Summary of Select Firearm Violence Prevention Strategies

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On average there are about 11,000 firearm homicides every year. While there are deaths resulting from accidental discharges and suicides, this document will focus on intentional firearm homicides. Fatalities from mass shootings (those with 4 or more victims in a particular place and time) account on average for 35 fatalities per year. Policies that address the larger firearm homicide issue will have a far greater impact even if they do not address the particular issues of mass shootings.

This document provides a cursory summary of select initiatives to reduce firearm violence and an assessment of the evidence for the initiative.

Gun buybacks

Twitter summary: Buybacks are ineffective unless massive and coupled with a ban

Goal: Reduce access to firearms by incentivizing owners to dispose of their unwanted guns rather than transfer them to a more risky possessor

Evidence: Gun buybacks are ineffective as generally implemented. 1. The buybacks are too small to have an impact. 2. The guns turned in are at low risk of ever being used in a crime. 3. Replacement guns are easily acquired. Unless these three points are overcome, a gun buyback cannot be effective.

The 1997 Australia gun buyback and its associated regulations is an exception to this. 1. It was large, buying back 20% of the firearm stock. 2. It targeted semi-automatic weapons. 3. It coupled the buyback with a ban on certain weapons and a nationwide registration and licensing program. There is strong evidence that it reduced mass killings (before the initiative massacres occurred on average once per year and none have occurred in the 15 years since).

The Australia buyback appears to have had no effect on crime otherwise. One study (Leigh & Neill 2010) has proven confusing in that its abstract suggests that Australia's gun buyback reduced firearm homicide rates by 80%, but the body of the report finds no effect. Others (Reuter & Mouzas 2003) have used the same data and also found no effect on crime although they also noted that mass shootings appear to have disappeared in Australia. A third study (Chapman et al 2006) using Australian data from 1979 to 2003 shows that the firearm homicide rate was already declining prior to the firearm reforms and that

there is no evidence that the new legislation accelerated the declines. This remains true when data through 2007 are added to the analysis (conducted by G. Ridgeway on 1/3/2013 at NIJ).

Large capacity magazines restrictions

Twitter summary: Great potential to reduce lethality; requires a massive reduction in supply

Goal: Reduce the lethality of guns by reducing the number of rounds that can be quickly fired.

Program: Restrictions on the manufacture, sale, transfer, and possession of large capacity magazines (usually defined as holding more than 10 rounds).

Evidence: Mass shootings predominantly involve the use of large capacity magazines. The most lethal ones all involve large capacity magazines. In addition large capacity magazines were used in nearly 25% of all crimes in 1993 just prior to the ban. There is reason to believe that reducing the availability of large capacity magazines could have an effect on the total number of homicides.

In five cities studied closely found no change in the criminal use of large capacity magazines during the ten year ban. However, a Washington Post analysis for Virginia continued the analysis where the research team left off. The data indicate that the percentage of crime guns using large capacity magazines declined from 18% in 1999 (when magazine imports were highest) to its lowest level in 2004 (10% of crime guns had large capacity magazines). The percentage doubled between 2004, when the ban expired, and 2010.

The 1994 ban on large capacity magazines had limited effectiveness because 1) Large capacity clips are a durable good 2) There were an estimated 25 million guns with large capacity magazines in 1995 3) The 1994 law exempted magazines manufactured before 1994 so that the importation of large capacity magazines manufactured overseas before 1994 continued through the ban 4) while the price of the clips increased dramatically (80% during the ban) they were not unaffordable. A 2004 study of the 1994 law found: "because the ban has not yet reduced the use of [large capacity magazines] in crime, we cannot clearly credit the ban with any of the nation's recent drop in gun violence." The 1994 ban essentially did little to affect the supply of large capacity magazines.

In order to have an impact, large capacity magazine regulation needs to sharply curtail their availability to include restrictions on importation, manufacture, sale, and possession. An exemption for previously owned magazines would nearly eliminate any impact. The program would need to be coupled with an extensive buyback of existing large capacity magazines. With an exemption the impact of the restrictions would only be felt when the magazines degrade or when they no longer are compatible with guns in circulation. This would take decades to realize.

Ammunition logs

Twitter summary: Increases opportunities to detect illegal firearm possessors

Goal: 1) Reduce flow of ammunition to the illicit market and 2) develop leads for illegal weapons.

Program: Laws that prohibit certain individuals from owning firearms also pertain to ammunition (18 USC 922g&n). Whereas direct retail sales of firearms to criminals are regularly disrupted by instant background checks, sales of ammunition are essentially unchecked. Ammunition purchase logs are a means of checking for illegal purchases and for developing intelligence on illegal firearms.

Alternatively, several states do not record purchases, but rather require the purchaser to show a permit to purchase ammunition and only of the same caliber or gauge as their firearm. While purchasing a firearm is a one-time action, repeated purchases of ammunition create more complications for prohibited firearm possessors.

