



What mental health providers can do to reduce firearm violence and suicide

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CAMFT 2021

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DISCLOSURES

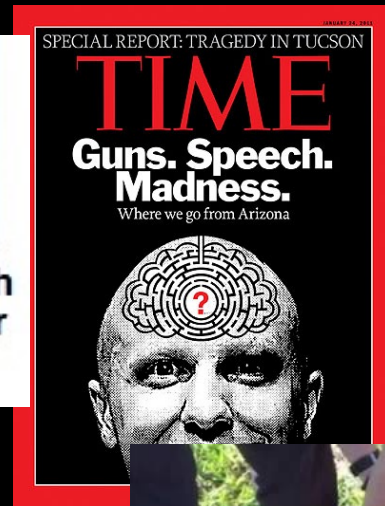
- ▮ The BulletPoints Project is funded by the State of California through the UC Firearm Violence Research Center.

Learning Objectives

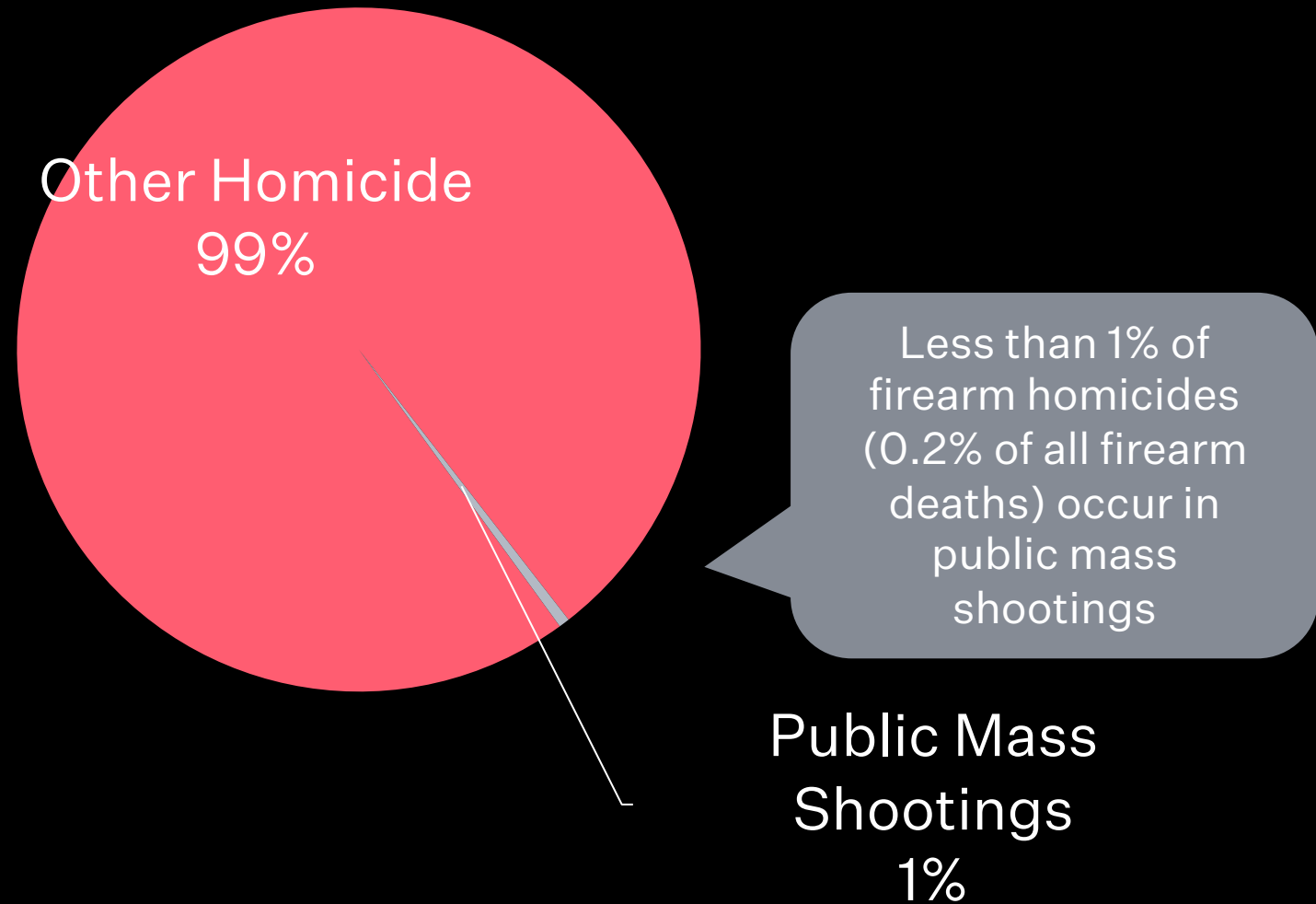
- ▢ Describe the 4 key facts about the data on firearm injury and death
- ▢ Identify 3 categories of risk for firearm-related harm and ways to engage with clients to reduce that risk
- ▢ Name 2 available mental health interventions for clients at risk of firearm-related harm



Epidemiology of Firearm Violence and Injury



Firearm Homicides in US, 2019



Data from CDC WISQARS & Follman et al. 2021. Homicides include deaths by legal intervention.

America should focus
on mental health care,
not new gun laws

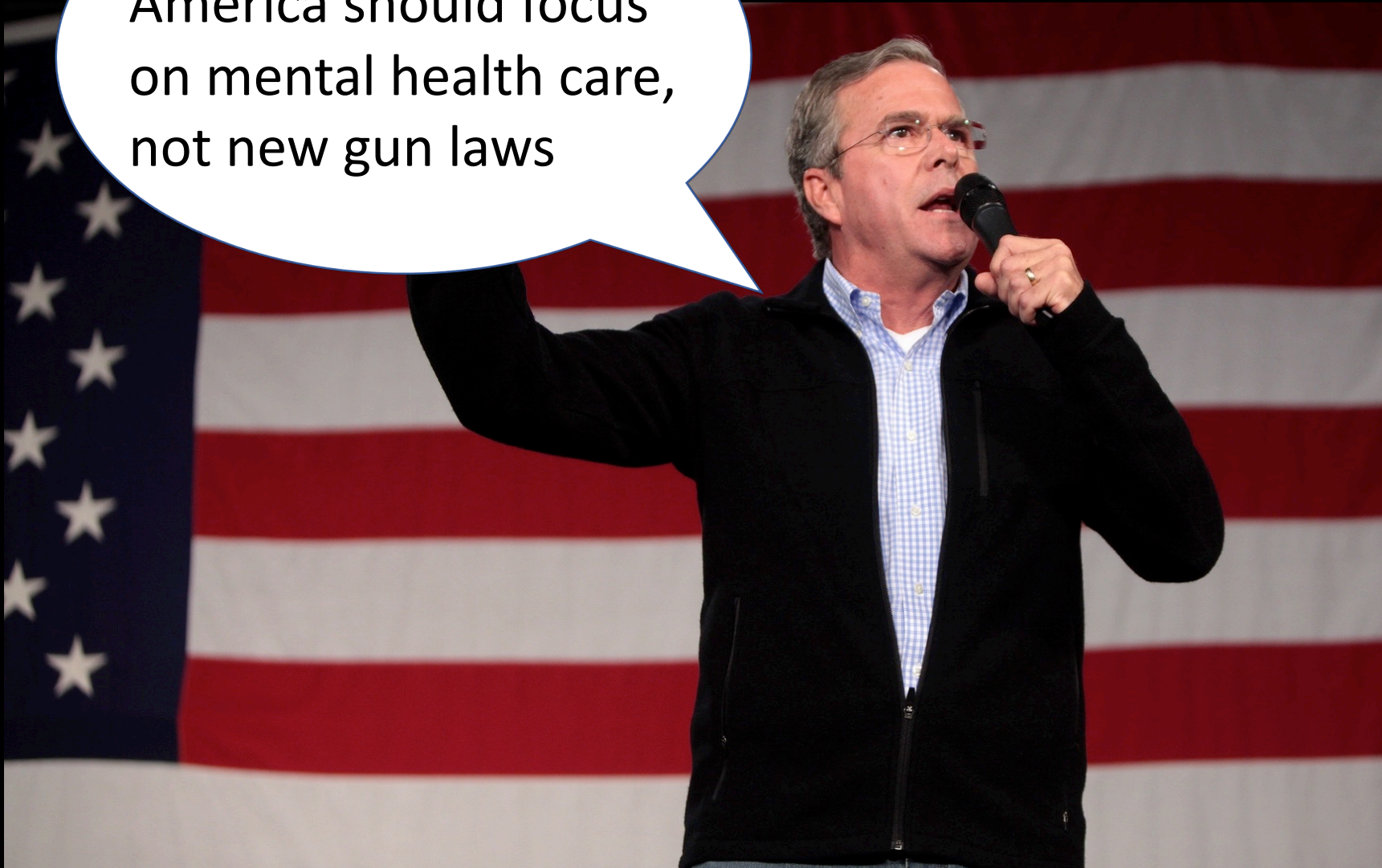
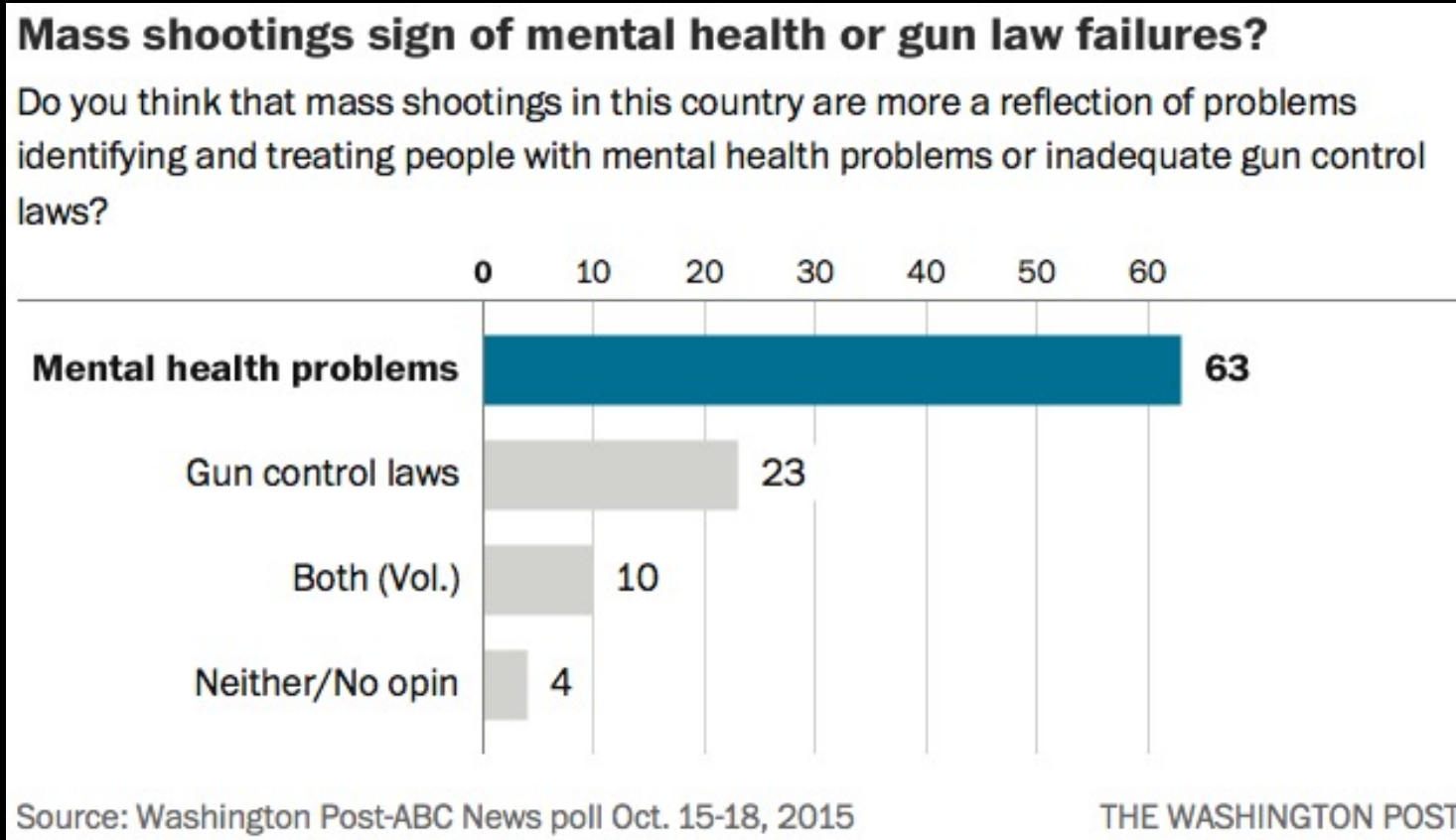


Photo by: Gage Skidmore

Public perception about mass shootings





Are people with mental illness at increased risk for violence?

