



Our 21st Century Seatbelt: Restricting Access to Methods in Suicide Prevention

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Disclosure

- I have no relevant financial relationships with the manufacturers(s) of any commercial products(s) and/or provider of commercial services discussed in this CME activity
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Objectives

- Review trends in suicide for youth
- Identify the most lethal methods used in completed suicides
- Explain how means restriction can be used to decrease risk of suicide attempts
- Learn to discuss means restriction effectively with parents even when it feels awkward.

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CLINICAL REPORT Guidance for the Clinician in Rendering Pediatric Care

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Suicide and Suicide Attempts in Adolescents

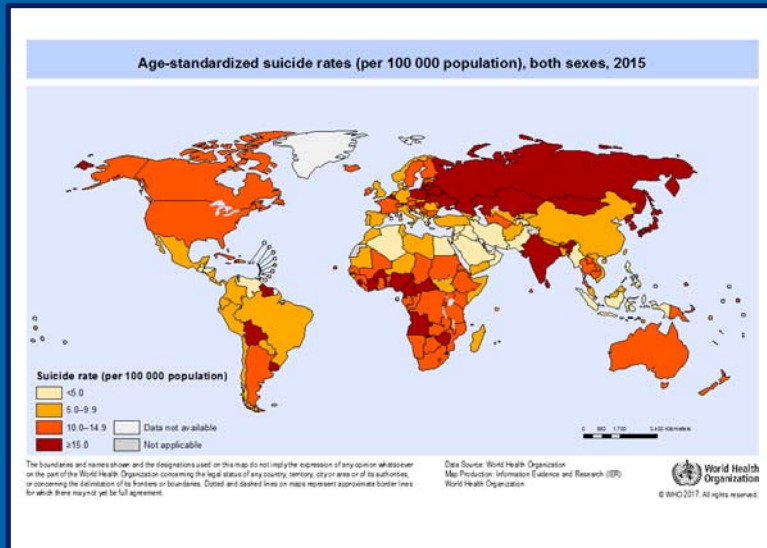
Benjamin Shain, MD, PhD, COMMITTEE ON ADOLESCENCE

Sentinel Alert
Event

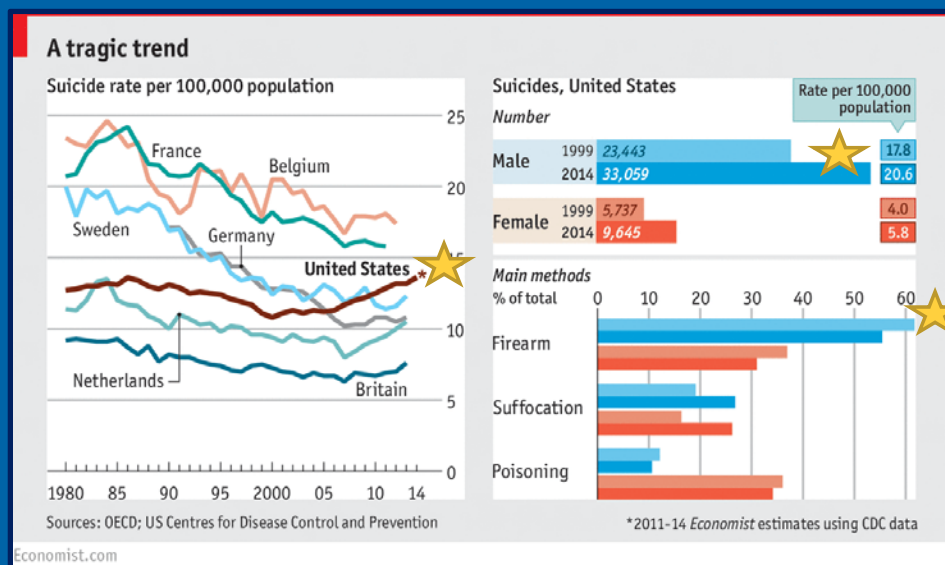
A complimentary publication of The Joint Commission
Issue 56, February 24, 2016

