

# Missouri's Firearm laws and Suicide and Homicide by Firearms in Missouri

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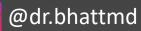
UNIVERSITY OF MISSOURI-KANSAS CITY/CENTER FOR BEHAVIORAL MEDICINE PSYCHIATRY RESIDENCY PROGRAM











### Disclosures

I have no commercial interests or disclosures to report.

I am not a firearm expert, nor a firearm law expert.

This topic may be sensitive or triggering for some viewers.

Take a break if you need it. You deserve it.

Firearm deaths are the 2nd leading cause of death in Missouri children.

# In 2017, Missouri ranked 6<sup>th</sup> highest in firearm deaths.

Image: Stl public radio

In 2018, every 4 days a young person in Missouri died by suicide via firearm.

(CDC WISQARS)



In Missouri, 58% of firearm deaths are suicides, and more than 58% of suicide deaths involve firearms.

(Bhatt et al 2020)

#### Early Research Links Coronavirus Gun Sales Surge to Increased Shootings

Amid a tangle of factors, data analysts have found a correlation between recent, record-level gun purchases and intentional shootings.

By Melinda Wenner Moyer Jul 8, 2020



2.1 million excess firearm purchases occurred from March-May 202064.3% increase compared to previous yearsRates of violence rose the most in states where sales surged the most

(Moyer et al 2020)

# Gun violence is a public health issue.

#### Learning Objectives

At the conclusion of this activity, the participant will be able to:

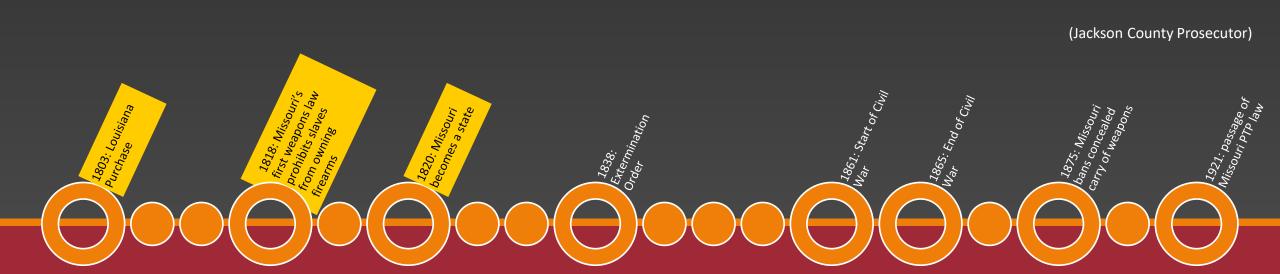


# History of Firearm Law Changes in Missouri



### Missouri Firearm Law History

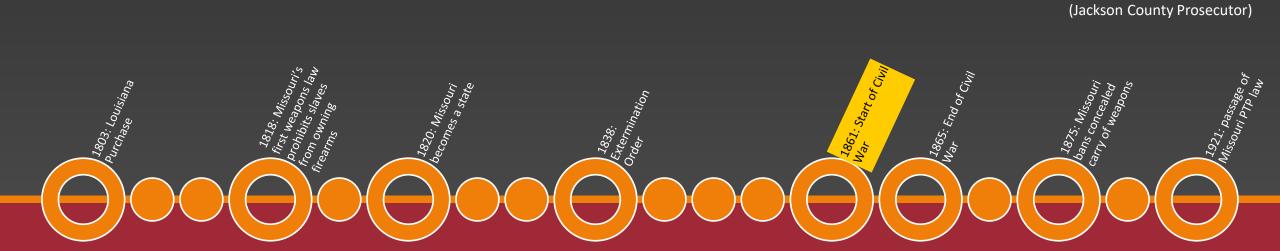
- Louisiana Purchase in 1803
- 1818- Missouri's first weapons law was passed prohibiting slaves from possessing guns and allowing white people to take guns from slaves
- 1820 Missouri becomes a state (Missouri Compromise)



## Missouri Firearm Law History- Civil War

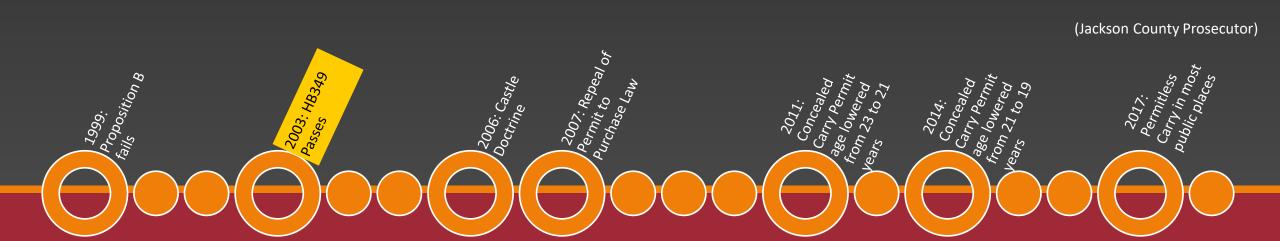
• Civil unrest with 4,000 pro-confederate guerrilla fighters

- Government officials responded to the violence with various firearm restrictions (none were effective). It took 60,000 Union troops to stop the violence
- Post civil war lawlessness led to vigilantism
- In 1875 Missouri banned all concealed weapons. This ban stood for 128 years



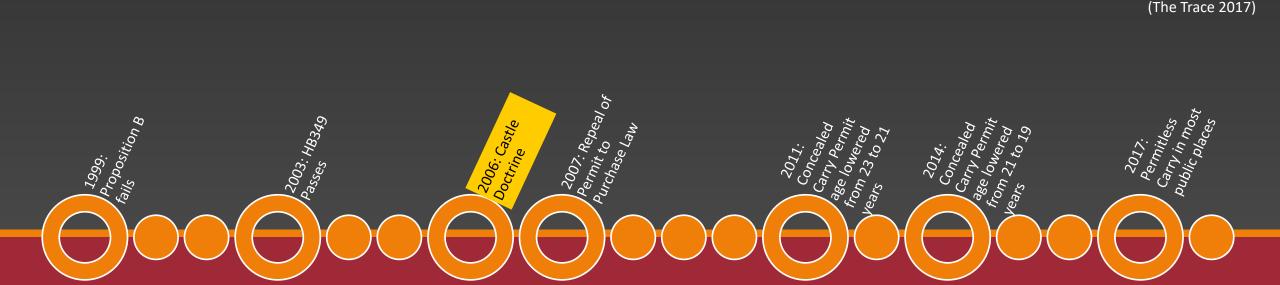
### 2003- HB 349 passes

- Missouri House of Representatives overturns the ban on concealed carry 128 years later passing HB 349 by a narrow vote
- Governor Holden vetoed it. MO Legislature overrides the Governor's veto.
- Had some early restrictions on concealed carry:
  - 23 years of age
  - Application at Sherriff's office
  - Concealed weapons were banned in many areas (police stations, schools, churches, day-care centers)



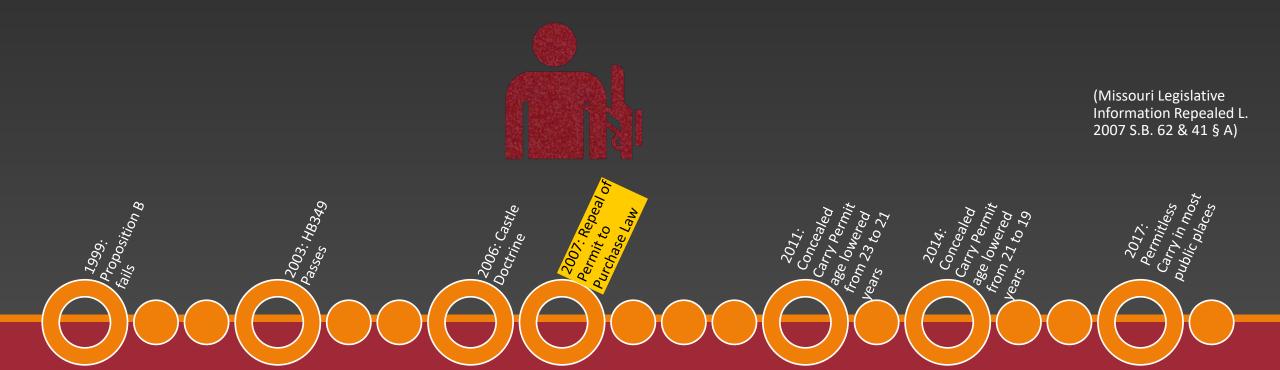
# 2006- SB 62- Missouri's Castle Doctrine (Stand Your Ground)

- In 2005, Florida was the first state to pass "Stand Your Ground" law
- Missouri quickly followed suit in 2006 with Senate Bill 62
- Allows citizens to use lethal force to defend themselves, family, home, property or vehicle as long as they "occupy" that property. No requirement to retreat into one's home.