- ▢ Under certain circumstances
 - ▢ Beginning of psychotic illness
 - ▢ Period surrounding psychiatric hospitalization

OR=2.4

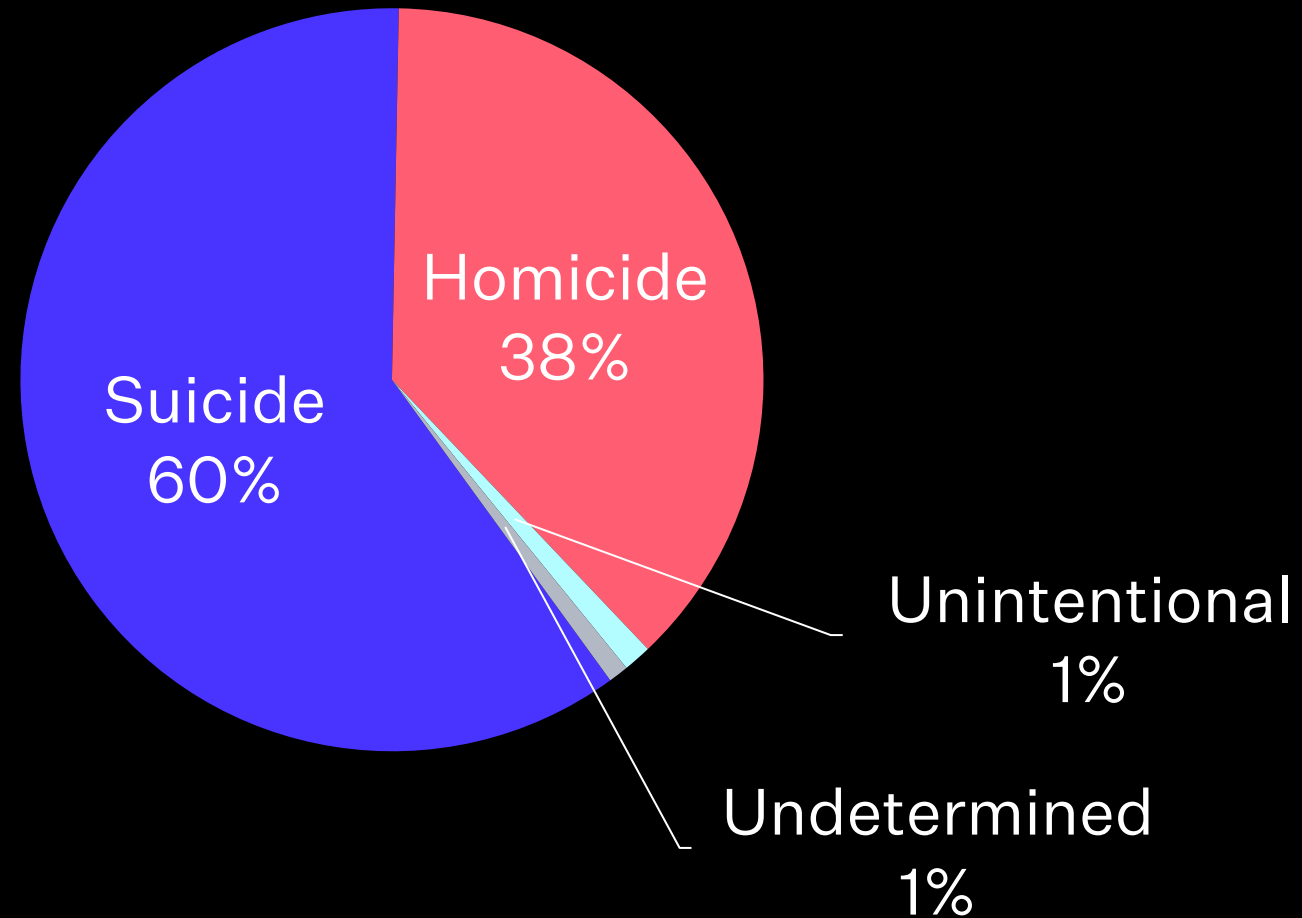
Violence and Alcohol

- ▢ 42% of homicide offenders under the influence of alcohol
- ▢ Conviction for an alcohol-related offense was associated with a 4-to 5-fold increase in risk for future violent or firearm-related crime

OR=6.8



Firearm Deaths in US by Intent, 2019

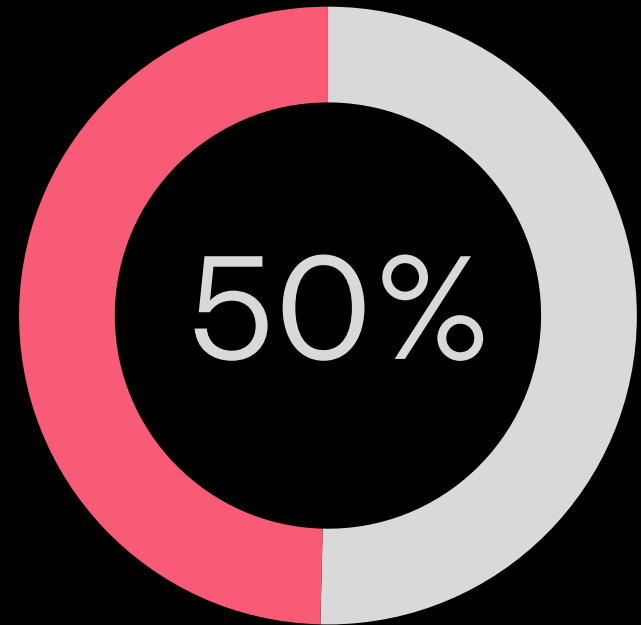


Data from CDC WISQARS & Follman et al. 2021. Homicides include deaths by legal intervention.

10 Leading Causes of Death, 2019

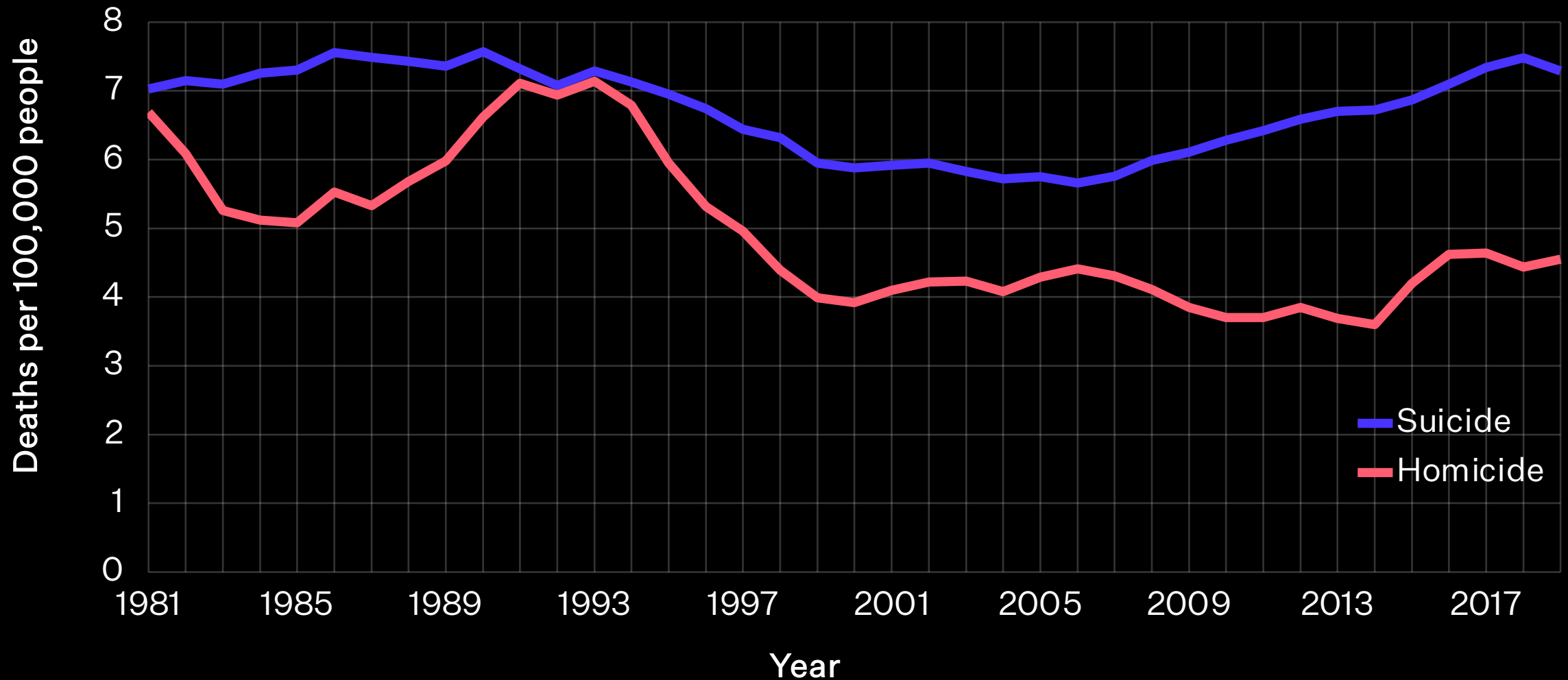
	10-14 yrs	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs	55-64 yrs
1	Unintentional Injury, 778	Unintentional Injury, 11755	Unintentional Injury, 24516	Unintentional Injury, 24070	Malignant Neoplasms, 35587	Malignant Neoplasms, 111765
2	Suicide, 534	Suicide, 5954	Suicide, 8059	Malignant Neoplasms, 10695	Heart Disease, 31138	Heart Disease, 80837
3	Malignant Neoplasms, 404	Homicide, 4774	Homicide, 5341	Heart Disease, 10499	Unintentional Injury, 23359	Unintentional Injury, 24892
4	Homicide, 191	Malignant Neoplasms, 1388	Malignant Neoplasms, 3577	Suicide, 7525	Liver Disease, 8098	Chronic Low. Respiratory Disease, 18743
5	Congenital Anomalies, 189	Heart Disease, 872	Heart Disease, 3495	Homicide, 3446	Suicide, 8012	Diabetes Mellitus, 15508
6	Heart Disease, 87	Congenital Anomalies, 390	Liver Disease, 1112	Liver Disease, 3417	Diabetes Mellitus, 6348	Liver Disease, 14385
7	Chronic Low. Respiratory Disease, 81	Diabetes Mellitus, 248	Diabetes Mellitus, 887	Diabetes Mellitus, 2228	Cerebrovascular, 5153	Cerebrovascular, 12931
8	Influenza & Pneumonia, 71	Influenza & Pneumonia, 175	Cerebrovascular, 585	Cerebrovascular, 1741	Chronic Low. Respiratory Disease, 3592	Suicide, 8238
9	Cerebrovascular, 48	Chronic Low. Respiratory Disease, 168	Complicated Pregnancy, 532	Influenza & Pneumonia, 951	Nephritis, 2269	Nephritis, 5857
10	Benign Neoplasms, 35	Cerebrovascular, 158	HIV, 486	Septicemia, 812	Septicemia, 2176	Septicemia, 5672

Half of suicides
in the US are by
firearm.



