University of Michigan Institute for Firearm Injury Prevention

Two-Year Anniversary Impact Report

INSTITUTE FOR FIREARM INJURY PREVENTION
UNIVERSITY OF MICHIGAN
With the Institute celebrating its second anniversary in June 2023, we wanted to highlight the progress that U-M faculty and staff have achieved in an effort to reduce firearm-related injury and death.

In 2023, our researchers provided evidence for bipartisan legislative proposals seeking to implement background checks, safe storage, and extreme risk protection orders—the most significant policy update on firearm injury prevention in Michigan in almost 30 years. Institute team members shared data for these policies with Michigan legislators, which were then passed and signed into law; these conversations highlight the critical role research plays in determining effective strategies and solutions.

The Institute has also received $1 million from the State to launch the Michigan School Safety Initiative, a resource for all Michigan school districts that focuses on providing training and technical assistance to improve school safety and prevent school violence.

A crucial aspect of implementing evidence-based policies and programs is also determining the effectiveness of such strategies. Through additional partnerships with the State of Michigan, our teams will lead a statewide evaluation of school safety initiatives, Michigan State Police community firearm violence prevention initiatives, and the policies recently signed into law addressing background checks, safe storage, and extreme risk protection orders.

In 2022, the Institute received funding to house and operate a National Institutes for Health-funded Coordinating Center to lead community-based research projects across the nation designed to reduce firearm-related injuries. We are providing technical assistance to funded projects and creating a nationwide network of community-engaged researchers to share lessons learned, measurements of success, and data across the sites.

Our team also hosted its second cohort of post-doctoral students funded by the first ever federal grant focused specifically on the prevention of firearm injuries. In 2023, we welcomed our second round of summer student interns, providing a pathway for students to learn more about this field of research and engage with faculty members and postdoctoral researchers.

As we enter our third year, we are poised to continue this progress and to make further significant strides in addressing the issue of firearm violence and injury. As always, we thank our donors for your continued support, and our colleagues and communities for your engagement in these efforts to save lives across the nation and world.

Patrick Carter, M.D.
Marc Zimmerman, Ph.D.
Co-Directors, Institute for Firearm Injury Prevention
Highlights of the First Two Years

- 6+ faculty members hired to join our team of 19 multidisciplinary scientists and scholars to expand the work of the Institute into new areas of research and scholarship.

- Implementing programs in 16+ Michigan communities and across 20+ states to advance evidence-based solutions for reducing firearm injury/death.

- Educated lawmakers on the evidence base behind 3+ firearm safety policies under consideration in Michigan.

- Funding to lead the Community Firearm Violence Intervention Network, the NIH’s largest investment to date to evaluate new programs being implemented to reduce firearm violence in communities across the U.S.

- Trained 9+ postdoctoral trainees, and 25+ student interns across campus, enhancing the next generation of scholars focused on developing solutions to this public health issue.

- Providing Training and Technical Assistance to 20+ Schools across Michigan to enhance evidence-based school safety and reduce school shootings.

- Partnering with the Michigan State Police to provide Community Violence Intervention (CVI) Program Evaluation, as part of the Bipartisan Safer Communities infrastructure Act.

- Created a real-time surveillance system of firearm incidents to help guide public health response in the state of Michigan.

- Created the largest existing national firearm data repository in the country, with 100+ datasets accessible to researchers nationwide to generate new knowledge about this public health problem.

- Published 86+ firearm-related publications, helping to disseminate knowledge within and outside the research community.

- $28 million+ in new firearm-related funding to expand programs of research across Michigan and the U.S.

- Launched the most comprehensive evidence-based online course to date with 37+ hours of education for researchers, practitioners, students, and the broader public.
A Resource for the State

U-M Firearm Injury Prevention Research Projects Across Michigan

The Institute is committed to addressing firearm injury broadly across Michigan. The map below highlights areas of Michigan where our projects are working to address firearm injury prevention.

