Firearms and Suicide

Deborah Azrael, PhD
Alaska Public Health Association
January 22, 2020

Is intent all that matters?
Suicide in the US

In 2017:

- 47,173 suicides
- 23,854 firearm suicides (51%)
- Suicide rate: 14.5/100,000

Suicide was the

- 10th leading cause of death overall
- 2nd leading cause of death among persons aged 15-24
- 2nd leading cause of death among persons 10-14

Source: Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System (WISQARS). Available at: www.cdc.gov/nipic/wisqars
Suicide in Alaska

In 2017:
• 200 suicides
• 119 firearm suicides (61%)
• Suicide rate: 27/100,000

Suicide was the:
• 5th leading cause of death overall
• 1st leading cause of death among persons 15-24
• 4th leading cause of death among persons 10-14

Source: Centers for Disease Control and Prevention, Web-based Injury Statistics Query and Reporting System (WISQARS). Available at: www.cdc.gov/nipc/wisqars
Suicide rates in the US and Alaska

SOURCE: AFSP.ORG/about-suicide/suicide-statistics/
2008-2014, United States
Death Rates per 100,000 Population
All Injury, Suicide, All Races, All Ethnicities, Both Sexes, All Ages
Annualized Crude Rate for United States 12.63

Reports for All Ages include those of unknown age.
* Rates based on 20 or fewer deaths may be unstable. States with these rates are cross-hatched in the map (see legend above). Such rates have an asterisk.

Produced by: the Statistics, Programming & Economics Branch, National Center for Injury Prevention & Control, CDC
Data Sources: NCHS National Vital Statistics System for numbers of deaths; US Census Bureau for population estimates.
Suicide data from WISQARS;

STATE-LEVEL SUICIDE RATES IN RELATION TO RATES OF WELL BEING

Suicide rate by gun ownership
GENES
(may influence some, but not all, domains in this figure)

ENVIRONMENTAL INFLUENCES ON NEURODEVELOPMENT
e.g. Childhood abuse; Loss of Parent

RISK FACTORS IN ADULTHOOD
• Relationship Breakdown
• Job Loss
• Socioeconomic Conditions
• Personality
• Life Event
• Substance Misuse

MENTAL ILLNESS
• depression; schizophrenia

IMPULSIVE BEHAVIOUR IN RESPONSE TO LIFE EVENTS

Mental Illness

PHYSICAL ILLNESS/RATIONAL SUICIDE

SUICIDAL THOUGHTS

PROTECTIVE FACTORS
• Motherhood
• Social Support
• Help Seeking
• Religious sanctions against suicide

FACILITATING FACTORS
• Personal & cultural acceptability
• Substance Misuse
• Media (imitation)
• Cognitive Skills/Problem Solving
• Age / Sex

ChoICE OF METHOD/METHOD AVAILABILITY
(media, culture)

ATTEMPTED SUICIDE

SUICIDE

AVAILABILITY OF EFFECTIVE TREATMENTS/ANTIDOTES

ENVIRONMENTAL INFLUENCES ON NEURODEVELOPMENT

We are beginning to understand that many people attempt suicide plays a crucial role in whether they live or die.
What proportion of suicide attempts by various methods prove fatal?

US Vital Statistics:
309,377 fatal suicides

US Emergency Department Sample:
1,791,638 nonfatal suicide attempts treated and discharged

US Inpatient Sample:
1,566,871 nonfatal suicide attempts hospitalized

Case fatality rate varies markedly by method, and frequency of method varies with demographics:

- 89.6%
- 56.4%
- 52.7%
- 30.5%
- 27.9%
- 26.8%
- <2%
- <2%
- <2%


http://annals.org/aim/article/doi/10.7326/M19-1324

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GENES
(may influence some, but not all, domains in this figure)

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MENTAL ILLNESS
- depression
- schizophrenia

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ENVIRONMENTAL INFLUENCES ON NEURODEVELOPMENT
e.g. Childhood abuse; Loss of Parent

GENES
(may influence some, but not all, domains in this figure)
Rates of Household Firearm Ownership and Rates of Suicide, Firearm Suicide and Non-Firearm Suicide across 7 North East States, 1996-2000