Evidence: A study used criminal background checks conducted on individuals purchasing ammunition in Los Angeles in April and May 2004. 2.6% of transactions involved prohibited purchasers. They purchased 5,000 rounds of ammunition per month during this period. Rather than institute instant checks on ammunition purchases, local police began regularly checking the logs for illegal purchases, using it as an intelligence tool to find not only ammunition but also the illegally possessed weapons. Sacramento instituted a similar program and identified 13 illegal purchasers per month in the first year, recovering an average of 7 illegal firearms per month.

There is evidence that the program can be used to identify prohibited purchasers and can aid in the recovery of illegal firearms. The volume of recoveries is not of a scale likely to impact the illegal firearm trade, but could disrupt some criminal activity.

In 2009 California passed AB 962 that would make the ammunition logs statewide. It has since been held up in court due primarily to the use of the phrase "handgun ammunition," which is not a well-defined phrase.

Universal background checks

Twitter summary: Effectiveness depends on the ability to reduce straw purchasing, requiring gun registration and an easy gun transfer process

To understand the value of background checks it is essential to understand the source of crime guns. Several sporadic attempts have been made to learn how criminals acquire guns. For example, a 2000 study by the ATF found the following distribution of sources

Source	Percentage
Straw purchase	47%
Stolen	26%
Store	14%
Residence	10%
Common carrier	2%
Unregulated private seller	20%
Gun shows/flea markets	13%
Retail diversion	8%

Note: Percentages do not add up to 100% since some sources fall into multiple categories (e.g. unregulated seller at a flea market)

These figures indicate informal transfers dominate the crime gun market. A *perfect* universal background check system can address the gun shows and might deter many unregulated private sellers. However, this does not address the largest sources (straw purchasers and theft), which would most likely become larger if background checks at gun shows and private sellers were addressed. The secondary market *is* the primary source of crime guns. Ludwig and Cook (2000) compared states that introduced Brady checks to those states that already had background checks and found no effect of the new background checks. They hypothesized that the background checks simply shifted to the secondary market those offenders who normally purchased in the primary market.

Supply sources can vary in different parts of the country. An NIJ funded study of the Los Angeles illicit gun market noted: "Results showed that many crime guns were first purchased at local—that is, in county—licensed dealers, rather than from out of state. That is, contrary to the conventional wisdom that crime guns were being trafficked across state borders from places with less stringent regulations, such as Arizona and Nevada, we found that a majority of the guns used in crimes were purchased in Los Angeles County." Thus, gun markets can be highly local.

Understanding gun sources requires a sustained and localized surveillance program. For example, the program could interview new arrestees at intake about how they acquired their gun, cost, and general gun availability. This could be conducted in conjunction with BJA's plans to target local violence prevention programs in 20 cities. This is similar to the ADAM program for monitoring drug markets and could, in fact, complement any restart of ADAM. In the coming years such data could become available through BJS efforts; BJS will include a series of questions in its 2013/2014 national inmate survey.

Target straw purchasers

Straw purchasers are the primary source of crime guns. Importantly, straw purchasers have no record of a prohibiting offense. As a result, they are quite different from those who actually commit crimes. Consistent with criminological theory, because the person conducting the straw purchase does not have a criminal history forbidding him or her from making legal purchases, this population could potentially be deterred from initiating this illegal activity.

Because straw purchasers are the largest source for the illicit market and these purchasers likely can be deterred, effort should be focused here. There is little evidence on what works. The ATF and NSSF sponsored the "Don't Lie for the Other Guy" public awareness campaign starting in 2000 but there are no evaluation reports of its effectiveness.

A Los Angeles program to target straw purchasers sent new gun buyers a letter, signed by prominent law enforcement officials, indicating that law enforcement had a record of their gun purchase and that the gun buyer should properly record future transfers of the gun. The letters arrived during buyers' 10-day waiting periods, before they could legally return to the store to collect their new gun. An NIJ-funded study found that the letter could modify gun owner behaviors. The study found that the rate at which guns are reported stolen for those who received the letter is more than twice the rate for those who did not receive the letter. While this does not show an effect on crime, it does show that a simple letter to those at risk of diverting guns to the illicit market can modify their behavior.

Require all gun transfers to occur at an FFL

Some states, such as California, require all transfers of guns to be properly documented (since 1923). This usually requires the involvement of a federally licensed dealer in the transaction. Despite this, straw purchasing continues largely unabated. Wachtel (1998) describes some straw purchasing of crime guns for Los Angeles between 1988 and 1995. There are disincentives to following the law in California ($35 and a waiting period). Such a process can discourage a normally law-abiding citizen to spend the time and money to properly transfer his or her firearm to another. To be effective, requiring all transfers to occur at an FFL needs to be coupled with all the necessary incentives (or at least no disincentives) for unlicensed sellers to follow the law. Sanctions and threats of penalties are insufficient.

