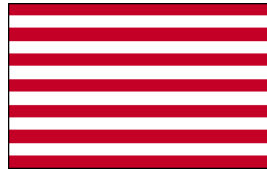


**Testimony Opposed
To HB948 of 2005
Maryland Assault Weapons Ban of 2005**
<http://www.mcrkba.org/PrTestimonyHB948.pdf>

Dr. Philip F. Lee¹

March 9, 2005



<http://www.mcrkba.org/>

¹ Dr. Lee has a PhD in Mathematics from Georgia Institute of Technology

Long Guns Are NOT Favored by Thugs in the U.S.

- Almost 2/3 of guns owned by Americans are long guns.
- Typically 12% of homicides involve long guns where firearms are used and the gun is known.

Shotguns tend to be used more than rifles (7% vs. 5%)

- When firearms are used in homicides in the U.S., handguns are preferred almost 9 to 1 (88%).

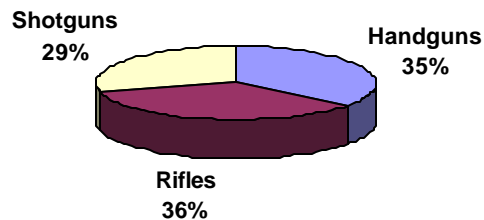
Handguns are easy to conceal in public so criminals favor them.

"... **assault weapons are rarely used** in gang-related drive-by shootings and other homicides" **according to the US Dept. of Justice** (see

<http://www.ojjdp.ncjrs.org/jjbulletin/9808/youth.html>)

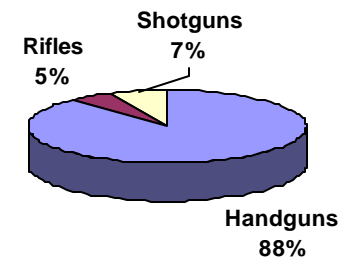
Distribution of 254M firearms in US

Source: Commerce in Firearms in the United States, BATF
www.atf.treas.gov/pub/fire-explo_pub/020400report.pdf



Homicide of people 12 and over with known type of firearm for 1993-2001

Source: Weapon Use and Violent Crime, BJS, NCJ 194820
www.ojp.usdoj.gov/bjs/pub/pdf/wuvc01.pdf



Long Guns Are NOT Favored by Thugs In Maryland



“Long guns” are difficult to use for most crimes

- Hard to Conceal
- Awkward

Proof of the Pudding is in the “Use” statistics

- In the five year period 1998-2002, more than 65% (1593) of all 2432 murders were with handguns.
- Less than 3.3% (~80) of Maryland's murders were with any kind of long gun (mostly common rifles and shotguns)
- 11.9% of murders were with knives (~290) – MANY MORE THAN LONG GUNS

WHERE IS THE CONCERN FOR “ASSAULT KNIVES”?

Use of “semi-automatic long guns” in murder is a small fraction of all long guns used which is a small fraction of murder altogether.

So, WHAT IS THE JUSTIFICATION for the focus on “semi-automatic long guns”?

Risks to LEOs from Long Guns Are Near All-Time Low

(outline of Enclosure A)

- Law Enforcement Officers (LEOs) risk of death from gunfire is lower than any time in the past 100 years!

Officer line of duty deaths have declined since the early 1970's as can be seen from Figure 1 and Figure 2 of Enclosure A. The data from Figure 2 is taken from the U.S. Justice Dept. web site:

<http://www.ojp.usdoj.gov/bjs/homicide/tables/leokweaptab.htm>

- Risk to LEOs from long guns has decreased over the past 30 years.

Officers deaths from "assault weapon" gunfire is not reported by the FBI, but the proportion of long gun deaths versus handgun deaths is virtually the same in the five-year periods 1998-2002 and 1973-1977.

Handguns account for 72.6% of the deaths in 1973-1977 and 70.5% in 1998-2002

In absolute numbers risks to LEOs from long guns have decreased to the same degree as handguns.

- There has been no shift in the proportion of officers killed with long guns versus handguns from the beginning of this 30-year period to its end!
- LEOs risk of death from career criminals is high and represents a problem that this legislature could address.

48% of LEO murderers had prior serious criminal convictions.

21% were on probation or parole – this is your valid 1 in 5 number.

Remember the criminal records of the killers of Sgt. Bruce Prothero and Cpl. Edward Toatley

NO Maryland LEO Killed with Rifle in 20 Years

- In the period 1986 through 2004, 55 sworn Maryland officers died from trauma received in the line of duty (see Enclosure A)

Twenty-eight of these officers died from accidents (vehicle trauma) and one died from accidentally being shot by other officers during a raid for a total of 29 accidental deaths.

Twenty-six died from wounds received in assaults with deadly weapons

One by stabbing ONLY.

One by stabbing until officer was helpless, then his gun was used to kill him.

Five assaulted with automobiles.