<table>
<thead>
<tr>
<th>State</th>
<th>Percent of Households with Firearms</th>
<th>Suicides per 100000</th>
<th>Firearm Suicides per 100000</th>
<th>Non-Firearm Suicides per 100000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vermont</td>
<td>42%</td>
<td>12.3</td>
<td>8.0</td>
<td>4.3</td>
</tr>
<tr>
<td>Maine</td>
<td>41%</td>
<td>13.3</td>
<td>7.8</td>
<td>5.5</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>30%</td>
<td>11.7</td>
<td>6.2</td>
<td>5.5</td>
</tr>
<tr>
<td>Connecticut</td>
<td>17%</td>
<td>8.5</td>
<td>3.3</td>
<td>5.2</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>13%</td>
<td>8.3</td>
<td>3.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>12%</td>
<td>7.5</td>
<td>2.1</td>
<td>5.4</td>
</tr>
<tr>
<td>New Jersey</td>
<td>12%</td>
<td>7.1</td>
<td>2.3</td>
<td>4.8</td>
</tr>
<tr>
<td>All 7 States</td>
<td>17%</td>
<td>8.2</td>
<td>3.1</td>
<td>5.1</td>
</tr>
</tbody>
</table>

Rates of household gun ownership and suicide

Figure 1. The visual discrepancy between the solid regression line (a model that examines the crude relationship between household firearm ownership and suicide mortality) and a line that can be visualized through the crosses marks is a representation of how little the association between firearm ownership and suicide mortality is affected by the covarying contribution of suicide attempt rates.
Firearms and suicide: is risk independent of underlying suicidal behavior?

Table 3. Suicides and Suicide Attempts in US States with the Highest and Lowest Gun Ownership Levels, 2008–2009

<table>
<thead>
<tr>
<th>Population Group by State Gun Ownership Level</th>
<th>Person-Years</th>
<th>No. of Firearm Suicides</th>
<th>No. of Nonfirearm Suicides</th>
<th>Total No. of Suicides</th>
<th>Population With Suicidal Acts, %</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>High–gun ownership states&lt;sup&gt;a, b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All adults</td>
<td>62,383,037</td>
<td>7,275</td>
<td>4,153</td>
<td>11,428</td>
<td>0.41</td>
<td>0.18, 0.63</td>
</tr>
<tr>
<td>Adult men</td>
<td>30,273,657</td>
<td>6,263</td>
<td>2,905</td>
<td>9,168</td>
<td>0.38</td>
<td>0.16, 0.60</td>
</tr>
<tr>
<td>Adult women</td>
<td>32,109,380</td>
<td>1,012</td>
<td>1,248</td>
<td>2,260</td>
<td>0.44</td>
<td>0.17, 0.71</td>
</tr>
<tr>
<td>Adults aged 18–29 years</td>
<td>13,829,694</td>
<td>1,303</td>
<td>960</td>
<td>2,263</td>
<td>1.04</td>
<td>0.40, 1.67</td>
</tr>
<tr>
<td>Adults aged ≥30 years</td>
<td>48,553,343</td>
<td>5,972</td>
<td>3,193</td>
<td>9,165</td>
<td>0.24</td>
<td>0.09, 0.38</td>
</tr>
<tr>
<td>Low–gun ownership states&lt;sup&gt;c, d&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All adults</td>
<td>62,447,876</td>
<td>1,697</td>
<td>4,341</td>
<td>6,038</td>
<td>0.49</td>
<td>0.00, 0.98</td>
</tr>
<tr>
<td>Adult men</td>
<td>29,810,942</td>
<td>1,572</td>
<td>3,207</td>
<td>4,779</td>
<td>0.38</td>
<td>−0.04, 0.79</td>
</tr>
<tr>
<td>Adult women</td>
<td>32,636,934</td>
<td>125</td>
<td>1,134</td>
<td>1,259</td>
<td>0.60</td>
<td>−0.01, 1.21</td>
</tr>
<tr>
<td>Adults aged 18–29 years</td>
<td>13,335,648</td>
<td>219</td>
<td>778</td>
<td>997</td>
<td>0.97</td>
<td>−0.01, 1.94</td>
</tr>
<tr>
<td>Adults aged ≥30 years</td>
<td>49,112,228</td>
<td>1,478</td>
<td>3,563</td>
<td>5,041</td>
<td>0.26</td>
<td>−0.06, 0.58</td>
</tr>
</tbody>
</table>

Abbreviation: CI, confidence interval.
<sup>a</sup> High–gun ownership states are Alabama, Alaska, Arkansas, Idaho, Iowa, Kentucky, Louisiana, Mississippi, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Tennessee, West Virginia, and Wyoming.
<sup>b</sup> In high–gun ownership states, 51% of adults live in households with firearms.
<sup>c</sup> Low–gun ownership states are Connecticut, Hawaii, Massachusetts, New Jersey, New York, and Rhode Island.
<sup>d</sup> In low–gun ownership states, 15% of adults live in households with firearms.
<sup>e</sup> The percent of the population that engaged in fatal and nonfatal suicidal acts over the past year.

