



# Youth and Gun Violence: Strategies for Prevention

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WHILE  
WE WERE  
SLEEPING

SUCCESS STORIES IN

INJURY AND VIOLENCE

PREVENTION

DAVID HEMENWAY

# *“While We Were Sleeping”* Success Stories in Injury Prevention

U Cal Press (2009)

David Hemenway, PhD  
Harvard Injury Control Research Center

# Outline

- Big Problem
- Lack of Resources
- Public Health Approach
- Gun Accidents (0-14)
- Gun Assaults (15-19)
- Gun Suicides (10-24)

Examples of Policies & Programs

# Big Public Health Problem: US Gun Deaths: **Age 0-24**

- 2014      **Per Day**

114 Shot

18 Die

# Violent Deaths: 2014, age 0-24

Suicide	5,507
Firearm Suicides	2,444 (44%)
Homicides	5,119
Firearm Homicides	3,892 (76%)
Unintentional & Undetermined Firearm Deaths	264
Total Firearm Deaths	6,600

Among high income countries:  
firearm death is a uniquely  
American problem





# U.S. vs. Other First World Countries (Similarities)

Similar Crime

Similar Violence

Similar Bullying rates

Similar Aggression/Depression rates  
among school children

# International Analyses

Homicide, Suicide, and Unintentional Gun Deaths among **5-14 year olds**:  
*The United States vs. the Other High Income Populous Countries, 2010*

	Mortality Rate Ratio
<b>Homicides</b>	
Gun homicides	18.5
Non-gun homicides	1.4
Total	3.4
<b>Suicides</b>	
Gun Suicides	11.2
Non-gun Suicides	1.1
Total	1.5
<b>Unintentional firearm deaths</b>	12.2
Total firearm deaths	14.2
Source: Grinshetyn & Hemenway AJM 2015	



Homicide, Suicide, and Unintentional Gun Deaths among **15-24 year olds**:  
The United States vs. the Other High Income Populous Countries, 2010

	<b>Mortality Rate Ratio</b>
<b>Homicides</b>	
Gun homicides	49.0
Non-gun homicides	3.1
Total	14.0
<b>Suicides</b>	
Gun Suicides	12.5
Non-gun Suicides	0.7
Total	1.2
<b>Unintentional firearm deaths</b>	12.6
Total firearm death rate	22.5

Source: Grinshetyn &  
Hemenway, AJM, 2016

# Lack of Available Firearms Data

- NVDRS not in all states
- Non-fatal data problems
- BRFSS no gun questions
- Tracing data not available
- State concealed carry data not available
- No longitudinal studies