Firearm Suicide and Homicide Rates by Year

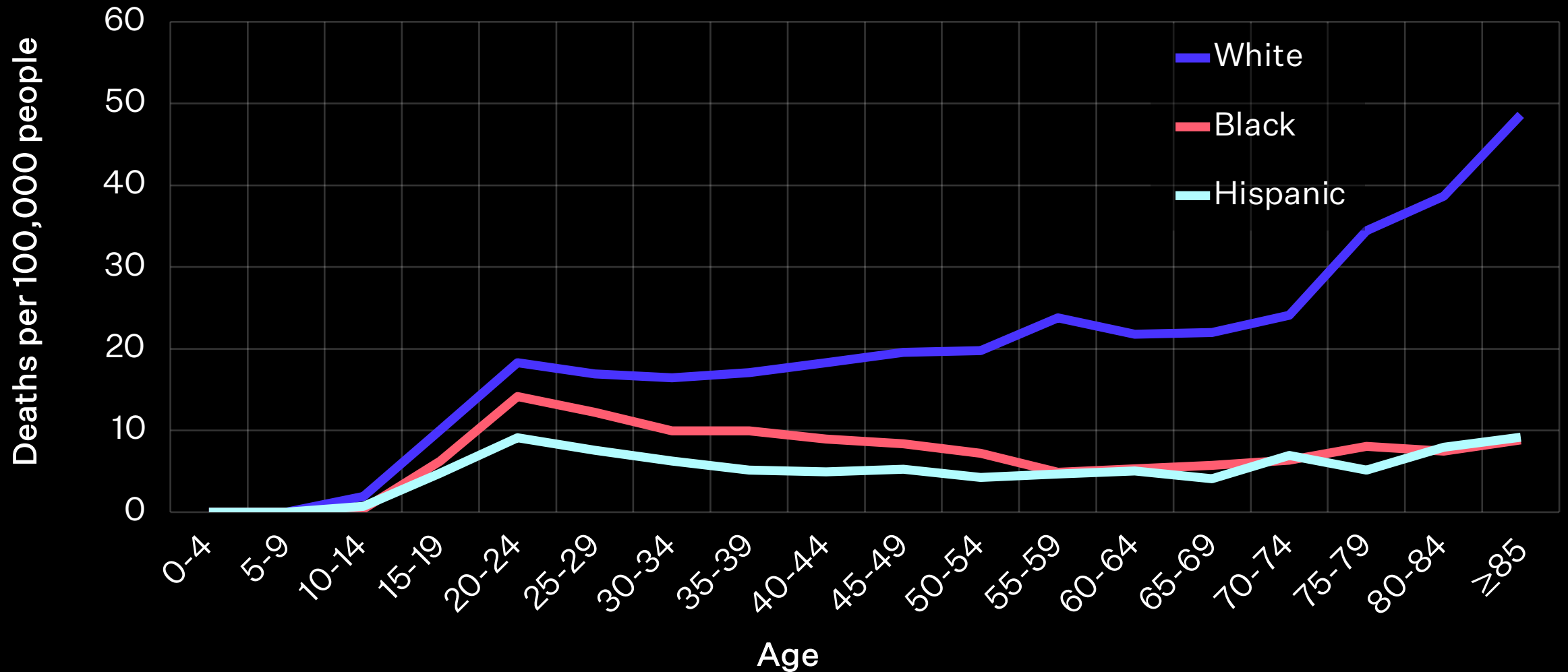
1981-2019



Data from CDC WISQARS. Homicides include deaths by legal intervention.

Firearm Suicide Rates by Age and Race/Ethnicity

Males, 2019



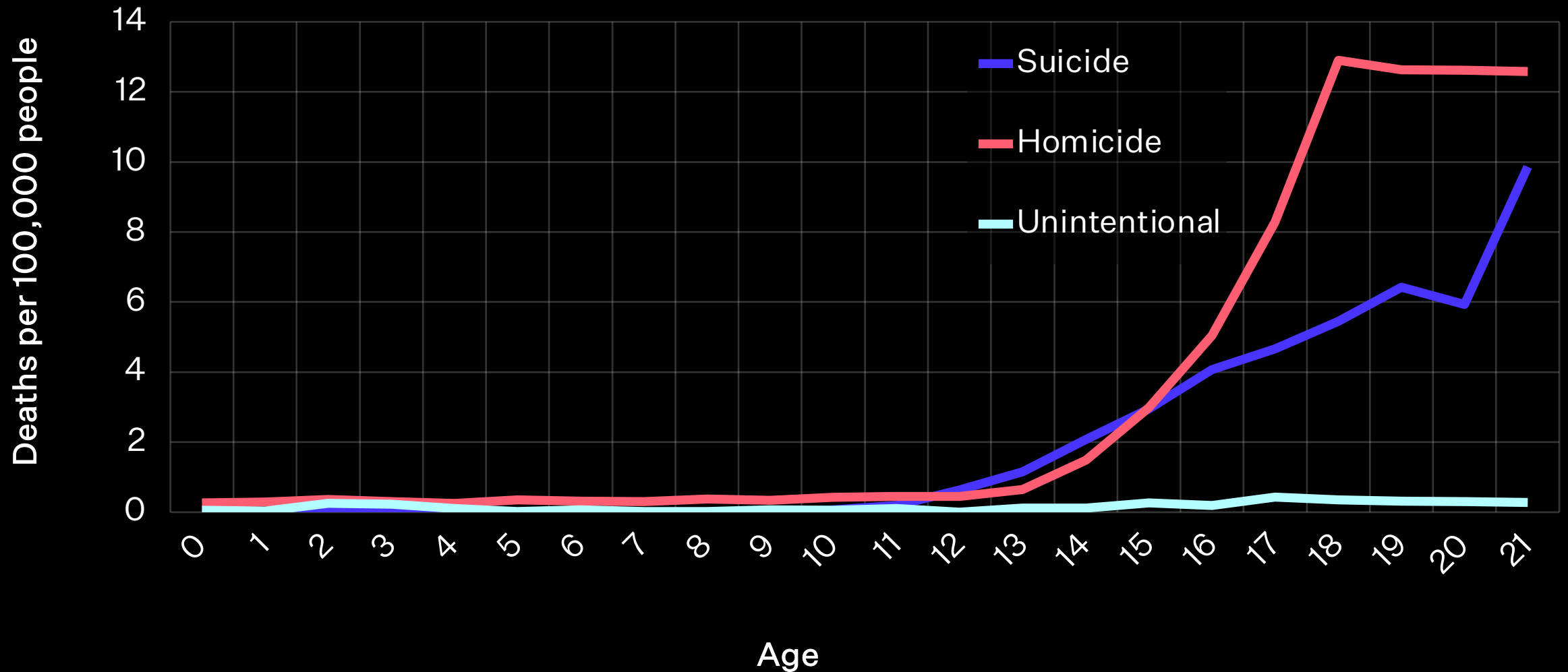
Firearm Suicide Rates by Age and Race/Ethnicity

Females, 2019



Firearm Death Rates by Age and Intent

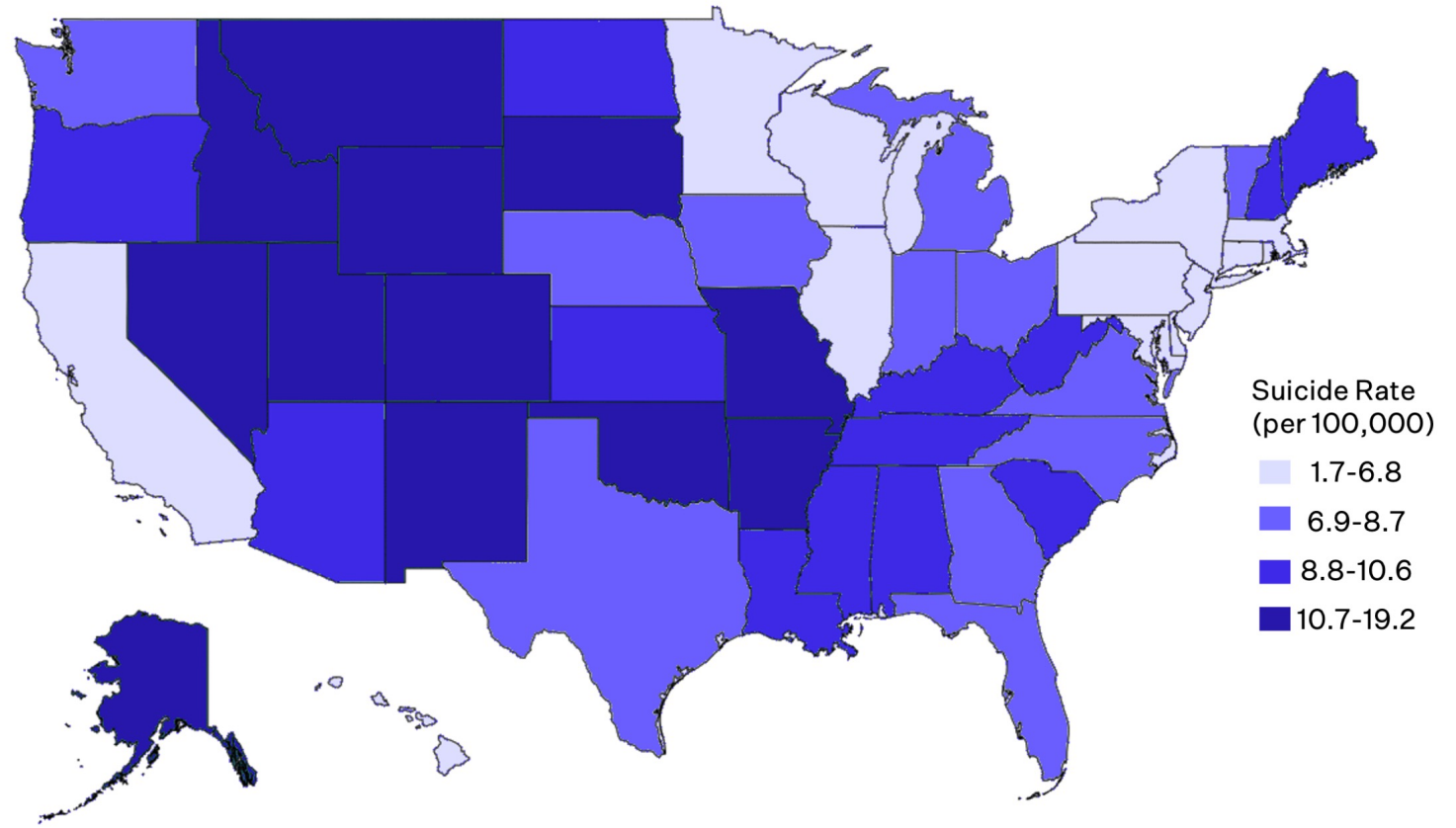
Children & Adolescents, 2019



Data from CDC WISQARS. Homicides include deaths by legal intervention.