Nineteen cases involving shootings ONLY:

Fifteen with handguns,

Three with shotguns,

One from a rifle wound received 23 years earlier.

- Baltimore County Officer John Stem died on 10/19/00 of complications from a Rifle wound received on 7/6/1977.

Officer Charles Huckeba was killed in that same incident.

ref. "Officer Critical After Shootout," **Baltimore Evening Sun**, July 7, 1977, pages C1 and C3

The rifle used was a semi-automatic M-1 Carbine – a rifle not on the U.S., Maryland, or California list of assault weapons.

- No Maryland Officer has been shot with a semi-automatic rifle and died in the 20-year period 1985–2004; **none has been shot and killed with ANY rifle.**

Manufactured Hysteria from the VPC and CeaseFire

- The Violence Policy Center (VPC) claimed in their report "Officer Down" (see <http://www.vpc.org/studies/officecont.htm>) that 41 of 211 officers slain in the line of duty (1998-2001) were killed with "assault weapons" including one from Maryland.

The officer is Baltimore County's John Stem, though not named by the VPC.

- CeaseFire Maryland also claimed Officer Stem (not named) died from being shot by an "assault weapon" in two documents issued in 2003/2004:

A Letter in Support of Banning Military-style Assault Weapons in Maryland (sent to Speaker Busch and Senate President Miller)

Press Release: <http://www.ceasefiremd.org/pub/press/110503.htm>

- **Both VPC and CeaseFire have made false claims that Officer Stem was killed with an "assault weapon"; both are deceptive about the time of the incident. VPC makes additional false claims:**

Phony number of police officer killings using "assault weapons."

Phony claim that the ban will protect police and the public.

Alternatives to "assault weapons" may increase risk to the public and police officers. ("If, on the other hand, offenders substituted **shotguns for assault weapons**, there could be negative consequences for gun violence mortality." "IMPACT EVALUATION OF THE PUBLIC SAFETY AND RECREATIONAL FIREARMS USE PROTECTION ACT OF 1994 Final Report," Jeffrey A. Roth and Christopher S. Koper, March 13, 1997, **THE URBAN INSTITUTE**)

VPC Deceptions about Number of LEOs Killed Using Banned "Assault Weapons"

- In addition to the false claims about Officer Stem, the VPC makes false claims about officers being killed with "assault weapons" or about the effects of a ban in 17 of 41 killings.

Fourteen of the Officer killings used semi-automatic rifles that are not listed as "assault weapons" in the Federal or Maryland definitions.

Eight SKS carbines, 4 M-1 carbines, 2 Ruger Mini-14 rifles.



The Federal Assault Weapons ban bill specifically protected the Ruger Mini 14 as a hunting arm (see booklet produced for Senator Feinstein at: <http://feinstein.senate.gov/booklets/assault.pdf> and the Mini 14 is explicitly listed in Appendix A of 18 USC Sec. 922 as NOT an assault weapon). This Appendix is the highly touted "list of protected firearms that would never be banned"

In a Fifteenth case the officer had been fatally wounded with a shotgun prior to use of any "assault weapon."

In the 16th and 17th cases a MAC-90 was legally possessed by a police department, was stolen and used to kill two Texas police officers.

- **For 17 of the 41 killings the VPC lied to inflate its claim that private ownership of "assault weapons" are a risk to police.**

Other VPC "Officer Down" Defects

- The "Officer Down" report ignores that prior offenders, disqualified by law from owning any firearms, killed 26 of the 41 officers listed (see <http://www.mcrkba.org/VPCTableWeb.html>). Some examples:

The killer of Officer Carrington had been out of jail only 9 days -- paroled from prison after a manslaughter plea reduced from a murder charge.

In 9 days he started selling drugs

In 9 days he bought a cosmetically challenged handgun banned by Federal and NY State law, in violation of a law against felons owning firearms and without a permit required by the City of NY.

In 9 days he killed Officer Carrington firing 3 rounds from his cosmetically challenged handgun.

Officer Carrington, acting undercover to buy drugs, was not wearing a ballistic vest and the shooting required no more capability than provided by a .38 caliber revolver.

The killer of Officer Brown (11/27/98) had previously been convicted of 2nd Degree Murder – that conviction didn't stop the killer from getting a gun.

The killer of Officer Crooks (5/19/98) was a habitual felon who actually killed two more police officers that day and the daughter of his female companion. The VPC does not list the two other officers killed, Randy Bell and Ricky Childers, because this killer used the officer's own handguns to kill them to escape custody and not an "assault weapon".

The killer of Officer Chetcuti had a record of prior violence and had been committed to a mental institution, but he made his "assault weapon".

The killer of Officer Kolb was an illegal immigrant who had numerous arrests prior to the killing, but had not been deported.

SADLY, THERE ARE MANY MORE SUCH CASES

History of Maryland Violence with Long Guns

(Outline of Enclosure B)

- Enclosure B shows plots of Maryland homicide history from 1975 through 2000 and explains briefly the principal weapons used and how Maryland compares with neighboring states and the U.S.