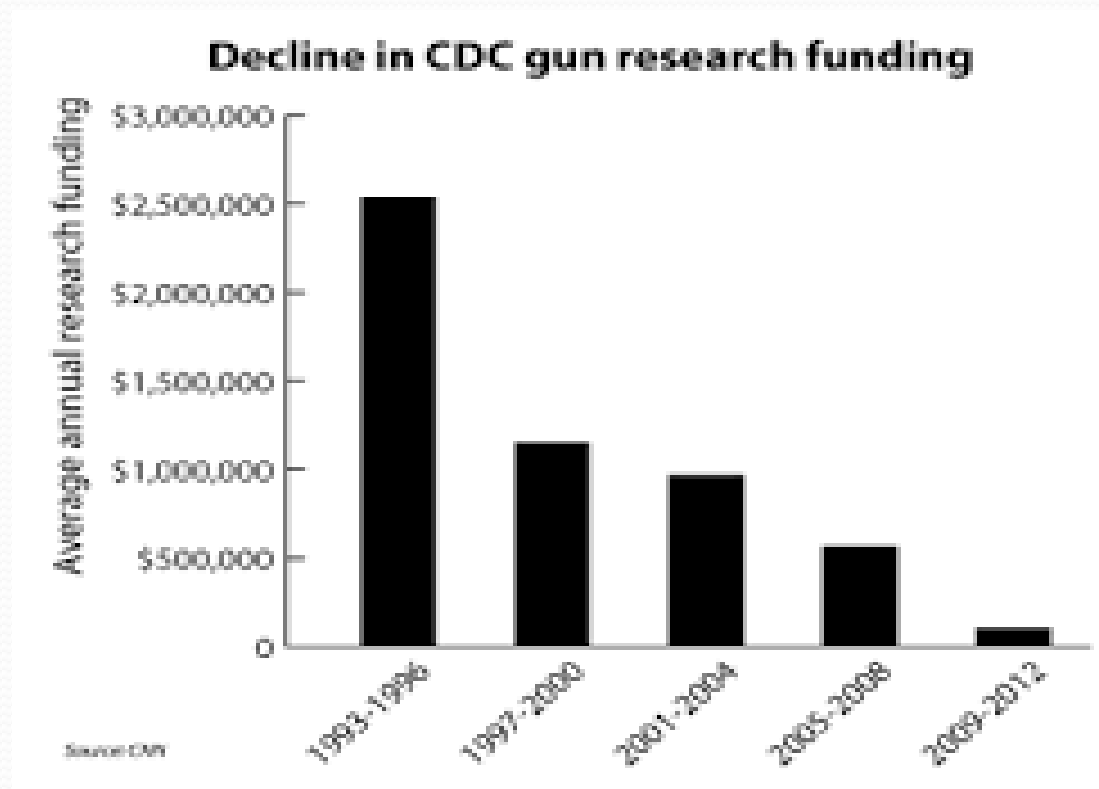
# Too Little Firearms Research

- Public Health underfunded relative to Medicine
- Within Public Health, injury prevention particularly underfunded
- Within injury prevention, firearms research particularly underfunded



**"You can't have a career doing gun research. I care about my students, so I specifically tell them, 'Don't do this.' It's an incredible sacrifice."**

# Lack of Government Funding



# Lack of Government Funding

## Disparity in NIH research awards

*Cholera, diphtheria,  
polio and rabies*

**2,068**

total cases, 1973-2012

**486**

NIH research awards

*Injuries from  
firearms*

**Over 4 million**

total cases, 1973-2012

**3**

NIH research awards

*Source: University of Chicago Crime Lab*

# So Not Enough Research

For youth aged 1-17:

- Firearms account for 12.6% of the deaths
- An analysis of PubMed concerning the ten leading causes of these deaths found that firearm articles accounted for less than 0.3% of the publications.

Ladapo et al, JAMA 2013

# What do we need more firearms research about?

Everything!

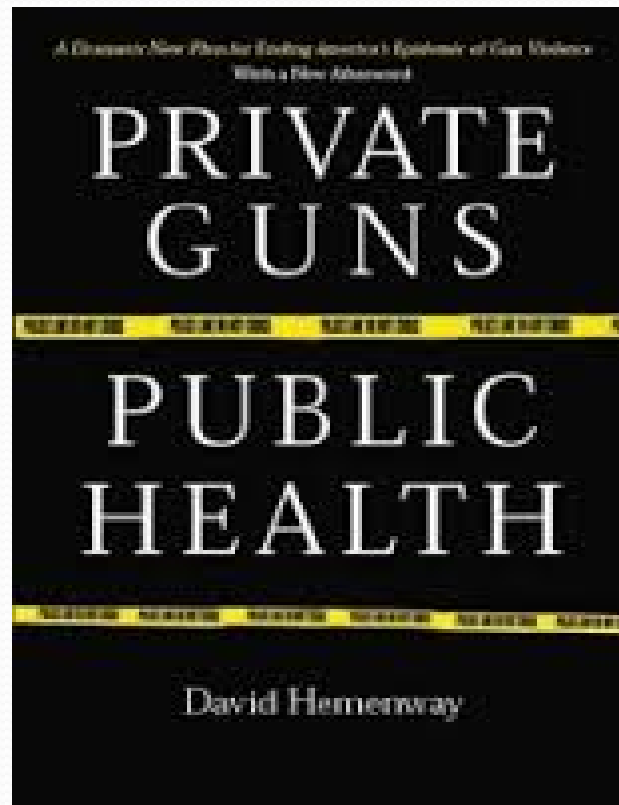
gun storage, gun training, gun theft, gun suicide, gun accidents, gun threats, gun use in self-defense, gun use to intimidate, guns in intimate partner violence, straw purchasers, smart guns, effect of gun laws, gun law enforcement, gun transfers, gun shop practices, concealed gun carrying, open gun carrying, guns on college campuses, guns at work, guns and alcohol, police and guns, assault weapons, Saturday night specials, penalties for illegal gun use, gun trafficking, liability laws and guns, insurance for gun owners, women and guns, children and guns, minorities and guns, Second Amendment, gun ranges, guns and hearing loss, guns and lead poisoning, gangs and guns, background checks, police discretion, machine guns, burglary, home protection alternatives, ....