Age-Adjusted Firearm Suicide Rates by State 2019

Suicide rates vary
geographically

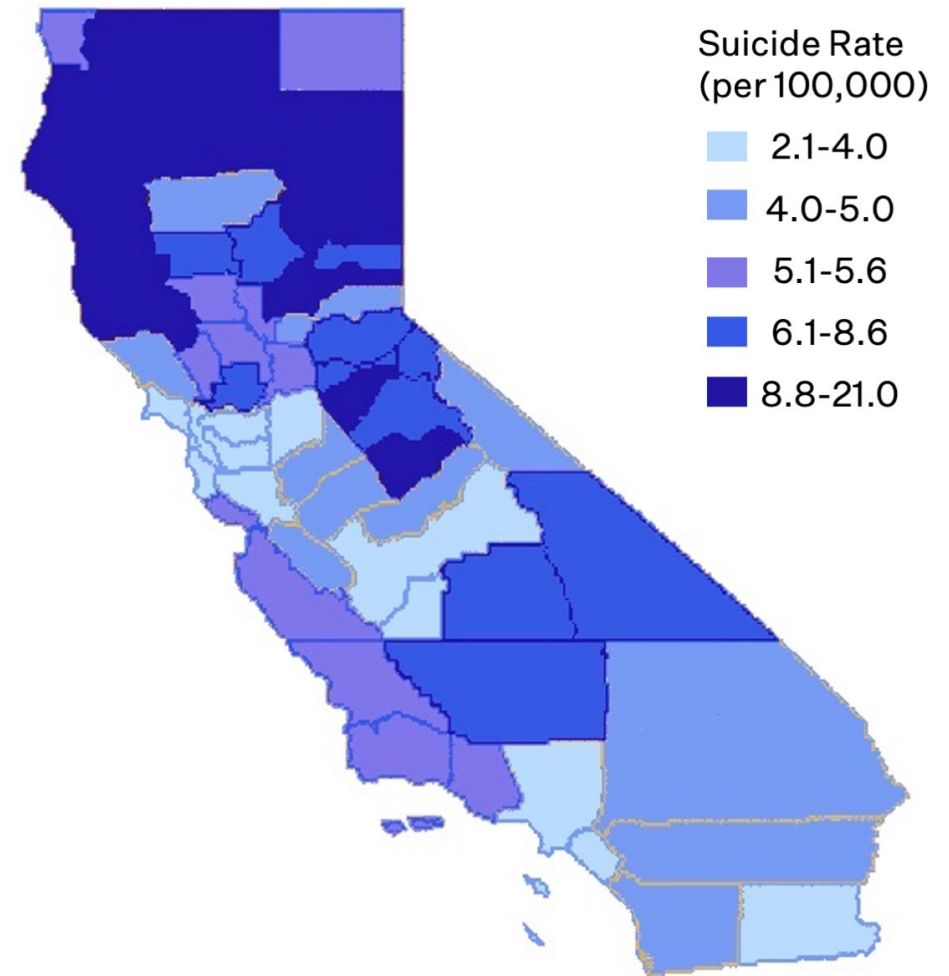


Data from CDC WISQARS

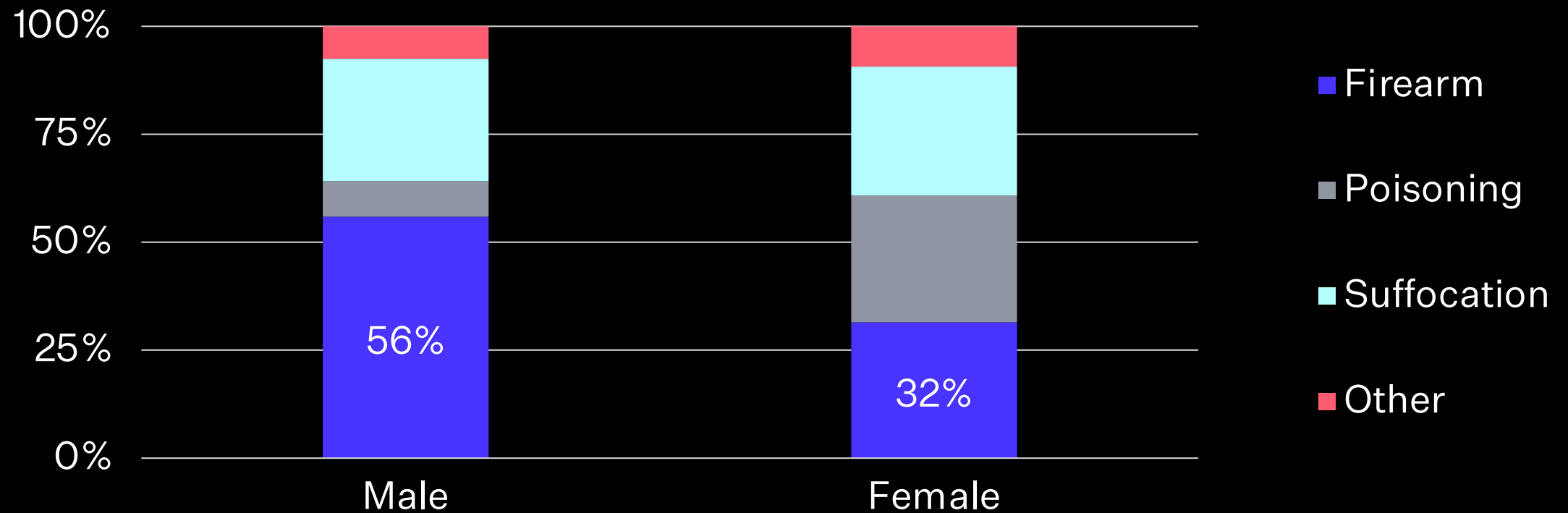
And in California

Significant variation by county

- Suicide rates lowest in Bay Area, LA County



Suicide Methods





A Brief Overview of Firearm Ownership

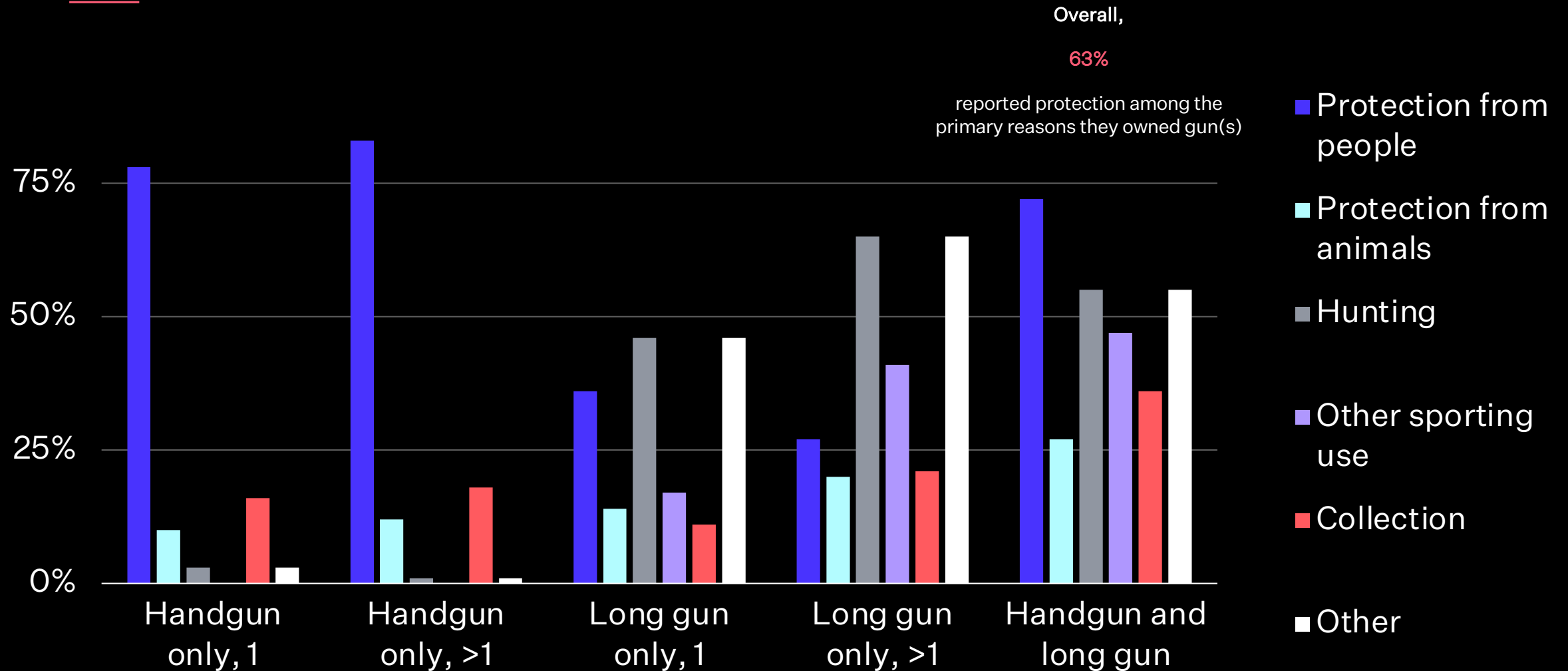
Prevalence of firearm ownership & access

- 22% personally own firearms
- Another 13% live in households with guns
- Shocks affect purchasing
 - Mass shootings
 - Natural disasters
 - Elections
 - COVID-19

Who owns firearms?

- Older
- White
- Males
- Veterans
- Those in rural areas

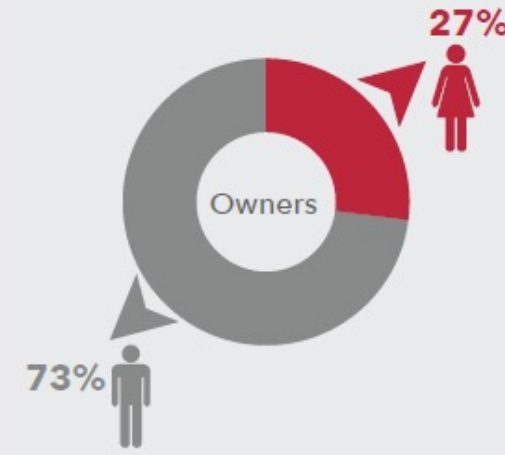
Reasons for firearm ownership



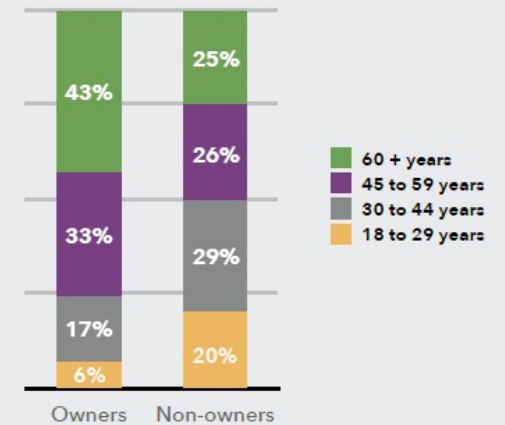
What about in CA?