Detecting and treating suicide ideation in all settings

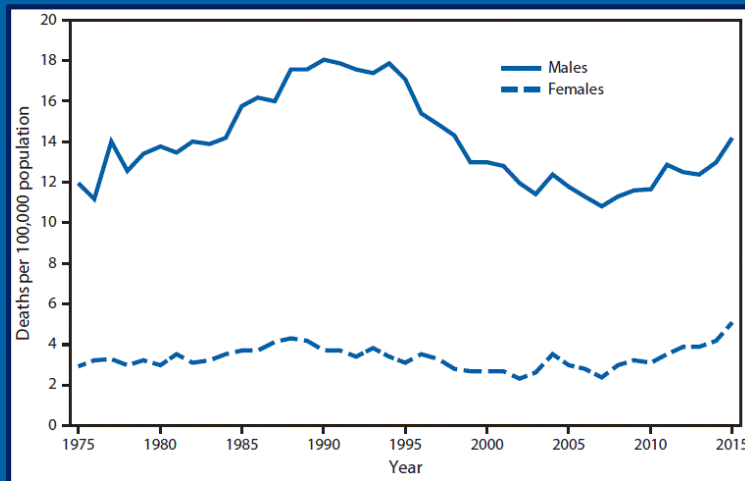
Age-standardized suicide rates (per 100,000)



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CDC: trends in suicide for 15-19 y/o Males and Females, 1975-2015



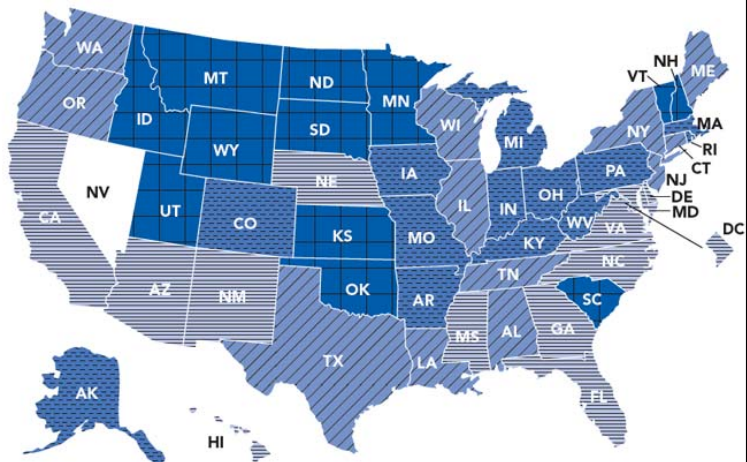
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Between 1999-2016, rates rose 45% in KS, 36% in MO (CDC, 2018)

Suicide rates rose across the US
from 1999 to 2016.



SOURCE: CDC's National Vital Statistics System;
CDC Vital Signs, June 2018.



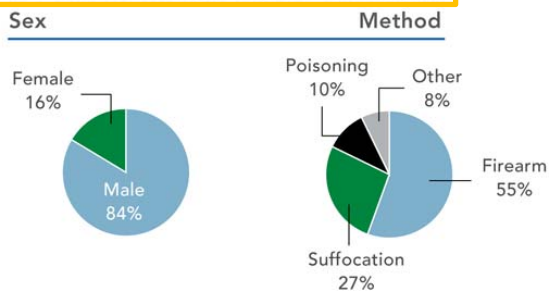
Males without known mental health conditions more likely to die by firearm

(CDC, 2018)