# Gun Manufacturers and Dealers Protections

- 1) No federal agency has oversight for safety
- 2) Almost impossible to sue
- 3) ATF hands tied in numerous ways

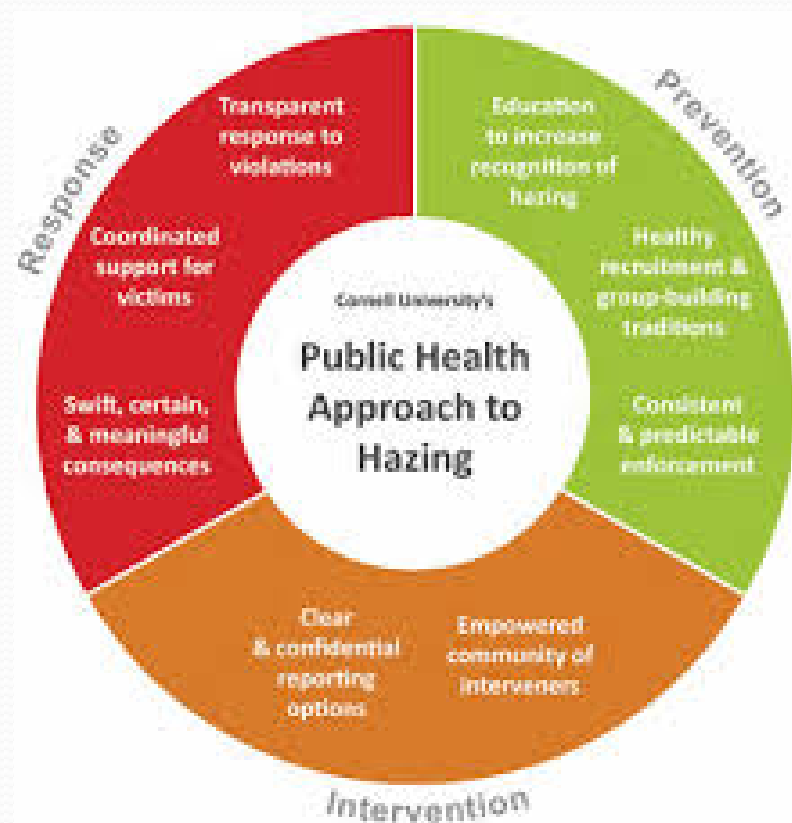


# Promoting the Public Health Approach to Gun Violence Prevention

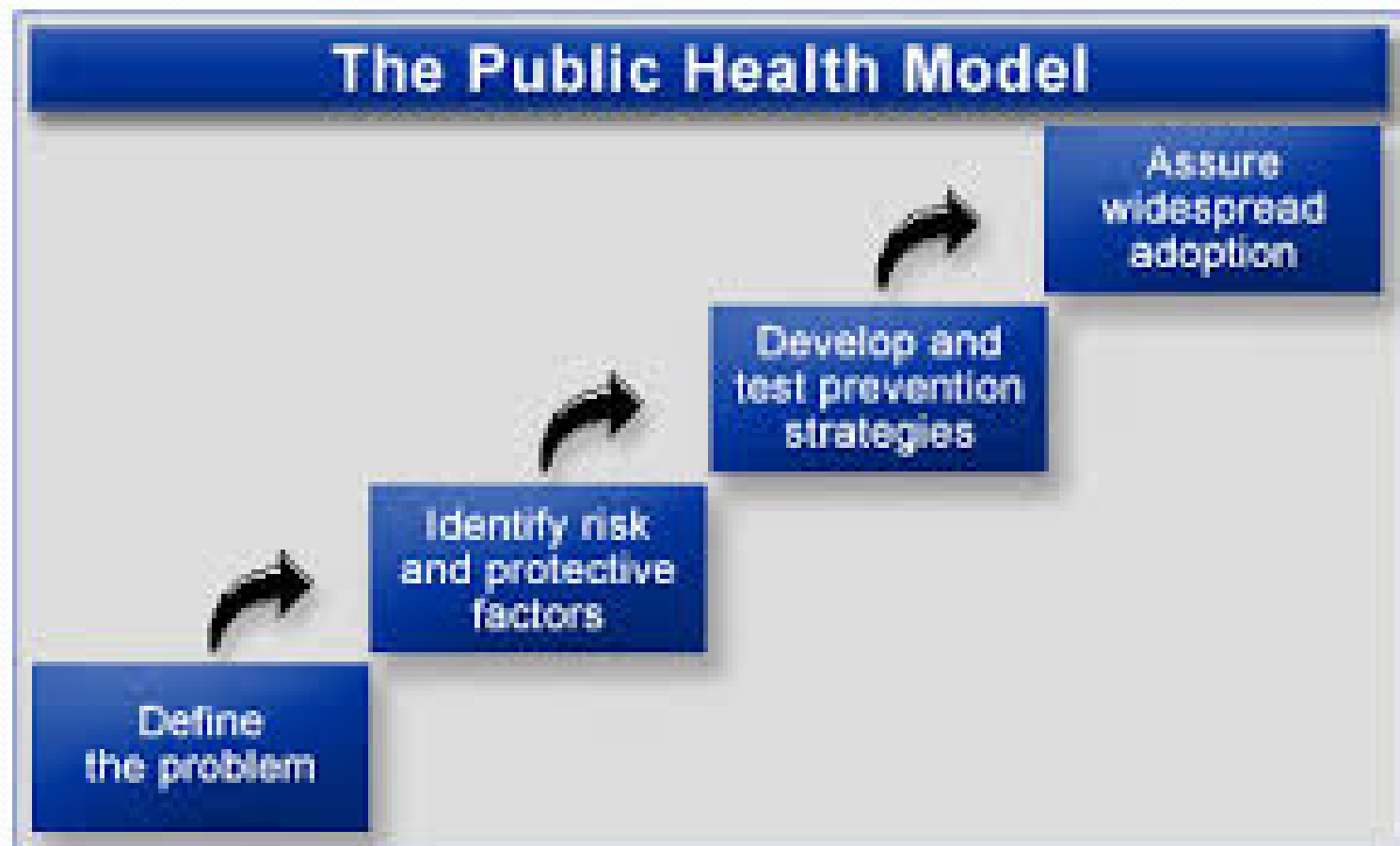


# Now everyone wants to use the public health approach: to everything

- Antimicrobial resistance
- Bereavement
- Bullying