- Prevalence of ownership lower in CA compared to nationwide
- Similar demographic trends among owners
- Similar reasons for ownership

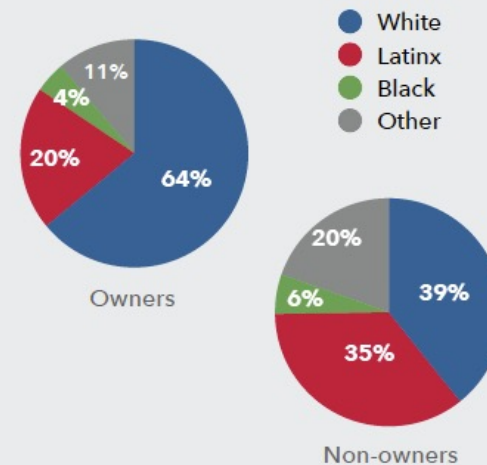
Data from Kravitz-Wirtz et al. 2019



Sex



Age



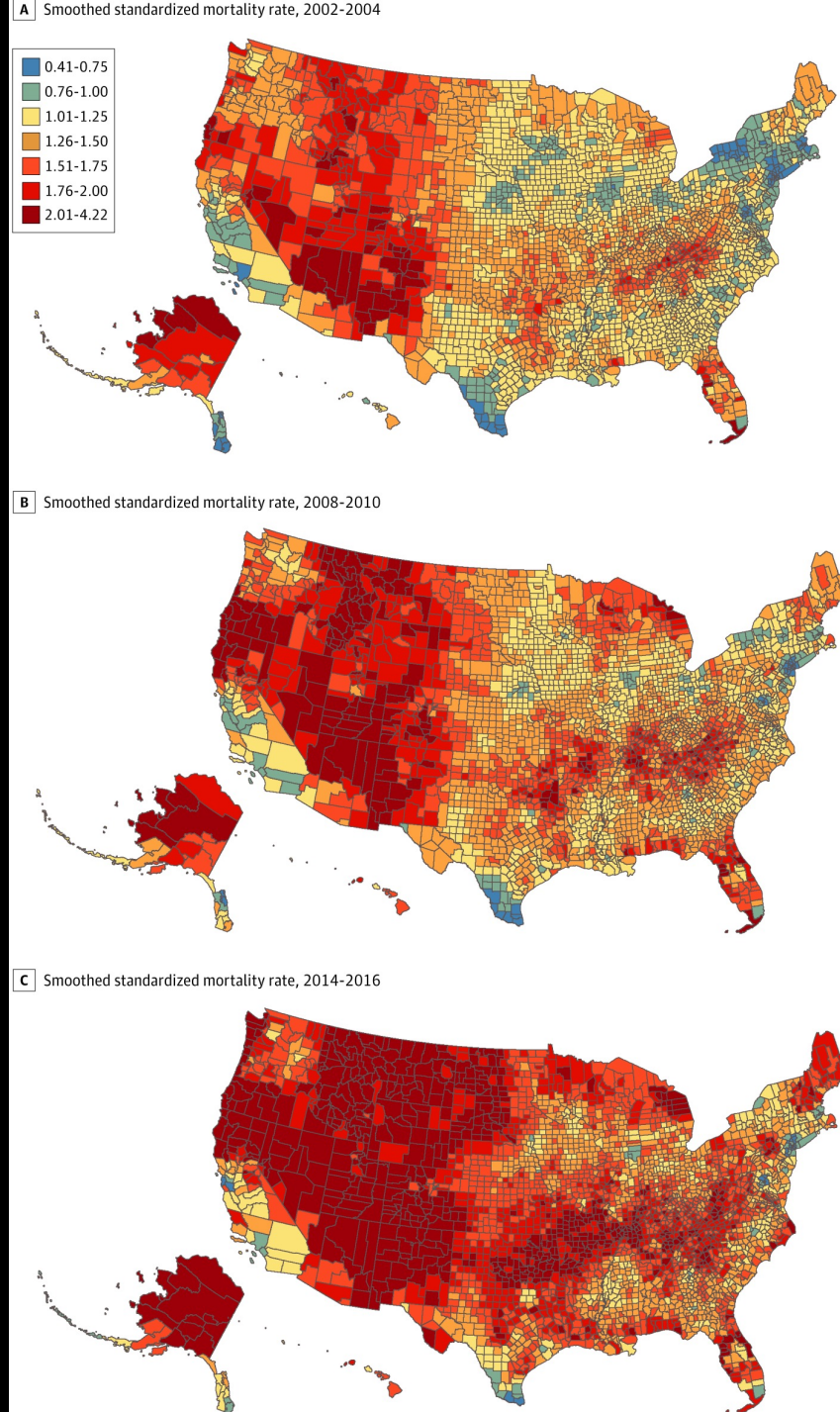
Race/ethnicity



Risk Factors for Suicide

Suicide is a complex, multi-factorial problem with social, economic, cultural, and psychiatric roots

Suicide Rates by County



Contextual Factors Associated
With County-Level Suicide Rates
in the United States, 1999 to 2016
JAMA 2019 Danielle L.
Steelesmith, PhD1; Cynthia A.
Fontanella, PhD1; John V. Campo,
MD2; et al

Factors associated with higher suicide rates

- ▢ Higher deprivation
- ▢ Lower social capital
- ▢ More social isolation
- ▢ More gun shops
- ▢ Less health insurance and access to care
- ▢ More veterans

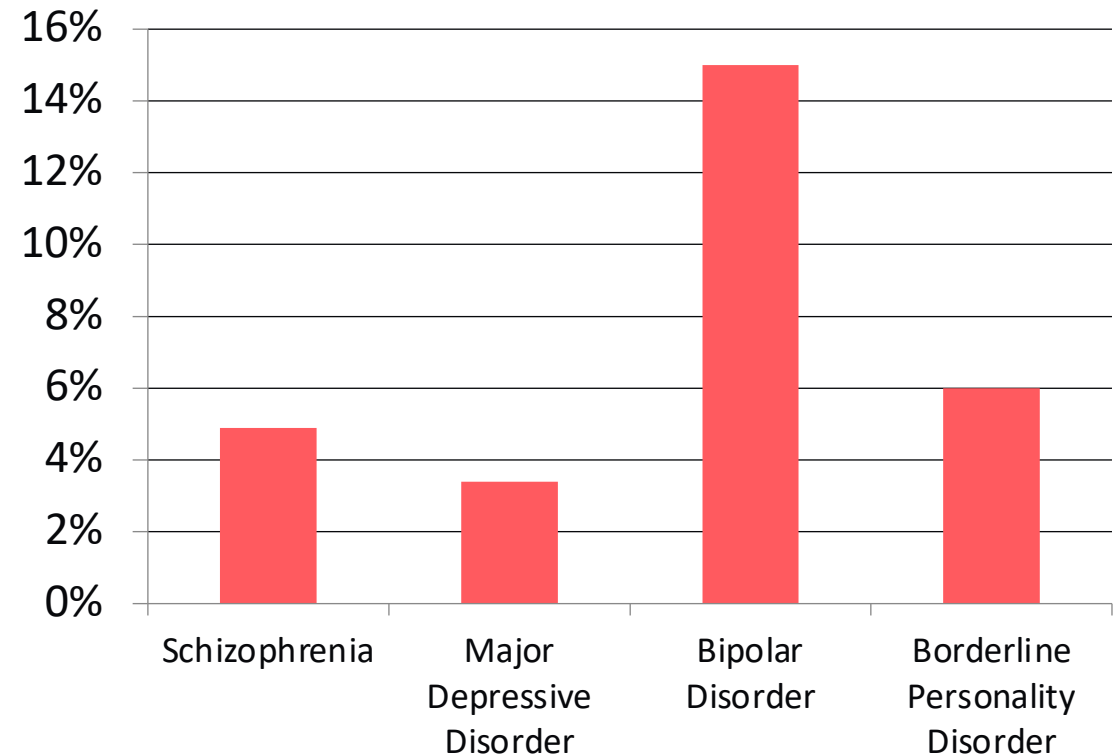
Individual Risk Factors

- ▢ Mental illness
- ▢ Chronic medical disorders (particularly chronic pain)
- ▢ Substance misuse
- ▢ Alcohol use

Mental illness

- 4-5% of interpersonal violence attributable to diagnosed mental illness
- Mental illness plays larger role in suicide
- ~1/2 of suicide decedents meet criteria for a mental illness at the time of their death

Lifetime Risk of Suicide (any means)

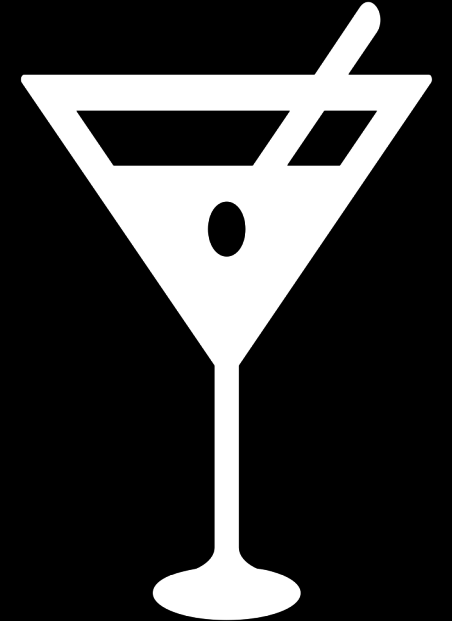


Increased risk of suicide with any major
mental disorder

OR = 5-10

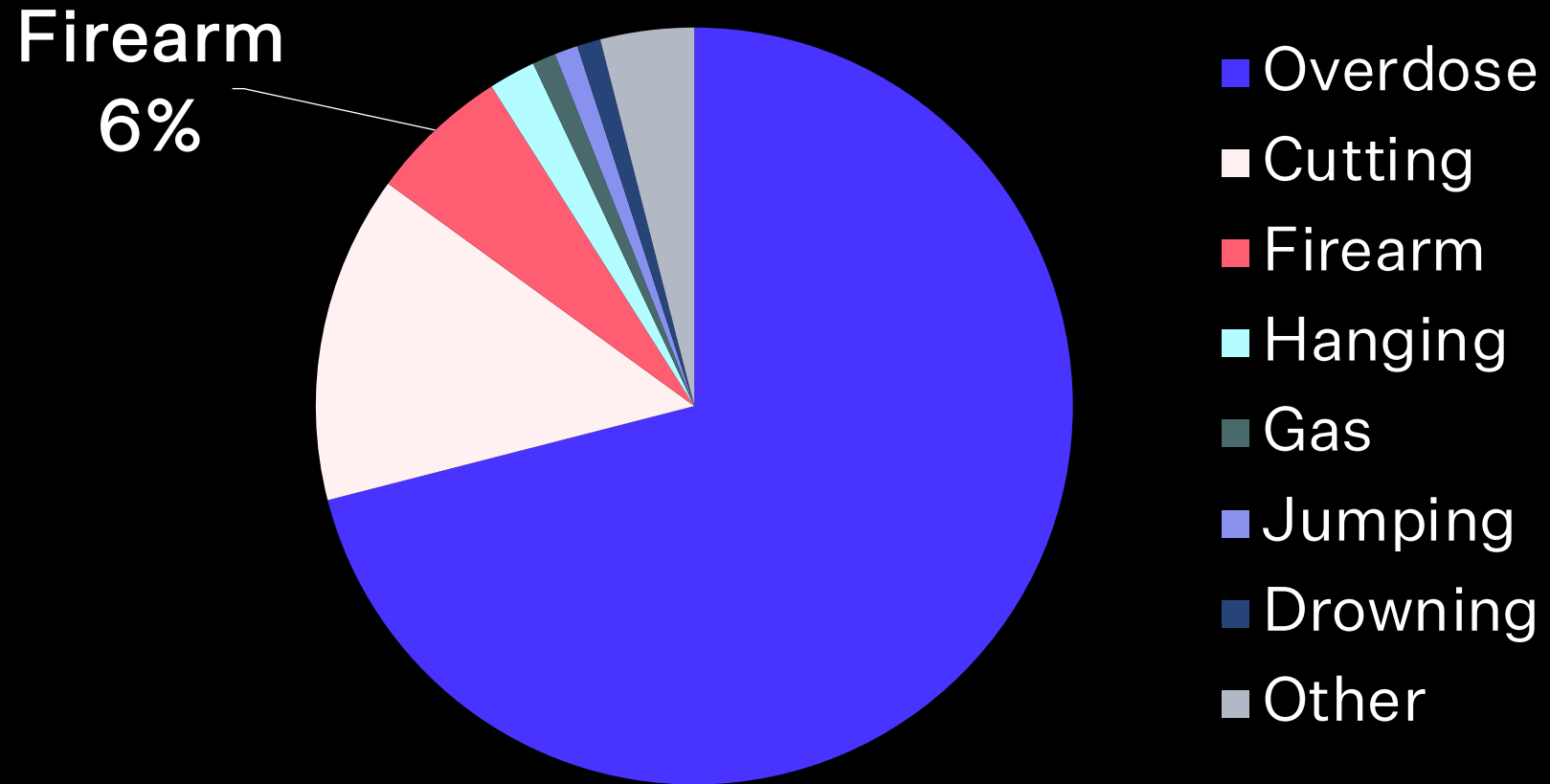
Suicide and alcohol

- ▢ 1/3 of people who completed suicide tested positive for the presence of alcohol
- ▢ Those who used a firearm more likely to be intoxicated at death compared to those who used less lethal methods