Rationale for Means Restriction

• Suicide acts are often impulsive and crises often fleeting

• Method used largely depends on availability
  ✓ CFR’s for commonly used methods vary greatly
  ✓ CFR firearms ~90%; CFR pills and cutting <5%

• Fewer than 10% of survivors, even of near-lethal suicide attempts, go on to die by suicide
  ✓ Implication: preventing a suicide today likely saves a life in the long run
Many Suicidal Crises Are Fleeting

On the bridge, Baldwin counted to ten and stayed frozen. He counted to ten again, then vaulted over. As he crossed the chord in flight, Baldwin recalls, “I instantly realized that everything in my life that I’d thought was unfixable was totally fixable—except for having just jumped.”

Tad Friend, New Yorker, 2003
Many Suicidal Crises Are Fleeting

The Houston Study: Nearly Lethal Suicide Attempts
N=153 (15-34 year olds)

Time between deciding to complete suicide and taking action:

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

Simon et al. 2001. Suicide & Life-Threatening Behavior (The Houston study, data from author)
Availability plays a large role in method used

Survivors of self-inflicted firearm injury. A liaison psychiatry perspective.
(De Moore et al, MJA1994)

- 33 survivors (31 men, median age 29)
- Majority had no psychiatric history
- Attempts were commonly precipitated by conflict – most often an ongoing interpersonal conflict with partner or family members -
- All used household firearms
- Availability was most often reason given for choice of method

SIMILAR DATA FROM PETERSON 1985; NVISS W 1/3RD ALL <18 +SAME DAY CRISIS
Impulsivity, the fleeting nature of many crises, and availability of methods interact → Availability plays a large role in method used

Interviews with 268 patients hospitalized for a poisoning suicide attempts in Sri Lanka found that just over half took the poison after less than 30 minutes of thought, often directly following an argument (Eddelston 2006). While most of the patients survived their attempts, 13 died. Like the nonfatal attempters, over half of those who died deliberated less than 30 minutes.

<table>
<thead>
<tr>
<th>Reason</th>
<th>Oleander</th>
<th>Paraquat</th>
<th>Other pesticides</th>
<th>Medicines</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. n =</td>
<td>137</td>
<td>23 *</td>
<td>41</td>
<td>49 *</td>
</tr>
<tr>
<td>Easy availability</td>
<td>74 (54)</td>
<td>12 (52)</td>
<td>15 (37)</td>
<td>34 (69)</td>
</tr>
<tr>
<td>Only poison available</td>
<td>40 (29)</td>
<td>6 (26)</td>
<td>21 (51)</td>
<td>5 (10)</td>
</tr>
<tr>
<td>Free/cheap</td>
<td>2 (1)</td>
<td>1 (4)</td>
<td>0 (0)</td>
<td>0 (0)</td>
</tr>
<tr>
<td>Lethal</td>
<td>14 (10)</td>
<td>2 (9)</td>
<td>2 (5)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Harmless</td>
<td>2 (1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Other</td>
<td>5 (4)</td>
<td>2 (9)</td>
<td>3 (7)</td>
<td>8 (16)</td>
</tr>
</tbody>
</table>

Prognosis after attempted suicide

$\leq 10\%$

of survivors of near-lethal suicide attempts subsequently die by suicide

Why is this important?
Does availability of method affect suicide rates?