- Climate change
- Cyber security
- Education
- Fracking
- Gambling
- Homelessness
- Justice reform
- Malware propagation
- Obesity
- Parenting
- War



# The Public Health Approach



# One Sentence Description

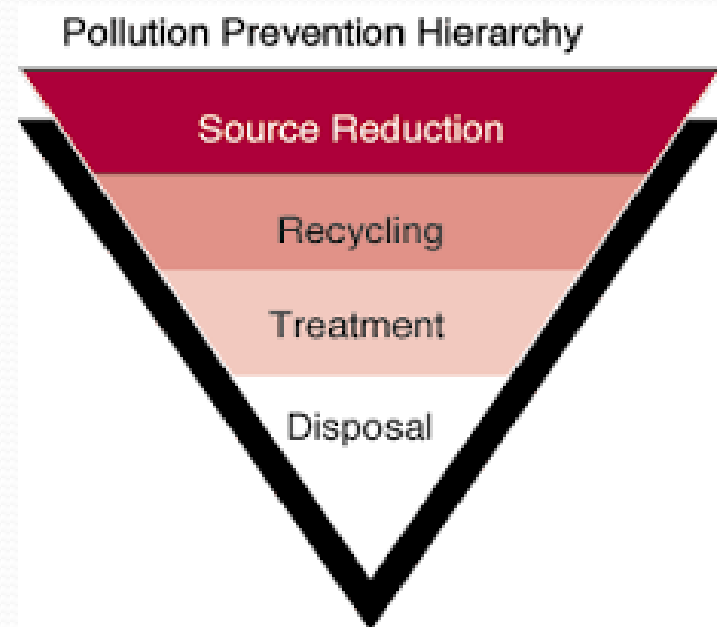
Make it easy for people to stay healthy  
And difficult to become sick or injured.

**MAKE HEALTHY EASY**



# Five key elements of the Public Health Approach

- Prevention (upstream if possible)



