NIJ-funded Research on Mass Shootings to Advance Evidence-based Policy and Practice

November 30, 2021 | 1:00 PM ET

The webinar will begin shortly
Important Notification

The research projects presented here are supported by Awards 2019-R2-CX-0003, 2018-75-CX-0025, IAA 20RO0004 from the National Institute of Justice of the U.S. Department of Justice.

The opinions, findings, and conclusions or recommendations expressed here are those of the authors and do not necessarily reflect the positions or policies of the Department of Justice.
Overview of NIJ research investment on mass shootings
Estimating the Global Prevalence of Mass Public Shootings

Grant Duwe, Ph.D.
November 2021

NIJ Webinar
Presentation Overview

• Provides preliminary results from our study (in progress)
  • “Estimating the Global Prevalence of Mass Public Shootings” by Grant Duwe, Nathan Sanders, Michael Rocque and James Alan Fox

• Study addresses the following key questions
  • What is the worldwide prevalence of mass public shootings?
  • What percentage of mass public shootings occur in the United States?

• Prior Research

• Data and Proposed Methodology

• Preliminary Findings
Prior Research

• Widely divergent findings about U.S. proportion of cases

• Lankford (2016)
  • U.S. accounts for 31% of mass public shootings from 1966-2012
  • U.S. makes up 4% of world’s population

• Lott and Moody (2019)
  • U.S. accounts for only 3% of mass public shootings from 1998-2012
  • Included terrorism and genocide

• Lankford (2019)
  • Most of L&M’s dataset involved incidents with multiple offenders
  • Usually not considered mass public shootings
  • U.S. = 30% of single-offender attacks
Limitations with Prior Research

- Sole reliance on news coverage as data source
  - Lankford (2016) → news archive and internet searches
  - Published lists have also relied strictly on news coverage
    - Lankford → NYPD Active Shooter
    - Lott and Moody → Global Terrorism Database

- News coverage-only data collection strategy = missing cases
  - Research using news reports and FBI’s Supplementary Homicide Reports (SHR) have achieved more complete datasets
    - USA Today (Overberg et al., 2013)
    - Congressional Research Service (Krause et al., 2015)
    - Fox, Duwe and Rocque (FDR)

- Relatively large # of U.S. cases missing from Lankford and Lott/Moody datasets
  - Comparison with FDR data from 1976-2012 period
  - Implications for measuring prevalence of non-U.S. cases
Defining Mass Public Shootings

- Mass Murder
  - Incidents in which 4 or more victims are killed within 24-hour period

- Mass Shooting
  - Any gun-related mass murder

- Mass public shooting
  - Incidents in which 4 or more victims are killed with a gun in a public location
  - Exclude cases in connection w/ other criminal activity, military conflicts or collective violence
    - Many of the cases included by Lott and Moody (2019) would be classified as mass murders/shootings but not as mass public shootings
    - Similar to definition used by Lankford (2016, 2019)
The Lankford and Lott/Moody Datasets

- Lankford (2016)
  - 292 mass public shootings from 1966-2012
    - 89 in the U.S.
      - 84 from 1976-2012
        - 82 actually meet mass public shooting criteria
    - 203 non-U.S. cases
  - Dataset includes “…all known mass shooters who attacked anywhere on the globe from 1966 to 2012 and killed a minimum of four victims.” (p. 2)

- Lott and Moody (2019)
  - 1,491 incidents from 1998-2012
    - 43 in the U.S.
      - 42 actually meet mass public shooting criteria
    - “We are confident that we have all the public mass shootings for the U.S. and perhaps for Europe.” (p. 52)
A Comparison of Three Datasets

• Fox, Duwe and Rocque (FDR) Dataset
  • 165 mass public shootings in U.S. from 1976-2020

• 1976-2012 period for U.S. mass public shootings
  • FDR = 124 mass public shootings
  • Lankford = 82
    • Missing 34% (N = 42)

• 1998-2012 period for U.S. mass public shootings
  • FDR = 67 mass public shootings
  • Lott and Moody = 42
    • Missing 37% (N = 25)
## Missingness Is Not Random

<table>
<thead>
<tr>
<th>Victims</th>
<th>Lankford</th>
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<th>Lott and Moody</th>
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Implications for Non-U.S. Mass Public Shootings

- Lower-severity mass public shootings in the U.S.
  - More numerous (a heavy-tail distribution)
    - 77% involve between 4 and 6 fatal victims
    - Extreme cases (10+ victims) are more rare...and more newsworthy
  - Underrepresented in both Lankford and Lott/Moody datasets
    - Both datasets undercounted U.S. mass public shootings overall
  - Less newsworthy
    - Results reflect well-established disadvantages of relying only on news coverage

- What are the Implications for Non-U.S. Cases?
    - Do most involve less than 7 fatal victims?
Comparison of U.S. and Non-U.S. Cases by Victim Count
Estimating the Global Prevalence of MPS

