

Testimony by Joel Fein MD, MPH Co-Director, Center for Violence Prevention Children's Hospital of Philadelphia Professor of Pediatrics Perelman School of Medicine at the University of Pennsylvania

Pennsylvania House Children and Youth Committee "Child & Adolescent Fatality Trends & Community Responses" September 14, 2022, 10:00 AM Ryan Office Building Thank you for the opportunity to speak with you on behalf of my fellow pediatricians and colleagues at the Center for Violence Prevention at Children's Hospital of Philadelphia. I'm grateful to the Chairs of this committee and its members for elevating the issue health and safety of our children for consideration before the legislature. My name is Joel Fein, and I am a pediatric and emergency physician at Children's Hospital of Philadelphia and a Professor of Pediatrics at The University of Pennsylvania. I also co-direct the Center for Violence Prevention at CHOP, which implements and studies multilevel violence intervention programs for children and families. My testimony today will focus on the issues of gun violence on our youth in the context of adolescent fatality trends and community responses.

Gun violence is not only an overall public health issue, but also threatens the physical and mental health of children in our Commonwealth. The good news is that we can bring our knowledge, experience, and commitment to collectively confront this challenge through preventive measures. We are all assembled here because we realize that the gun violence epidemic in Pennsylvania is getting worse, not better. In 2020, gun deaths rivaled motor vehicle accidents as the leading cause of death in children in the United States.¹ More than 1700 Pennsylvanians were killed by guns in 2020, and over 3000 more were injured. More than 60% of these were suicides, which are highest per capita in rural areas of the state. Each year, experts estimate that the annual economic costs of gun violence in the Commonwealth was more than \$8 billion in 2019 and closer to \$12 billion this year, taking into consideration health care costs, lost income and employer losses, as well as the burden on law enforcement and the criminal justice system.²

While the numbers speak volumes, we know that behind them are individual stories of countless families that have seen gun violence shatter their hopes for the future. As a pediatric emergency physician, I witness firsthand the devastating effects of violence on our children and their families. The physical toll is most obvious – in the past decade our trauma centers at Children's Hospital of Philadelphia and The University of Pennsylvania have cared for almost 2000 children and adolescents with gun injuries. However, as you will hear from my colleague Jennifer Dee, the mental and emotional toll of recovery is often the greatest hurdle.

What you may not realize is that the ripple effects of gun violence travel beyond that child's mother, father, and cousins. Gun violence truly effects the health and wellness of entire communities. Our own research at CHOP has shown the grave impact of gun violence on neighborhoods. In a sample of more than 50,000 children, we found that those who lived within a ¼ mile of a shooting were almost twice as likely to visit our Emergency Department for a mental health problem such as anxiety, depression, insomnia, or intentional self-harm. This association was strongest for children living within 2-3 blocks of the shooting -- particularly in the two weeks immediately after the shooting and for children exposed to multiple shootings.³ This is what we call a "dose response," and it strongly supports that these particular shootings were directly related to the mental health issues that brought these children to our ER. Our research generated a large amount of media coverage and interest in the violence prevention community, and my colleagues in Chester, Pittsburgh, Hershey and

many other cities around the Commonwealth know that it also applies to the children and families in for whom they care.

As a violence prevention researcher, I know that there are many angles from which we can find solutions for gun violence in our communities. I am thankful for all the public health interventions out there, from neighborhood greening to street mediation, to hospital-based violence intervention programs that wrap around kids and families after a violent injury. We don't pretend that firearm violence exists in a vacuum or believe that there is one simple solution. We know that societal inequities and distressed economic conditions render communities of color under-resourced and more vulnerable to ongoing cycles of violence. We know that access to quality education, job training and mental health services are the tools of violence prevention. Evidence-based interventions, policies, and legislation must target *these* issues in addition to preventing crime, retaliation, and reinjury.

Based on what I have learned about this issue as a researcher and a practitioner, I would like to spend the remainder of my time reviewing some examples of what you, our legislature, can do to help alleviate this massive violence epidemic in our state. Each of these policies, if they were in place, could have given me fewer patients to care for and, most importantly, saved families from grieving and communities from being fractured.

To paint a clearer picture...one night I cared for a toddler who had been struck by a bullet shot accidentally by his older brother. Their mother was left wondering how that child got hold of his uncle's handgun, which had been placed on top of the refrigerator.

