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#### Subsequent Criminal Activity among Purchasers of Handguns: Incidence and Impact of Denial of Purchases by Prohibited Persons

Garen Wintemute, MD, MPH February 22, 2012

An estimated 348,975 firearm-related violent crimes, including 11,015 homicides, were committed in the United States in 2010. <sup>1,2</sup> To prevent such crimes, federal statute has long prohibited the purchase and possession of firearms by felons, persons convicted of misdemeanor crimes of domestic violence, those adjudicated as mental defectives, and others. In 2009, federal and state agencies conducted 10,764,237 background checks for firearms transfers or permit applications; 150,013 transactions (1.4%) were denied. <sup>3</sup>

Such screening and denial policies give rise to three important questions. 1) Do the existing criteria for denial extend to the entire population of persons at high risk of committing violent and firearm-related crimes? 2) How often do persons who have purchased firearms legally, following a background check, become ineligible to possess those firearms? 3) Do such policies reduce the incidence of violent and firearm-related crimes among persons whose purchases are denied? We briefly review the evidence.

- 1) Nowhere do the criteria for denial of firearm purchase extend to all those with criminal records. A cohort study in California<sup>4</sup> followed 5,923 legal handgun purchasers (2,795 with no prior arrests, 3,128 with one or more prior criminal convictions) for up to 15 years after their purchases. The incidences of arrest for the two groups were 9.8% and 50.4%, respectively (relative risk (RR) 7.5, 95% confidence interval (CI) 6.6-8.7, after adjustment for age and sex). There was a dose-response relationship; risk of subsequent arrest increased with the number of prior convictions. Among males, handgun purchasers with 2 or more prior convictions for violent misdemeanors were at substantially higher risk of arrest, compared with those having no prior arrest record, for nonviolent firearm offenses (RR 11.7, 95% CI 6.8-20.0), violent offenses (RR 10.4, 95% CI 6.9-15.8), and violent Crime Index offenses (murder, rape, robbery, aggravated assault; RR 15.1, 95% CI 9.4-24.3).
- 2) Enforcement efforts have focused on preventing firearms acquisition by prohibited persons. Relatively little attention is given to the reverse circumstance: the transition to prohibited-person status of an individual who previously acquired firearms legally and still possesses them. A second cohort study<sup>5</sup> followed 7,256 legal purchasers of handguns in California (4,495 with no prior arrests and 2,761 with a non-prohibiting criminal history) for up to 5 years. (Violent misdemeanants were by then ineligible to purchase firearms in California.)

# Subsequent Criminal Activity among Purchasers of Handguns: Incidence and Impact of Denial

Garen Wintemute, MD, MPH CEBCP Congressional Briefing

#### **Federal Prohibitions**

- Under indictment for, or convicted of, a crime punishable by imprisonment for more than 1 year
- Unlawful user of, or addicted to, a controlled substance
- Adjudicated as a mental defective or committed to a mental institution
- Convicted of a DV misdemeanor, subject to a final DV restraining order
- Fugitive, underage (handguns, 21; long guns, 18), illegal alien, other

## Do These Prohibitions Cover the Population at Risk?

- Cohort study: 5,923 handgun purchasers
  - 2,795 no criminal record, 3,128 prior conviction(s)
- ▶ 15y follow-up

Prior	Percentage Arrested			
History	Any	Gun, Not Violent	Violent	Violent Crime Index
None	9.8	2.0	4.4	2.5
Conviction	50.4	13.2	24.9	15.4

Violent Crime Index: murder, rape, robbery, aggravated assault

## Prior Crimes and Relative Risk of Arrest

Prior		Relative Risk			
Convict	ions	Any	Gun, Not Violent	Violent	Violent Crime Index
G-, V-	1	5.9	4.8	4.8	5.0
	2+	7.8	6.5	6.8	6.4
G+, V-	1	6.4	7.7	4.4	5.2
	2+	10.9	14.7	13.0	12.4
V+	1	9.3	8.7	8.9	9.4
	2+	11.3	11.7	10.4	15.1

Referent: Handgun purchasers with no prior criminal record.

## How Often Do Legal Purchasers Become Prohibited Persons?

- 7,256 handgun purchasers
  - 4,495 no criminal record, 2,761 criminal history
- 5y follow-up

Prior	Percentage with Outcome				
Convictions	California Prohibition	Federal Prohibition	Violent CI Conviction		
No record	1.0	1.0	0.3		
1	4.3	3.3	1.3		
2	8.3	7.0	2.1		
3+	7.8	7.3	2.0		

#### Is Screening and Denial Effective?

- Violent misdemeanants seeking to purchase handguns
- "Treatment" group: n=986, purchase denied under new law
- Control group: n=787, purchase allowed under prior law
- Otherwise very similar (age, criminal history)
- Hypothesis: no difference in risk of arrest

## Handgun Purchase and Relative Risk of Arrest

Characteristic	Relative Risk		
	Gun/Violent Crime	Non-gun, Nonviolent Crime	
All	1.3 (1.0-1.6)	1.0 (0.8–1.2)	
Age 21-24	1.4 (0.9-2.0)	1.0 (0.7–1.5)	
1 Conviction	1.3 (0.9-1.8)	1.0 (0.7–1.4)	
1 G/V Conviction	1.4 (1.1–1.8)	1.0 (0.7–1.3)	

Referent: Persons with characteristic whose purchases were denied

### **Findings**

- Current denial criteria do not cover the population at risk
- Legal purchasers become prohibited persons frequently enough to matter
- Screening and denial reduce risk of arrest for violent and firearm-related crimes among those directly affected

During that time, 0.9% of purchasers with no prior arrests and 4.5% of those with a non-prohibiting criminal history were convicted of a new crime that prohibited them from possessing firearms under federal law (RR 5.1, 95% CI 3.3-7.7). Incidence rates varied by a factor of 200 or more based on age and the extent of the prior criminal history.

3) The Brady Act may not reduce rates of firearm-related violent crime, <sup>6</sup> in part because the background checks it requires are not conducted for the estimated 40% of firearm transfers that do not involve Federal Firearms Licensees. <sup>7</sup> Screening and denial policies are best assessed by studying those directly affected. A quasi-experimental study <sup>8</sup> evaluated California's statute extending its firearm prohibitions to include violent misdemeanants. The "treatment" group comprised 986 persons whose purchases were denied after the statute took effect; 787 persons whose purchases were approved under prior law made up the referent group. All had been convicted of one or more violent misdemeanors within 10 years of their purchase applications. Over 3 years of follow-up, those whose purchases were approved were at increased risk of arrest for firearm-related or violent crimes (RR 1.29, 95% CI 1.04-1.60), but not for other crimes (RR 0.96, 95% CI 0.78-1.19). This specificity is consistent with the inference that the effect is attributable to the new policy. Similar results were obtained in a study comparing convicted felons whose purchases were denied with felony arrestees whose purchases were permitted. <sup>9</sup>

The evidence presented here suggests that current criteria for prohibition of firearm purchase and possession do not extend to the entire population at high risk. (Our discussion is limited to criteria related to prior criminal activity and does not address characteristics such as alcohol abuse, which is not a criterion for denial under federal law but is a risk factor for violence<sup>10-13</sup> and is related to firearm ownership and risk-taking behavior with firearms.<sup>14</sup>) A small but significant proportion of legal purchasers of firearms become prohibited persons, because of new criminal activity, within a short period of time. Denial of firearm purchases by prohibited persons reduces their risk of arrest for new firearm-related or violent crimes.

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