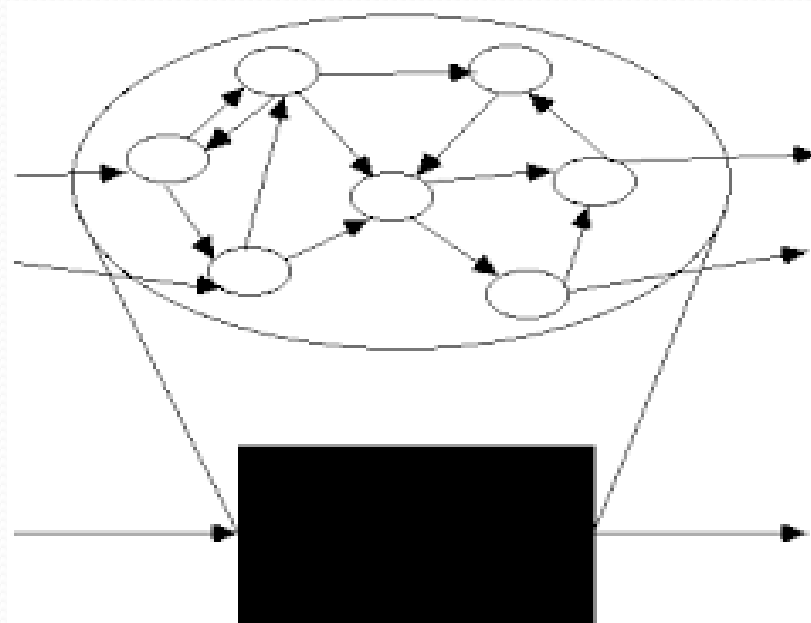
# The Public Health Approach

- Population based (not named individuals)



# The Public Health Approach

- Systems Approach



# Public Health Approach

- Broad and Inclusive (get everyone to help)
- Less Blame, more shared responsibility





# Motor Vehicle Injuries: CDC calls one of the great public health accomplishment of 20<sup>th</sup> Century



# Motor Vehicles

Most motor vehicle *crashes* are due to driver error

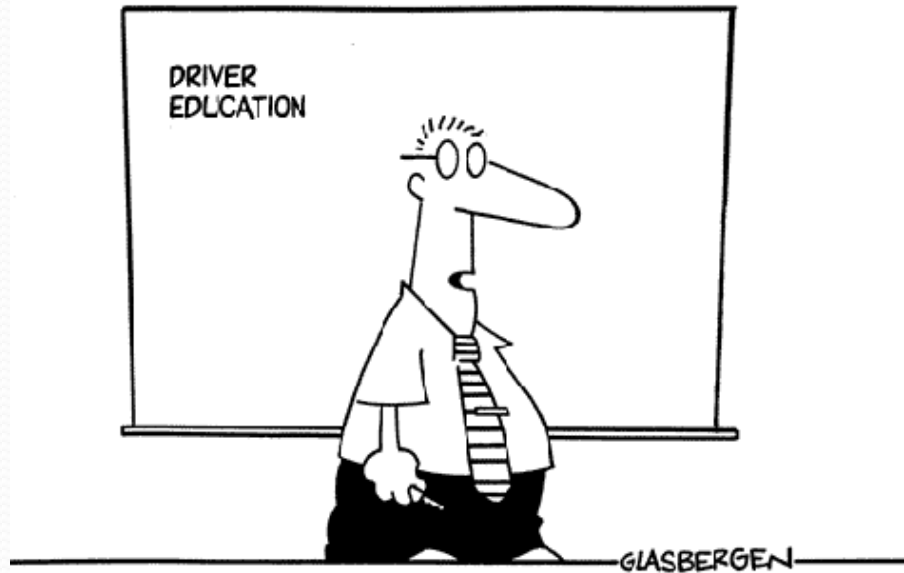
(e.g. tired drivers,  
distracted drivers,  
angry drivers.)



# Policy?

## Educate and train drivers!

Copyright 2001 by Randy Glasbergen. [www.glasbergen.com](http://www.glasbergen.com)



**"Today we'll learn how to put on makeup, dial a cell phone, and eat a Big Mac while parallel parking."**

# Motor Vehicles

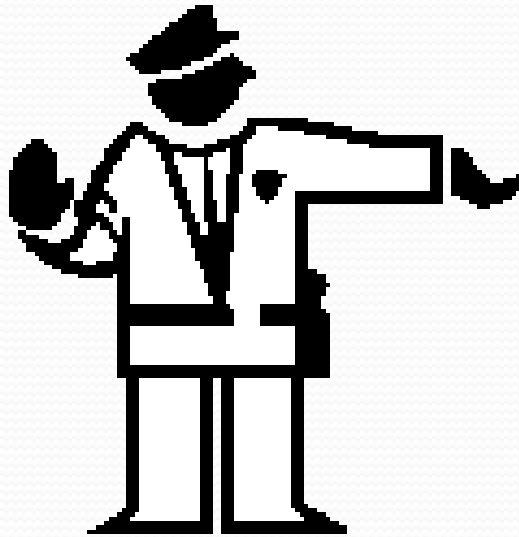
Most motor vehicle *deaths* are associated with clear and deliberate unlawful behavior by motorists

(e.g. speeding,  
drunk driving,  
running red lights)



# Policy?

Enforce the traffic laws!



# Public health physicians changed the question:

Not,

Who caused the crash?

But,

What caused the injury?