Gun shows

Gun shows do provide firearms to the illicit market, but the problem is not uniquely about gun shows but rather secondary transfers of unregulated private sellers. Gun shows simply convene numerous private sellers along with FFLs. Gun shows in states requiring all transfers to be documented have fewer illegal gun sales according to Wintemute et al 2007.

Gun registration and continuous checks for possession eligibility

Universal checks are insufficient for ensuring that firearm owners remain eligible. Convictions, mental health issues, and restraining orders can develop after the background checks.

Recovering guns from those that become ineligible is likely effective. There is evidence from three studies that policies that check domestic violence perpetrators for firearm possession are effective at

reducing intimate partner violence. Vigdor and Mercy (2006) found a 7% reduction in intimate partner homicide in states that allowed guns to be confiscated on site of domestic violence incidents. Zeoli and Webster (2010) found that state statutes restricting those under restraining orders from accessing firearms are associated with reductions of 20%-25% in total and firearm intimate partner homicide. Bridges et al (2008) found that most domestic violence laws do not effect intimate partner homicide *except* those relating to firearms. All three studies use methods that make alternative explanations unlikely.

The challenge to implementing this more broadly is that most states do not have a registry of firearm ownership. Currently NICS background checks are destroyed within 24 hours. Some states maintain registration of all firearms. Gun registration aims to 1) increase owner responsibility by directly connecting an owner with a gun, 2) improve law enforcement's ability to retrieve guns from owners prohibited from possessing firearms.

Gun registration also allows for the monitoring of multiple gun purchases in a short period of time.

Assault weapon ban

Twitter summary: Assault weapons are not a major contributor to gun crime. The existing stock of assault weapons is large, undercutting the effectiveness of bans with exemptions

Goal: Limit access to assault weapons.

Program: Ban the manufacture, sale, transfer, or possession of assault weapons.

Evidence: Guns are durable goods. The 1994 law exempted weapons manufactured before 1994. The exemption of pre-1994 models ensures that a large stock, estimated at 1.5 million, of existing weapons would persist. Prior to the 1994 ban, assault weapons were used in 2-8% of crimes. Therefore a complete elimination of assault weapons would not have a large impact on gun homicides.

A National Academy study of firearms and violence concluded that the weaknesses of the ban and the scientific literature suggest that the assault weapon ban did not have an effect on firearm homicides.

There is some evidence that the assault weapons bans can affect the availability of assault weapons. A 2004 study found that "Following implementation of the ban, the share of gun crimes involving [assault weapons] declined by 17% to 72% across the localities examined for this study (Baltimore, Miami, Milwaukee, Boston, St. Louis, and Anchorage)... This is consistent with patterns found in national data on guns recovered by police and reported to ATF." Weil and Knox (1997) found a sharp reduction in the number of assault weapons recovered by Baltimore police in the six months following Maryland's ban on assault weapons. The federal ban came into effect a few months after Maryland's ban, but Maryland's ban had no provision grandfathering in already owned assault weapons.

Since assault weapons are not a major contributor to US gun homicide and the existing stock of guns is large, an assault weapon ban is unlikely to have an impact on gun violence. If coupled with a gun buyback and no exemptions then it could be effective. The 1997 Australian gun buyback was massive in scale and, while it appears to have had no effect on gun homicide, Australia has had no mass shootings since the ban was put in place.

Smart guns

Twitter summary: Most appropriate for making guns child safe or preventing police officers from being assaulted with their own firearm. Unlikely to affect gun crime

Goal: Prevent gun use by unauthorized users, particular to prevent diversion of legally acquired firearms to the illicit market.

Program: Between 1994 and 2004, the National Institute of Justice conducted a research effort to develop a technology that would preclude anyone but the owner of a gun from using it. If a gun were stolen with this technology installed, it would become inoperable. The focus of this effort was to preclude a law enforcement officer's gun from being used if it were wrested from them during an assault. This technology was commonly referred to as 'smart' gun technology because it enabled the gun to 'recognize' its owner.

In its 2005 assessment of this effort "Technological Options for User-Authorized Handguns: A Technology-Readiness Assessment" the National Academy of Engineering estimated that it would cost an additional $30 million and take 5 to 10 additional years to bring a 'smart' gun to market. The most likely approach to achieving this capability would be through use of radio frequency identification (RFID) technology.

Evidence: The development of the technology has focused on making the guns child-proof or providing law enforcement officers with a firearm that could not be used against them. The realization of this technology would not prevent such shootings perpetrated by the owners of the guns involved. In addition this would not eliminate the illicit market, but rather alter it. There would remain an illicit market for guns that did not have this technology installed or for smart guns in which the technology had been neutralized.