Understanding the Relationship between Public Art, Community Engagement, and Reducing Firearm Violence

- **Detroit**
  - In partnership with the National Endowment for the Arts, this project builds on the Institute’s prior work in environmental and place-based interventions. A main goal of the project is to understand the role of the arts and humanities in improving health and well-being by promoting community factors that protect youth from firearm violence. Working with community partners and Detroit residents, this project seeks to deepen our understanding of relationships between public art and firearm and other interpersonal violence, and support community engagement via public art projects.

Increasing Help-Seeking Behaviors and Improving the Use of the Suicide Crisis Line with National Guard Members

- **Grayling, Battle Creek**
  - Military personnel are disproportionately affected by firearm suicide, especially in the National Guard where suicide rates are the highest of all Armed Forces. In collaboration with National Guard training weekends, project leaders work to provide education and training to National Guard members on the national crisis line. The study also promotes a peer outreach approach to increase the use of the crisis line among National Guard members and to encourage help-seeking behaviors for themselves and their peer soldiers during periods of elevated risk.

Educating Lawmakers on the Research and Evidence Behind State Firearm Policies

- **Lansing, Flint**
  - In 2023, Institute leadership provided expert testimony and education to legislators in the Michigan House and Senate on what we know from the existing research literature about the effectiveness of three policies under consideration by the Michigan Legislature: Extreme Risk Protection Orders, permit-to-purchase licensing and universal background checks, and secure storage. All three bills were signed into law by Governor Gretchen Whitmer, and will be implemented in early 2024. The Institute is currently working in Detroit with LGBT+ youth-serving organizations to fill these gaps by identifying the specific structural, social, organizational, and psychological factors that may influence firearm violence and injury, and to inform tailored prevention efforts among LGBT+ youth of color to improve health outcomes.

Reducing Youth Risky Firearm Behavior Through Hospital-Based Violence Intervention Programming

- **Saginaw, Flint**
  - Emergency Department visits can serve as an opportunity to work with youth at risk for violence before they experience a violent injury. The Institute currently leads an Emergency Department study in Flint and Saginaw that engages with youth and young adults that report they carry firearms, and provides one-to-one counseling during and after their hospital visit. This counseling approach focuses on discussions around why and how to reduce their involvement with risky firearm behaviors. Counselors work collaboratively with patients to identify resources and services in the community that will help them meet their goals and safety needs, and assist in connecting the patients with these services. The research study, which is funded by the Centers for Disease Control and Prevention (CDCP), is also investigating ways that technology can support the counseling sessions and is utilizing a smartphone application to enhance the messaging delivered through the counseling sessions, as well as helping to link youth to services in their community.

Understanding Firearm Violence and Firearm Injury Prevention Efforts among LGBT+ youth of color

- **Detroit**
  - LGBT+ youth are disproportionately affected by both suicide and interpersonal violence. Currently, there is a lack of research on the extent of firearm violence and injury experienced by LGBT+ youth and young adults of color, and the specific supports and tailored programs that are necessary to prevent firearm-injury outcomes. Our team is currently working in Detroit with LGBT+ youth-serving organizations to fill these gaps by identifying the specific structural, social, organizational, and psychological factors that may influence firearm violence and injury, and to inform tailored prevention efforts among LGBT+ youth of color to improve health outcomes.

Preventing School Violence and Enhancing School Safety in Michigan

In 2023, the Institute launched a statewide initiative to enhance school safety and prevent school violence, including school shootings. The Michigan School Safety Initiative, funded by the State of Michigan, will be available in all K-12 schools in the state, providing training and assistance to district leadership and staff regarding evidence-based best practices to improve school safety such as social emotional learning, threat assessments and related screening programs, and trauma-informed responses. State support will allow the Institute to conduct a comprehensive needs assessment of Michigan schools, evaluate the effectiveness of existing school safety actions and convene a Michigan-specific school safety advisory board.

Preventing Suicide in Michigan Men Through Training Agencies on Lethal Means Counseling

- **Marquette County, Lapeer, Muskegon, Ingham County, Wayne County, Washtenaw County**
  - Reducing access to lethal means, such as firearms, especially during moments of crisis, is an evidence-based suicide prevention strategy. In collaboration with the Michigan Department of Health and Human Services (MDHHS), our team provides training to Michigan agencies on how to identify clients and patients that could benefit from lethal means counseling. In addition to this training, our team is also assisting MDHHS by evaluating the program, ensuring that this work is reaching the intended audience.