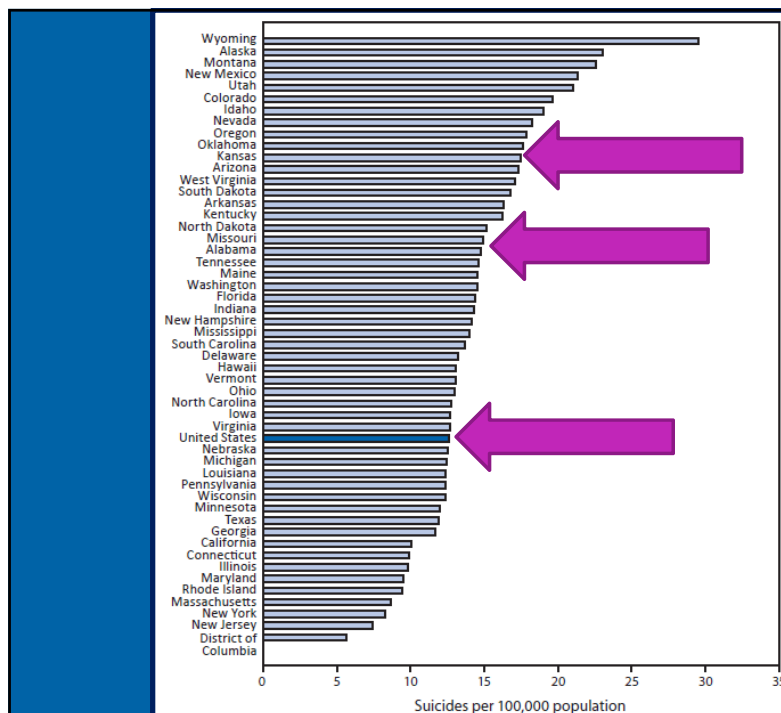
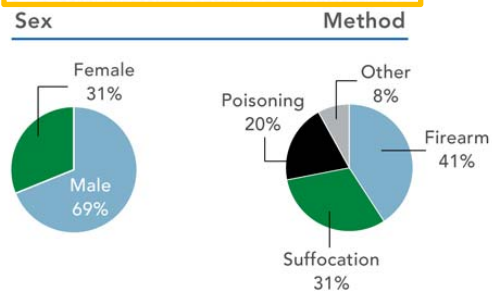
Differences exist among those with and without mental health conditions.

People without known mental health conditions were more likely to be male and to die by firearm.

No known mental health conditions



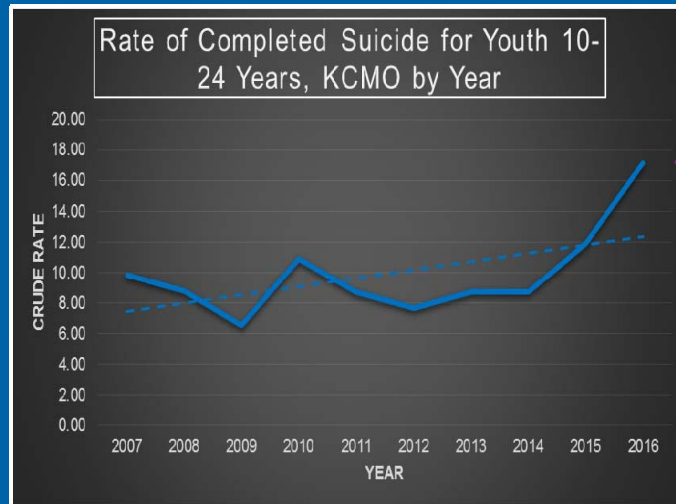
Known mental health conditions



- Source: National Vital Statistics System. Mortality public use data files, 2012. Available at http://www.cdc.gov/nchs/data_access/vitalstatsonline.htm.

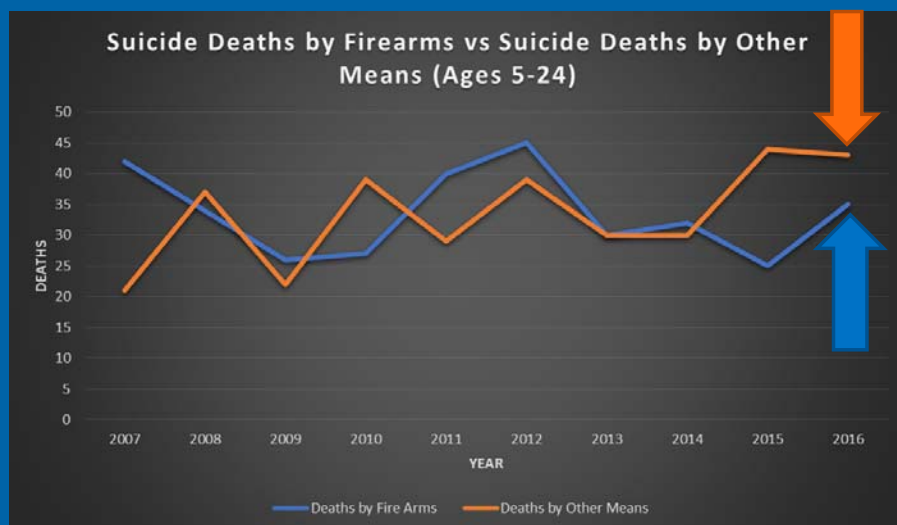
QuickStats: Age-Adjusted* Suicide† Rates, by State§ — United States, 2012