- Evidence strongly suggests LLM combined Non-U.S. dataset missed lower-severity cases
  - 40% of MPS had < 7 fatal victims

- Assume LLM captured all of the extreme cases (10+ victims)
  - LLM = 49 Non-U.S. cases with 10+ fatal victims
  - FDR = 9 U.S. cases with 10+ fatal victims
    - U.S. = 15.5% of all mass public shootings with 10+ victims

- Develop initial estimate of missingness for cases < 10 victims
  - Assume that victim count distribution for non-U.S. is similar to that observed for U.S.
    - 4 victims = 41% of all cases
    - 5 victims = 19% of all cases
    - 6 victims = 16% of all cases
    - 7 victims = 7% of all cases
    - 8 victims = 6% of all cases
    - 9 victims = 2% of all cases
Estimated Global Prevalence of Mass Public Shootings, 1976-2012

- Overall Estimate = 797
- U.S. Cases = 124 (16% of total)
- Non-U.S. Cases = 673
Next Steps

• Develop additional, more refined estimates using hierarchical Bayesian models
  • Uses series of heavy-tailed distributions (power law, lognormal, etc.) to help estimate missingness in non-U.S. cases
  • Similar to prior work that forecasted the severity of mass public shootings in the U.S. (Duwe, Sanders, Rocque and Fox, 2021)

• If additional estimates are similar, what’s the take-away?
  • U.S. is not like rest of the world when it comes to MPS
  • MPS are also not a uniquely American phenomenon
  • MPS incidence is still 4X higher relative to population size
    • MPS is most visible manifestation of violence in a nation that has long been more violent than comparable countries.
IMPROVING THE UNDERSTANDING OF MASS SHOOTING AND OTHER MASS ATTACK PLOTS

NIJ-funded Research on Mass Shootings to Advance Evidence-based Policy and Practice

November 30, 2021

John S. Hollywood
Senior Operations Researcher, RAND Corporation

Center for Quality Policing
Justice Policy Program
Three Top Takeaways

**Power to Prevent**
- Everyone can prevent
- 2/3 of our foiled plots found from public reporting
- Most cases handled outside of justice system

**Relentless Follow-Up**
- Multi-organizational teams needed
- Key steps: assess, determine next steps, follow up, and reassess regularly

**Prepare and Train**
- “Heroes are made because they prepare”
- Need advance planning, resourcing, and training for all partners
- Need to prepare for actions after the attack is over
Outline

- Objectives
- Methodology
- Organizing the findings – the mass attack defense chain
- Findings to prevent, mitigate, and follow up afterwards
- For policymakers and executives
- Conclusions
Objectives

**Improve prevention**
- Characterize how plots have been discovered and what we can learn when plots reached execution

**Improve immediate response**
- Characterize what factors and types of events have led to lower casualties

**Improve actions after attacks end**
- Characterize actions to support victims, bystanders, and responders, and improve community resilience and learning

**Improve understanding**
- Capture findings in an educational toolkit

**Improve understanding of needs**
- Inform and support development priorities
## Methodology

### Case Review
- 600+ foiled and executed plots, with 100+ cases considered; over 60 fields tracked and coded

### Expert Interviews
- Dozens of federal, state, and local

### Literature Review
- 200+ journal articles, guidance, policies

### Drafting and programming
- Reflects expertise on educational approaches

### Advisory Panel
- Feedback from a dozen SMEs, followed by academic QA

### Formal publication
- Professional editing and programming
Organizing Findings: The Mass Attack Defense Chain (Top Level)

- Attack plots
- Phase I. Attack prevention
- Attacks not prevented
- Phases prevented
- Phase II. Attack mitigation
- Phase III. Follow-up after the attack
Power to Prevent: From 600+ Cases, What Led to Plots Being Foiled?

- Direct Threats: 28%
- Tips About Potential Plots: 36%
- Extremism / Terrorism Investigations: 24%
- Suspicious Actions: 3%
- Ordinary Criminal Investigations: 9%
Top Warning Signs: The Something in “See Something, Say Something”

**Motivation:**
- Inspired by past attacks to be infamous, too
- Inspired to fulfill an extremist cause (esp. if kicked out of a group for being too violent)
- Belief that someone(s) is so harmful or threatening that they have no choice but to attack

**Preparation:**
- Written plans for an attack
- Trying to recruit others
- Trying to learn how to kill many people (in person, online)
- Coordinating with known violent extremists
- Seeking arsenals of weapons & ammunition (without a benign reason, like hunting)
- Travel for training or to target
- Site probing / breaching

**Warning:**
- Intent + actions
Relentless Follow-Up: A Model for Using Warning Signs, Threat Assessment, and Follow-Up Actions

Start

Warning signs → Report

Show possible intent & action towards an attack

Intake, initial handling & vetting

Report → Vetted report

Risk & mitigating factors

Threat assessment

Update

Follow-up decisions

Follow-up actions

Iterative process to get new info, follow-up, and re-evaluate

End (monitoring and age-out)

