

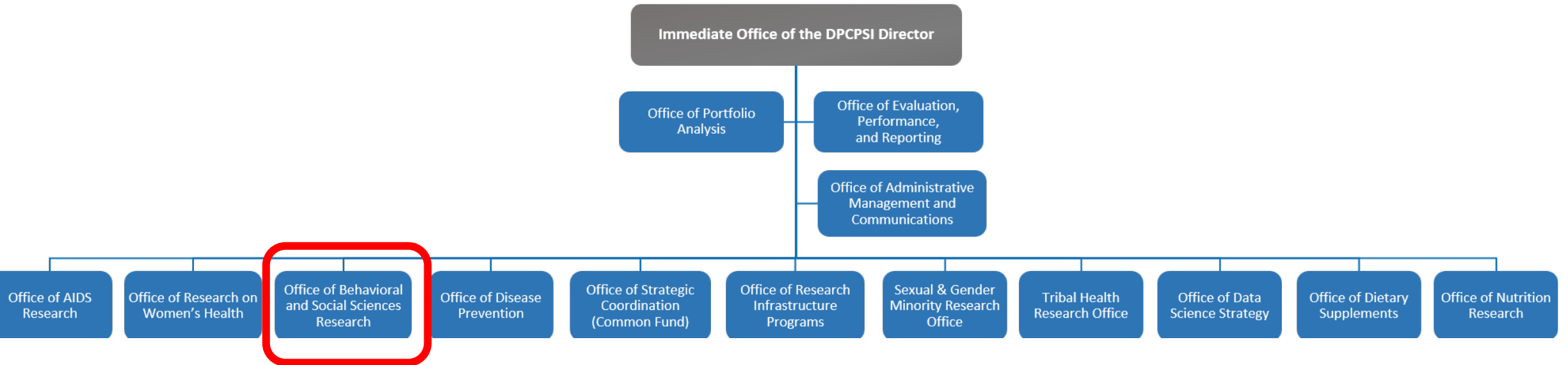
NIH Research Support: Firearm Injury and Mortality Prevention

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*NINR Council
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Office of Behavioral and Social Sciences Research (OBSSR)



- ▶ Integration of BSSR into the broader biomedical research efforts consistent with the NIH mission
- ▶ Coordination and collaboration with the ICs on cross-cutting and high priority BSSR across the NIH
- ▶ Identify and help address critical challenges that are barriers to advancement in BSSR
- ▶ Focus on challenges that OBSSR is uniquely positioned to address



Background

Firearm violence is an urgent public health crisis:

- 2020: 79% of all homicides and 53% of all suicides involved firearms
- 2019 to 2020: firearm homicide rate increased by 35%--highest in over 25 years
- 2020: for ages 1-19, firearm-related injuries became the leading cause of death
- Large disparities exist by race, ethnicity, and poverty; significantly impacting AA and AIAN populations

Firearms Research Awards 2019-2022



Includes new awards only; both firearms-specific FOAs and others, but not FY22 network awards

For more information: [NIH RCDC](#) “firearms research” (starting in 2020)



Previous FOAs on Firearms Research

Research on the Health Determinants & Consequences of Violence & its Prevention, Particularly Firearm Violence (R01, R03, R21)---24 total awards (12 firearms focused)

- Alcohol, Drug, and Other Prior Crimes and Risk of Arrest in Handgun Purchasers: [R01AA02355](#); PI: Garen Wintemute
- Psychological and socio-contextual factors in gun carrying and firearm violence: [R01HD086761](#); PI: Dustin Pardini
- Exposure to Violence and Subsequent Weapons Use: Mediating and Moderating Processes: [R01HD084652](#); PI: Rowell Huesmann



Previous FOAS on Firearms Research

- A randomized trial of abandoned housing remediation, substance abuse and violence ([R01AA024941](#); PI: John MacDonald)
- Building Resilient Neighborhoods and Positive Social Networks to Prevent Gun Violence ([R01MD010403](#); PI: Emily Wang)
- Interagency Data Base Linkage: Precursors of Firearm Injuries and Suicide ([R21MH112201](#); PI: Kathleen Carlson)