Long guns use has decreased significantly while use of the heavily controlled handgun has increased.

Long guns were used even less than knives

- In 2001, long guns were used in 3.7% of all homicides in Maryland.

52 knife versus 17 long gun homicides

- In 2002, long guns were used in 3.2% of all homicides in Maryland.

65 knife versus 17 long gun homicides

- **Use of long guns in homicide in Maryland have decreased over time (handgun use has increased) so banning semi-automatic long guns as proposed by HB948 seems to be aimed at the non-criminal citizens of Maryland ONLY.**

Deceptive Practices

About Criminal Use of “semi-automatic long guns”

- CeaseFire had to reach back to 1977 to the shooting of Officer Stem for an example with a military style semi-automatic rifle – CeaseFire failed to tell the full story of this officer’s death.
- VPC ignored actual declines in line of duty deaths from firearms and pretended that a growing crisis existed.
- VPC ignored the prior criminal records for 26 of the killers in “Officer Down” cases and ignored the fact that possession of the guns used by these killers was already illegal – giving another example of their deceptive practices.

See <http://www.mcrkba.org/VPCTableWeb.html> for some more details and links to more information about these cases

- VPC included cases where the killers used common semi-automatic rifles not on anybody’s list of “assault weapons” to bolster their weak case – giving a third example of their deceptive practices.
- VPC also failed to tell the full story of Officer Stem’s death.
- **For Maryland legislators to quote statistics (1 in five officers killed) or to advance VPC goals shows poor judgment in their political efforts – you are known by the company you keep – in this case the company is one of liars.**

Gun Control Does Not Work to Control Violence

- The Federal 1994 ban is reported by the U.S. Dept. of Justice as having no detectable effect. -- See Enclosure C for more details
- The Center for Disease Control and Prevention (CDC) reports they have no scientific evidence to prove gun control reduces violence – see "First Reports Evaluating the Effectiveness of Strategies for Preventing Violence: Firearms Laws," (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5214a2.htm>) and their press conference (<http://www.cdc.gov/od/oc/media/transcripts/t031002.htm>)
- Even the Brady Law has had no measurable effect on homicides. Ludwig and Cook said, "Our analyses provide no evidence that implementation of the Brady Act was associated with a reduction in homicide rates" – see "Homicide and Suicide Rates Associated With Implementation of the Brady Handgun Violence Prevention Act," JAMA, August 2, 2000, Vol. 284, No. 5. (<http://www.mcrkba.org/LudwigCookJAMA.pdf>)
- The National Academy of Sciences has just issued a 328-page report on gun control laws. Based on a review of 253 journal articles, 99 books, 43 government publications, and its own research, the panel couldn't identify a single gun control regulation that reduced violent crime, suicide or accidents.

This panel was established during the Clinton administration, and all but one of its members whose views on guns were publicly known before their appointments had favored gun control.

Bans on Guns Don't Have Positive Effects

- A legal ban on firearms that are rarely used by criminals will have little effect on violence.

Remember, the federal justice department says "... assault weapons are rarely used in gang-related drive-by shootings and other homicides" (<http://www.ojjdp.ncjrs.org/jjbulletin/9808/youth.html>)

U.S. Department of Justice reports have been misunderstood by certain Maryland politicians or deceptively misquoted – a misunderstanding might stem from a lack of training in use of statistics.

- References to read more about the Centers for Disease Control and National Academy of Sciences results:

"Gun control doesn't reduce crime, violence, say studies," December 30, 2004

http://www.worldnetdaily.com/news/article.asp?ARTICLE_ID=42167

"Data on Firearms and Violence Too Weak to Settle Policy Debates; Comprehensive Research Effort Needed," NAS Press release, 12/16/04

<http://www4.nationalacademies.org/news.nsf/isbn/0309091241?OpenDocument>

"Firearms and Violence: A Critical Review," THE NATIONAL ACADEMIES PRESS,

<http://books.nap.edu/books/0309091241/html/R1.html#pagetop>

"CDC News Conference Transcript," October 2, 2003

<http://www.cdc.gov/od/oc/media/transcripts/t031002.htm>

"Gun bans don't work," Oct. 6, 2003, **The Washington Times**

<http://www.washingtontimes.com/op-ed/20031006-085844-8119r.htm>

Gun Control wastes resources that could be used for crime control

HB948's Ban is Against the U.S. Constitution

Legislators Have Responsibility to Judge Constitutionality of Bills

- The bill prevents, discourages, and makes it cost-prohibitive for law-abiding residents to exercise their right to keep and bear arms, their right to self-defense, and is being used to reduce effectiveness of the national governments reserve military – the militia.