Working with Rural Communities to Prevent Firearm Suicide and Unintentional Injury among Children & Teens

- **Marquette County**
  - Ensuring firearms are stored safely and used correctly is a critical piece of preventing firearm injury and death. The Institute has been working with rural, firearm-owning families in Michigan’s Upper Peninsula. This project, Store Safely, is a collaborative effort bringing together local public health practitioners, local business owners, law enforcement officials, K-12 school personnel, suicide prevention specialists, and local citizens. The program works to tailor firearm safety strategies for families living in rural communities and consists of a four step online process that provides tools and resources to prevent firearm injuries and misuse among children and teens. A main focus of the project is to work closely with law-abiding firearm owners to ensure their reasons for owning a firearm are valued and honored while also providing evidence-based safety strategies.

Reducing Y risk Firearm Behavior

- **Marquette County**
  - Emerging out of the Institute’s urban work on the Detroit Firearm Injury Prevention Initiative (DFIPI), the DFIPI is a collaborative effort bringing together local public health practitioners, local business owners, law enforcement officials, K-12 school personnel, suicide prevention specialists, and local citizens. The program works to tailor firearm safety strategies for families living in rural communities and consists of a four step online process that provides tools and resources to prevent firearm injuries and misuse among children and teens. A main focus of the project is to work closely with law-abiding firearm owners to ensure their reasons for owning a firearm are valued and honored while also providing evidence-based safety strategies.
The Institute for Firearm Injury Prevention is also a national leader in conducting firearm injury prevention research. Our team works with communities in over 20 states to provide data-driven, evidence-based solutions to firearm injury.

Michigan Youth Violence Prevention Center: Building Evidence for Firearm Violence Prevention

The Michigan Youth Violence Prevention Center, one of the five Centers of Academic Excellence funded by the Centers for Disease Control and Prevention in the United States, is also housed within the Institute. This Center works in partnership with two communities to study the implementation and effectiveness of two distinct strategies for firearm violence prevention. In Muskegon, Michigan, the Center is implementing SafeRteens, an evidence-based brief intervention program designed to reduce youth violence, across 6 clinical settings (emergency department, primary care office, etc.) to determine the effectiveness of the program in reducing firearm violence. In Washington, D.C., the Center is working with the TRIGGER program, which engages youth in employment, social office, etc., to determine the effectiveness of the program in reducing firearm violence.

Family Safety Net: Developing a Suicide Prevention Approach to Enhance Safe Firearm Storage in Rural Alaska

Rural Alaska Native communities are disproportionately affected by youth suicide, with 60% of Alaskan Native suicides resulting from firearms. Partnering with local tribal leaders, this project is developing a family-centered suicide prevention approach that is implemented through primary care clinics in remote Alaskan villages and addresses the need for locked storage of household firearms.

Community Firearm Injury Prevention Network: Leading the NIH’s Network Coordinating Center to Provide Technical Assistance and Scientific Expertise to Research Projects Across the Nation

The Coordinating Center is funded to lead this network, providing support to NIH-funded projects across the nation, including assistance with research design, community-based participatory research methods, and statistical analysis. The Institute is also harmonizing data collection across these projects to allow for cross-site research, enhancing the potential impact of this Network to generate new solutions to reducing firearm violence. Currently the team is working with funded projects in Washington, D.C., Illinois and Mississippi, with up to six new projects joining the Network in the Fall of 2023.

Evaluating How Extreme Risk Protection Orders are Being Used and Associated Reductions in Suicide Risk

In December 2022, the Institute partnered with federal funders and other academic universities to co-host the National Research Conference on Firearm Injury Prevention in Washington, D.C. The Conference featured over 260 presentations by academic researchers and was attended by more than 500 researchers representing more than 250 different institutions — making it the largest multidisciplinary research conference dedicated to the scientific study of firearm injury prevention. In addition to broadly disseminating scientific knowledge to the academic community and public, this conference has led to the founding of the Research Society for the Prevention of Firearm-Related Harms to help advance solutions to the public health problem of firearm injury and death. Institute faculty continue to serve in leadership roles for this new Society and on planning committees for future annual conferences.