Additional Support for Firearms Research

Sample awards (FY19-22)

- A comparative effectiveness trial of strategies to implement firearm safety promotion as a universal suicide prevention strategy in pediatric primary care (PI : Rinad Beidas; [R01MH123491](#))
- Pediatric Firearm Deaths: A Mixed-Methods Analysis of Individual- and Situation-Level Factors Contributing to Racial and Ethnic Disparities (PI: Amy Hunter; [R03HD104738](#))
- Understanding the Short- and Long-Term Impacts of Childhood Exposure to Violence: Evidence from School Shootings (PI: Maya Rossin Slater; [R01HD102378](#))
- Comparative Assessment of Modifying Social Determinants of Health to Reduce Firearm-Related Mortality and Disparities (PI: Daniel Kim; [R21MD015812](#))
- Moving Upstream: Understanding Racism, Firearm Injury Risks, and Resiliency Among Asian Americans (PI: Hsing-Fang Hseih; [NR020753-01](#))
- TRUE HAVEN: Trusted Residents and Housing Assistance to decrease violence exposure in New Haven (PI: Brita Roy; [R01MD017526](#))



FY20-23 Appropriations Report Language

- ▶ \$12,500,000 to conduct research on firearm injury and mortality prevention
- ▶ Recommends the NIH take a comprehensive approach to studying **underlying causes and evidence-based methods of prevention of injury**, including crime prevention
- ▶ All grantees required to fulfill requirements around **open data, open code, pre-registration of research projects, and open access** to research articles
- ▶ Ensure that such awards support **ideologically and politically unbiased research projects**
- ▶ **None of the funds** made available in this title may be used, in whole or in part, **to advocate or promote gun control**



FY20/21 FOAs Using Appropriation

PAR-20-143: Two-year pilot R61 awards (7 awards; NIMH, NIA, NICHD, NIAAA)

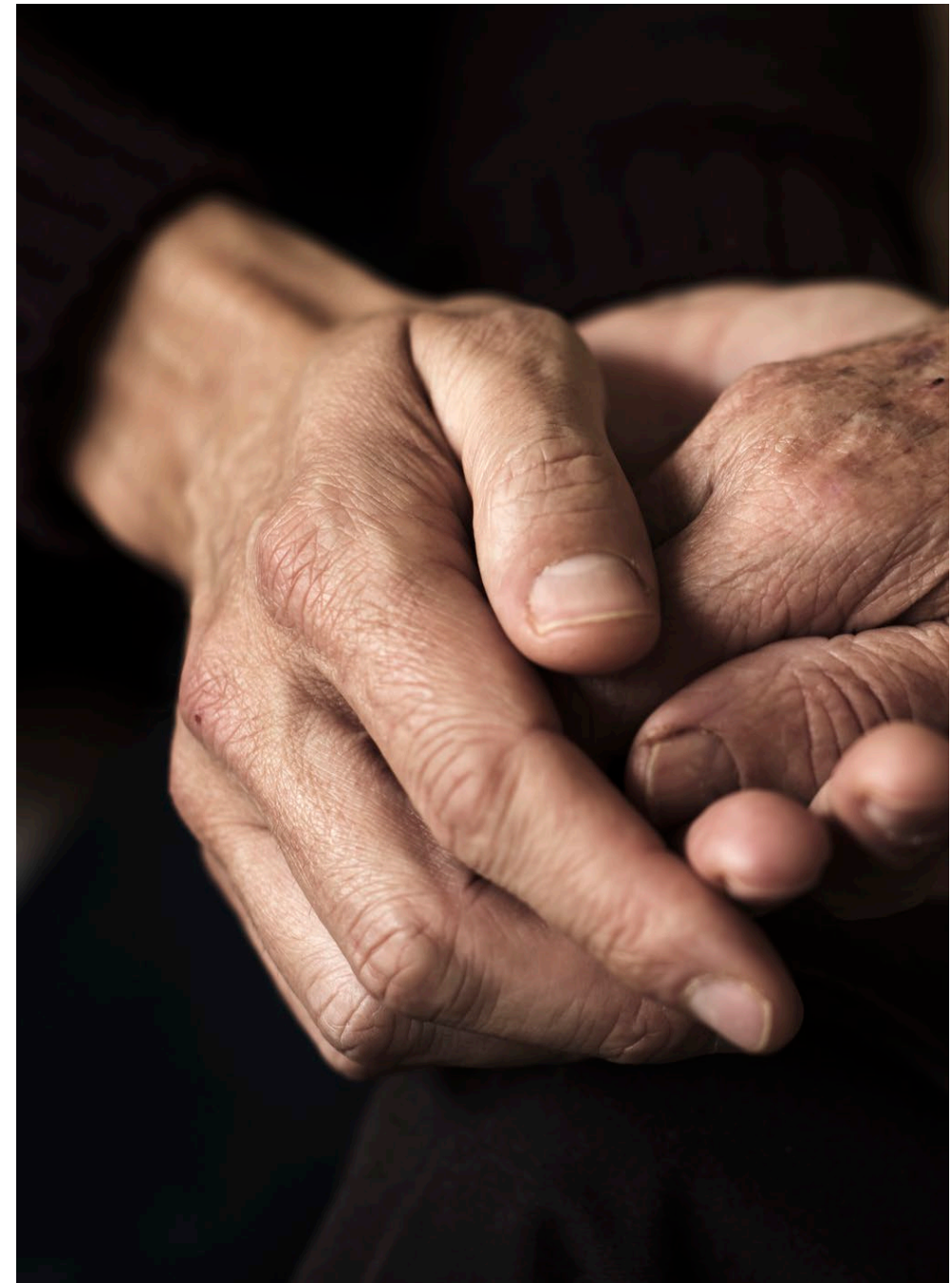
NOT-OD-20-089: Competitive supplements to existing awards (2 awards; NICHD, NIA)