Pesticides: Sri Lanka
Coal Gas: England
Firearms: US, Israel
Suicide rates by gender & pesticide bans

Class I pesticides, including methamidophos & monocrotophos, gradually banned over 4 year period (1991-5)

Endosulfan banned (1998)
THE COAL GAS STORY
(Kreitman, 1976)

Percentage of CO in domestic gas, United Kingdom 1955-74

![Graph showing the percentage of CO in domestic gas from 1955 to 1974. The percentage decreases over the years.](image-url)
THE COAL GAS STORY (Kreitman, 1976)

Sex-specific suicide rates by mode of death: England & Wales

**Males**

- Total
- Non CO
- CO

**Females**

- Total
- Non CO
- CO
Firearms – Israeli Military

- Virtually all 18-21 year-olds in Israel serve in the Israeli Defense Force (IDF).
- In the early 2000s, IDF focused on preventing suicides—most of which were by firearm, with many occurring on weekends while soldiers were on leave.
- In 2006, IDF required soldiers to leave their weapons on base during weekend leaves.
- The suicide rate decreased by 40%.
- Weekend suicides dropped significantly.
- Weekday suicides did not.

Lubin 2010, Suic & Life-Threat Behavior.
Figure 2. Household gun ownership levels and rates of firearm and non-firearm suicide mortality:
United States, 1981-2002

What do we know about guns in the US?

- ~300,000,000 firearms in civilian hands, owned by about 1 in 5 US adults.
  - Average: 5 guns
  - Median: 2
- 20% of gun owners own only long guns, 22% only handguns, and the remainder both handguns and long guns, which means that ¾ of gun owners own both handguns and long gun
- ~1/3 Adults live in homes with guns
- ~1/3 Children in the US live in homes with guns
# Firearm Storage

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>% Storing at Least 1 Gun Loaded and Unlocked</th>
</tr>
</thead>
<tbody>
<tr>
<td>All gun owners</td>
<td>30%</td>
</tr>
<tr>
<td>Gun owners w/kids under 18</td>
<td>21%</td>
</tr>
<tr>
<td>Gun owners w/out kids under 18</td>
<td>33%</td>
</tr>
<tr>
<td>Own gun primarily for protection against strangers (63% of owners)</td>
<td>40%</td>
</tr>
<tr>
<td>Own handguns only</td>
<td>27%</td>
</tr>
<tr>
<td>Own long guns only</td>
<td>10%</td>
</tr>
<tr>
<td>Own both handguns &amp; long guns</td>
<td>41%</td>
</tr>
</tbody>
</table>

NFS 2015 data
What do we know about guns used in suicides?

• The vast majority come from the victim’s home, or from the home of a friend or relative
• Most suicides involve handguns, FS among adults → 75% handguns and 25% long guns;
• But what gun is used appears to depend on availability…
• FS among adolescent males in rural areas → half are long guns
Information on how youths obtained the gun they used in a suicide was recorded by the coroner/medical examiner for 44 of the 63 firearm suicides.

Among the 44, 82% used a gun belonging to a family member, usually a parent. Among the cases in which a youth used a family member’s gun, 75% of the reports (n=27) included information about how the gun was stored. Among those, 64% were stored unlocked. When the gun was stored locked, the youths either knew where the key was kept, learned the combination, or broke into the cabinet.
More than a dozen US Case-Control Studies:

Gun in home is a risk factor for suicide for gun owner, spouse, and children

Factors held constant:
Age
Gender
Community
Living alone
Education
Alcohol
Depression medication
Illicit drug use
Psychiatric diagnosis
From: The Accessibility of Firearms and Risk for Suicide and Homicide Victimization Among Household Members: A Systematic Review and Meta-analysis

Risk of Suicide in the Home in Relation to Various Patterns of Gun Ownership

<table>
<thead>
<tr>
<th>Variable</th>
<th>Adjusted Odds Ratio</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of guns in the home</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One or more handguns</td>
<td>5.8</td>
<td>3.1 – 4.7</td>
</tr>
<tr>
<td>Long guns only</td>
<td>3.0</td>
<td>1.4 – 6.5</td>
</tr>
<tr>
<td>No guns in the home</td>
<td>1.0</td>
<td>--</td>
</tr>
<tr>
<td><strong>Loaded guns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any gun kept loaded</td>
<td>9.2</td>
<td>4.1 – 20.1</td>
</tr>
<tr>
<td>All guns kept unloaded</td>
<td>3.3</td>
<td>1.7 – 6.1</td>
</tr>
<tr>
<td>No guns in the home</td>
<td>1.0</td>
<td>--</td>
</tr>
<tr>
<td><strong>Locked guns</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any guns kept unlocked</td>
<td>5.6</td>
<td>3.1 – 10.4</td>
</tr>
<tr>
<td>All guns kept locked up</td>
<td>2.4</td>
<td>1.0 – 5.7</td>
</tr>
<tr>
<td>No guns in the home</td>
<td>1.0</td>
<td>--</td>
</tr>
</tbody>
</table>