Suicide Rate for Youth in KC, MO



(2007-2016) Death Records, City of Kansas City, Missouri Health Department

Suicide Deaths in KS, 5-24 y/o, 2007-2016, Firearms & Other Causes



Orange:
Other
means

Blue:
Firearms

Youth Risk Behavior Survey, (Kann et al, 2018)

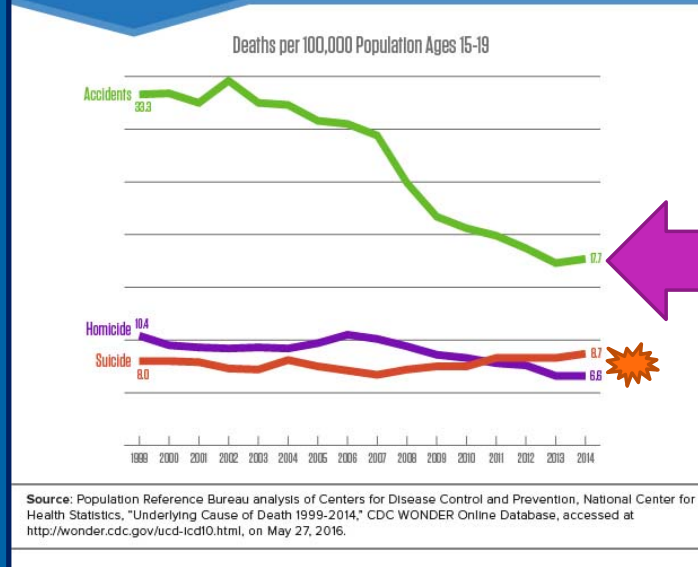
- 31.5% felt sad or hopeless 2+ weeks
- 17.2% seriously considered suicide
- 13.6% made a plan
- 7.4% attempted suicide
- Less than 2.4% saw a medical provider for the attempt

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SUICIDE SURPASSED HOMICIDE TO BECOME SECOND-LEADING CAUSE OF DEATH FOR TEENAGERS, AGES 15-19, IN THE UNITED STATES



Means Matter

- Death by asphyxiation is the most common method for young women
- Firearms most common for males
- Females have more attempts, males more completed suicides; M:F 4:1

(CDC, 2015)

Means Restriction:

Modify the environment:

Limiting access to the
methods used in suicide

(Yip et al, 2012)

Which Methods Matter?

- Method should contribute substantially to mortality in that area/region
- Method should be something you can eliminate or constrain on a broad scale
- Should be able to monitor impact of intervention

(Yip, et al, 2012)

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Many crisis are short-lived

Patients reported time between decision to attempt suicide and taking action:

47% report < 10 minutes

(Deisenhammer EA, et al, 2009)

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The Coal Gas Story

- Carbon Monoxide content is decreased in the UK/Scotland in the late 1950's
- Total suicide rates fell; other methods increased for the youngest, but the overall rate still fell
- Catalytic converters had a similar impact in the US

(Kreitman, 1976)

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Sri Lanka

- Pesticides: highly lethal, highly common in Asia
- 1990: Safer storage of pesticides, banned highly toxic pesticides
- WHO: Incidence of suicide:

37.4 in 1995 vs.