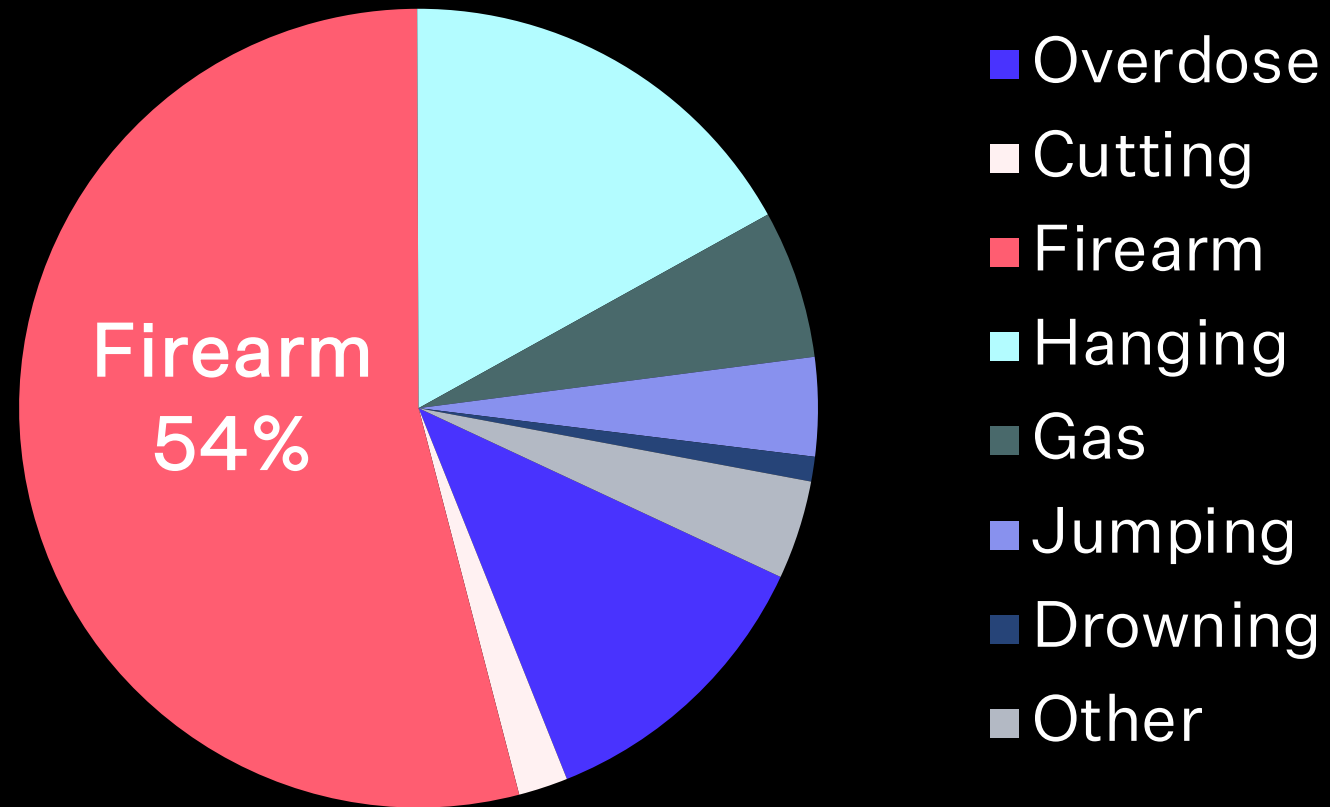


Importance of Lethal Means Access Reduction for Suicide Prevention

Suicide Attempts by Method



Suicide Deaths by Method



85-90%

of suicide attempts by firearm are
fatal

One of the most effective ways to reduce suicide risk is to put time and distance between the at-risk person and lethal means

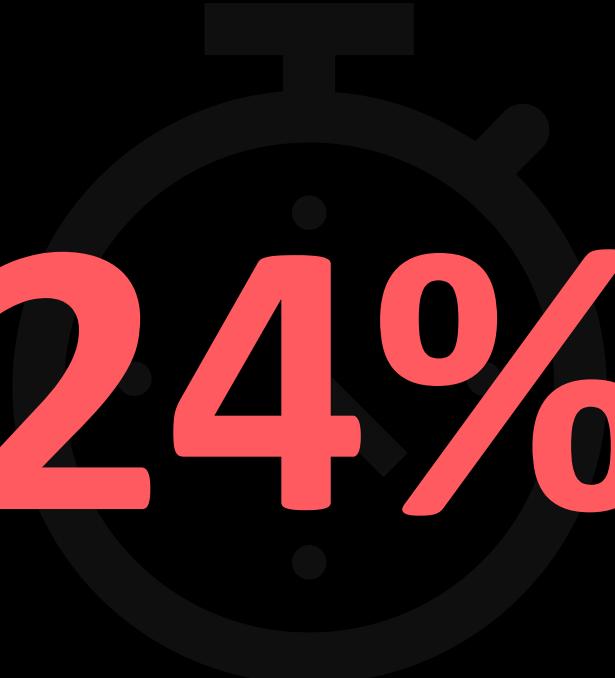


Percentage of people who made near lethal suicide attempts that made the decision in less than an hour:



70%

Percentage of people who made near lethal suicide attempts that made the decision in less than five minutes:



24%

A gun in the home increases the
odds of completed suicide

$$OR = 3.24$$

A gun in the home increases the odds of someone (>35 who lives with others in the house) dying by homicide

OR = 16.4

80% of school shooters got gun from
home or family member



What Mental Health Providers Can Do

Assess risk and, when it's clinically relevant, talk with patients about how to reduce risk

The message?

**Reduce access
for those at risk**

Barriers include

- ▢ Competing clinical priorities (i.e., time)
- ▢ Legal considerations
- ▢ Concern for alienating patients
- ▢ Gaps in training and knowledge
 - ▢ Firearms
 - ▢ Risk
 - ▢ Recommendations
 - ▢ And more

There are no state or federal statutes that prohibit clinicians from talking with patients about access to firearms.

What do patients think?

A majority report
conversations
about firearm
safety appropriate

66% of respondents

and especially
when someone in
the home is at
increased risk

54% of gun owning
respondents

90% for thoughts of suicide

84% when children or teens
in home

Special considerations for talking to gun owners

- ▢ Firearm ownership may be part of patient's identity

These conversations are about reducing access for those at risk

- ▢ Nearly two-thirds of owners own for self-protection

There are ways to safely store firearms and keep them quickly accessible

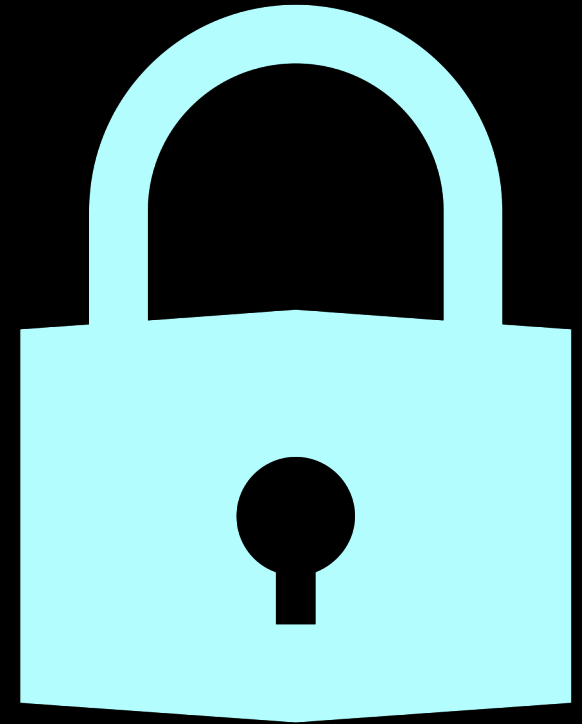
- ▢ Talking about firearms can be perceived as political

Politics has no place in these conversations. If politics comes up, redirect the conversation toward the shared goal of reducing risk.

When discussing risk and firearm access

- ▢ Put this in context of risk
- ▢ Use appropriate language
- ▢ Know the safest way to store guns
- ▢ Think about **harm reduction** & make reasonable, tailored recommendations
- ▢ Remember the importance of trust
- ▢ Be aware of relevant policies in your area

When no one is at imminent risk, safe storage is the appropriate recommendation.



The
safest
way to
store a
firearm:



Unloaded



Locked up using a locking device



Separate from ammunition



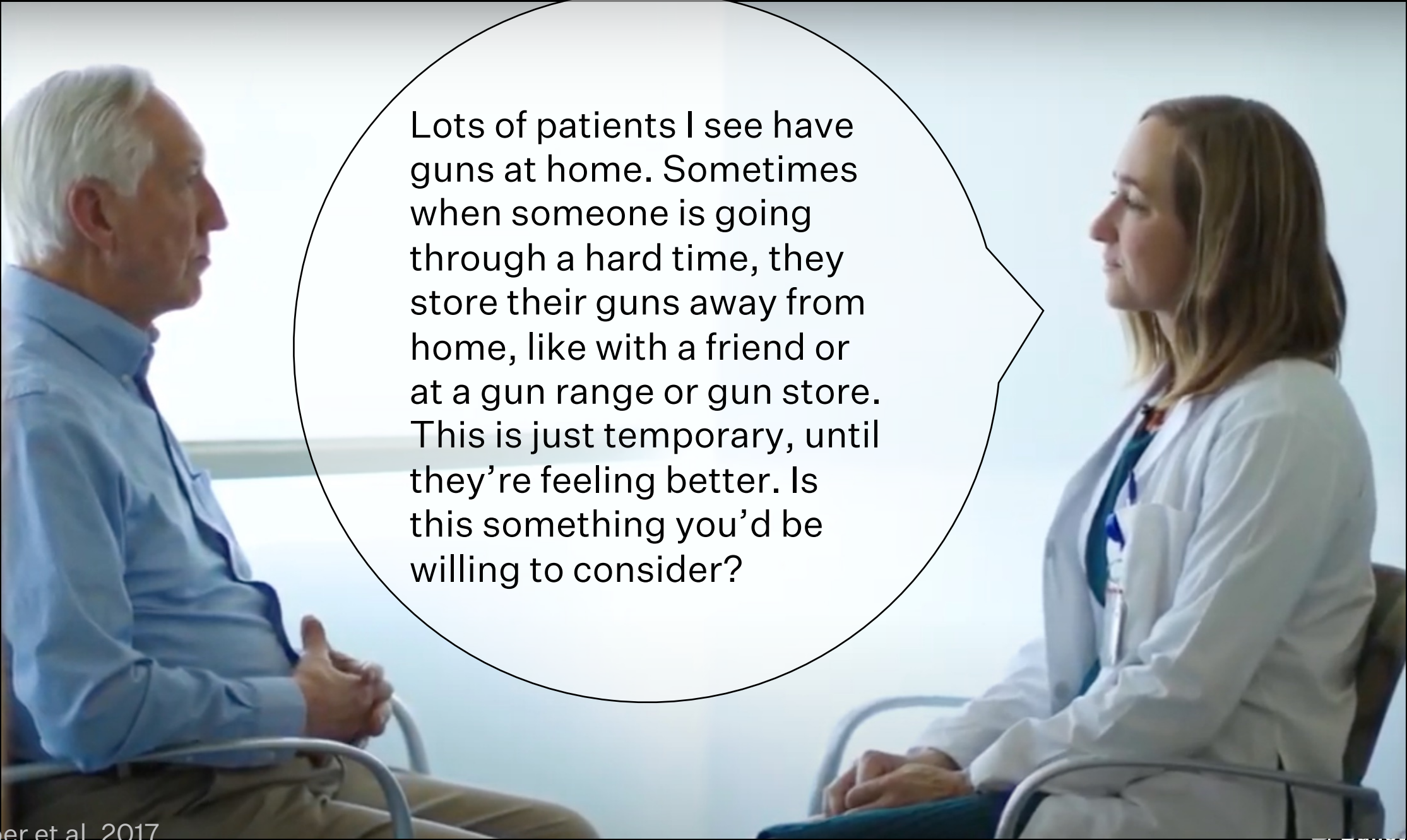
With **keys and combinations**
inaccessible to children and others
at risk