# Punchline

Nobody thinks drivers today are better than they were in the 1950s:

Fatalities per mile driven have fallen 85%



# Key Insight: Don't have to change people

Create a system

- Hard to make mistakes
- Hard to behave inappropriately
- If some still do, ensure that no one seriously injured



# Learning to Live with Firearms

- Changes in the firearm itself
- Changes in the distribution system
- Changes in social norms about guns
  
- Reduce gun accidents
- Reduce gun assaults and intimidation
- Reduce gun homicides
- Reduce gun suicides

# First Step in Public Health Approach

- Create a good data system

Fatality Analysis Reporting System (FARS)  
for motor vehicle deaths

National Violent Death Reporting System (NVDRS)  
for firearm and other violent deaths

# Typology of Child Violent Death

- Children as Homicide Victims
- Children as Homicide Perpetrators
- Children as Suicides
- Children in Unintentional Firearm Death

as Victims  
as Shooters

Data from the NVDRS



# Unintentional Firearm Deaths to Children

Claims of gun advocates:

- “There are only 60 unintentional firearm deaths each year to children (age 0-14)”
- “About two thirds of accidental deaths to children are not shots fired by other little kids but rather adult males with criminal backgrounds”

John Lott

# Actual Unintentional Firearm Deaths to Children (age 0-14)

1. Some 110 deaths/year (80% more than Vitals reports)  
Vital Statistics good for overall gun deaths, not good classifying unintentional shootings vs. homicides of children.

2. Children killing children  
1/3 self inflicted;  
1/3 other children as shooters;  
1/6 older teenagers as shooters;  
most of the rest are parents as shooters

# Unintentional Child Firearm Deaths

	Deaths/million years	% Male	% Other Inflicted	% At Friends House
0-1	0.4	29%	86%	0%
2-4	1.6	88%	29%	0%
5-10	1.1	72%	69%	0%
11-12	2.1	83%	67%	39%
13-14	2.5	95%	69%	45%
				Hemenway & Solnick Injury Epidemiology 2015

# Of interest

- Mostly shot by someone else (older brother or friend)
- But 2-4 year olds have relatively high rates of accidental firearm deaths AND shoot selves
- No one shot at a friends house before the age of 11.

# Policy

For 2-4 year olds—child proof guns



For 10+ year old males—ASK campaign





# Read all cases:

## Most common circumstance

- “I didn’t know the gun was loaded”



# Policy

- Blame kid
- Blame parents



- Or solve problem

--magazine safety--



Parents and Children ( $\leq 14$  years old)  
Alabama Pediatricians/Family Practice Offices  
N=200 gun owners

Has your child handled gun in the home?

Parents Report:

Yes: 30%      No : 70%



In homes where parents report “No”,  
children report:

Boys:    Yes      36%

Girls:    Yes      12%

# Policies

- Safe Storage
- Smart Guns



# Homicides 0-1 year olds

- Very many homicides
- Almost never use guns
- Most of the homicide perpetrators were....the boyfriend
- **Policy:** teach moms about purple period of crying not directly relevant to the problem

# Adolescents



# Boston Data Project

## Major Components

1. Boston Youth Survey
2. Boston Neighborhood Survey
3. External Data
  - US Census data
  - Emergency department and hospital data
  - Crime data

# Fear

	% Feel Unsafe*
<b>Home</b>	
<b>School</b>	
<b>To/from school</b>	
<b>On your street</b>	
<b>Neighborhood</b>	
<b>Public Transportation</b>	

\*rarely/never feel safe



# Fear

2006

	% Feel Unsafe*
<b>Home</b>	<b>3</b>
<b>School</b>	<b>10</b>
<b>To/from school</b>	<b>16</b>
<b>On your street</b>	<b>19</b>
<b>Neighborhood</b>	<b>21</b>
<b>Public Transportation</b>	<b>30</b>

\*rarely/never feel safe

# Why Carry?

- Afraid

Why Afraid?