The Militia is defined in United States Code (USC) TITLE 10--ARMED FORCES Section 311. Militia: composition and classes (a) The militia of the United States consists of **all able-bodied males at least 17 years of age** and, except as provided in section 313 of title 32, **under 45 years of age** who are, or who have made a declaration of intention to become, citizens of the United States and of female citizens of the United States who are commissioned officers of the National Guard. (b) The classes of the militia are-- (1) the organized militia, which consists of the National Guard and the Naval Militia; and (2) **the unorganized militia, which consists of the members of the militia who are not members of the National Guard or the Naval Militia.**

According to the U.S. Supreme Court in *Presser v. Illinois* (1886), "It is undoubtedly true that all citizens capable of bearing arms constitute the reserved military force or reserve militia of the United States as well as of the States." In the same decision the Court stated that even setting aside the Second Amendment, **"the states cannot prohibit the people from keeping and bearing arms so as to deprive the United States of their rightful resource for maintaining the public security, and disable the people from performing their duty to the general government."**

According to the U.S. Congressional Subcommittee Report on the Constitution in 1982: "The conclusion is thus inescapable that the history, concept, and wording of the second amendment to the Constitution of the United States, as well as its interpretation by every major commentator and court in the first half-century after its ratification, indicates that what is protected is an individual right of a private citizen to own and carry firearms in a peaceful manner."

On March 10, 1942 Maryland Governor Herbert L. O'Connor called for volunteers from the unorganized militia and said, "For the present the hard-pressed Ordnance Department of the United States Army cannot be expected to furnish sufficient arms, ammunition, or equipment. Hence, the volunteers, for the most part, will be expected to furnish their own weapons. For this reason, gunners (of whom there are 60, 000 licensed in Maryland), members of Rod and Gun Clubs, of Trap Shooting and similar organizations, will be expected to constitute a part of this new military organization.

- The sponsors and supporters of HB948 have forgotten our history of only 63 years ago. The Constitution gives control of the militia to the U.S. Congress, not the Maryland legislature.

This law will trap the law-abiding in technical violations

- It will ensnare law-abiding people moving to Maryland who bring long-guns with them not realizing they are banned.
- It will allow the official theft of private property.
- It will reduce the desirability of living in Maryland for millions of people -- look at what has happened to Baltimore.

Risks to Police from Firearms

Philip F. Lee, PhD², 1/10/04, rev. 2/20/05

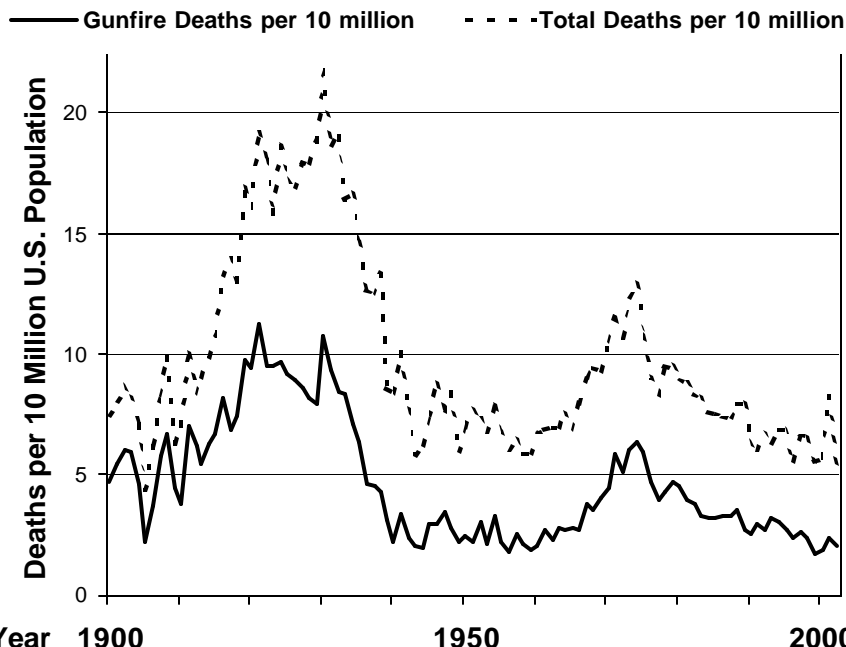
"The pure and simple truth is rarely pure and never simple." -- Oscar Wilde

Risks within the whole U.S.

In 1999 the United States saw 46 law enforcement officers (LEOs) killed by criminal and accidental use of firearms, the lowest recorded number of such deaths since 1962 when the U.S. population was 186.5 million.

(ref. http://www.findarticles.com/cf_dls/m2194/8_69/65241454/p1/article.jhtml)

Figure 1. Police Line of Duty Deaths

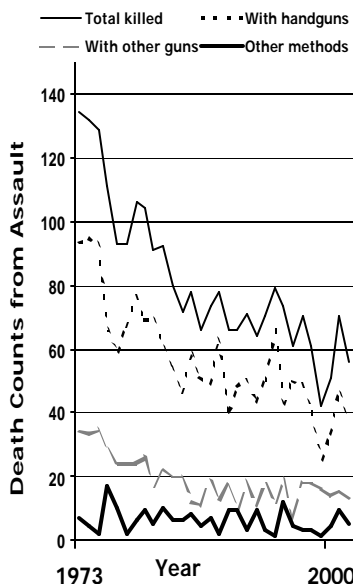


Examining LEO death rates (here the number of deaths per 10 million people) allows the comparison of safety over a span of years and different populations. In 2002, the rate of deaths from gunfire was 2.0 officers per 10 million people (57 officers and 288 million total US population so $57/28.8 = 1.979$).