Hospital-Based Violence Prevention Programs: Reducing Risk for Repeat Injuries Among Assault-Injured Youth

In an effort to reduce retaliatory violence and the potential for repeat violent injuries, the Institute is developing and evaluating hospital-based violence prevention programs that intervene with youth after they have sustained an assault injury. Health Coaches meet via telehealth with patients in the immediate aftermath of a violent injury and for the subsequent 12-weeks, providing in-depth counseling, support, and linkage to resources. The program also provides skills in navigating difficult situations such as anger management, non-violent conflict resolution, positive communication, violence avoidance and de-escalation, as well as reducing firearm and weapon carriage. This program utilizes artificial intelligence technology to personalize the intervention delivery approach and the intensity of intervention content to best meet each patient’s individual needs. This work is being conducted across hospitals in Flint, Detroit, Philadelphia, and Atlanta.

Understanding Racism, Firearm Injury Risks, and Resiliency Among Asian Americans

The rise in Anti-Asian sentiment during the COVID-19 pandemic, combined with long-existing structural racism, has elevated the risk of racial violence and discrimination towards the Asian-American Community. This research study, led by Institute faculty, applies a mixed-method approach to improve the understanding of how this recent rise in racism is associated with firearm behavior, injury, and mortality among Asian Americans, and to inform culturally competent prevention strategies.

Supporting the Field of Research: Co-Hosting the National Research Conference on Firearm Injury Prevention

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The Institute is committed to educating and training the next generation of faculty and students. The Institute is focused on providing diverse and collaborative opportunities such as:

- The first-ever NIH-funded training grant solely dedicated to the study of the prevention of firearm injuries among children and teens
- A robust summer internship and research program for graduate and undergraduate students
- Access to the most comprehensive, free online training course on the science of firearm injury prevention (the course is available to all levels of learners)

Our program is dedicated to addressing the leading cause of pediatric mortality by providing post-doctoral research training on the prevention of firearm injuries among children and teens.

Post-doctoral Research Fellowship Training

Our postdoctoral fellows and their efforts have already made significant contributions to our understanding of this public health crisis, and assisted in the Institute’s mission of developing and rigorously testing evidence-based prevention strategies. Since launching the postdoctoral training program, the Institute has worked with 9 trainees to develop and expand their portfolios of research in the topic areas of criminology, gender studies/gender-based violence, youth violence prevention and treatment, homicide, intimate partner violence, policy, high-risk populations, arms trafficking, and school safety. Current and past trainees:

- Shaun Bhatia, PhD
- Leigh Rauk, PhD
- Stephen Oliphant, PhD
- Eugenio Weigend Vargas, PhD
- Zainab Hans, PhD
- Karissa Pulliard, PhD, MS
- Heather Hartman, MD
- Laura Goward, MD
- Chris Cooper, PhD
- Esmeralda Veloz and Vargas, PhD

Providing Research Opportunities to Undergraduate and Graduate Students

The Institute has trained more than 25 interns or research assistant students representing more than 7 U-M schools. Current interns:

- Mitunuel Alhacham
- Samantha April
- Prudhvi Bommaraju
- Aylin Tebbs
- Zainab Hans
- Eileen Spiegel
- Ahndi Ramos
- Juliaowen
- Katherine Romero-Trejo
- Elizabeth Stout
- Akhil Paleru
- Jaymie Tibbits
- Mildred Wallace

Free Online Course For Learners of All Levels

The Institute, in partnership with the FACTS Consortium and the Center for Academic Innovation, launched the most comprehensive, free firearm injury prevention online course to date in 2023, covering a range of firearm injury topics including: firearm-related suicide, unintentional firearm injury, firearm-related community and youth violence, firearm-related intimate partner violence, school and mass shootings, and officer-involved shootings. Through 37+ hours of training and interviews, eligible learners can earn free continuing education credits.
As always, we thank our donors for your continued support, and our colleagues and communities for your engagement in these efforts to save lives across the nation and world.