On another night I cared for a young teenager who was grappling with depression and made the decision to end his own life using his father's handgun, which was left loaded in his father's bedside table for the rare event that a stranger entered his house with intent to kill. These tragedies were undoubtedly avoidable – if the guns were properly stored and secured.

We know that at least one third of American households have at least one firearm. And we also know that approximately 1 out of every 3 handguns are kept unlocked and loaded. A number of studies showed that parents were surprised to discover that their kids know how to access the loaded firearms that are kept in their homes.^{4,5} One of the programs in our Center for Violence Prevention provides parent education and counseling about safe storage and offers free gun locks to families. We also know that states with the strictest Child Access Prevention laws, or CAP laws, which place responsibility for safe storage squarely in the hands of gun owners, result in lower rates of unintentional injury and suicides. There are also efforts such as Extreme Risk Protection Orders - colloquially known as "red flag laws" - that can serve to further protect our youth and families by temporarily removing, via court order, firearms from those experiencing a crisis. Thank you to Rep. Stephens for his leadership on pushing measures like this forward.

CHOP also runs a Hospital-based Violence Intervention Program that provides long-term, wraparound community-based support to youth who come to our hospital after a violent injury. We have unfortunately seen the number of children we treat for firearm injury double

in the past 2 years. Because many of the guns involved in crimes are obtained illegally, there are some enforcement actions on the supply side that may have great impact. According to a report from Brady United - based on publicly available data from the Pennsylvania Office of Attorney General - 90% of guns recovered and traced by PA law enforcement used in crimes can be traced to only 20% of gun dealers, and 50% of these guns came from 1% of dealers. In 2020, only 8% of dealers were responsible for 100% of traced crime guns where the time between purchase and recovery crime was less than 1 year.⁶ Such a short "time to crime" is a strong indicator that a gun was purchased with the intent to traffic or criminally misuse it. Possible solutions that our legislature could consider include promoting the use of existing electronic databases for background checks, offering training structures for dealers to ensure they are meeting the law, and holding those who do not satisfy these laws accountable in the same manner that we do the violent criminals who use those weapons.

During this testimony I have shared a few examples of what we know can curb gun violence in Pennsylvania. However, there is still much that we are still learning, which is why our Center for Violence Prevention performs research as well as programming in the community. Although funding for community violence interventions has increased in past years, the amount allotted for research is still relatively paltry. Research funding will help us discover which interventions work, and which should be improved or placed aside. Rigorous evaluation leads to successful innovation, and we must dedicate resources to the science of effective violence prevention.

The statistics and data clearly indicate that gun violence and its impact on our children, whether directly or indirectly, deserves the attention of policymakers across the Commonwealth. Again, I want to thank this committee for allowing me to testify today and discuss these important issues. I'm happy to answer any questions you may have. Thank you.

¹ Goldstick JE, Cunningham RM, Carter PM. Current Causes of Death in Children and Adolescents in the United States. N Engl J Med 2022; 386:1955-1956

DOI: 10.1056/NEJMc2201761.

² U.S. Congress Joint Economic Committee Democratic Staff. "A State-by-State Examination of the Economic Costs of Gun Violence." Joint Economic Committee, 18 Sept. 2019,

https://www.jec.senate.gov/public/_cache/files/9872b4d4-4151-4d3e-8df9-bc565743d990/economic-costs-of-gun-violence---jec-report.pdf

³ Vasan A, Mitchell HK, Fein JA, Buckler DG, Wiebe DJ, South EC. Association of Neighborhood Gun Violence With Mental Health–Related Pediatric Emergency Department Utilization. JAMA Pediatrics. Published online September 20, 2021. doi:10.1001/jamapediatrics.2021.3512

 ⁴ Salhi C, Azrael D, Miller M. Parent and Adolescent Reports of Adolescent Access to Household Firearms in the United States. JAMA Network Open; 2021;4(3):e210989. doi:10.1001/jamanetworkopen.2021.0989
⁵ Jackman GA, Farah MM, Kellermann AL, Simon HK. Seeing Is Believing: What Do Boys Do When They Find a Real Gun?. Pediatrics June 2001; 107 (6): 1247–1250. 10.1542/peds.107.6.1247

⁶ Pennsylvania-Crime-Guns-Trace-Report.pdf (Pennsylvania-Crime-Guns-Trace-Report.pdf (bradystatic.s3.amazonaws.com)