- Other kids are carrying

**POLICY:** reduce fear



Findings:

# Perceptions

# Peer Perceptions of Gun Carrying

## Gun Carrying Overestimates

Self-reported Carrying	5.5%
Mean estimate of classmates carrying	15.9%
Mean estimate of neighborhood carrying	32.6%

# Difficulty for Teenagers to Get a Gun

	EASY	DIFFICULT	IMPOSSIBLE
Estimated Difficulty for OTHER KIDS to get gun	68%	24%	8%
Estimated difficulty of SELF to get gun	39%	24%	36%
Ideal world- How easy for teens to get a gun	18%	14%	68%

Findings:

Trauma

# N=1800

Any family member or close friends murdered?	47%
Post year (real life) seen someone shot or shot at?	24%
Are gunshots / shootings a problem in your neighborhood?	67%
Do you mostly / always feel safe on your street (% NO)	56%

Findings:

Diet



# Diet & Injury

- Soft Drinks



# Twinkie Defense

Soft Drink Consumption (past week)

	<1 Can	2-4 Cans	5-7 Cans	14+ cans
Violent toward peers	35%	46%	55%	59%
Violent in dating relationship	15%	18%	25%	27%
Violent toward sibling	25%	30%	39%	45%

### BYS Soft Drink Consumption (past week)

	<1 Can	2-4 Cans	5-7 Cans	14+ cans
Depression Signs	31%	35%	43%	48%
Self-Injury	6%	8%	10%	14%
Considered Suicide	10%	10%	16%	16%
Attempted Suicide	3%	2%	6%	8%

BYS  
Solnick & Hemenway (2011)

YRBS Soft Drink Consumption (past 7 days)  
(N=16,188)

	<1 Can	2-4 Cans	5-7 Cans	14+ cans
% of Total	19 <sup>0</sup> %	33 <sup>0</sup> %	19 <sup>0</sup> %	29 <sup>0</sup> %
Past Year				
In a fight	22 <sup>0</sup> %	27 <sup>0</sup> %	33 <sup>0</sup> %	42 <sup>0</sup> %
Made Suicide Plan	9 <sup>0</sup> %	10 <sup>0</sup> %	11 <sup>0</sup> %	13 <sup>0</sup> %
Attempted Suicide	5 <sup>0</sup> %	5 <sup>0</sup> %	5 <sup>0</sup> %	9 <sup>0</sup> %

Findings:

Sleep

# Sleep and Aggression



## Hours of Sleep

	8+ (14%)	6-7 (58%)	≤5 (30%)
Aggressive behavior (hit, punched, kicked) in past month	30%	38%	40%

# Policies

- Make places where fearful less scary
- Provide more accurate estimates of gun carrying
- Trauma sensitive schools
- Better food in schools
- Start schools later
- “Where did the gun come from”?