### 2007 Repeal of Permit to Purchase

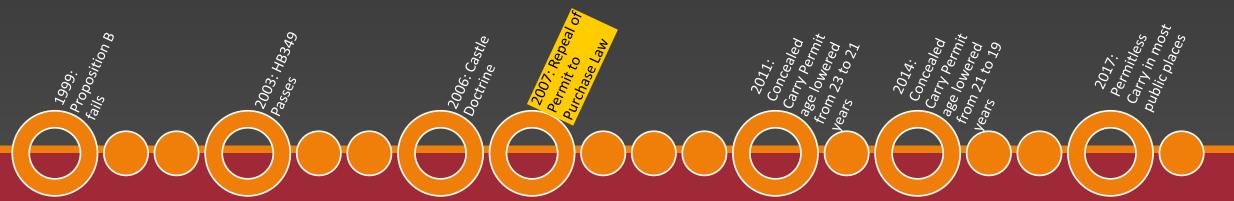
- Missouri removed a requirement for gun owners to have a PTP license for concealable firearms
- PTP law required all handgun purchasers to have a valid license to buy a handgun from ANY SELLER, licensed or unlicensed
- Residents were required to submit an application to local sheriff's office



# 2007 Repeal of Permit to Purchase

#### Application required:

- Basic information
- Reason for desiring the permit
- and that the applicant
  - (1) was at least 21 years old;
  - (2) had not pled guilty to, been convicted of, or was currently charged with a crime punishable by imprisonment for over 1 year;
  - (3) was not a fugitive from justice;
  - (4) had not been dishonorably discharged from the US military;
  - (5) was not known to be habitually in an intoxicated or drugged condition; and
  - (6) was not currently adjudged mentally incompetent and had not been committed to a mental health facility.



(Missouri Legislative Information Repealed L. 2007 S.B. 62 & 41 § A)

### 2007 Repeal of Permit to Purchase

 Essentially removed an additional background check step for prohibited persons to legally purchase a firearm.



# 2011: Conceal Carry Permit change

• Missouri lawmakers lowered the legal age to obtain a concealed carry permit age from age 23 to 21

• Governor Jay Nixon vetoed it, but the legislature overrides his veto by a vote of 117 to 39

2007. Repeal of

chase Lay

2006: Castle

octrine

Proposition B

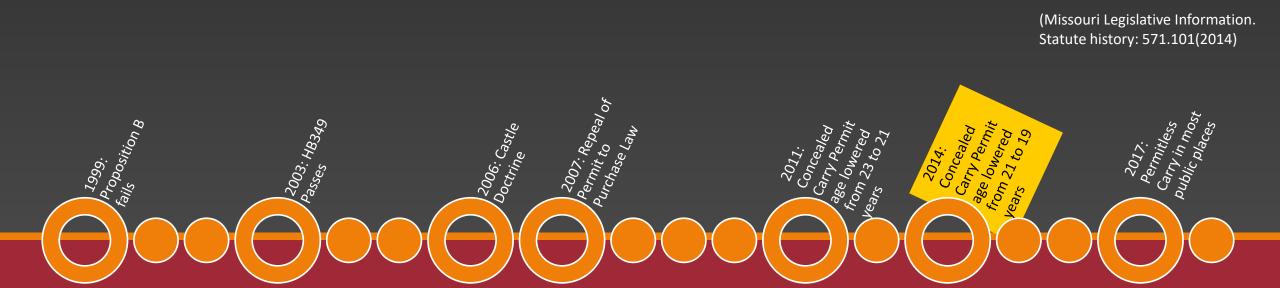
1999;

2003: HB349

(Missouri Legislative Information)

### 2014: Conceal Carry Permit change

• Missouri lawmakers further lowered the age from 21 to 19 years



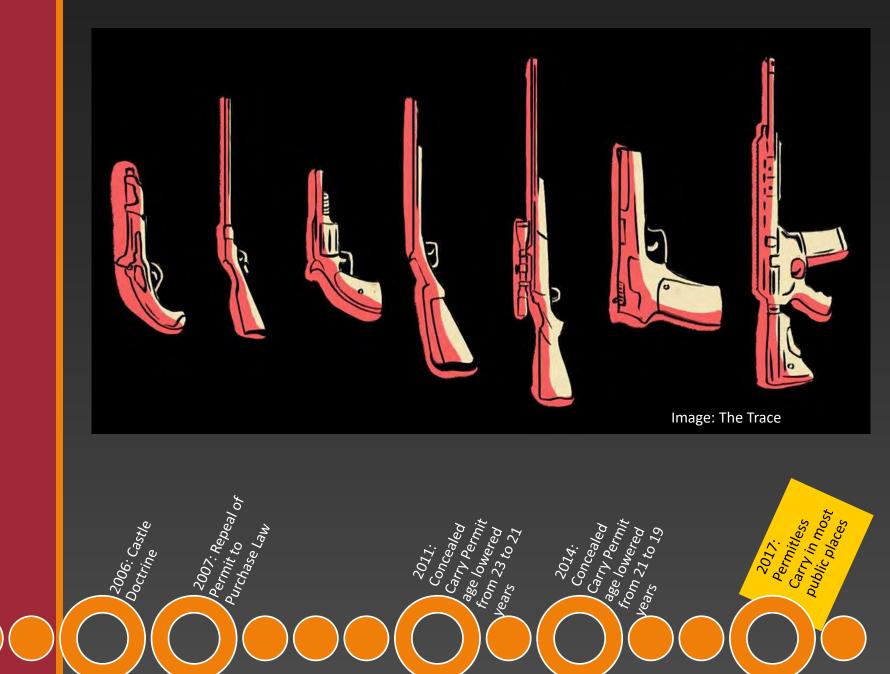
#### 2017

<sup>1</sup>999. P<sup>r</sup>oposition B fails

 Allows permitless carry in most public places

(Missouri Legislative Information. Statute History: 571.030)

2003: HB349



# Current State of Affairs

#### MISSOURI LAW- "PERMISSIVE"

#### FEDERAL LAW

- Private possession of firearms is permitted without a license
- It is unlawful to sell or give a firearm to anyone under the age of 18 without parental consent
- Buyers of firearms in private sales are not required to pass official background checks before taking possession of the firearm
- No established waiting period for a firearm purchase to be completed
- Current regulations do not have written specifications for safe storage of private firearms and ammunition
- Missouri law does not prohibit individuals convicted of domestic violence misdemeanors from purchasing or possessing firearms (unlike federal law, 18 U.S.C. § 922(g)(9)) and does not require removal of firearms at the scene of a domestic violence incident

- Federal law requires licensed firearms dealers to run background checks before taking possession of the firearm
- Removal of firearms at scene of a domestic violence incident

#### Learning Objectives

At the conclusion of this activity, the participant will be able to: Recall the timeline of changes in Missouri firearm policy Describe the current state of affairs regarding Missouri firearm law

Review the scientific literature on Missouri firearm law and suicide and homicide Describe how firearm status impacts suicide by firearms/suicide risk in youth

Identify future preventive strategies to mitigate suicide by firearms in the state

# Data Overview

Created by Alice Design from Noun Project

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#### Missouri had a 71% increase in suicides in 10-24 year olds

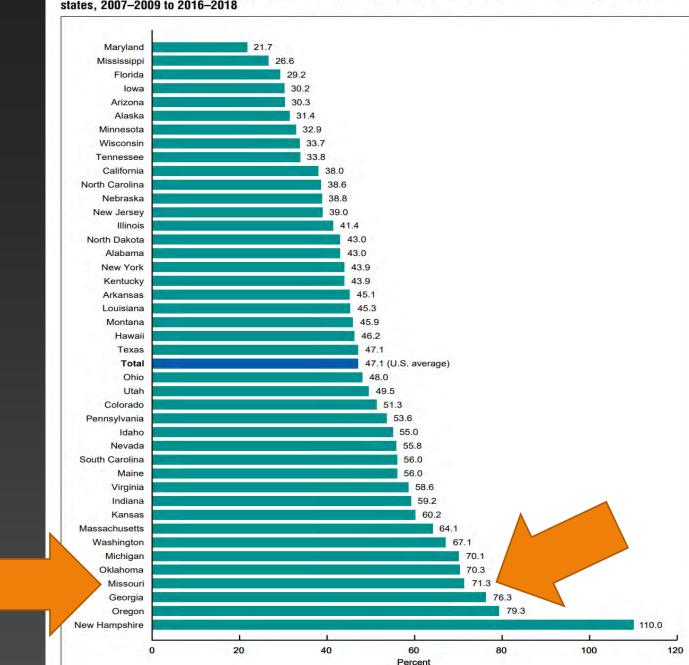


Figure 1. Percent increase in suicide death rates among persons aged 10-24 years: United States and selected states, 2007-2009 to 2016-2018