11.2 per 100,000 in 2009

- Admissions for drug overdose have increased, but are less lethal (Silva, 2012)

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Israeli Defense Force Suicide Prevention Program

- Interventions:
 - Psychoeducation
 - Increased access to mental health officers
 - No access to weapons on weekends
- Suicide rate: fell by 40%

(Shelef L, Tatsa-Laur L, Derazne E, Mann JJ, Fruchter E, 2015) 22

Mortality Rates by Method

Most lethal

Firearm: 82.5%

Drowning: 65.9%

Suffocation/hanging:
61.4%

Poison by gas: 41.5%

Least lethal

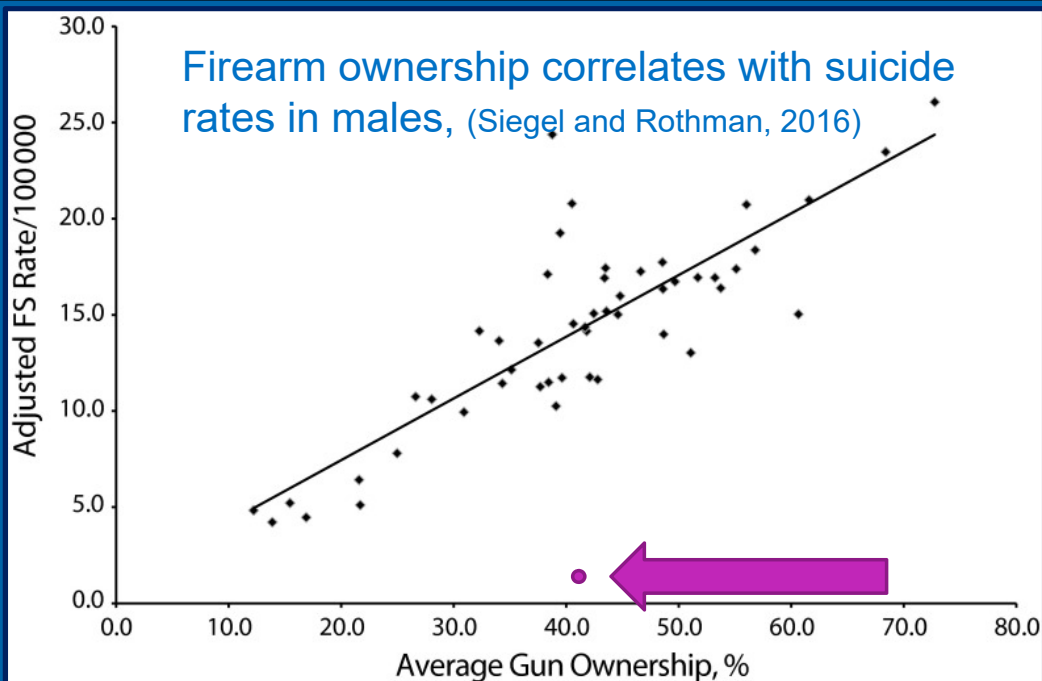
Jumping: 34.5%

Drug/poison ingestion:
1.5%

Cut/pierce: 1.2%

(Spicer RS, Miller TR, 2000)

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Storage Links to Risk

- Population: Youth < 20 years of age
 - Youth who sustained intentional/unintentional self-inflicted GSW, or accidentally shot another
- Compared to:
 - Youth not involved in a shooting but with firearms in the home
- Risk of being shot was less if firearms were stored locked, unloaded, ammunition locked up separately

(Grossman et al, 2005)

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Promoting Safe Firearm Storage

- Review of studies published 2000-2012
- Interventions that provided a device to families showed significant improvement in storage practices
- Only ¼ studies without a firearm storage device showed significant improvement (Rowhani-Rahbar, Simonetti, Rivara, 2016)



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Means Restriction



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Beliefs and Practices in the ER

Beliefs of physicians and nurses:

- 44% thought most/all suicides are preventable
- 84% felt psychiatrists should be responsible for asking about firearms
- 49% of physicians, 72% of nurses “hardly ever” counsel on firearm storage (Betz et al, 2013)

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What About Method Substitution?