Police death rates from firearm injury have been decreasing since 1974 and rates are lower than any time in the past 102 years as you can see from Figure 1. The figure graphs death rates per 10 million people from firearm injury (including accidents) and from all line of duty causes and is computed from census bureau data and deaths recorded at: <http://www.odmp.org/yeardisp.php>

Except for the blip showing the 9-11 attack in 2001, the total death risk for officers is trending near an all-time low

Figure 2. Police Feloniously Killed in the Line of Duty



for the past 100 years (only the 1905 rate of 4.3 deaths per million is lower than the 2002 rate of 5.3). In a typical year more officers die in vehicle accidents than are killed with firearms (see Figure 1).

Figure 2 shows counts reported by the FBI for LEOs killed in the line of duty from felonious assaults (but does exclude the 9/11 attack deaths). These counts are slightly smaller than those presented for the same years in Figure 1 since Figure 2 does not contain the accidents with firearms shown by Figure 1, since Figure 1 contains a small number of officers who had heart attacks while on duty not in Figure 2 and since reporting to the FBI is voluntary and the FBI does not get 100% of the reports (the report "Law Enforcement Officers Killed and Assaulted, 2000" addresses jurisdictions employing 441,311 officers protecting nearly 200 million people out of 280+ million residents of the U.S.). The FBI data shows in absolute numbers a similar improvement in officer safety. Generally, over the recent 30-year period **LEO safety has improved significantly**. (ref: <http://www.fbi.gov/ucr/ucr.htm>).

Averaging over the 30 year FBI data period shows assault with handguns produced 69.3% of the felonious assault deaths and other guns 23.1%. The five years 1998 through 2002 show typical small randomly varying deviations from these averages with handguns used to kill 65.6%, 59.5%, 64.7%, 65.7%, 67.9% of officers. In the same five years other guns, including semi-automatic long guns, have been used in 29.5%, 38.1%, 27.5%, 21.4%, and 23.2% of the deaths. By comparison, the five years 1973 through 1977 show handguns used for 69.4%, 72.0%, 72.1%, 59.5% and 63.4% and

² Dr. Lee received a PhD in Mathematics from Georgia Institute of Technology in 1970.

other guns used for 25.4%, 25.0%, 26.4%, 25.2% and 25.8% of LEO deaths from felonious assaults. There is no obvious shift in LEO killings from handguns to long guns between the beginning and end of the period.

From 1976 through 1998, 48% of the murderers of police officers had prior criminal convictions and 21% were on probation or parole. (ref: "Policing and Homicide, 1976-98: Justifiable Homicide by Police, Police Officers Murdered by Felons," Jodi M. Brown, Patrick A. Langan, Ph.D., **BJS**, March 2001, NCJ 180987 see <http://www.ojp.usdoj.gov/bjs/abstract/ph98.htm> , page 45). Evidently, a major risk to police officers is an overly liberal parole system and a revolving door justice system with sentences incommensurate with the severity of crimes committed.

Being a police officer is not in the top 10 of risky jobs in the U.S. It is true that police officers' jobs are more dangerous than many – 22.2 officers per 100,000 died on the job annually compared with the national average of 4.0 per 100,000 for all occupations in 2002. The following table shows job fatality rates (per 100,000 employed) for selected occupations compared to risks for policemen.

Table 1. Census of Fatal Occupational Injuries, 2002

Number of deaths per 100,000 employed, Source: Bureau of Labor Statistics
(ref. <http://money.cnn.com/2003/10/13/pf/dangerousjobs/>)

Timber cutting	117.8
Fishermen	71.1
Airplane Pilots & Navigators	69.8
Structural Metal Workers	58.2
Drivers Sales Workers	37.9
Roofers	37.0
Electrical Power Installers	32.5
Farmers	28.0
Construction laborers	27.7
Truck drivers	25.0
Sworn Police Officers *	22.2
National average:	4.0

* 2002 total deaths (data for Figure 1.) divided by 7.08
(708,000 employed officers in 2000 according to
<http://www.ojp.usdoj.gov/bjs/sandle.htm>)

Risks within Maryland

The FBI reports that nationally, an average of 12.0 out of every 100 LEOs were assaulted in the line of duty in 2002. The part of Maryland that reported to the FBI (police agencies covering approximately 86% of Maryland's population) had 3096 assaults on 11,755 officers for a rate of 26.3 out of every 100 officers, or 2.2 times the national rate (ref. **Law Enforcement Officers Killed And Assaulted, 2002**, FBI Uniform Crime Reports). This high level of violence against police officers is typical of other Maryland violence (Maryland robbery rate recently was 1.8 times the national rate).

