

The Social and Economic Costs of Firearm Violence



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Firearms:

There is much violence without firearms.
Various substitutes for firearms, but

- Lethal
- Portable
- Concealable
- Allow for killing at a distance (impersonal)

Costs

Many types of costs,

- Various ways to categorize costs
 - Individual
 - Interpersonal (e.g. family)
 - Community
 - Society

Types of Firearm Violence

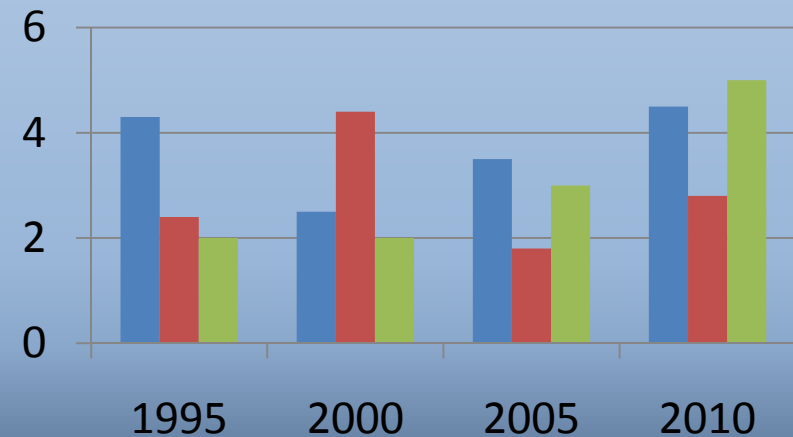
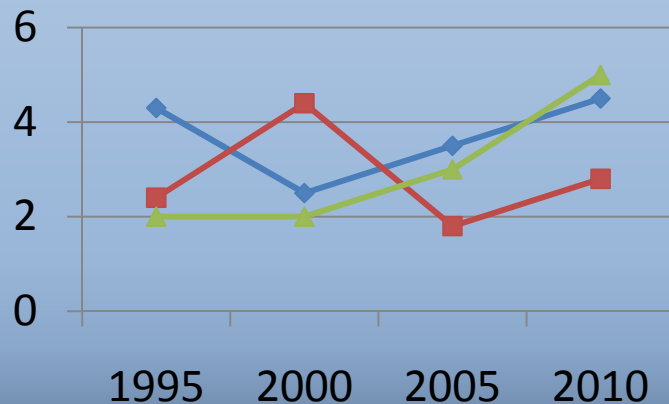
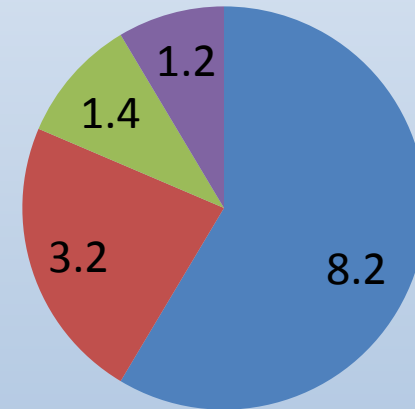
2007 (US)

	Deaths	Non-fatal
• Unintentional		
– Self-inflicted	300*	5,000*
– Other-inflicted	300*	3,000*
• Intentional		
– Self-inflicted	17,350	3,000
– Other-inflicted	13,000	44,500
• Crime/intimidation		
• Collective Violence		
– War		

*crude estimates

Key Finding:

- Need better data
- More research



I. Unintentional

“Man Accidentally Kills Best Friend in Misfired Gun Prank” Vermont: November 2011

“A man shot and killed his best friend in what police say was an apparent prank that went horrifically wrong. The 24 year old from Vermont tried to prank his sleeping friend by waking him up with the startling sound of an air rifle but the shooter mistakenly used a real rifle. Both men were visiting the residence of a mutual friend for Thanksgiving ...”