- Some argue “when there’s a will there’s a way”
- Fortunately, **research does not support this notion**
- Remember Sri Lanka: the more lethal method was less available, so less lethal methods were chosen
- 90% of those who survived a violent attempt did not go on to die by suicide (O'Donnel, Arthur, Farmer, 1994)

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Public Opinions on Firearm Counseling

Who agreed it was sometimes appropriate for health professionals to talk about firearms?

- 54% of firearm owners
- 70% of non-owners
- Only 55% participation rate

(Betz, Azrael, Barber, Miller, 2016)

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Opinions on Discussions with Pediatricians

- 36% reported firearm ownership, 1/4 of owners had at least one firearm stored loaded
- 75% thought pediatricians should advise on safe storage
- 12.8% reported a discussion on firearms with their pediatrician
- 31.5% of firearm owners did not think patients should be asked about ownership (Garbutt et al, 2016)

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Firearm Storage Practices in Homes with Children at High Risk for Self-harm

- Adults who cared for a child were asked about firearm ownership and storage practices
- All were asked about the presence of children with self-harm risk factors living in the home:
 - Depression
 - Mental health conditions outside of depression
 - ADHD

(Scott, Azrael, Miller, 2018)

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Firearm Storage: No relation to Risk Factors

- Firearms were present in 43.5% of homes with risk factors, compared with 42.3% with none
- Families who stored firearms locked, unloaded, with ammunition locked separately:
 - 34.9% with risk factors
 - 31.8% without risk factors

The authors concluded there was no appreciable difference between storage practices in high-risk homes and low-risk homes

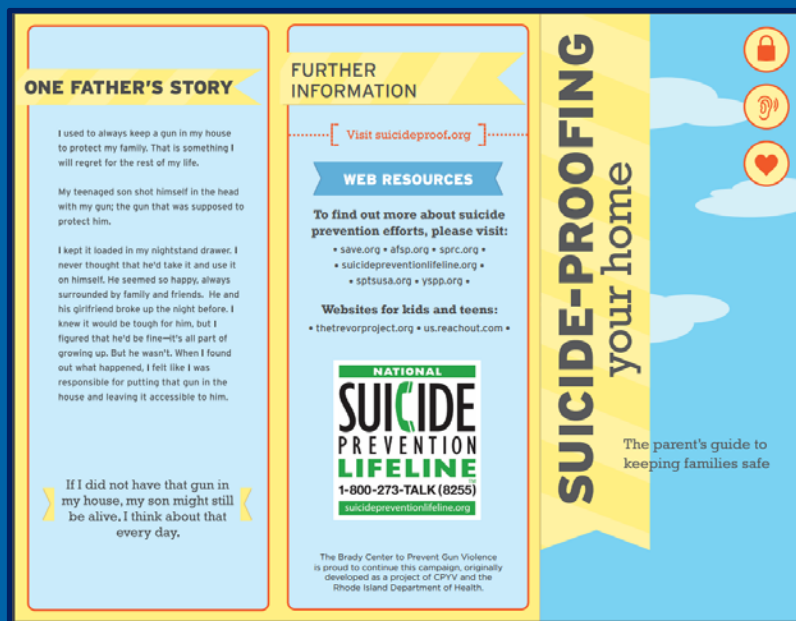
(Scott, Azrael, Miller, 2018) ³³

In a recent study, 82% of youth who died by suicide with a gun were not in treatment at the time of their deaths (Fowler et al, 2017)

How Do You Feel About Firearms?

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<http://www.bradycampaign.org/sites/default/files/Suicide-Proof-Your-Home-Brochure.pdf>



The brochure is titled "SUICIDE-PROOFING your home" in large, bold, yellow letters on a blue background. It is divided into three main sections: "ONE FATHER'S STORY", "FURTHER INFORMATION", and "WEB RESOURCES".

ONE FATHER'S STORY

I used to always keep a gun in my house to protect my family. That is something I will regret for the rest of my life.

My teenaged son shot himself in the head with my gun; the gun that was supposed to protect him.