Between 1985 and 2004, 54 sworn Maryland police officers died from line-of-duty trauma injuries received in that period and one died from wounds received in 1977 (55 total). Most frequently, the trauma was vehicle related (33 cases) – 5 of which resulted from deliberate assaults with automobiles. Among the 22 remaining cases, one officer was stabbed to death, one, Ira N. Weiner, was stabbed until disabled then shot to death with his own firearm, and one officer was shot accidentally by other officers in a raid. In the remaining 19 cases, 15 officers were killed only with handguns, three officers were killed with shotguns, and one death, Officer Stem, was attributed to trauma from a rifle. The officers' names and trauma injury sources are listed in Table 2. There were 28 vehicle accidental deaths and one accidental shooting for a total of 29 accidents.

Of the 26 deaths of Maryland police officers in Table 2 from intentional assaults, 16 (61.5%) involved handguns – one (3.8%) of which used the officer's own handgun, 11.5% shotguns, and 3.8% rifles. Five Maryland officers (19.2%) were killed by assaults with cars. Firearms were used in 21 of the 26 intentional killing of Maryland officers for 80.8%. By comparison, the U.S. from 1991 through 2000 saw 70.2% of officers slain with handguns (in 7.9% of the cases the officer's own handgun was used), 17.7 percent by rifles, and 5.4 percent by shotguns. These U.S. and Maryland percentages are very similar.

Table 2. Maryland Officers Line-of-Duty Trauma Deaths 1985-2004

Officer's Name	Year of Death	Vehicle	Handgun	Shotgun	Rifle	Other	Remark
Anthony Jones	2004	X					Vehicular assault
Brian D. Winder	2004		X				
Duke G. Aaron III	2004	X					Vehicular assault
Anthony M. Walker	2003	X					
Joseph A. Mattingly	2003	X					
Thomas G. Newman	2002		X				
James V. Arnaud	2002		X				
Elizabeth L. Magruder	2002		X				
Crystal D. Sheffield	2002	X					
Kristin M. Pataki	2002	X					
Mark F. Parry	2002	X					Vehicular assault
Michael J. Cowdery	2001		X				
Michael S. Nickerson	2001			X			
Jason C. Schwenz	2001			X			
Kilonzio M. Masembwa	2000	X					
Edward M. Toatley	2000		X				
John W. Stem*	2000				X		shot in 1977
Kevin J. McCarthy	2000	X					
John D. Platt	2000	X					
Brian K. Heller	2000	X					
Kevon M. Gavin	2000	X					Vehicular assault
Jamie A. Roussey	2000	X					
Bruce A. Prothero	2000		X				
Barry W. Wood	1998	X					
Harold J. Carey	1998	X					
Raymond G. Armstead, Jr.	1998	X					
Owen E. Sweeney, Jr	1997			X			
Timothy C. Minor	1996	X					
Joseph T. Lanzi, Sr	1995	X					
Edward A. Plank, Jr	1995		X				
John J. Novabilski	1995		X				
John L. Bagileo	1994	X					
James E. Walch	1994	X					
Herman A. Jones, Sr	1993		X				
Mark M. Filer	1993	X					
Roger P. Fleming	1992	X					
Mark P. Groner	1992	X					
Ira N. Weiner	1992		X			X	stabbed & shot w own gun
Ryan C. Johnson	1992		X				
Thomas Crouch	1991	X					
Theodore D. Wolf	1990		X				
Harry L. Kinikin, Jr	1990					X	stabbed
William J. Martin**	1989		X				
Mark K. Murphy	1988		X			X	Accidental shooting by other officers
Eric D. Monk	1988	X					
Larry Eugene Small	1987	X					
John Edward Sawa	1987	X					
Gregory A. May	1986	X					
Carey S. Poetzman	1986	X					
Richard T. Miller	1986	X					Vehicular assault
Robert Alexander	1986	X					
Robert Franklin Pyles Sr.	1986		X				
Robert W. Zimmerman	1986	X					
Richard J. Lear	1985	X					
Vincent J. Adolfo	1985		X				

* Officer Stem's shooting is described at <http://www.mcrkba.org/OfficerStem.html>

** Verified handgun from FBI supplemental homicide reports

Officer Stem died from complications from being shot with an M-1 carbine (ref. "Officer Critical After Shootout," **Baltimore Evening Sun**, July 7, 1977, pages C1 and C3) 23 years after the shooting. The M-1 carbine rifle does not appear in federal, Maryland or the stringent California lists of defined "assault weapons" (ref:

http://www.atf.gov/pub/fire-explo_pub/complete.htm ,

http://www.mdsp.maryland.gov/mdsp/downloads/assault_weapons.pdf ,

<http://caag.state.ca.us/firearms/forms/pdf/awguide.pdf>).