PAR-21-192: Three-year R01 awards (8 awards; NIA, NIMHD, NICHD)
PAR-21-191: Pilot R21/R33 awards (2 awards; NCCIH, NIA)



FY20/21 Firearms Research Using Appropriation

- ***Took a broad public health approach:*** healthcare and community settings; multi-level considerations; victimization and perpetration risk; inclusive of developmental stage, gender, disparity population, comorbid condition, other special population
- ***Types of violence and populations:*** Suicide, youth violence, childhood injury, intimate partner violence, justice involved individuals, people with Alzheimer's and related dementias, AA men, AIAN youth
- ***Type of research:*** Risk and protective factors for firearm injury/mortality at multiple levels; developing and pilot testing innovative programs to screen for and prevent firearm injury/mortality



Sample Awards

- “Family Safety Net: Developing an upstream suicide prevention approach to encourage safe firearm storage in rural and remote Alaskan homes” (PI: Lisa Wexler; [1R61MH125757-01](#))
- “A Nationwide Case-Control Study of Firearm Violence Prevention Tactics and Policies in K-12 Schools” (PI: Charles Branas; [1R01HD108027-01](#))
- Alcohol restrictions and firearm prohibitions based on mental illness: Effects on fatal and nonfatal firearm injuries (PI: Nancy Nicosia; [1R61AA029064-01](#))
- Mechanisms underlying the association of firearm availability and vulnerability to suicide (PI: Craig Bryan; [1R61MH125759-01](#))
- Relationship between lawful handgun ownership and risk of homicide victimization in the home (PI: David Studdert; [R01AG076382-01](#))
- FOREST (Fostering Optimal Regulation of Emotion for prevention of Secondary Trauma): Implementation and evaluation of a burnout prevention program for staff in gun violence prevention programs (PI: Judith Moskowitz; [R21AT011863-01](#))
- Impact of State-Level Policies on Maternal Mortality (PI: Maeve Wallace; [3R01HD096070-03S1](#))
- “Risk prediction and optimizing outcomes to 1-year after firearm injury among children using emergency services in the US” (PI: Craig Newgard; [R01HD108017-01](#))



Full list of awards at:

<https://obssr.od.nih.gov/about/violence-research-initiatives>

FY22/23: Research on Community Level Interventions for Firearm and Related Violence, Injury and Mortality Prevention (CLIF-VP)