I kept it loaded in my nightstand drawer. I never thought that he'd take it and use it on himself. He seemed so happy, always surrounded by family and friends. He and his girlfriend broke up the night before. I knew it would be tough for him, but I figured that he'd be fine—it's all part of growing up. But he wasn't. When I found out what happened, I felt like I was responsible for putting that gun in the house and leaving it accessible to him.

If I did not have that gun in my house, my son might still be alive. I think about that every day.

FURTHER INFORMATION

Visit suicideproof.org

WEB RESOURCES

To find out more about suicide prevention efforts, please visit:

- save.org • afsp.org • sprc.org •
- suicidepreventionlifeline.org •
- sptsusa.org • yspp.org •

Websites for kids and teens:

- thetrevorproject.org • us.reachout.com •

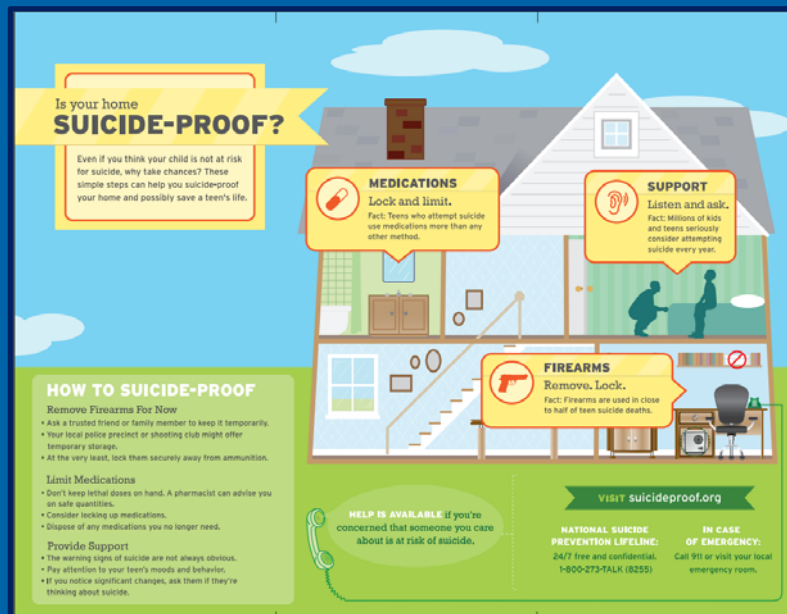
NATIONAL SUICIDE PREVENTION LIFELINE
1-800-273-TALK (8255)
suicidepreventionlifeline.org

The Brady Center to Prevent Gun Violence is proud to continue this campaign, originally developed as a project of CPV and the Rhode Island Department of Health.

The parent's guide to keeping families safe

Icons on the right side: a padlock, a hand holding a heart, and a heart.

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“Because firearms are the most lethal among suicide methods, it is particularly important that you remove them until things improve at home, or, second best, lock them very securely.”

(<https://www.hsph.harvard.edu/means-matter/recommendations/families/#Questions>)

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No Need to Ask About Ownership!

“Guns are really common in our community, so I’ve started talking to all my families about the safest way to store them. We have free gun locks because storing a gun locked and unloaded is one of the most important things we can all do to keep kids safe”

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“I’m not against guns, I’m against your son having access to a gun if he’s feeling desperate. We know teens often have trouble seeing past today, so making sure they don’t have a gun when upset is extremely important. The don’t always understand that this feeling or situation will pass”

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Acknowledge it: This is Painful

“This is one of the hardest conversations I have with parents. But I would much rather for us to both feel uncomfortable right now then someday wish I’d talked to you about this. I have seen too many parents who wish someone would have told them, because having your child attempt suicide is really not something even the best parent is prepared to face. We all want to feel we have done everything possible to keep our kids safe.”

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How Are Firearms Stored in Your Home?