National Vital Statistics Reports

Volume 69, Number 11

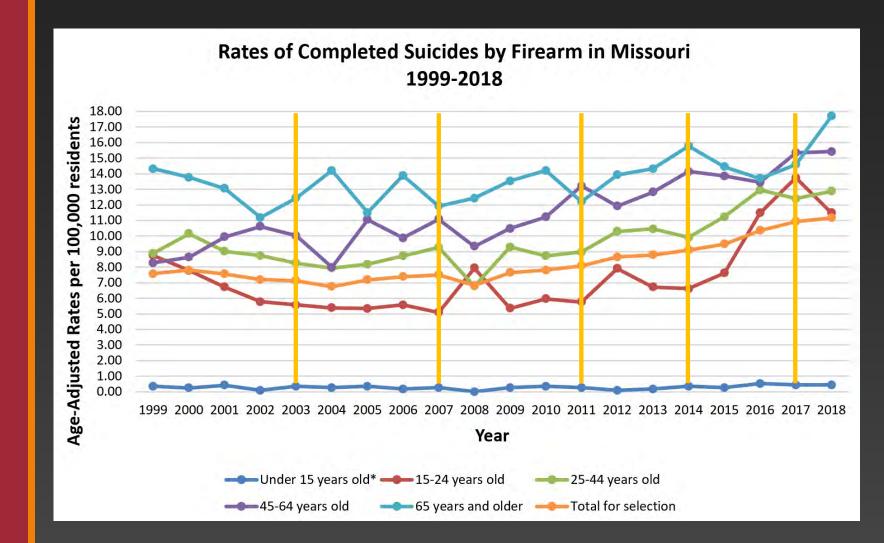
September 11, 2020

State Suicide Rates Among Adolescents and Young Adults Aged 10–24: United States, 2000–2018

by Sally C. Curtin, M.A.

#### The Data: Suicides by Firearm

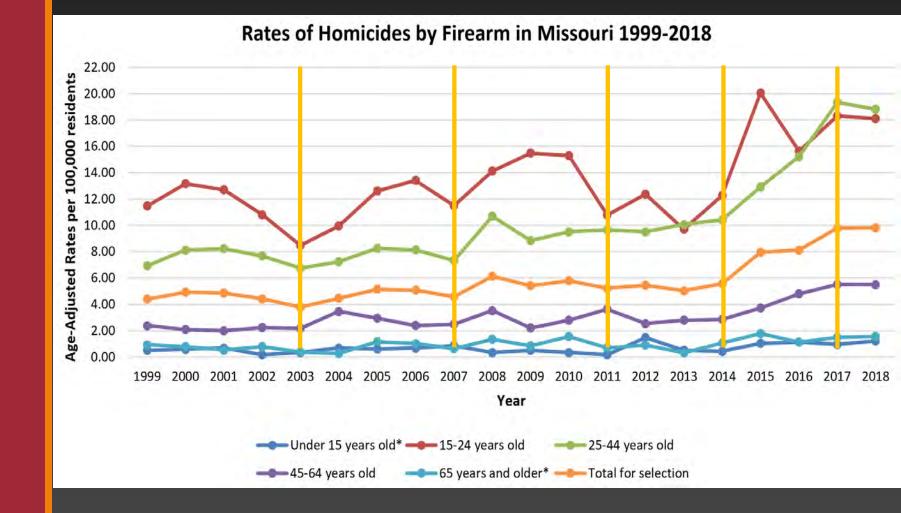
Data source: Missouri MICA assessment



\*Rate is unreliable; numerator less than 20

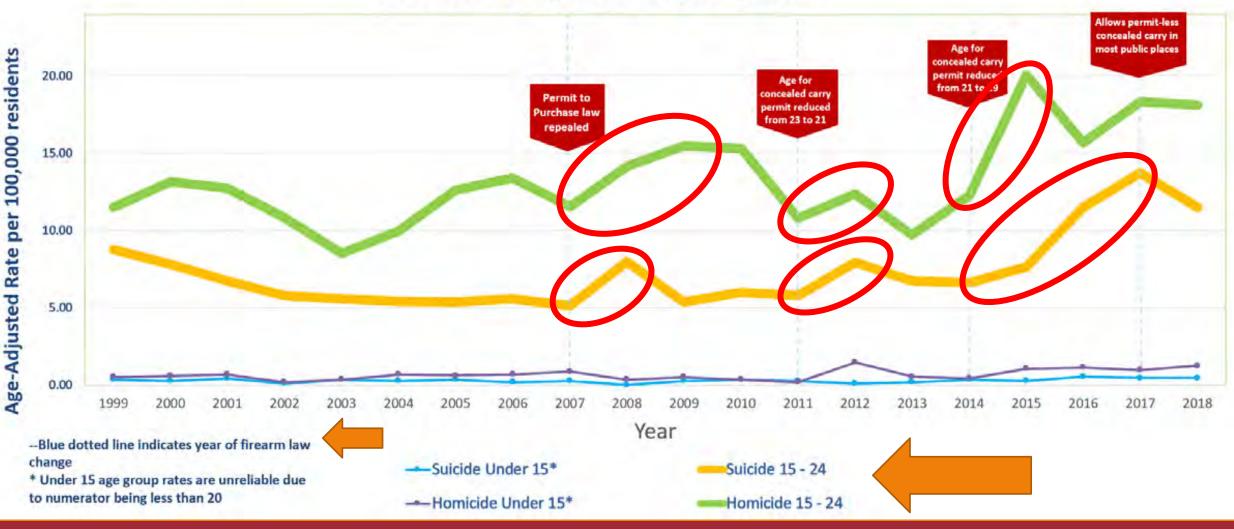
#### The Data: Homicides by Firearm

Data source: Missouri MICA assessment



\*Rate is unreliable; numerator less than 20

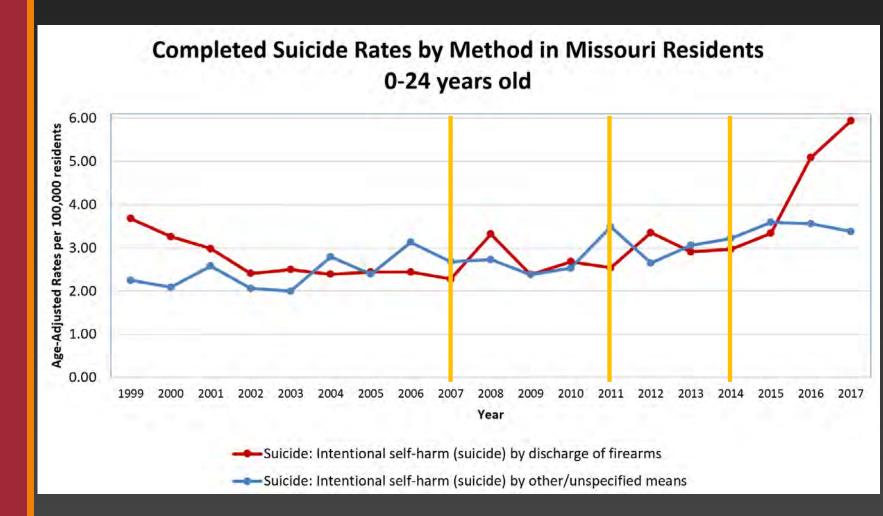
#### Rates of Suicide and Homicide by firearms in young Missouri residents ages 0-24 years old