# Citizens for Safety

- “Where Did the Gun Come From”
- Operation Lipstick-women as straw purchasers





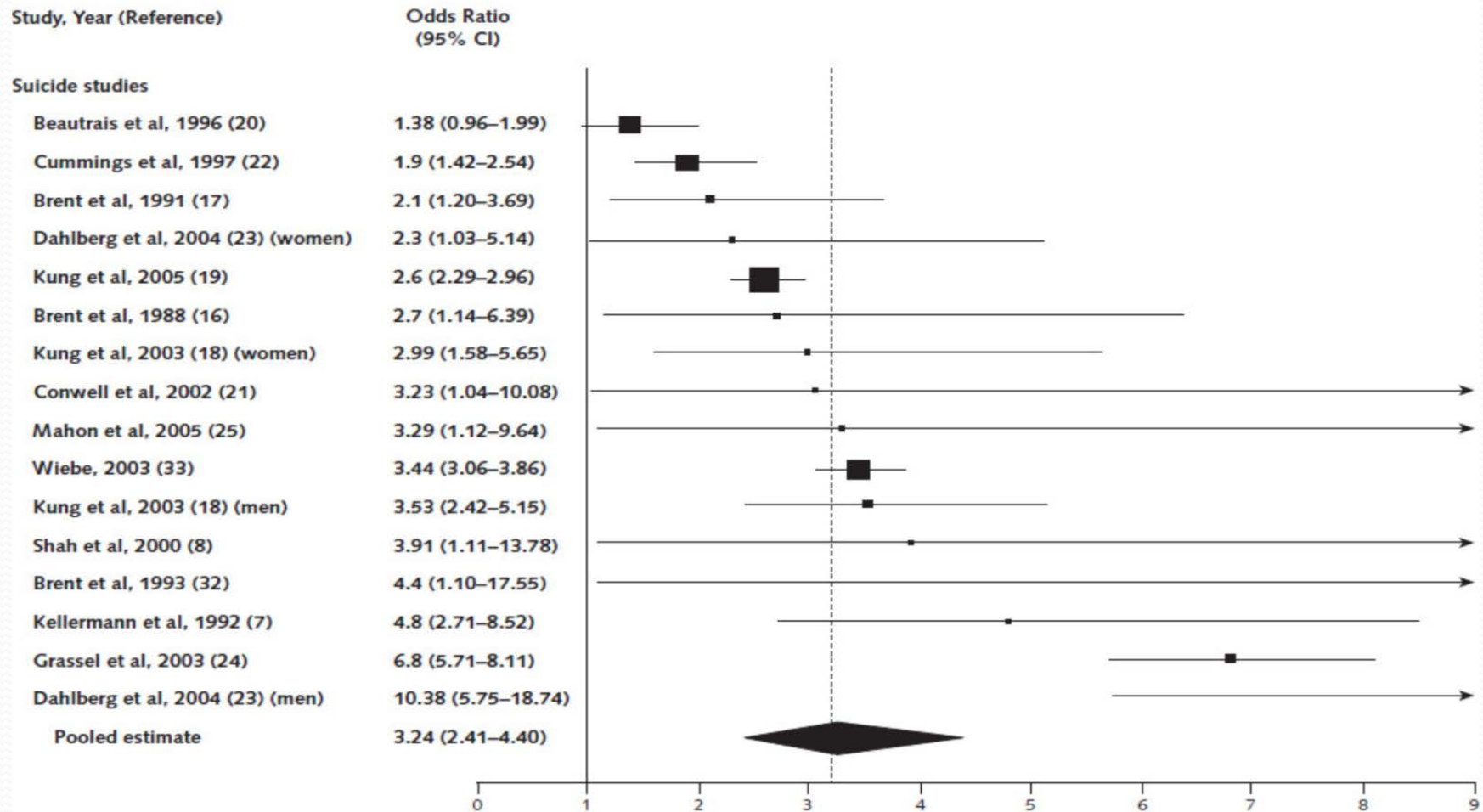
# Suicide Prevention



Without changing any laws,  
Without changing anyone's mental health

# Scientific Evidence Overwhelming

## Sixteen case-control studies



Homicide studies

# Disseminating the Message

- Suicide Experts Army, VHA, National-State Strategies
- Providers/Gatekeepers Lethal Means Counseling (suicide prevention plans)
- Gun-Owning Community Expand firearm safety to include suicide prevention

# Training: CALM-Online

- Counseling on Access to Lethal Means – Free online training by Harvard, Dartmouth, & SPRC  
<http://training.sprc.org>

You are not logged in [login] 

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### SUICIDE PREVENTION ONLINE TRAINING

Welcome to SPRC's online training site. Our mission is to train service providers, educators, health professionals, public officials, and community-based coalitions to develop effective suicide prevention programs and policies.

SPRC's online courses are listed below. All courses are available free of charge and can be completed at your own pace.

### ENHANCED COURSES

#### COUNSELING ON ACCESS TO LETHAL MEANS (CALM)



Access to lethal means can determine whether a person who is suicidal dies or survives. This course is designed for providers who counsel people at risk for suicide, primarily mental health and medical providers, but also clergy and social service providers. The first module explains why reducing access to lethal methods of self-harm saves lives. The second module teaches practical skills on when and how to ask suicidal clients about their access to lethal means and how to work with them and their families to reduce their access.

[ENTER COURSE](#) [DESCRIPTION](#)

# Finding Common Ground

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- Gun organizations are very safety oriented.
- Emphasis on preventing gun accidents (~500 deaths a year) and family protection.
- Expand focus to include preventing firearm suicides (21,000 deaths a year); falls within the safety culture of gun groups.
- Some gun-owner groups have already begun.

# Working with gun advocates to reduce suicide

- Gun Shop Project
- Gun Trainers

**CONCERNED ABOUT  
A FAMILY MEMBER  
OR FRIEND?**

**ARE THEY SUICIDAL?**

- Depressed, angry, impulsive?
- Going through a relationship break-up, legal trouble, or other setback?
- Using drugs or alcohol more?
- Withdrawing from things they used to enjoy?
- Talking about being better off dead?
- Losing hope?
- Acting reckless?
- Feeling trapped?

**SUICIDES IN NH**  
far outnumber homicides

**FIREARMS ARE THE  
LEADING METHOD**

**ATTEMPTS WITH A GUN  
ARE MORE DEADLY**  
than attempts with other methods



# GUN SAFETY RULES

11 ~~10~~ COMMANDMENTS  
OF GUN SAFETY

Look inside  
to see  
what's new!

**11. Consider temporary off-site storage if a family member may be suicidal.** When an emotional crisis (like a break-up, job loss, legal trouble) or a major change in someone's behavior (like depression, violence, heavy drinking) causes concern, storing guns outside the home for a while may save a life. Friends as well as some shooting clubs, police departments, or gun shops may be able to store them for you until the situation improves.



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