*RELATIVE RISK highest for age group < 24 years old.* Kellerman et al. 1992. NEJM
### Storage Practices and Firearm Suicide Risk, 5-19 year olds

<table>
<thead>
<tr>
<th>Firearm Storage Practice</th>
<th>No. (%)</th>
<th>Controls (N=480)</th>
<th>Adjusted Odds Ratio (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gun unloaded</td>
<td>66%</td>
<td>91%</td>
<td>0.30 (0.16-0.56)</td>
</tr>
<tr>
<td>Gun locked</td>
<td>32%</td>
<td>58%</td>
<td>0.27 (0.17-0.45)</td>
</tr>
<tr>
<td>Ammunition locked</td>
<td>24%</td>
<td>48%</td>
<td>0.39 (0.23-0.66)</td>
</tr>
</tbody>
</table>

So what can we do to act on what we know?
• Clinical interventions
  • Anticipatory guidance
  • Acute risk

• Training clinicians and gatekeepers
  • CALM on line (SPRC) (https://www.sprc.org/resources-programs/calm-counseling-access-lethal-means)
  • UC Davis (https://health.ucdavis.edu/what-you-can-do/)
Changes in Firearm and Medication Storage

<table>
<thead>
<tr>
<th>Firearm and Medication Storage</th>
<th>Usual Care n=349 (Guns before ED visit=123)</th>
<th>Intervention n=226 (Guns before ED visit=85)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firearm storage is safer after ED Visit</strong></td>
<td>12%</td>
<td>21%</td>
</tr>
<tr>
<td>• Moved all guns out of home</td>
<td>3%</td>
<td>7%</td>
</tr>
<tr>
<td>• Locked all previously unlocked firearms</td>
<td>9%</td>
<td>13%</td>
</tr>
<tr>
<td>• Unloaded all previously loaded firearms</td>
<td>0%</td>
<td>2%</td>
</tr>
<tr>
<td><strong>Medication storage is safer after ED visit</strong></td>
<td>22%</td>
<td>45%</td>
</tr>
</tbody>
</table>
As part of routine care, should physicians and other health care professionals talk with their patients about firearms and firearm safety if their patient or a patient's family member is...

<table>
<thead>
<tr>
<th>Condition</th>
<th>Always</th>
<th>Sometimes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>At risk of suicide:</td>
<td>0.52</td>
<td>0.3</td>
<td>0.17</td>
</tr>
<tr>
<td>Mental health or behavioral problems</td>
<td>0.58</td>
<td>0.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Has a substance abuse problem</td>
<td>0.54</td>
<td>0.31</td>
<td>0.13</td>
</tr>
<tr>
<td>Victim of domestic violence</td>
<td>0.55</td>
<td>0.3</td>
<td>0.14</td>
</tr>
<tr>
<td>Alzheimer's Disease</td>
<td>0.44</td>
<td>0.34</td>
<td>0.2</td>
</tr>
<tr>
<td>Going through a hard time</td>
<td>0.31</td>
<td>0.43</td>
<td>0.23</td>
</tr>
</tbody>
</table>

