsylvania Association for the Education of Youth Children. Dr. Matone received her Doctor of Public Health, specializing in child and adolescent health and development, from Johns Hopkins Bloomberg School of Public Health. She is an alumnus of the Doris Duke Fellowship for the Promotion of Child Well-being program and a former Stoneleigh Foundation fellow.



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Ms. Rosenquist has extensive experience working in health policy, advocacy, and related work. Prior to joining CHOP, she was the director of state engagement for Shatterproof ATLAS, a quality measurement system for addiction treatment programs, where she led Shatterproof's partnerships with state agencies and stakeholders in ATLAS pilot states.

Prior to that, Ms. Rosenquist was the associate director for health policy at the Leonard Davis Institute of Health Economics at the University of Pennsylvania (Penn LDI). She has also worked for Action for Global Health, a cross-European coalition of non-profits funded by the Bill & Melinda Gates Foundation, and the Thomson Reuters Foundation, both in London, UK. She started her career in state and local politics, working for the political action committee EMILY's List.

Ms. Rosenquist is a graduate of the College Scholars Program at Cornell University and received her master's degree in global politics from the London School of Economics & Political Science. She lives in Narberth with her husband and two children.



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Team

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Laura Cavello (she/her) is the communications manager at PolicyLab working to distill the latest research into digestible content and resources that policymakers, researchers, and advocates can use to help explore and address some of today's most pressing issues concerning children's health. Ms. Cavello provides broad communications support across PolicyLab and produces and executes strategic communications plans for investigators within the Behavioral Health and Family & Community Health Portfolios. She also manages the PolicyLab virtual conversation and webinar series, and authors PolicyLab's newsletter, "The Check-Up."

Prior to joining PolicyLab, Ms. Cavello spent several years at GMMB, a Washington D.C.-based communications firm, working on issues surrounding health insurance marketplaces, Medicaid, the Children's Health Insurance Program and early childhood development. Ms. Cavello attended Lafayette College and graduated with a BA in government & law.



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Polina Krass MD

Faculty Member

Polina Krass (she/her) is a faculty member at PolicyLab at Children's Hospital of Philadelphia (CHOP), an attending pediatrician at CHOP and a post-doctoral fellow in the National Clinician Scholars Program at the University of Pennsylvania. She also serves as a research scholar in the CHOP Center for Violence Prevention, and an associate fellow of the Leonard Davis Institute of Health Economics at the University of Pennsylvania.

Dr. Krass' research focuses on equitable access to comprehensive adolescent health care. She is particularly interested in evaluating the way that local, state, and federal policies impact the availability of mental and reproductive health care, and in implementing strategies to make this care more widely accessible.

Dr. Krass graduated from Harvard University with a bachelor's degree in chemistry. She then received her medical degree from the New York University School of Medicine, followed by pediatrics residency training at CHOP. She currently functions as an attending physician in the CHOP Adolescent Medicine and Emergency Medicine Departments and as the lead physician for the Adolescent Protection Collaborative at CHOP's Karabots Care Center.



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Related Tools & Publications

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[Spiking Rates of Gun Purchases During COVID-19 Pandemic Put Youth at Risk
Blog Post](#)

Jun 05, 2020

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[Preventing Unintentional Firearm Injury & Death Among Youth: Examining the Evidence
Evidence to Action Briefs](#)

Dec 2020

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[Partner Toolkit – Preventing Unintentional Firearm Injury & Death Among Youth
Tools and Memos](#)

Feb 2021

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[Protecting Youth From Unintentional Firearm Injury: Addressing the Research Gaps
Policy Briefs](#)

Feb 2021

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[Firearm Policies to Protect Youth: Building on Research to Inspire Action](#)

[Webinars](#)

May 2021



[Association of Neighborhood Gun Violence With Mental Health–related Pediatric Emergency Department Utilization](#)

[Article](#)

Sep 2021