When risk for suicide is acute


- ▢ Engage trusted people in the patient's life
- ▢ Focus on the temporary nature of most suicide risk
- ▢ Consider the options for reducing firearm access
- ▢ Be aware of the role firearms play in values and identity
- ▢ Scale interventions to level of risk and ability to collaborate

Ways to reduce access to lethal means:

- ▢ Safe storage
- ▢ Temporary transfers
- ▢ Extreme Risk Protection Orders
- ▢ Hospitalization

A photograph of a male doctor with grey hair, wearing a white lab coat, sitting in a chair and talking to an elderly male patient. The patient is wearing a light blue button-down shirt and khaki pants. They are in a bright, clinical setting with large windows in the background. A large, white, irregular speech bubble is superimposed over the center of the image, containing text.

Lots of patients I see have guns at home. Sometimes when someone is going through a hard time, they store their guns away from home, like with a friend or at a gun range or gun store. This is just temporary, until they're feeling better. Is this something you'd be willing to consider?

A healthcare professional, a Black man with glasses and a beard, wearing blue scrubs and a stethoscope, is smiling and talking to a woman and a young girl. The woman has long brown hair and is wearing a grey top. The young girl has brown hair in braids and is wearing a pink shirt. They are in a clinical setting with a white wall and a framed picture in the background.

I ask all caregivers about things that pose a risk to their families: water heaters, pools, medications, firearms. What steps do you take to reduce access to firearms for those who shouldn't have it?

Language matters

- ▢ “Reducing access” preferred when talking about storing guns locked up or getting guns out of the home
- ▢ Use “storage” when you’re talking about storage, rather than “gun safety”
- ▢ “Temporary” and “voluntary” when talking about options for getting guns out of home in time of crisis



Safe Storage Devices

Lock boxes

- Come in many sizes to accommodate different firearms
- Can have keys, combinations, quick-access technology or biometric technology
- Keep firearms out of sight
- Portable



Safes

- Come in many sizes to accommodate different types and >1 firearms
- Can have keys, combinations, or biometric technology
- Not portable



Cable locks

- With action locked open, a cable is inserted through the magazine well and out the ejection port
- Often secured with a lock & key
- Inexpensive and often available for free by law enforcement, gun stores, hospitals, etc.
- Don't prevent theft



Trigger locks

- A cylinder placed through the trigger guard blocks the trigger from being pulled
- Usually secured with a lock & key or combination
- Don't prevent theft



Temporary Transfers

Used when removing firearms from the home is the safest option.

- ▢ Temporary transfer to family or other trusted person
 - ▢ Background check requirements vary
 - ▢ In some places, these policies are in flux
- ▢ Temporary, voluntary storage at a gun range, store, or with a law enforcement agency*

Recap

- ▢ Clinicians can take a risk-based approach to prevention
- ▢ There are no state/federal laws prohibiting these conversations
- ▢ Recommendations depend on who's at risk and for what type of harm (recs might depend on types owned, reasons for ownership)
- ▢ Use a **harm reduction** approach: collaborate with patients to help reduce access for those at risk

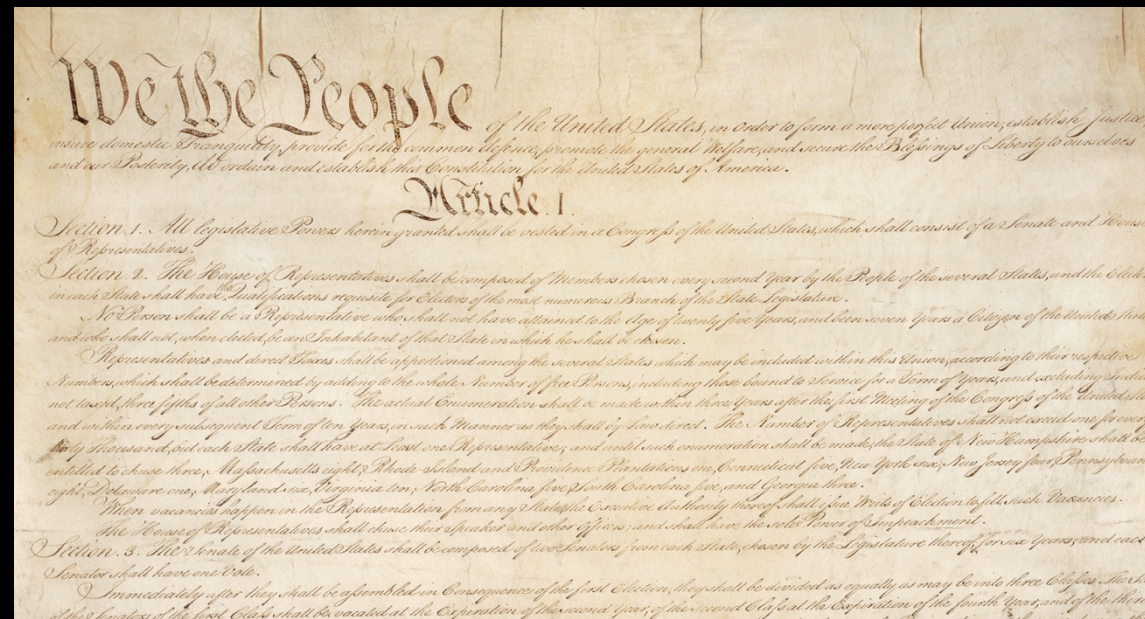
If a patient at high risk is not willing to collaborate, further intervention may be necessary to prevent harm.

If the risk is acute:

- ▮ If the person needs mental health treatment, consider a 5150
- ▮ If the person is not willing to relinquish their firearms, consider a GYRO for temporary, involuntary removal of guns
- ▮ These two are not mutually exclusive

Second Amendment to the Constitution

"A well regulated Militia being necessary to the security of a free State, the Right of the People to keep and bear Arms shall not be infringed."



The Gun Control Act of 1968

- ▢ Regulates firearm industry and owners
 - ▢ Prohibits ownership by a list of “prohibited persons” including
 - ▢ Felons
 - ▢ Unlawful users of or people addicted to a controlled substance
 - ▢ Respondents to DV restraining orders
 - ▢ Anyone “adjudicated as a mental defective” or who has been “committed to any mental institution”

The Gun Control Act of 1968

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 - ▢ Anyone “**adjudicated as a mental defective**” or who has been “**committed to any mental institution**”

“Committed to a Mental Institution”

- ▢ Happens after an involuntary admission to a psychiatric hospital
- ▢ Requires hearing before a judge or hearing officer



California State-level Prohibitions

- ▢ Admission for dangerousness
- ▢ Tarasoff (duty to warn / protect) statutes
- ▢ Involuntary / assisted outpatient commitment



5150 Involuntary Hold

APPLICATION FOR ASSESSMENT, EVALUATION, AND CRISIS INTERVENTION OR PLACEMENT FOR EVALUATION AND TREATMENT

REFERENCES AND DEFINITIONS

“**Gravely Disabled**” means a condition in which a person, as a result of a mental disorder, is unable to provide for his or her basic personal needs for food, clothing and shelter. SECTION 5008(h) W&I Code.

“**Gravely Disabled Minor**” means a minor who, as a result of a mental disorder, is unable to use the elements of life which are essential to health, safety, and development, including food, clothing, and shelter, even though provided to the minor by others. Intellectual disability, epilepsy, or other developmental disabilities, alcoholism, other drug abuse, or repeated antisocial behavior do not, by themselves, constitute a mental disorder. SECTION 5585.25 W&I Code.

“**Peace officer**” means a duly sworn peace officer as that term is defined in Chapter 4.5 (commencing with Section 830) of Title 3 of Part 2 of the Penal Code who has completed the basic training course established by the Commission on Peace Officer Standards and Training, or any parole officer or probation officer specified in Section 830.5 of the Penal Code when acting in relation to cases for which he or she has a legally mandated responsibility. SECTION 5008(i) W&I Code.

Section 5152.1 W&I Code

The professional person in charge of the facility providing 72-hour evaluation and treatment, or his or her designee, shall notify the county mental health director or the director's designee and the peace officer who makes the written application pursuant to Section 5150 or a person who is designated by the law enforcement agency that employs the peace officer, when the person has been released after 72-hour detention, when the person is not detained, or when the person is released before the full period of allowable 72-hour detention if all of the conditions apply:

- (a) The peace officer requests such notification at the time he or she makes the application and the peace officer certifies at that time in writing that the person has been referred to the facility under circumstances which, based upon an allegation of facts regarding actions witnessed by the officer or another person, would support the filing of a criminal complaint.
- (b) The notice is limited to the person's name, address, date of admission for 72-hour evaluation and treatment, and date of release.

If a police officer, law enforcement agency, or designee of the law enforcement agency, possesses any record of information obtained pursuant to the notification requirements of this section, the officer, agency, or designee shall destroy that record two years after receipt of notification.

Section 5152.2 W&I Code

Each law enforcement agency within a county shall arrange with the county mental health director a method for giving prompt notification to peace officer pursuant to Section 5152.1 W&I Code.

Section 5585.50 W&I Code

The facility shall make every effort to notify the minor's parent or legal guardian as soon as possible after the minor is detained. Section 5585.50 W&I Code.

A minor under the jurisdiction of the Juvenile Court under Section 300 W&I Code is due to abuse, neglect, or exploitation.

A minor under the jurisdiction of the Juvenile Court under Section 601 W&I Code is due to being adjudged a ward of the court as a result of being out of parental control.

A minor under the jurisdiction of the Juvenile Court under Section 602 W&I Code is due to being adjudged a ward of the court because of crimes committed.

Section 8102 W&I Code (EXCERPTS FROM)

(a) Whenever a person who has been detained or apprehended for examination of his or her mental condition or who is a person described in Section 8100 or 8103, is found to own, have in his or her possession or under his or her control, any firearm whatsoever, or any other deadly weapon, the firearm or other deadly weapon shall be confiscated by any law enforcement agency or peace officer, who shall retain custody of the firearm or other deadly weapon.

“Deadly weapon,” as used in this section, has the meaning prescribed by Section 8100.