Unintentional Shootings

Costs

Individual: Morbidity
 Mortality
 Trauma

Interpersonal: Grief
 Guilt
 Trauma

Community: -----

Society: -----

Three families affected

- Victim
- Shooter
- Location of shooting

Size of the Problem

Fatalities

Vital statistics inaccurate: 60% sensitivity and 60% specificity

NVDRS accurate: 99% sensitivity and 98% specificity

Barber & Hemenway, Accident Analysis & Prevention, 2011

Maybe 500/year

Young Age of victim: median age 23

Male: 90%

Size of the Problem

Fatalities

Age of Victim	% Other Inflicted
0-14	78%
15-24	60%
25-54	33%
55+	19%

Hemenway et al. Accident Analysis Prevention 2010

Overall 50% other inflicted

In other inflicted, young age of shooter: 82% underage 25
male: 92%

Unintentional Non-Fatal Gun Injuries

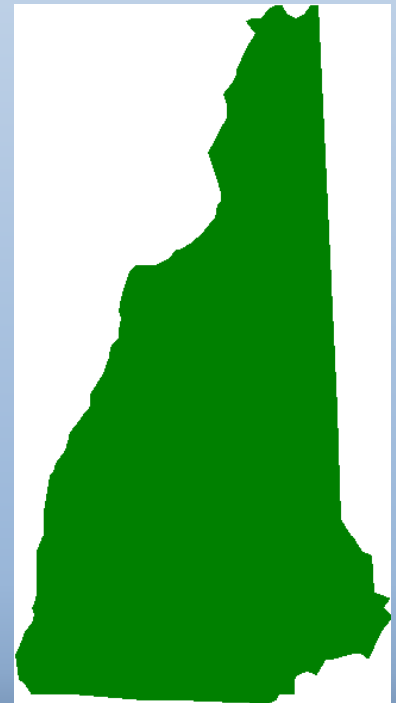


WISQARS inaccurate
8,000 – 10,000/year

II. Intentional Self-Inflicted (Suicide)

“Suicide at Gun Shop” New Hampshire, 2007

“A 29 year old man who was enrolled in a gun safety course at PSMG gun shop fatally shot himself there... The business’ owner and gun safety teacher was standing beside the man when he put the handgun against his temple and fired the shot...”



Breakdown of Costs

Individual: Morbidity
 Mortality

Interpersonal: Grief
 Guilt

Community: -----
 (copycat)

Society: -----



Many suicides impulsive, risks
transitory

Nearly lethal suicides

N=153 (ages 13-34)

Time between thinking about suicide and taking action:

>5 minutes	24%
<20 minutes	48%
<1 hour	70%
<8 hours	86%

Suicide and Life-Threatening Behavior, 2001
(data from author)

What percent of survivors of near-lethal suicide attempts eventually complete suicide?