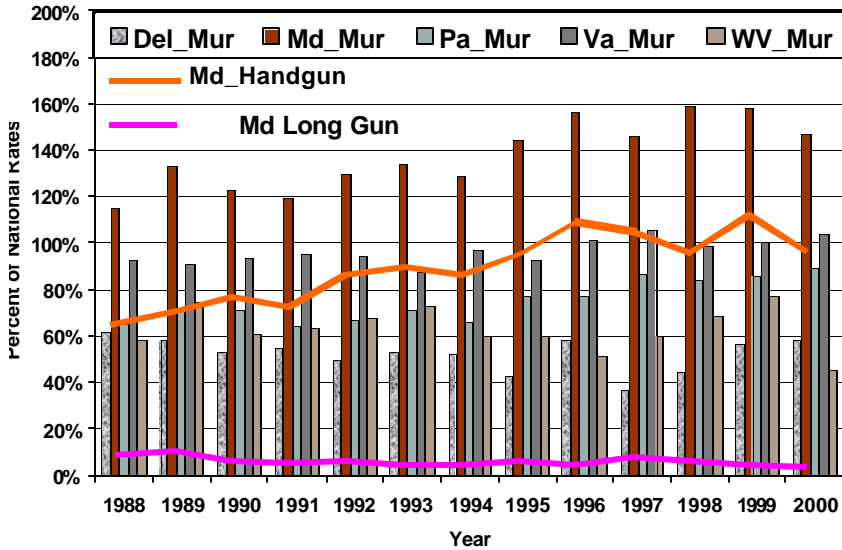
Despite Maryland ranking high in violence throughout the period, **not a single police officer was shot and killed here with an "assault rifle" during the 20 years (1985-2004) examined.** In fact, not a single rifle of any kind has been used in Maryland to kill a police officer in this period. Criminals rarely use rifles in Maryland and other states.

Use of Long Guns Versus Handguns in Maryland

Philip F. Lee, PhD¹

Figure 1 shows Maryland's murder rate as a percent of national rates for 1988 through 2000. So, in 2000 the whole United States had a murder rate of 5.5 per 100,000 and Maryland had a rate of 8.1 ($100 \times 8.1 / 5.5 = 147\%$). By showing rate as a percent of the national rate, we remove national induced trends from the data so that we can evaluate how Maryland does for itself. To provide a context for judging Maryland's performance we include results for the states bordering and surrounding Maryland.

Figure 1 Murder Rates in Maryland and Neighboring

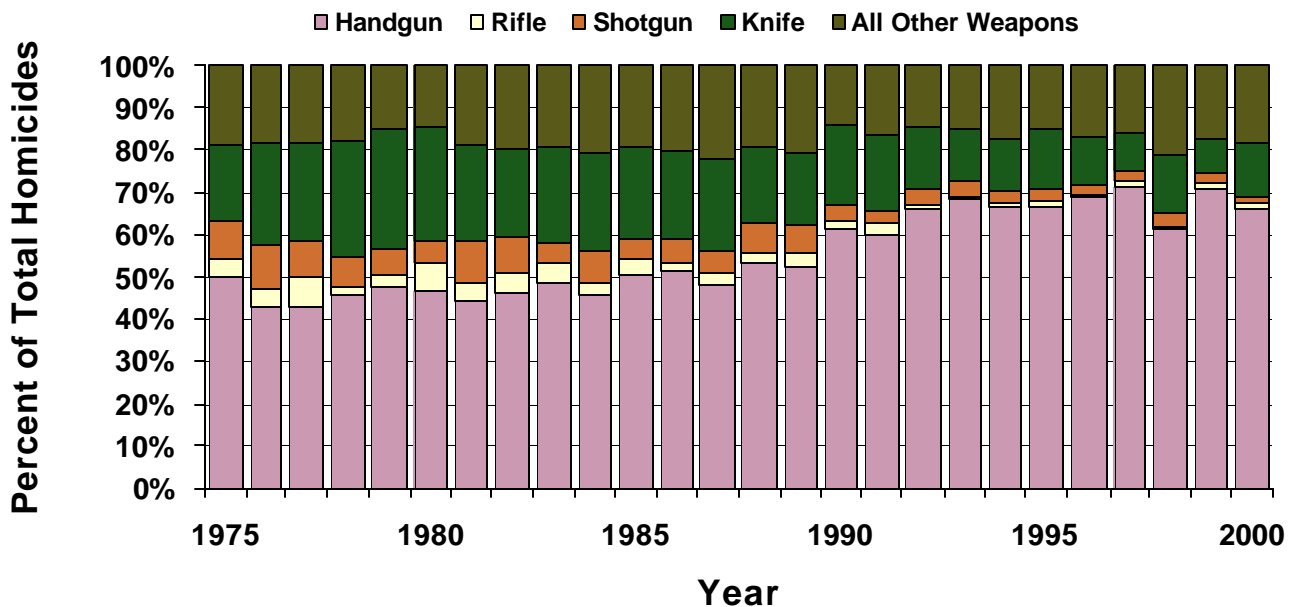


context for judging Maryland's performance we include results for the states bordering and surrounding Maryland.