Can be charges, but mostly services, protective measures, and watchful waiting
Prepare and Train: Mitigating Casualties from Mass Shootings and Other Mass Attacks

**Overall: Need a Coordinated Response for Mitigation**, which requires advance planning, coordination, and training, among all response partners

<table>
<thead>
<tr>
<th>Securing venues</th>
<th>Bystander &amp; security response</th>
<th>Law enforcement &amp; medical response</th>
<th>Command &amp; communications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Distance, movement, &amp; physical barriers</td>
<td>• Basic strategy of Run, Hide, and Fight</td>
<td>• Need multi-organizational planning and training of all participants</td>
<td>• Learn, train &amp; implement the Incident Command System &amp; NIMS</td>
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<tr>
<td>• <em>Don’t let shooters surprise a crowd at close range without ways to escape</em></td>
<td>• Value and risks of intervening in different types of situations</td>
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**For Leaders: Need to Support Planning, Coordination, and Training** which requires direction, ongoing follow-up and resourcing (and if necessary, seeking resources)
Post-Attack Priorities: Planning and Training is a Necessity

- In the immediate aftermath of the attack:
  - Search and apprehension of attackers
  - Investigate attackers and potential co-conspirators
  - Immediate mental health and emotional support
  - Family assistance centers/post-event victim welfare
  - Public communications and public relations
  - Near term debriefs

- Provision of health, support, and community services:
  - Mental health and emotional support for victims/survivors
  - Victim services, family assistance, and long-term services
  - Mental health and emotional support for first responders
  - Long-term responder and family support and services

- Longer-term recognition and learning
  - Recognition: awards for acts of valor; ceremonies for victims and heroes
  - Memorials and anniversary events/VIP visits
  - After Action Reports
For Policymakers and Executives

- Can use internal authorities
- Can use external tools at local, state, and federal level

**Improvements for Procedures & Training**

- Public education on reporting
- Finding pre-attack site surveillance & gun diversion
- Wellness checks
- Threat assessment
- Coordinated response
- Coordinated post-attack actions

**Resources are Available**

- Commonly known – federal grants
- Others that are less known – state and local sources, relevant philanthropies
Online Toolkit

**What You Need to Know Now**
The key takeaways to improve your own prevention efforts

**Research Findings**
New and already-established findings to inform prevention priorities

**Tools & Programs**
Learn about solutions from agencies

**Policy & Program Needs**
From leadership and elected officials to address challenges

**Case Examples**
Cases to illustrate possible solutions, successes, and challenges

**For Further Reading**
Additional resources and references

**AUDIENCES – “TOOLKIT FOR EVERYONE”**

- Law Enforcement & Service Providers
- Policy Makers
- Public
Conclusions – Coming Soon

And remember top three –

✓ Power to prevent
✓ Relentless follow-up
✓ Prepare and train
Questions?

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Center for Quality Policing
Justice Policy Program
Active Shooter IV Project

November 30, 2021

FBI – BAU1
Behavioral Threat Assessment Center
SSA Karie Gibson, Psy.D., LP
Active Shooter: Phase I

PHASE I (2014): 160 events

• Incidents during 2000-2013
• Actively killing or attempting to kill
• Using a firearm
• In a populated area

“What happened during and after the shooting?”

Relied on incident reports and open sources
Active Shooter: Phase II

PHASE II (2018): 63 active shooters

• Demographics
• Weapons
• Stressors and concerning behaviors
• Grievances, targeting, pre-attack communications
• Substance abuse and mental health

“How do active shooters behave before they attack?”

Subtle behaviors verified in full investigative files
Active Shooter: Phase III

PHASE III (2020): 63 active shooters & 63 persons of concern

“How do active shooters differ from individuals who display concerning behavior but do not commit mass violence?”

- Differences in concerning behaviors and stressors
- Variation in bystander responses
- Law enforcement investigative files
Active Shooter: Phase IV

PHASE IV: 72 active shooters (adjudicated)
- 13 subjects from AS II
- 67 potential interviews to complete
- 60 prison locations
- Interview protocol expanded from AS II to include findings from AS III

“Offender interviews will allow a better understanding of the thought processes, motivations, planning/preparation, and tactics used.”
Active Shooter: Phase IV

Update: 16 cases coded/reconciled

Sample Findings:

1) Majority showed desire to obtain weapons 6 months or more before incident
2) Majority felt rejected and disenfranchised within the year leading up to the attack
3) The shortest amount of time between grievance and attack was 3-5 months with most being 25 or more months
4) Most common concerning behavior reported was offender’s mental health issues
5) Most common concerning behavior that was observable but did not raise concern was the offender’s behavioral leakage
Active Shooter: Phase IV

Plan:
- Ongoing coordination with prisons
- Interviews to begin in 2022
- Coding to continue with revised protocol
- Full-time researcher assigned
Thank You

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