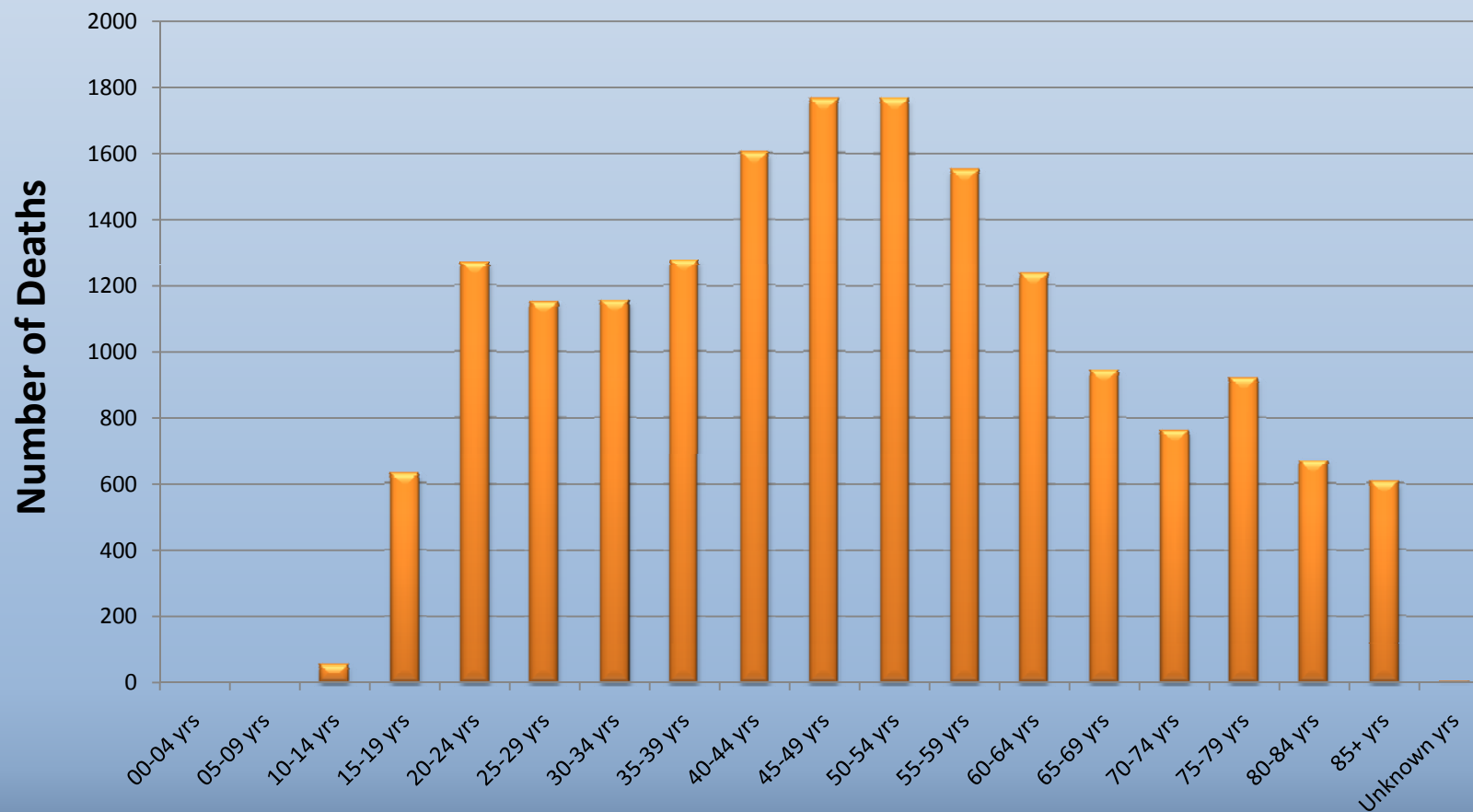
- 10%
- 25%
- 50%
- 75%
- 90%

< 10%

of survivors of near-lethal
suicide attempts commit
suicide

Firearm Suicides: Size of the Problem

Suicide by Firearm, Deaths 2007



Suicide: Size of Problem

	*	Rate
White	16,000	6.3
Black	1,000	2.5
Male	15,200	10.4
Female	2,200	1.4

III. Intentional- other inflicted (Assaults/Homicide)

“An Arrest in City’s latest Homicide” Omaha, NE
2011



“_____, 18, was arrested at booked at 1:30A.M.
Police said Joe Piper was shot several times at
Seymour Smith Park Tuesday afternoon.
According to witnesses, multiple shots were fired.
Witnesses said they say a man pull a gun out as
two men were arguing... ‘ it is very taxing when
you have so many events happen in such a short
amount of time’ said Police Chief Hayes.

Costs

Individual: Morbidity
Mortality: SCI, TBI

Interpersonal: Grief
Guilt
Trauma
2 families
Witnesses

Community: Large

Society: Large

Size of Problem

Firearm Homicide (US): 13,000

Victims: 54% African American (7x white rate)

86% Male

Peak age 20-24

Median age 27

2/3 victims aged 15-34

Size of the Problem

- Nonfatal Firearm Assaults
- Firearm Robbery / Intimidation
- Morbidity: 44,500
- Robbery/intimidation: 1 million*

*crude estimate

Individual Costs:

Gun Crime (even if no physical injury)

- Loss of property
- Shame/guilt
- Intimidation (IPV)
- Fear, lack of freedom

Most crimes/violence do not include firearms

- Simple Assault
- Purse snatching
- Child abuse
- Bullying
- Elder Abuse

Effects from fear / witnessing /victimization /perpetration on individuals involved AND the community

- Psychiatric
- Emotional
- Behavioral
- Health

Effect from fear / witnessing /victimization /perpetration on individuals involved AND the community

- **Psychiatric:** PTSD, brain damage, personality change, depression, anxiety, intrusive thoughts, sleep problems
- **Emotional:** anger withdrawal, low aspirations, quality of relationships, survival guilt, despair, grief, loneliness, nervousness,

Effect from fear / witnessing /victimization /perpetration on individuals involved AND the community

- **Behavioral:** Academic performance, risky sexual behavior, substance abuse, delinquency, violence
- **Health:** Asthma, low birthrate of children, heart disease

Effects of...

- Economic Development
 - e.g. entrepreneurship, productivity
- Education systems
 - e.g. special ed, counseling, school disruption
- Work force
 - e.g. absenteeism, hiring / firing
- Social services
 - e.g. child protective services, adult protective services

All these costs “keep on giving”

e.g. quality of relationships, risky sexual
behavior, low birth-weight children

Community Costs:

Trauma / Stress

- Even for perpetrators
- Even for MDs



Community Costs:

Medical care

- Half born by taxpayer
- Short and long term
 - e.g. SCI, TBI

Community Costs:

Criminal Justice System

Prevention / Deterrence: gun laws, police

Enforcement: Police, DAs, judges, prisons, parole officers

Community Costs:

Gun Laws

- e.g. inconvenience to gun owner



Community Costs:

Avoidance and Protection Costs

Avoidance Costs:

Guard against being shot

- Work (when and where willing to work)
 - e.g. Restrictions on evening work

Avoidance Costs:

Recreation / Shopping / Leisure

- Where allow children to play (obesity)



Avoidance Costs:

Neighborhood Deterioration

Loss of social capital and role models

- Residential location decisions (“White Flight”)
- Commercial locational decisions
- Tourism

Protection Costs:

“Target hardening”

- Metal detectors in schools
- Metal detectors in airports
- Police bullet proof vests
- Secret service

Protection Costs:

“Target Hardening” (cont’d.)

- Obtain guns
- Join gangs

Overall Community Costs

Major problem is 'positive feedback' loop
(e.g. youth violence)

- Other-inflicted intentional gun violence → more such violence....
 - Guns for protection
 - Retaliation
 - Normalization of violence
 - Trauma
 - Neighborhood deterioration

Societal costs:

Political Stability

Mayor of “Most dangerous city in world” April, 2011

Mayor of Juarez (2007-2010): “They killed two chiefs of police, judges, cops. They even killed the administrative assistant whose only job was to chose which cop worked which day.”



Societal costs:

Political Stability (cont'd.)

- Drug cartels (Mexico)
- 'Gun pollution' in Philippines excuse for Marcos dictatorship (1972)
- Assassinations (e.g. John, Bobby, Martin) (U.S.)
- Civil war

Societal costs:

Cross-border issues

- War
- Refugees
- International gangs
- Movement of guns

Conclusion

The costs of firearm violence, particularly, interpersonal street violence, are grossly underestimated by focusing only on morbidity and mortality.