Supplementary Material

Supplemental Table 1. Effect of legislation on firearm homicides in Canada

Study (Year)	Bill	Reported beneficial effect?	Effect on firearm homicides[1]	Evidence of method substitution
Sproule (1988)	C-51	Yes	• No change in total standardized national homicide rate • Mean standardized firearm homicide rate decreased from 1.38 to 1.10 per 100,000	Non-firearm homicide increased post-Bill C-51. After accounting for relationship between suspect/victim, effect was diminished due to high victim:suspect ratio in firearm vs. non-firearm homicides
Mundt (1990)	C-51	No	• No effect on homicide rate	None reported
Mauser (1992)	C-51	No	• No significant effect on homicide rate • Covariates: male youth % of population, unemployment rate, % of population foreign immigrant, gun law (before/after 1977), homicide clearance rate, % of population with Indian status, time (to account for linear trend in homicide rates)	None reported
Leenaars (1994, 1996, 1997, 2001)	C-51	Yes	• Mean firearm homicide rate (per 100,000 per year) decreased from 0.96 ± 0.15 to 0.82 ± 0.08 • Use of firearms for homicide was decreased for those >15 years	Non-firearm methods for homicides increased in 15-24 year olds
			Multivariate model • Decline in overall homicide rate • Nonsignificant decline in firearms homicide rate • Nonsignificant reduction in % of homicides committed by firearms • Covariates: Bill C-51, % young males, birth rate, marriage rate, divorce rate, unemployment, median family income	No increase in homicide rate by all other methods
Bridges (2004)	C-17	Yes	• Mean firearm homicide rate decreased from 0.69 per 100,000 (SE 0.03) to 0.57 per 100,000 (SE 0.04) • Rates of firearm homicide, total homicide rate, and homicide by all other methods showed significant decreases	Raw rate of homicide by all other methods decreased
Blais (2011)	C-51	Yes	• Firearm homicide rate decreased by 5%-10%, depending on the province • Reduction most noticeable in homicides committed with a shotgun or a hunting rifle	No evidence of method substitution
	C-17	No	• No decline in firearm homicide rate	No evidence of method substitution
	C-68	Yes	• Firearm homicide rate decreased by 5%-10%, depending on the province	No evidence of method substitution

Appendix 2, as supplied by the authors. Appendix to: Bennett N, Karkada M, Erdogan M, et al. The effect of legislation on firearm-related deaths in Canada: a systematic review. *CMAJ Open* 2022. doi: 10.9778/cmajo.20210192.

			• Reduction most noticeable in homicides committed with a shotgun or a hunting rifle Covariates: Bill C-51, Bill C-17, Bill C-68, % population aged 15-24 yrs, population growth associated with immigration • Effectiveness of laws was attributed to reduced access and availability of firearms rather than to the severity of sentences provided in the legislation	
Langmann (2012)	C-51	No	• No effect on firearm homicide rate • No effect on overall homicide rate or spousal homicide rate	No evidence of method substitution
	C-17	No	• No effect on firearm homicide rate • No effect on overall homicide rate or spousal homicide rate	No evidence of method substitution
	C-68	No	• No effect on firearm homicide rate • No effect on overall homicide rate or spousal homicide rate • Joinpoint analysis showed an increasing trend in homicide by firearm rate after enactment of the licensing portion of C-68 Covariates: median age of population, population attributed to immigration, population per police officers, rate of prison incarceration, rate of unemployment, % of 15-24 yr old population in low income bracket, % of total population in low income bracket, Gini index of equality	No evidence of method substitution
Linteau (2013)	C-68	Yes	• Gradual decline in firearms homicide rate was observed in homicides committed with long guns (rifle, shotgun)	No substitution effect was observed
McPhedran (2013)	C-68	No	• ARIMA modelling showed no effect on domestic firearm homicide • ZA test for males showed no significant breaks in firearm homicide time series • ZA test for females showed significant breaks in firearm homicide time series but these breakpoint occurred prior to Bill C-68	None reported
Langmann (2020)	C-17	No	• No effect on male or female homicide rates	None reported
	C-68	No	• No effect on male or female homicide rates Covariates: province/territory, year, % license holders, alcohol consumption, unemployment rates, % aboriginal population, % low income persons	None reported

SE, standard error; ARIMA, autoregressive integrated moving average; ZA, Zivot-Andrews.
[1]Significance of results are reported verbatim from the original article.