Data source: Missouri MICA Assessment

#### The Data in Young People: Changes in Methods of Suicide

Following the 2014 law change, suicide by firearms nearly doubled



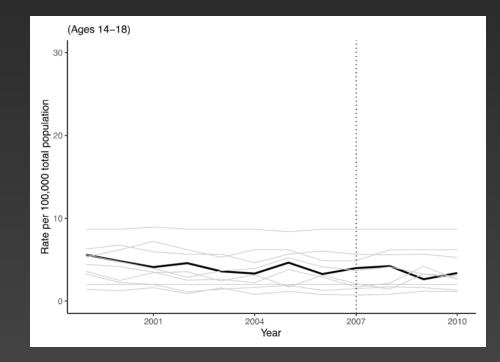
Data source: Missouri MICA Assessment

# The Literature

Created by Komkrit Noenpoempisut from Noun Project

# The Synthetic Control method

- method of evaluating impact of law changes on public health outcomes
- Uses data from comparison states that do not have the intervention to create a "synthetic control group"
- a good synthetic control group resembles the state with the intervention before the intervention occurred
- does not produce traditional p-values
- usually end up with a percent difference between the state with policy change and synthetic control group



# Study 1: Effects of changes in PTP handgun laws in Connecticut and Missouri on Suicide Rates

#### OBJECTIVE

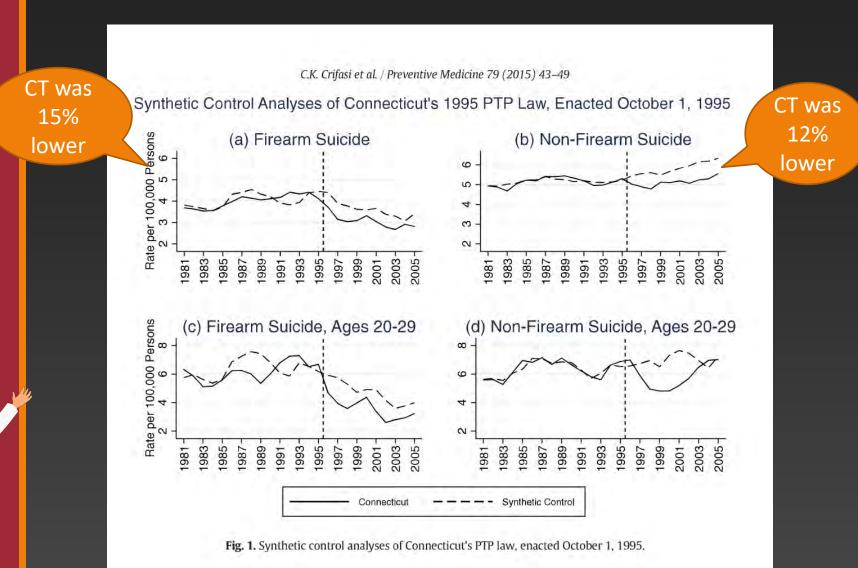
- Study evaluated changes to PTP laws in Connecticut and Missouri on suicide from 1981-2012
- Missouri repealed PTP law (2007)
- Connecticut established a mandatory PTP system (1995)
  - Made it illegal to sell a handgun to anyone who did not have an eligibility certificate
  - Requirement to complete 8-hour handgun safety course

#### **METHODS**

- Used synthetic control model
- Analyses controlled for factors associated with suicide rates: unemployment, poverty, % of population that was male, black, Hispanic, married, completed high school, military veteran, lived in a Metropolitan area, per capita consumption of ethanol, firearm availability, rate of religious adherence

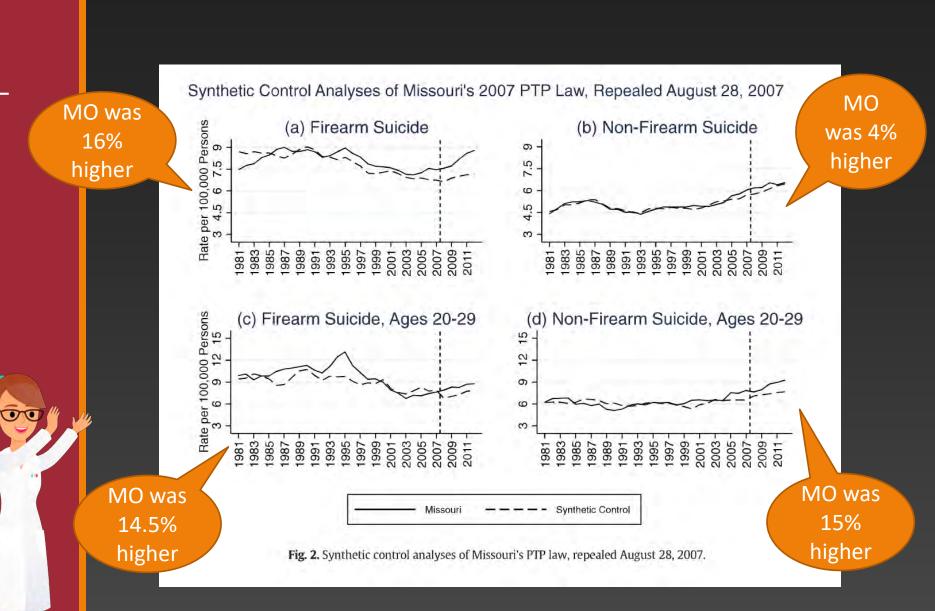
Study 1: Effects of changes in permitto-purchase handgun laws in Connecticut and Missouri on suicide rates

**Results: Connecticut** 



Study 1: Effects of changes in permitto-purchase handgun laws in Connecticut and Missouri on suicide rates

Results: Missouri



# Study 1: Effects of changes in PTP handgun laws in Connecticut and Missouri on suicide rates

#### **MAIN RESULTS**

- •15% **decrease** in firearm suicide rates associated with Connecticut's PTP law
- Repeal of Missouri's PTP law was associated with a 16% **increase** in firearm suicide rates

#### CONCLUSION

 Findings linked firearm availability to increased risk of suicide, and lower suicide risks associated with PTP handgun laws

### Study 2: Effects of the repeal of Missouri's Handgun Purchaser Licensing Law on Homicides

#### **OBJECTIVES**

- Evaluated the impact of Missouri's 2007 repeal of PTP law on state homicide rates
- repeal of the PTP law eliminated mandatory background checks for handguns sold by unlicensed sellers
  - Gave prohibited individuals access to firearms

#### **METHODS**

- Annual state level homicide rates
- Controlled for changes in rates of poverty, unemployment, incarceration, burglary, law enforcement officers per capita, and the presence of 4 laws relevant to lethal violence (Stand Your Ground laws, Right to Carry laws, bans of unsafe handguns (including Saturday Night Specials) and firearm prohibitions for young adults resulting from convictions for serious crimes adjudicated in juvenile courts).
- hypothesized that the law change would affect homicide by firearm rates only
- Missouri vs border states vs USA

Study 2: Effects of the repeal of Missouri's handgun purchaser licensing (PTP) law on homicides

Results: Missouri



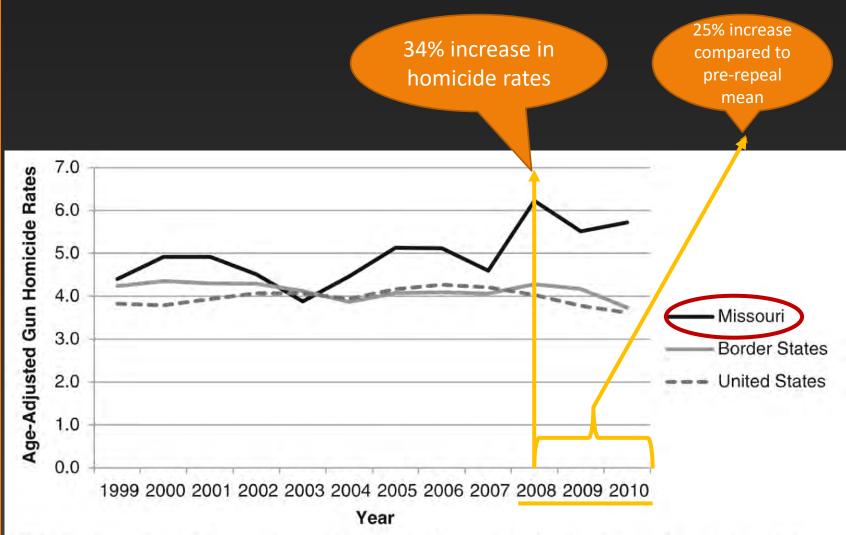


FIG. 1 Age-adjusted firearm homicide rates in Missouri, states bordering Missouri (population-weighted averages), and the USA, 1999–2010.