- ▶ **Purpose:** To support a network of research projects that will develop and test prospective interventions at the community or community organization level
 - ▶ Requires community partners as key personnel
 - ▶ 12 Participating ICOs: NIA, NIAAA, NICHD, NIDA, NIMH, NINR, NIMHD, NCCIH, OBSSR, ORWH, ODP, SGMRO
- ▶ U24 Coordinating Center to act as data and communication resource for field ([PAR-22-120](#))
- ▶ UG3/UH3 Phased Research Projects [PAR-22-115](#) and [PAR-23-066](#) (**OPEN now!**)

CLIF-VP Research Network Awards

University of Michigan, Ann Arbor

University of Michigan Multi-disciplinary Coordinating Center for the Community Firearm Injury Prevention Network

1U24HD111315-01 (NICHD)

PI: Carter, Patrick Michael

University of Mississippi Medical Center

A Proposal to Establish the Mississippi Violence Injury Prevention (VIP) Program

1UG3MD018298-01 (NIMHD)

PI: Zhang, Lei

University of Chicago

Harmonizing Hospital-Based Violence Intervention Programs with a Novel Medical-Legal Partnership for Equity in the Social and Structural Determinants of Health – the HVIP-MLP Model

1UG3HD111325-01 (NICHD)

PI: Zakrison, Tanya

George Washington University

Changing the Narrative on Firearms Violence: A Community Collaborative Intervention

1UG3MD018296-01

(NIMHD)

PI: Edberg, Mark

Firearm Injury and Mortality Prevention Research ([NOT-OD-23-039](#))

- **Purpose:** to highlight interest in research to improve understanding of the
 - Identification of those at risk of firearm injury (including self- and other-directed, victims and perpetrators, accidental injury)
 - Development, piloting, and testing of innovative interventions to prevent firearm injury and mortality
 - Examination of approaches to improve the implementation of existing, evidence-based interventions to prevent firearm injury and mortality.
 - Broad inclusion of settings (e.g., health care, community, legal system, schools), populations and multi-level, cross-sector partnerships when appropriate with each Institute outlining priority areas
- ICOs:** NCCIH, NIA, NIAAA, NICHD, NIDA, NIMH, NIMHD, NINR, OBSSR, ODP, ORWH, SGMRO



Research on Addressing Violence to Improve Health Outcomes (**NOT-OD-22-167**)

- **Purpose:** To highlight interest in addressing the role of violence in health outcomes and in integrating violence-related screening and interventions into health care settings
- **Violence** includes but is not limited to child maltreatment, intimate partner violence/teen dating violence, elder mistreatment, peer violence/bullying, and community violence
- **Health care settings** are broadly defined to include any organization where patients go to get physical or behavioral health care
- **ICOs:** NIA, NIAAA, NICHD, NIDA, NIDCD, NIDCR, NIMH (AIDS), NIMHD, NINR, OBSSR, ODP, ORWH, SGMRO



Violence Research Coordination Activities



- OBSSR and NICHD co-lead NIH-wide working group focused on violence research
 - **Goal:** Implement coordinated activities to build on ICO specific efforts
 - **ICO Members:** NICHD, NCCIH, NIA, NIAAAA, NIDA, NIMH, NIMHD, NINR, OBSSR, ODP, ORWH, and SGMRO

Violence Research Coordination Activities (contd.)

- ▶ NIH-wide priorities and efforts (with focus on firearm violence) outlined:
 - ▶ Burgdorf, C.E, Maholmes, V., O'Connor, S. and Blachman-Demner, D.R. (2022). “Emerging research areas and contributions of NIH in violence research across the lifespan and throughout different settings” *Translational Behavioral Medicine* <https://doi.org/10.1093/tbm/ibac052>
 - ▶ Increasing recognition of critical role of violence in health-related outcomes due to COVID, focus on **structural racism** and broader interest in all **social determinants of health**
 - ▶ [IMPROVE initiative](#) (maternal mortality) and [Transformative Health Disparities](#) program include investigator-initiated projects focusing on violence
 - ▶ Future priorities include capacity building and training support, particularly for PIs from traditionally under-represented populations
 - ▶ Ongoing **collaboration with CDC, National Institutes of Justice (NIJ)** and other Federal partners

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