Also on the figure, we show line graphs of murders in Maryland using long guns and handguns to the same scale. Notice that since about 1995, Maryland's murder rate using handguns is approximately equal to the U.S. total murder rate (100%) by itself. The use of handguns in murder has grown as a percent of murders and in absolute number since 1988 when Maryland banned small cheap handguns. That is, handguns were

used in 241 (53%) of the 452 murders reported by the Maryland State Police (MSP) in 1988 but by 2000, handguns were used for 289 (66%) of 438 murders. By contrast, in 1988 long guns (rifles and shotguns) were used for 42 (9%) murders while in 2000 long gun use had shrunk to 12 (3%). In Figure 2 we see that knives are used more frequently than long guns for murder. Even hands and feet are used more frequently for murder than long guns in Maryland.

Figure 2 Weapon Use in Maryland Homicides



¹ Dr. Lee received a PhD in Mathematics from Georgia Institute of Technology in 1970

Justice Says 1994 Assault Weapon Ban Has No Detectable Effect **Philip F. Lee, PhD¹**

Delegate Quinter is mistaken in his claim that the Federal 1994 gun ban produced a 6.7% decrease in homicides. That isn't his only mistake, but this mistake is the focus of this note since it involves statistics which few understand and many misuse.

The report "Impacts of the 1994 Assault Weapons Ban: 1994–96," Jeffrey A. Roth and Christopher S. Koper, March 1999, **National Institute of Justice**, <http://www.ncjrs.org/pdffiles1/173405.pdf#173405> on page 9 states: **"Random, year-to-year fluctuations could not be ruled out as an explanation of the 6.7-percent drop. . . . the model lacks the statistical power to detect a preventive effect of even 20 percent under conventional standards of statistical reliability."**

The English translation of this finding is the post ban homicide data showing a 6.7% reduction is not sufficiently different from the pre-ban homicide data to say the ban had an effect. Actually, the statement is a bit stronger than this translation. The authors Roth & Koper really say **that you cannot say with confidence that the ban had a measurable effect even if the data showed a 20% difference** in the totals (rather than the 6.7%) from pre-ban to post-ban homicides.

The problem of determining an effect of the federal 1994 ban on assault weapons is a classical case of statistical hypothesis testing. We see statistical fluctuations in real life all the time. It is human nature to try to read a pattern in random data (and sometimes those patterns do exist). A typical case is that of the Dow Jones Industrial stock level fluctuations. On an average day, the market will go up or down in no clear trend from the previous day and then something changes in the economy and a trend will develop for a while. Delegate Quinter believes that this study did the equivalent of detecting a stock market trend in the face of the random fluctuations and using only yesterday's and today's stock reports. The Justice report is saying the difference in the homicide levels is not sufficient to declare a trend in this case. Unfortunately, just like the stock market, emotions are high over these fluctuations.

The logic of statistical hypothesis testing answers the question (in this case) of how likely it is that the set of homicides after the ban has the same statistics as before the ban (i.e., the ban had no effect).

The logic behind statistical hypothesis testing may be compared to that of the American criminal court system: 1) suspects are presumed innocent until "proven" guilty, 2) evidence collected according to certain procedures is presented at the trial, 3) this evidence must establish the case for guilt "beyond a reasonable doubt," 4) the jury may decide either guilty or not guilty, 5) juries can be wrong in two ways: a suspect is really innocent, but the jury finds him guilty (type I error) a suspect is really guilty, but the jury finds him not guilty (type II error)

In statistical hypothesis testing we have similar error types where the ban really had no effect, but the statistical test says that it did have an effect (type I error); or where the ban had an effect, but the statistical test says that it had no effect (type II error). Statistical analysis replaces the trial and jury.

In the case of the Federal 1994 gun ban, we are looking for an effect that changes the pattern of homicides after the ban and which may be produced by the ban. "May be" is important, because there are statistical fluctuations all the time in homicides and it is possible that an observed change in homicide pattern is randomly produced. Also, it is possible the change is created by another effect (i.e., say a change in the economy). It is important not to fall into a "Post Hoc, ergo propter hoc" fallacy.

Statistics deals with the issues relating to the random fluctuations. When we talk about the significance level of our test we using a statistical term for how confident we are about our conclusions (that we have not made a type I or II error from random fluctuations).

Returning to Del. Quinter's claimed 6.7% reduction in homicides after the ban, study authors Roth & Koper say that even a 20% reduction from pre-ban to post-ban homicides would **NOT** be a sufficient change to make the claim that the ban produced and effect according to typical standards of statistical analysis. In simple English, any effect is pure speculation.

If glove doesn't fit, you must acquit. The glove doesn't fit Del. Quinter's assertion.

¹ Dr. Lee received a PhD in Mathematics from Georgia Institute of Technology in 1970.