Webster, Crifasi et al 2014

Study 2: Effects of the repeal of Missouri's handgun purchaser licensing law on homicides

Results: Border States and USA



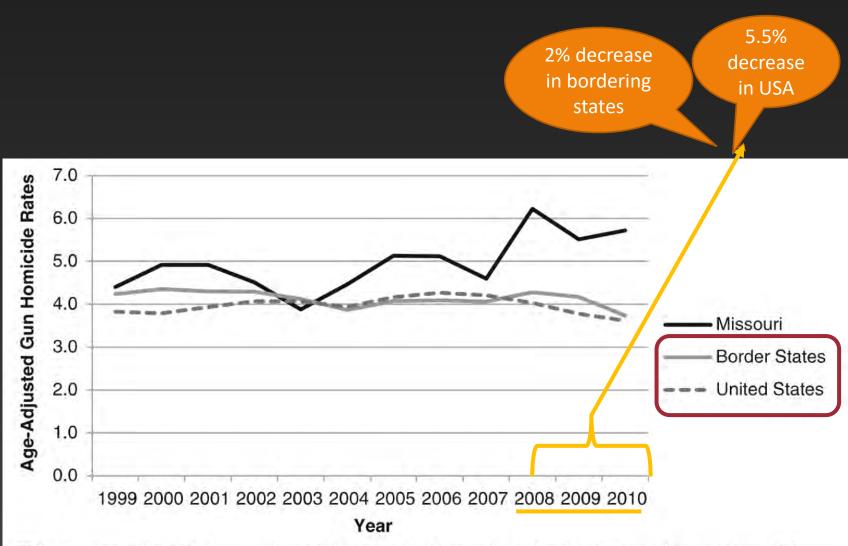


FIG. 1 Age-adjusted firearm homicide rates in Missouri, states bordering Missouri (population-weighted averages), and the USA, 1999–2010.

# Study 2: Evaluating Missouri's handgun purchaser law

#### CONCLUSIONS OF THE STUDY

#### LIMITATIONS OF THE STUDY

- Repeal of Missouri's PTP law was associated with
  - a 23% increase in annual firearm homicide rates
  - no changes in non-firearm homicide rates
  - A 16% increase in annual murder rates (estimated increase of 55-63 homicides/year in Missouri)

- relatively short pre-repeal baseline period
- lack of longitudinal data

# Study 3: Purchaser licensing, point-of-sale background check laws, and firearm homicide and suicide in 4 US states, 1985-2017

#### OBJECTIVE

 To estimate and compare the effects of state background check policies on firearm-related mortality in 4 US states

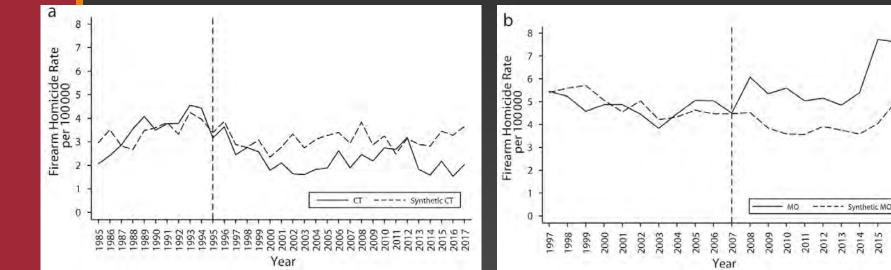
#### METHODS

- Annual data from 1985-2017 were used to examine:
  - Maryland and Pennsylvania (which implemented point-of-sale CBC laws for handgun purchasers)
  - Connecticut (which adopted a handgun purchaser licensing law and ERPO law)
  - Missouri (which repealed a handgun purchaser licensing law)
- Used synthetic control methods to estimate the effects of these laws on firearm and nonfirearm homicide and suicide rates

Study 3: Purchaser licensing, point-ofsale background check laws, and firearm homicide and suicide in 4 US states, 1985-2017

# Law changeFirearm Homicides<br/>(% effect)Non-firearm Homicides<br/>(% effect)Connecticut 1995 PTP<br/>law28% decreaseNo changeMissouri 2007 PTP law<br/>repeal47% increase<br/>(2x increase)18% increase

FIGURE 1—Effects of Purchaser Licensing Laws on Firearm Homicides in (a) Connecticut (Adopted 1995) and (b) Missouri (Repealed 2007)



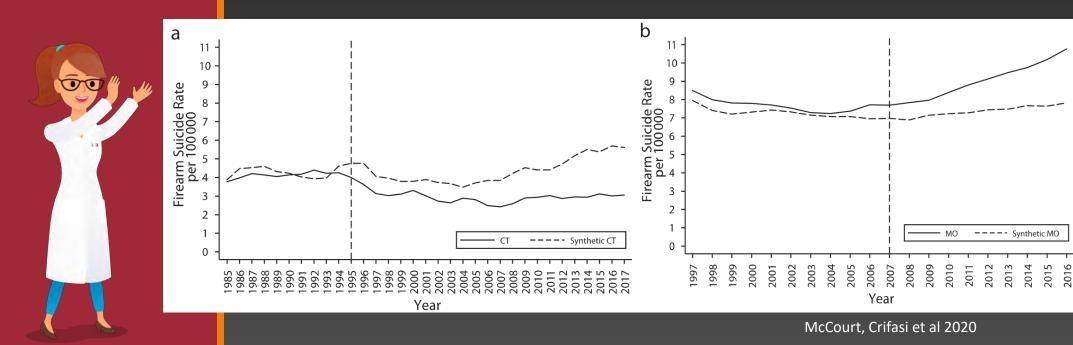
#### <u>RESULTS</u>

 Authors found Purchaser licensing laws (PTP) were more clearly associated with changes in firearm homicide rates

 Connecticut's ERPO law: there weren't that many firearm seizures Study 3: Purchaser licensing, point-ofsale background check laws, and firearm homicide and suicide in 4 US states, 1985-2017

Law change	Firearm Suicides	Non-firearm Suicides
Connecticut 1995 PTP law	33% decrease	3% decrease
Missouri 2007 PTP law repeal	23% increase	7% increase

FIGURE 2—Effects of Purchaser Licensing Laws on Firearm Suicides in (a) Connecticut (Adopted 1995) and (b) Missouri (Repealed 2007)



### Study 3: Purchaser licensing, point-of-sale background check laws, and firearm homicide and suicide in 4 US states, 1985-2017

#### RESULTS

- Found no consistent relationship between CBC laws and firearm mortality in Maryland and Pennsylvania
- Purchasing licensing laws coupled with CBC requirements were consistently associated with lower firearm homicide and suicide rates, but CBC laws alone were not.

#### PUBLIC HEALTH IMPLICATIONS

"Our results contribute to a body of research showing that CBC laws are not associated with reductions in firearm-related deaths unless they are coupled with handgun purchaser licensing laws."

#### Link to paper:





#### Original Investigation | Public Health

#### Association of Changes in Missouri Firearm Laws With Adolescent and Young Adult Suicides by Firearms

Apurva Bhatt, MD; Xi Wang, MS; An-Lin Cheng, PhD; Kalee L. Morris, MS; Luke Beyer, BS; Abbie Chestnut, JD; Kristy Steigerwalt, MLS, PharmD; Jeffrey Metzner, MD

#### Abstract

**IMPORTANCE** Suicide by firearm is a major cause of mortality in young Missouri residents. Changes in statewide firearm policy may have contributed to changes in suicide rates.

**OBJECTIVE** To evaluate if changes in Missouri permit-to-purchase (PTP) and concealed carry firearm laws were associated with changes in rates of suicide by firearms in young Missouri residents.

**DESIGN, SETTINGS, AND PARTICIPANTS** This cross-sectional study examined rates of suicide by firearm in Missouri among adolescents (ages 14-18 years) and young adults (ages 19-24 years) from January 1999 to December 2018, following changes to state PTP and concealed carry law, in comparison with a donor state pool with existing firearm laws (13 states in PTP pool; 42 states in concealed carry pool) that did not make changes during this period. This study used a quasiexperimental, synthetic control design at the state level that defined Missouri as the treated state and treatment as changes in firearm laws.

**EXPOSURES** Legislative changes to Missouri's PTP and concealed carry firearm laws.

MAIN OUTCOMES AND MEASURES Age-adjusted annual rates of firearm-related suicide mortality per 100 000 people for adolescents (aged 14-18 years) and young adults (aged 19-24 years).

#### **Key Points**

Question Were changes in Missouri's firearm laws associated with rates of suicide by firearms in young Missouri residents?

