

Firearm Violence and Prevention Research

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NIJ Has Pursued Numerous Research Efforts on Firearm Violence

- Evaluation of lethality assessments
 - Predict lethal violence by measuring access to firearms, prior use of weapons, prior injuries, etc.
- Analyze value of firearm trace data
 - Test whether characteristics of firearm transactions are related to illicit firearms markets, released in 2013
- Examination of Ceasefire-Chicago
 - Comprehensive review of a program to interrupt gun violence, released in 2009
- Review of Project Safe Neighborhoods
 - Reports on PSN implementation in 94 districts in an effort to reduce gun violence, released in 2009

Working Group in 2011 Developed Research Priorities

- Advance basic knowledge
 - acquisition of firearms used in crimes
 - defensive gun use
- Assess the value of gun prohibitors
- Study prosecution of gun crimes and illegal gun markets
- Develop and test gun violence prevention programs
- Improve gun possession, acquisition, and use data
- Monitor international efforts to reduce gun violence

Social, Forensic, and Physical Science at Work to Reduce Firearm Violence

- Social science
 - Milwaukee Homicide Review Commission
- Forensic science
 - Strengthen ballistic evidence analysis
- Physical science
 - Gun safety technology

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Milwaukee Homicide Reviews Analyzes and Responds to the City's Homicides

- Foster and support innovative homicide prevention
 - Better understand the nature of homicide through strategic problem analysis
 - Develop innovative responses to the problem of homicide
 - Focus limited enforcement and intervention activities on identifiable risks
- MHRC involves multiple layers
 - Frontline response to incident and victims
 - Monthly review of homicides and shootings
 - Community service provider review
 - Semi-annual public reviews
- Study examined 173 homicides and 99 shootings

Revealed That Homicides...

- Clustered in specific places
 - 20% in drug houses, 36% in street, and 10% in and around taverns
- Involved active offenders well known to the justice system
 - 77% of victims and 90% of suspects already known to police
 - 26% of suspects and 15% of victims under the active supervision
- Often the outcome of an ongoing dispute involving respect, status, and retribution as motives
 - 60% resulted from a dispute

Better positioned to address high-risk places and people
Improved cooperation among key stakeholders

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Research to Improve Likelihood of Solving Gun Crimes

- Study how police use ballistics in their investigations and identify best practices for improving NIBIN
 - Slower than alternative methods for solving cases
 - Rarely identified suspect through NIBIN
- Strengthen forensic science of ballistic evidence
 - Repeatability and uniqueness of toolmarks
 - Methods for improving the automation and characterizing uncertainty in ballistics



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Gun Safety Technology Efforts Advance Engineering Approaches

- Child safe guns
 - Personalized guns by sensing features of user's grip
- User authenticated guns
 - Examined RFID technology
- Researching current and emerging technology useful for user authenticated guns
- Planning research challenges on gun safety technology in 2014

Priority Research Topics

General need for more and better data

1. Analyses to identify the greatest opportunities
2. Methods to increase the likelihood of solving firearm homicides
3. Development of the next phase of gun safety technology



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