(b)(1) Upon confiscation of any firearm or other deadly weapon from a person who has been detained or apprehended for examination of his or her mental condition, the peace officer or law enforcement agency shall issue a receipt describing the deadly weapon or any firearm and listing any serial number or other identification on the firearm and shall notify the person of the procedure for the return, sale, transfer, or destruction of any firearm or other deadly weapon which has been confiscated. A peace officer or law enforcement agency that provides the receipt and notification described in Section 33800 of the Penal Code satisfies the receipt and notice requirements.

(2) If the person is released, the professional person in charge of the facility, or his or her designee, shall notify the person of the procedure for the return of any firearm or other deadly weapon which may have been confiscated.

(3) Health facility personnel shall notify the confiscating law enforcement agency upon release of the detained person, and shall make a notation to the effect that the facility provided the required notice to the person regarding the procedure to obtain return of any confiscated firearm.

5150

- ▮ Allows for temporary removal of gun *in a person's possession* when they are detained for an emergency psychiatric evaluation
- ▮ Does not trigger a prohibition unless patient admitted to psychiatric hospital

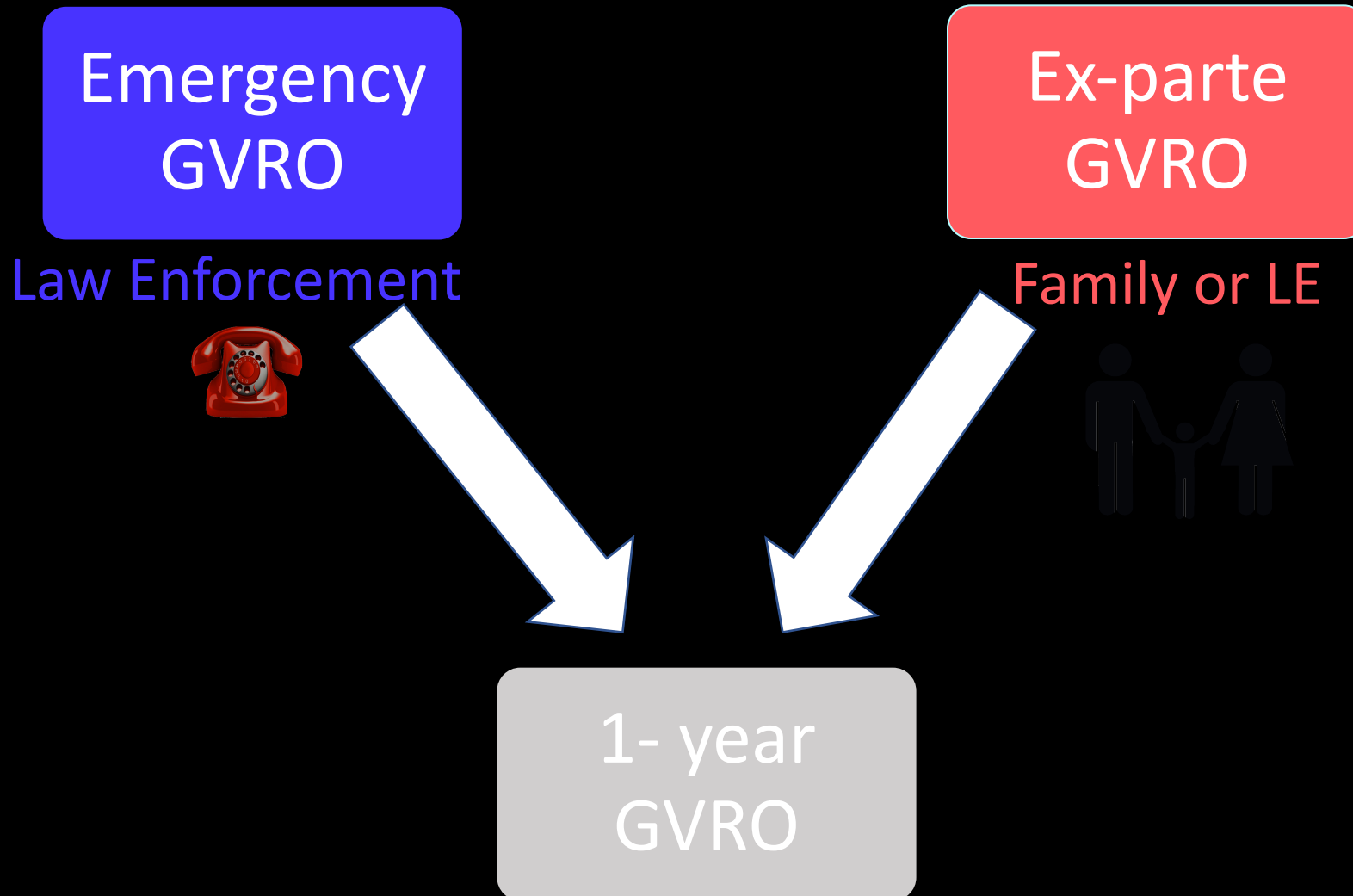
Gun Violence Restraining Orders



Gun Violence Restraining Orders

- ▮ Allows family members or police to petition to have a person's guns removed based on a concern for violence in the near future
- ▮ Modelled closely after DVRO
- ▮ No mental health evaluation or history required!

Gun Violence Restraining Order



For more information



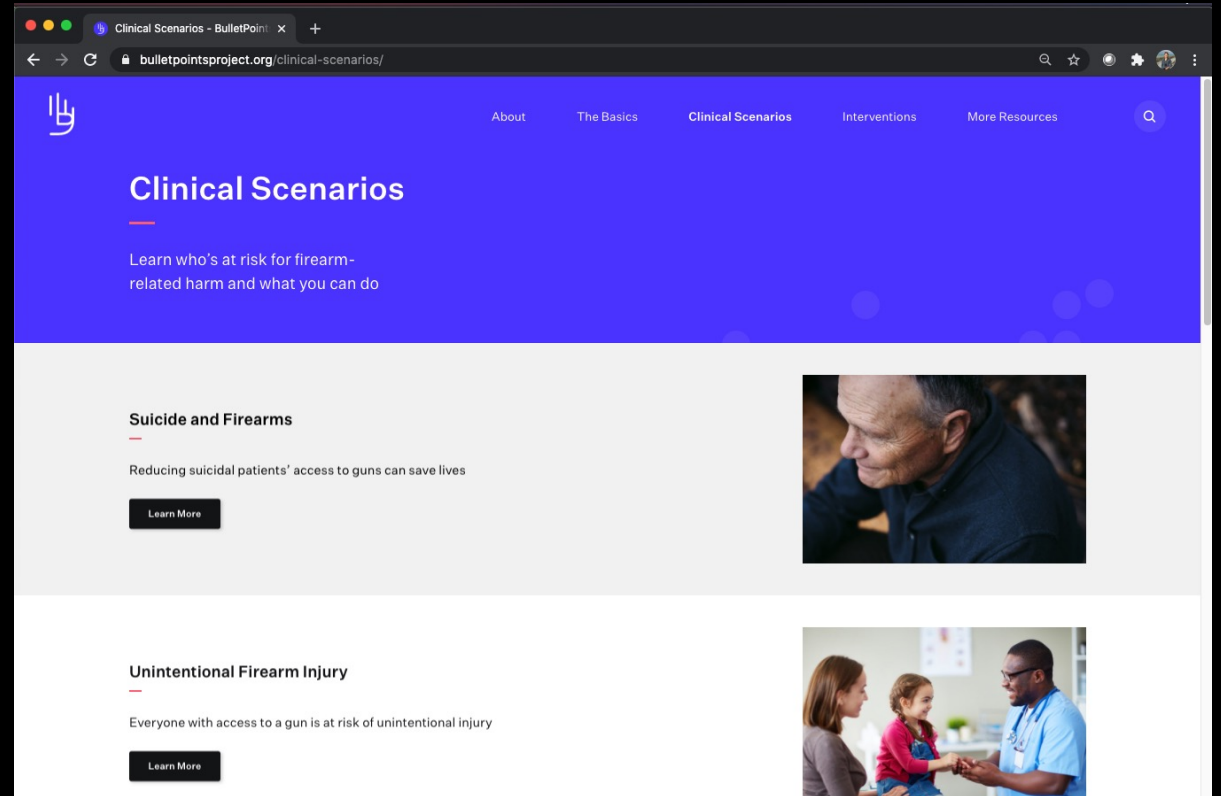
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References (1)

- Anglemeyer A, Horvath T, Rutherford G. The accessibility of firearms and risk for suicide and homicide victimization among household members: a systematic review and meta-analysis. *Ann Intern Med* 2014; 160(2): 101–10.
- Blair-West GW, Cantor CH, Mellsop GW, Eyeson-Annan ML. Lifetime suicide risk in major depression: sex and age determinants. *Journal of Affective Disorders* 1999;55(2–3):171–8.
- Boggs JM et al. General Medical, Mental Health, and Demographic Risk Factors Associated With Suicide by Firearm Compared With Other Means. *Psychiatr Serv*. 2018 Jun 1;69(6):677–684..
- Follman M, Aronsen G, Pan, D. “US Mass Shootings, 1982-2020: Data From Mother Jones’ Investigation,” Updated Feb 26, 2020, Accessed April 17, 2020. <https://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data/>.
- Grinshteyn E, Hemenway D. Violent Death Rates: The US Compared with Other High-income OECD Countries, 2010. *Am J Med* 2016;129(3):266–73.
- Goodwin FK. Suicide Risk in Bipolar Disorder During Treatment With Lithium and Divalproex. *JAMA* 2003;290(11):1467.
- Kaplan MS, McFarland BH, Huguet N, et al. Acute alcohol intoxication and suicide: a gender-stratified analysis of the National Violent Death Reporting System. *Injury Prevention* 2013;19(1):38–43.
- “Learn the facts,” American Foundation for Suicide Prevention, accessed Dec 2019, <https://afsp.org/learn-the-facts>.
- Miller M, Azrael D, Hemenway D. The epidemiology of case fatality rates for suicide in the northeast. *Annals of Emergency Medicine* 2004;43(6):723–30.
- Miller M, Hemenway D. Guns and Suicide in the United States. *N Engl J Med* 2008;359(10):989–91.
- Palmer BA, Pankratz VS, Bostwick JM. The Lifetime Risk of Suicide in Schizophrenia: A Reexamination. *Arch Gen Psychiatry* 2005;62(3):247.
- Rossow I, Amundsen A. Alcohol abuse and suicide: a 40-year prospective study of Norwegian conscripts. *Addiction* 1995;90(5):685–91.
- Simon TR, Swann AC, Powell KE, Potter LB, Kresnow M, O’Carroll PW. Characteristics of Impulsive Suicide Attempts and Attempters. *Suicide and Life-Threatening Behavior* 2002;32:49–59.

References (1)

Simonetti JA, Azrael D, Rowhani-Rahbar A, Miller M. Firearm Storage Practices Among American Veterans. Am J Prev Med 2018

Soloff PH. Characteristics of Suicide Attempts of Patients With Major Depressive Episode and Borderline Personality Disorder: A Comparative Study. American Journal of Psychiatry 2000;157(4):601–8.

Swanson JW. Mental disorder, substance abuse, and community violence: An epidemiological approach. [Internet]. In: Violence and Mental Disorder: Developments in Risk Assessment. University of Chicago Press; 1994.

Swanson, JW, McGinty, EE, Fazel S, & Mays VM. (2015). Mental illness and reduction of gun violence and suicide: bringing epidemiologic research to policy. Annals of Epidemiology.

Spicer RS, Miller TR. Suicide acts in 8 states: incidence and case fatality rates by demographics and method. Am J Public Health 2000;90(12):1885–91.

WISQARS (Web-based Injury Statistics Query and Reporting System). Injury Center. CDC [Internet]. Available from: <https://www.cdc.gov/injury/wisqars/index.html>