Findings In this cross-sectional study, repeal of the permit-to-purchase law was associated with a 21.8% increase in firearm suicide rates in young adults aged 19 to 24 years in Missouri. Lowering the minimum age of concealed carry to age 19 years in Missouri was associated with increased firearm suicide rates by 32.0% and nonfirearm suicide rates by 29.7% in adolescents aged 14 to 18 years, and increased firearm suicide rates by 7.2% in young adults aged 19 to 24 years.

Monning Those findings suggest that

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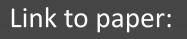
### Study 4: Association of changes in Missouri firearm laws with adolescent and young adult suicides by firearms

#### OBJECTIVES

- To evaluate if changes in Missouri permit-topurchase (PTP) and concealed carry firearm laws were associated with changes in rates of suicide by firearms in young Missouri residents.
  - 2007 repeal of PTP
  - 2011 reduction in Conceal Carry permit age
  - 2014 further reduction in Conceal Carry permit age

#### METHODS

- Examined rates of suicide by firearm in Missouri among adolescents (ages 14-18 years) and young adults (ages 19-24 years) from January 1999 to December 2018
- Synthetic control design that defined Missouri as the "treated state" and "treatment" being changes in firearm laws





### Study 4: Association of changes in Missouri firearm laws with adolescent and young adult suicides by firearms

#### METHODS

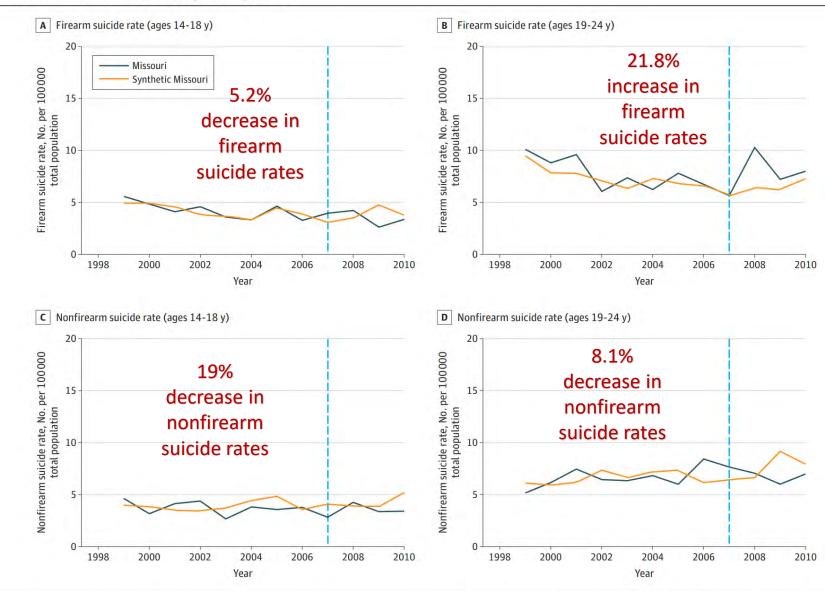
- Confounding variables
  - Rurality (population density)
  - Unemployment rates
  - Percentage of residents below the federal poverty line
  - Educational attainment
  - Household gun ownership

#### ADDITIONAL CONFOUNDING VARIABLES FOR ADOLESCENT GROUP

- depressive symptoms
- seriously considered suicide
- suicidal planning
- suicide attempts
- marijuana use
- heroin use
- binge drinking

Results of Missouri's PTP repeal

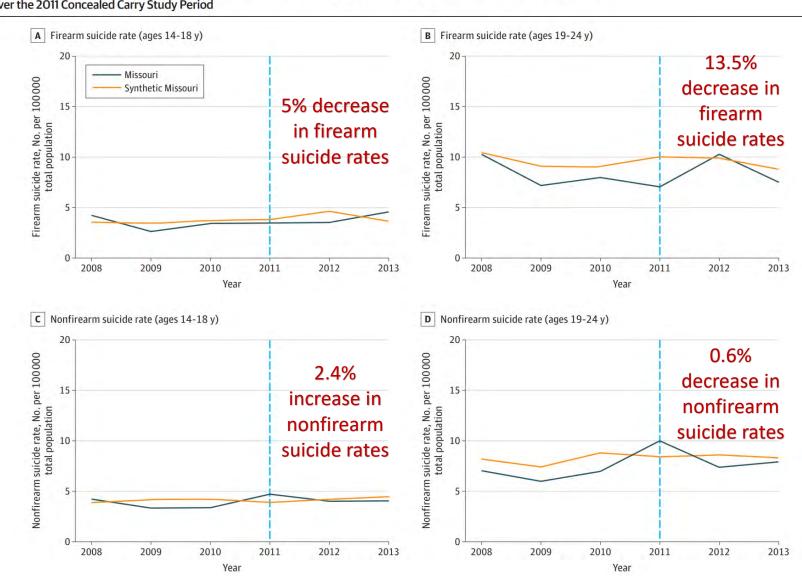
Figure 1. Trend in Annual Rate of Firearm and Nonfirearm Suicides per 100 000 People in Missouri and Synthetic Missouri Over the Permit-to-Purchase (PTP) Repeal Study Period



The blue dotted line indicates the year the PTP repeal was passed in the Missouri state legislature. Synthetic Missouri is a weighted combination of control states that best approximated relevant characteristics of Missouri prior to the law changes examined by the study.

Bhatt et al 2020

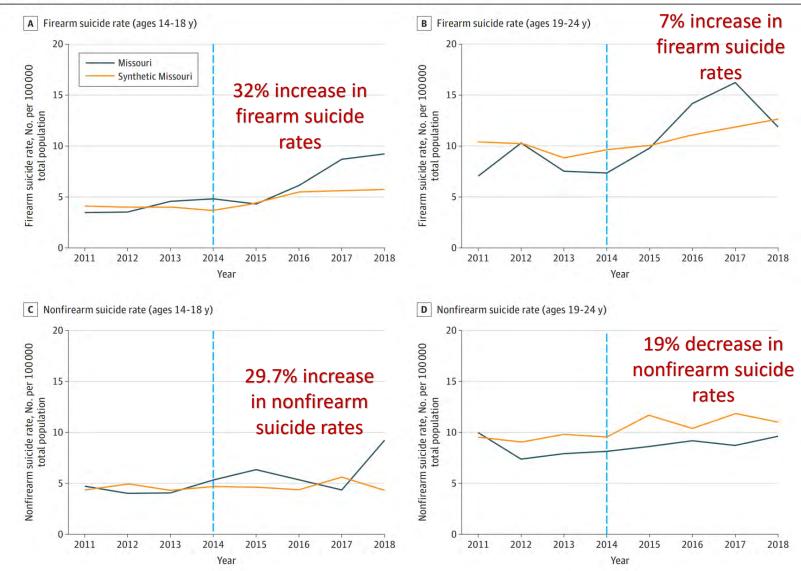
Results of Missouri's lowering of minimum age for Concealed Carry Permit from 23 to 21 years old



The blue dotted line indicates the year the concealed carry law was passed in the Missouri state legislature. Synthetic Missouri is a weighted combination of control states that best approximated relevant characteristics of Missouri prior to the law changes examined by the study.

Figure 2. Trend in Annual Rate of Firearm and Nonfirearm Suicides per 100 000 People in Missouri and Synthetic Missouri Over the 2011 Concealed Carry Study Period

Results of Missouri's lowering of minimum age for Concealed Carry Permit from 21 to 19 years old Figure 3. Trend in Annual Rate of Firearm and Nonfirearm Suicides per 100 000 People in Missouri and Synthetic Missouri Over the 2014 Concealed Carry Study Period



The blue dotted line indicates the year the concealed carry law was passed in the Missouri state legislature. Synthetic Missouri is a weighted combination of control states that best approximated relevant characteristics of Missouri prior to the law changes examined by the study.

Study 4: Association of changes in Missouri firearm laws with adolescent and young adult suicides by firearms

#### CONCLUSIONS

#### LIMITATIONS

 Increases in rates of suicide by firearms in adolescents and young adults were seen in the years following repeal of Missouri's PTP law and the 2014 lowering of the minimum age of Concealed Carry to 19 years old • We did not evaluate the 2017 law change which allowed for permitless carry in most public places (because postintervention period data was limited)

### Learning Objectives

At the conclusion of this activity, the participant will be able to: Recall the timeline of changes in Missouri firearm policy Describe the current state of affairs regarding Missouri firearm law

Review the scientific literature on Missouri firearm law and suicide and homicide Describe how firearm status impacts suicide by firearms/suicide risk in youth

Identify future preventive strategies to mitigate suicide by firearms in the state

# Firearm access and suicide/homicide risk



For many individuals attempting suicide, the time between suicidal ideation and attempt can be as little as 10 minutes. If a person's access to lethal means can be restricted during periods of distress or impulsivity, a suicide may be prevented.