- “Lady you don’t live in my neighborhood”
- “My son is safe with guns, he took the safety class, we hunt, he knows how to be safe”
- “Are you trying to say my daughter is going to shoot herself? I know my daughter, she’d never do that”
- “The kids have no idea where we hide the gun”

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APA Official Actions

Position Statement on Banning of Pharmacy Benefit Management Policies that Require the Provision of Dangerous Quantities of Medications

Approved by the Board of Trustees, July 2012
Approved by the Assembly, May 2012

APA POSITION:

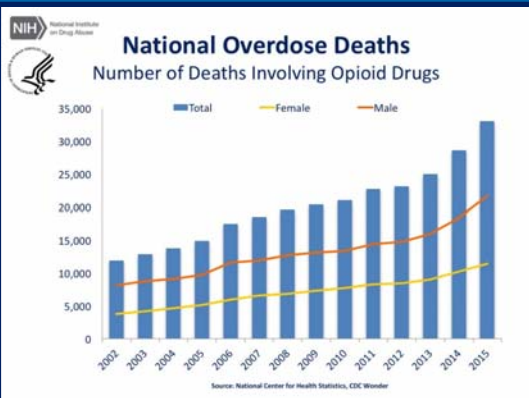
Pharmacy Benefit Management companies should offer

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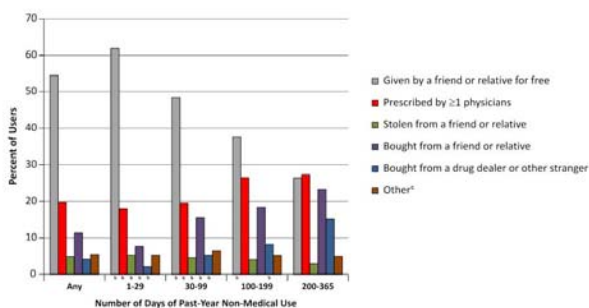
Substances found at home are some of the most commonly used in abuse, attempts



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Sources of Prescription Opioids Among Past-Year Non-Medical Users^a



^a Obtained from the 1995 National Survey on Drug Use and Health, 2008 through 2011.¹

^b Estimate is statistically significantly different from that for highest-frequency users (200-365 days) (p < .05).

^c Includes written fake prescriptions and those opioids stolen from a physician's office, clinic, hospital, or pharmacy; purchases on the Internet; and obtained some other way.

SOURCE: Jones C, Paulozzi L, Mack K. Sources of prescription opioid pain relievers by frequency of past-year nonmedical use: United States, 2008–2011. JAMA Int Med 2014; 174(13):802–803.

Medication Storage

- Lock up full bottles
- Use pill boxes
- Keep small amounts of PRN meds available unlocked
- Educate parents on the impulsive nature of teens
- Point out that OTC meds can be dangerous

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Dispose of Old Meds!

- DEA has a helpful website for specific guidance:
<https://www.fda.gov/ForConsumers/ConsumerUpdates/ucm101653.htm>
- Next Take Back day is October 27
- Some pharmacies/hospitals now taking meds back
- Dispose of meds in a Ziploc mixed with coffee grounds or kitty litter, sealed, into the trash

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Our 21st Century Seatbelt

- Limit access to firearms
- Limit access to sharps
- Lock up ALL medications, especially OTC, ETOH
- Dispose of old medications
- Open door policy
- Suicideproof.org



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Questions?

Resources on Suicide

- **Suicide prevention hotline and chat:**
- <https://suicidepreventionlifeline.org/>
- **Local resources on suicide prevention:**
- <http://speakup.us/>
- <https://www.jocogov.org/dept/mental-health/education-outreach/suicide-prevention/johnson-county-suicide-prevention-coalition>
- <http://www.kansassuicideprevention.org/>
- <https://dmh.mo.gov/mentalillness/suicide/>
- **Support for survivors of suicide (local):**
- <http://www.sass-mokan.com/>

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Resources continued

- **National Data and Resources:**
- <https://www.cdc.gov/vitalsigns/suicide/index.html>
- <https://afsp.org/>
- <https://www.hsph.harvard.edu/means-matter/>
- <http://www.sptsusa.org/parents/talking-to-your-kid-about-suicide/>
- <https://childmind.org/audience/for-families/>
- <http://www.sprc.org/sites/default/files/resource-program/AfteraSuicideToolkitforSchools.pdf>
- <http://reportingonsuicide.org/>

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