2019 National Firearms Survey, unpublished
Been spoken to by a clinician, demographics

Prevalence of having ever been spoken to by a physician or other health care provider about firearm safety among US adults living in households with firearms (n=4,011)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Prevalence of Counseling (95% CI), %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>8.2 (6.9, 9.8)</td>
</tr>
<tr>
<td>Male</td>
<td>6.8 (5.6, 8.3)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-29 y</td>
<td>8.0 (5.2, 12.2)</td>
</tr>
<tr>
<td>30-44 y</td>
<td>11.5 (9.2, 14.22)</td>
</tr>
<tr>
<td>45-59 y</td>
<td>7.5 (5.9, 9.5)</td>
</tr>
<tr>
<td>&gt;60 y</td>
<td>4.5 (3.6, 5.6)</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Children in household</strong></td>
<td></td>
</tr>
<tr>
<td>None aged &lt;18 y</td>
<td>5.3 (4.4, 6.3)</td>
</tr>
<tr>
<td>Any aged &lt;18 y</td>
<td>12.0 (9.9, 14.6)</td>
</tr>
<tr>
<td><strong>Firearms ownership status</strong></td>
<td></td>
</tr>
<tr>
<td>Nonowner, lives with firearm owner</td>
<td>7.5 (5.8, 9.5)</td>
</tr>
<tr>
<td>Firearm owner, lives with another firearm owner</td>
<td>9.3 (7.5, 11.5)</td>
</tr>
<tr>
<td>Firearm owner, does not live with another firearm owner</td>
<td>6.1 (4.8, 7.6)</td>
</tr>
</tbody>
</table>
Changing social norms
### Barriers to Suicide and Suicide Prevention: Public Opinion and the Golden Gate Bridge (2004 survey)

<table>
<thead>
<tr>
<th>Category</th>
<th>Percent who think <strong>ALL</strong> Jumpers would find another way to kill themselves if a foolproof anti-suicide barrier were put up on the Golden Gate Bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>All respondents (n=2638)</td>
<td>34%</td>
</tr>
<tr>
<td>Male (n=1310)</td>
<td>37%***</td>
</tr>
<tr>
<td>Female (n=1328)</td>
<td>31%</td>
</tr>
<tr>
<td>Personally own a firearm (n=735)</td>
<td>48%***</td>
</tr>
<tr>
<td>Live in a household with guns but do not personally own any firearms (n=296)</td>
<td>36%***</td>
</tr>
<tr>
<td>Live in a household without firearms (n=1560)</td>
<td>26%</td>
</tr>
</tbody>
</table>

An additional 40% thought that most jumpers would have found another way to complete suicide

Partnerships with gun owners
New Hampshire Gun Shop Project

• Coalition of gun retailers, public health practitioners, and gun rights activists met together to examine whether there was a role for gun shops in preventing suicide.
• Jointly developed customer education materials for gun shops in NH with input from gun shop owners.
48% of NH gun shops displayed at least one of the materials (observed during unannounced visits to all shops in state).
Gun Partnerships - 2019

GSP = Gun shop project
AFSP = Am Fdn Suicide Prev. pilot GSP

- WA Safe Homes Task Force
- CA GSPs
- NV Gun Shows, GSP
- Utah Firearm Instructor Module
- Colo GSP
- TX Suicide-Safer Homes App; GSP
- NM - AFSP
- KS GSP
- ID GSP
- MO-GSP
- IA GSP
- MI Diner Placemats
- WI GSP
- VT Sportsman Clubs/GSP
- NH Birthplace!
- MA Firearm instructor Module
- NY GSPs
- DE Governor’s TF
- VA Lock & Talk GSP
- KY - AFSP
- TN GSP
- AL - AFSP
- GSP=Gun shop project

AFSP= Am Fdn Suicide Prev. pilot GSP
Utah Firearm Deaths

~85% of firearm deaths in Utah are *suicides*.

2013-2017 Firearm Deaths

Source: CDC WONDER website (official mortality data)
Utah Responds

- State SAMH agency (Kim Myers) sets up diverse firearm committee of UT Suicide Prevention Coalition to advise on materials.
- 2016 legislature funds research project to understand Utah suicides.
Utah Mortality Data Linkage

Suicides 2014 & 2015

History of hospital visits

NVDRS Data
Details on incident and person from police, medical examiner & death certificate

• Brady Background Check
• Concealed Carry Permit Status
• ATF Trace

https://tinyurl.com/utahreport
Findings lead to action

• 24% of firearm suicide decedents had a permit to carry a concealed firearm.
  – Suicide prevention & lethal means safety part of CFP classes and now part of application and renewal process.

• About half of people who took their lives were treated in a Utah hospital in the year before their death.
  – Free online training produced by Intermountain Healthcare with Means Matter & CALM now available for all clinicians.
Findings lead to action

- $2 million state matching fund to promote lethal means safety with the largest private donors coming from across the board: Intermountain Healthcare, Church of Jesus Christ of the Latter Day Saints, Utah Shooting Sports Council
• Daunting challenge
• Good work is happening
• And we know that reducing access to firearms will save lives

• THANKS
• Deb Azrael
  – azrael@hsph.harvard.edu