 Skills for different aspects of decision-making reach maturity at different rates



Grisso et al (1980, 2003)

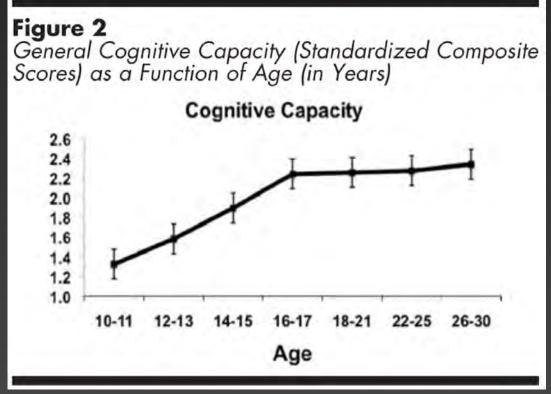
#### • "Are Adolescents Less Mature than Adults?"

#### •The MacArthur Juvenile Capacity Study

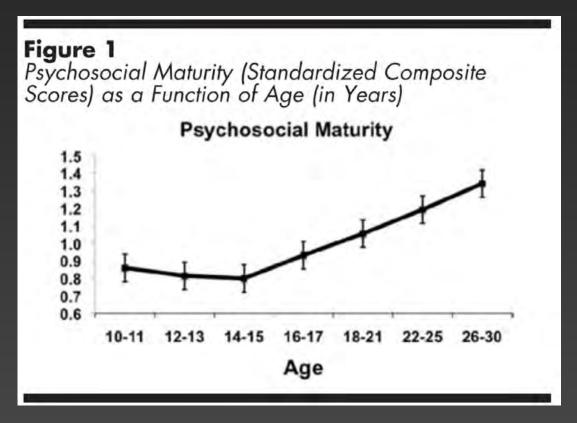
 Designed to examine age differences in cognitive and psychosocial capacities relevant to maturity of adolescents and adults

#### Cognitive skills (working memory, digit span, verbal fluency)

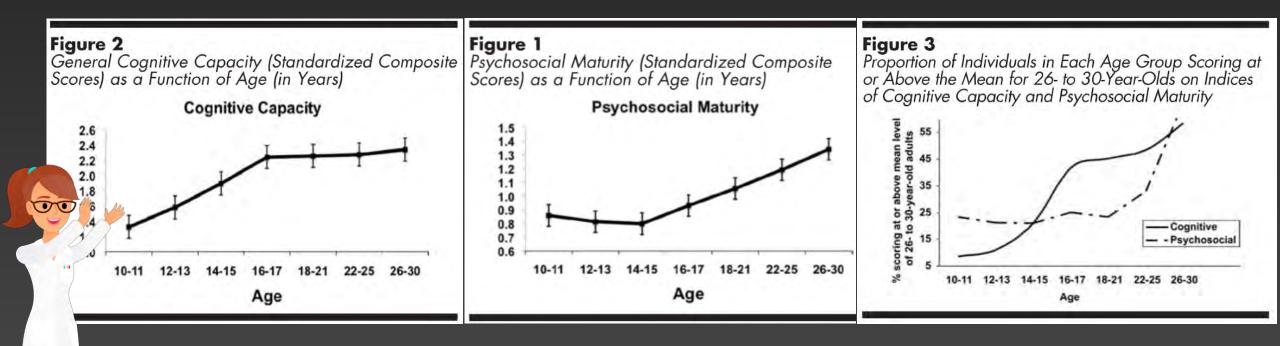
• They found that these skills improved with age only until age 16. After that, they didn't do much better than those who were age 20s.



- Psychosocial maturity (risk perception, sensation seeking, impulsivity, resistance to the influence of peers, and future orientation)
  - These skills didn't start showing differences until age 16 years old
  - Continued to differ (18-21 year olds did worse than age 26 years and older)
  - 15 year olds did not perform better than 10 year olds in this domain



#### By 16 years old: cognitively mature, but psychosocially still immature



#### • Steinberg et al 2009 concluded that

#### Adolescents (by age 16) are likely to be capable of adult-level decision making in situations where:

- Deliberative, reasoned decision making is permitted
- With minimal social and emotional influences
- And with adult consultants available

#### Adolescents (at least until 18) are likely to make IMMATURE decisions in situations

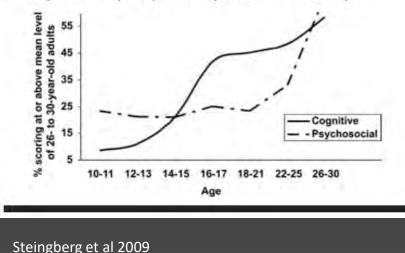
- Eliciting impulsivity
- With high levels of emotional arousal
- Where there is social coercion
- That don't encourage expert consultation

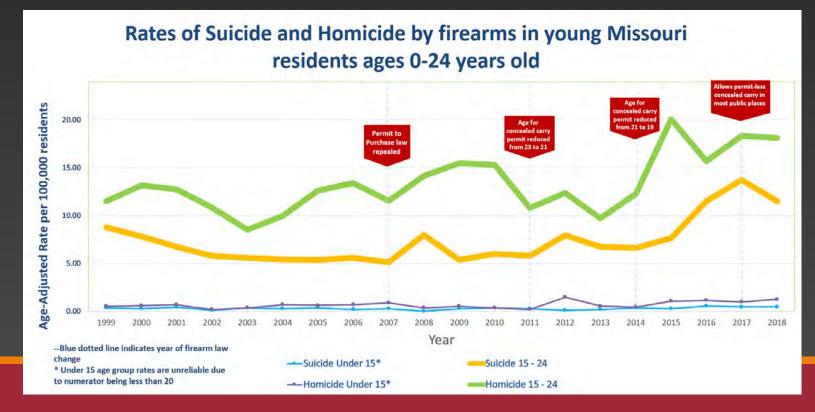
## This becomes relevant with the lowering for age for Concealed Carry Permit in MO

 When adolescents/young adults are thinking about suicide/homicide, they are likely to make these decisions without logical reflection, without adult consultation, and without considering the risks of their actions

#### Figure 3

Proportion of Individuals in Each Age Group Scoring at or Above the Mean for 26- to 30-Year-Olds on Indices of Cognitive Capacity and Psychosocial Maturity



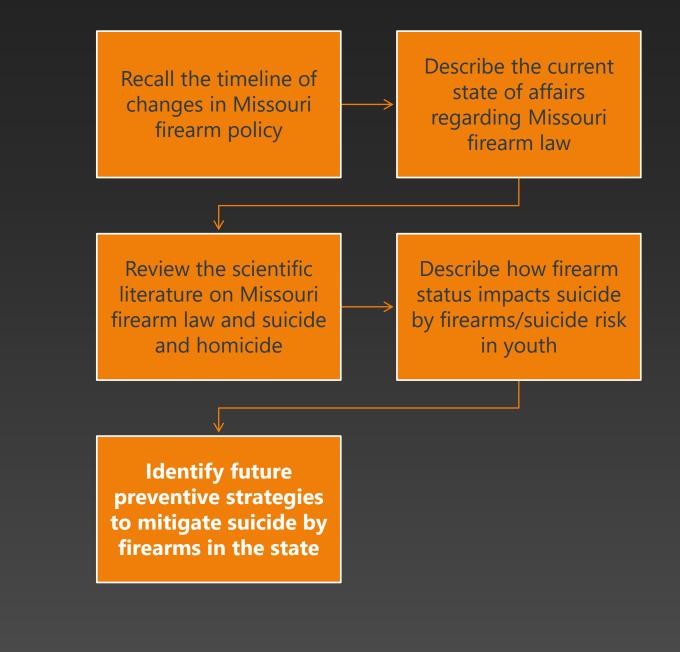


## CALL TO ACTION: What can YOU do?

Image from the Vox

### Learning Objectives

At the conclusion of this activity, the participant will be able to:



### INTERVENTIONS:

Screening/Counselling for gun safety Gun safety (gun locks) Legislative Advocacy



Image from the Vox

### Firearm safety screening/counselling

- *Pediatrics* study on office-based counselling about <u>firearm storage</u>
  - Asked if there was a firearm in the home,
  - did brief motivational interviewing to discuss safe firearm storage
  - gave out a free cable lock to family
- In this national RCT, they found that parents who received the safety lock had safer firearm storage
- This is an evidenced based practice now (American Academy of Pediatrics guidelines)



Created by supalerk laipawat from Noun Project

## Can healthcare professionals in Missouri ask their patients about firearms access?

A. Yes

**B.** No, I heard there's a gag order..

C. I don't know....

SECOND REGULAR SESSION [TRULY AGREED TO AND FINALLY PASSED] CONFERENCE COMMITTEE SUBSTITUTE FOR HOUSE COMMITTEE SUBSTITUTE FOR

### **SENATE BILL NO. 656**

97TH GENERAL ASSEMBLY

2014

5082S.04T

#### AN ACT

To repeal sections 21.750, 84.340, 571.030, 571.101, 571.107, 571.111, 571.117,

575.153, 590.010, and 590.205, RSMo, and to enact in lieu thereof sixteen new

sections relating to firearms, with penalty provisions.

