

**Police Strategies to Reduce Illegal Possession and Carrying of Firearms:
Effects on Gun Crime (A Campbell Systematic Review)
Christopher S. Koper¹ and Evan Mayo-Wilson**

Background: Criminal misuse of firearms is among the world's most serious crime problems. Strategies to reduce gun violence include efforts to restrict the manufacture and sale of firearms, interrupt the illegal supply of guns, deter gun possession, reduce gun carrying in public places, toughen responses to illegal gun use, reduce demand for firearms, promote responsible ownership of guns, and address community conditions that foster gun crime. In this review, we examine research on the effectiveness of selected law enforcement strategies for reducing gun crime and gun violence.

Objectives: This review examines the impacts of police strategies to reduce illegal possession and carrying of firearms on gun crime. Examples include gun detection patrols in high-crime areas, enhanced surveillance of probationers and parolees, weapon reporting hotlines, consent searches, and other similar tactics.

Criteria for Inclusion of Studies: Studies using randomized designs or quasi-experimental designs involving a non-intervention condition were eligible for inclusion. Eligible studies had to include pre and post-intervention measurements of the outcome measure(s) for an intervention area(s) or group(s) and at least one comparison area or group without the intervention. However, we also included studies involving repeated interventions with one group or area in which the intervention and comparison units consisted of samples of time with and without the intervention. Eligible studies also had to measure gun-related crime (e.g., gun murders, shootings, gun robberies, gun assaults). The review does not include studies in which eligible interventions were implemented simultaneously with other new crime-reduction efforts.

Search Strategy: We searched 11 national and international databases for published and unpublished literature available through the end of 2009; examined 25 reviews and compilations of research on policing, gun control, and violence reduction; and searched the websites of five prominent police and criminal justice organizations in the United States and the United Kingdom. Four studies met the inclusion criteria, reporting a total of 7 non-randomized tests of directed patrols focused on gun carrying in three American cities (5 tests) and two Colombian cities (2 tests).

Data Collection and Analysis: From each included study, we extracted data pertaining to research design, subject characteristics, intervention(s), and outcome measure(s). We present a detailed narrative assessment of each included study, followed by a qualitative and quantitative synthesis of key features and results across studies. Our synthesis does not include a statistical meta-analysis of the results due to variability in the study designs and problems in computing a usable standardized effect size index for the studies.

Main Results: Six of the seven tests (not all of which were independent) suggest that directed patrols reduced gun crime in high-crime places at high-risk times. The Colombian studies, which were based on before and after changes from repeated interventions measured at the city level, estimated that crackdowns on gun carrying reduced firearm homicides 10% to 15%. Estimated effects were generally larger and more variable in the American studies, which examined before and after changes in smaller target areas (beats or patrol zones) relative to changes in comparison areas. With one exception, the American studies found that gun crime declined by 29% to 71%, depending on the outcome measures and statistical techniques used.

Authors' Conclusions: These studies suggest that directed patrols focused on illegal gun carrying prevent gun crimes. However, conclusions and generalizations must be qualified based on the small number of studies, variability in study design and analytic strategy across the studies, pre-intervention differences between intervention and comparison areas, and limited data regarding factors such as implementation, crime displacement, and long-term impact. There is also a strong need for rigorous study of other strategies to reduce illegal possession and carrying of firearms.

¹ Corresponding Author. Police Executive Research Forum, 1120 Connecticut Avenue, N.W., Suite 930, Washington, D.C. 20036. Email: ckoper@policeforum.org. Phone: (202) 454-8317