Be it enacted by the General Assembly of the State of Missouri, as follows:

### Missouri does not really have a "gag" rule for healthcare professionals

### Missouri Senate Bill 656

"Nothing in this section shall be construed as prohibiting or restricting a health care professional from inquiring about and documenting whether a patient owns or has access to a firearm if such inquiry or documentation is necessitated or medically indicated by the health care professional's judgement"



## CALL TO ACTION:

# Counsel on firearm safety



### How to Counsel

Source: Bullet Points Project by UC Davis

Clinicians can learn how to effectively talk with patients about risk, access to firearms, and safety.

The clinician's goal is to reduce access to those at risk.



The BulletPoints Project

Clinical tools for preventing firearm injury

Created by supalerk laipawat from Noun Project 

### How to Counsel

## 1. Be informed and respectful

Source: Bullet Points Project by UC Davis



#### The BulletPoints Project

Clinical tools for preventing firearm injury

- Conversations about reducing risk of firearm injury will be more effective if clinicians understand and respect the reasons people own guns
- Focus should be on the patient's and clinician's shared interest- the health and safety of the patient and their family
- Avoid opinions and politics about firearms
- Use appropriate language
  - If a clinician is concerned about a patient's access to a firearm:
  - Don't use: "surrender," "seize," or "confiscate"
  - Use: "hold for safekeeping," "keep safe," or "Recover"
  - Words like "temporary" or "voluntary" emphasize the time-limited nature of crisis and can help maintain patient autonomy



### 2. Assess risk for firearm-related harm

Source: Bullet Points Project by UC Davis

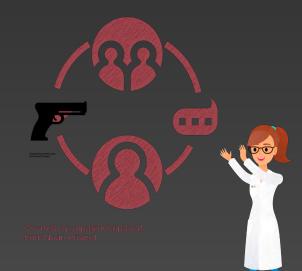


#### The BulletPoints Project

Clinical tools for preventing firearm injury

The following increase the risk for firearm injury in households with guns:

- Alcohol or drug misuse
- History of violence (domestic violence, interpersonal violence)
- Early psychosis, paranoia, or command auditory hallucinations
- Depression
- History of suicidal thoughts or attempts
- Dementia or other cognitive impairment
- Children in the home
- Active suicidal ideation
- Active intent to harm others
- Unsafe gun storage



## Establish context and ask about access

Source: Bullet Points Project by UC Davis



The BulletPoints Project

Clinical tools for preventing firearm injury

Establish a context that makes the question about firearm access relevant to the patient's health and safety:

 "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 family member. This is just temporary until they're feeling better. Is this something you'd be willing to consider?"

• "I ask all caregivers about things that pose a risk to their families: pools, medications, firearms. Do you have any of those things at your house? What kind of safety measures do you have in place?"

• "It sounds like he's not doing well. I worry that if things escalate to a crisis, he might try to use one of the guns in the home. Have you thought about ways to make them inaccessible, to keep everyone in your home safe?"

## Establish context and ask about access

Source: Bullet Points Project by UC Davis



The BulletPoints Project

Clinical tools for preventing firearm injury

Acknowledge patients' reasons for owning guns:

- Gun ownership may be an important part of their identity
- Protection
- other reasons



4. Engage in riskbased, contextspecific counseling

Source: Bullet Points Project by UC Davis



The BulletPoints Project

Clinical tools for preventing firearm injury

After the clinician identifies that a patient at risk as access to firearms, they should collaborate with the patient to find acceptable and realistic solutions for reducing access.

#### Examples of escalating risk and interventions

Level of risk	Examples	Intervention	Learn more
Patients or others in the home have risk factors for unintentional injury only	Children in the home	Safe storage in the home that renders guns inaccessible to unauthorized users	<u>Safe storage</u>
Patients or others in the home have chronic or intermittent risk factors for intentional injury but are not at acute risk	Depression without suicidal ideation, past history of suicide attempts, heavy drinking, history of domestic violence, dementia	Voluntary, temporary storage outside home	<u>Temporary</u> <u>transfers</u>
Patients or others in the home are in an acute crisis that could become lethal with access to firearms	Active suicidal ideation, active threats of harm against others, acute risk of domestic violence	Immediate separation from firearms	<u>Civil protective</u> orders, mental health holds

### 5. Follow up with continued discussions

Source: Bullet Points Project by UC Davis



The BulletPoints Project

Clinical tools for preventing firearm injury

Risk for firearm injury is dynamic.

Checking in at future visits about changes in risk keeps the conversation about firearms open.

Created by supalerk laipawat from Noun Project 

## CALL TO ACTION:

## Know Safe Gun Storage

Image from the Vox

**41%** of adolescents in gun-owning households report having "easy access" to the guns in their homes.



Source: Li G, Baker SP, Discala C, Fowler C, Ling J, Kelen GD. Factors associated with the intent of firearmrelated injuries in pediatric trauma patients. Archives of Pediatric & Adolescent Med.1996;1160–1162. **BeSMARTforKids.org** 

## Safe gun storage

As families practice social distancing due to Covid-19, many children and teens are isolated, anxious and bored. Assume children and teens can find guns. Store firearms locked, unloaded and separate from ammunition. Assume children and teens can find guns. Store firearms locked, unloaded and separate from ammunition.





BeSMARTforKids.org

# BE

#### Secure

all guns in your home and vehicles

responsible behavior around guns

Model

Ask about the presence of unsecured guns in other homes

the role of guns in suicide

Recognize Tell your peers to

**be SMART** 

For more information on what you can do to keep kids safe, visit BeSmartForKids.org

### **GUN STORAGE** FOR YOUR LIFESTYLE

As a gun owner, you can choose from multiple options for safely storing and protecting your firearms when they're not in use.

A RANGE OF OPTIONS

Use this guide to determine which mechanism best suits your lifestyle, priorities and environment.

#### **CABLE LOCK** Price Range: \$10-\$50

A cable lock can be used on most firearms, allows for quick acess in an emergency and offers security from theft. The cable runs through the barrel or action of a firearm to prevent it from being accidentally fired, requiring either a key or combination to unlock it.

#### AFFORDABLE ACCESSIBLE THEFT DETERRENT

S AFFORDABLE

PORTABLE

PROTECTS

FROM DAMAGE

#### GUN CASE Price Range: \$10-\$150

For those looking to conceal, protect or legally transport a registered firearm, a gun case is an affordable solution available in a variety of materials including plastic, fabric or metal. Be sure to lock it with an external device for added security.

#### LOCK BOX

**LUCK BUX** Price Range: \$25-\$350 With integrated locks, storage boxes provide reliable protection for firearms, and allow gun owners to legally transport them outside of their home. PORTABLE
ACCESSIBLE
PROTECTS

PORTABLE

DETERRENT

FROM DAMAGE

PROTECTS

THEFT

FROM DAMAGE

ELECTI Price Ra Electror

#### ELECTRONIC LOCK BOX Price Range: \$50-\$350

Electronic lock boxes are an effective way to store or legally transport firearms, and they also prevent theft since only the person with the code can access the contents. Some electronic lock boxes are specially designed for quick access to stored firearms.

#### PLEASE HELP PREVENT ACCIDENTS. STORE FIREARMS RESPONSIBLY.

These are just a few of the storage options available to firearms owners. For the greatest level of security, consider using a combination of safety mechanisms and educate family members about handling firearms properly.

To learn more about firearms safety, visit ProjectChildSafe.org



#### FULL SIZE AND BIOMETRIC GUN SAFES

Price Range: \$200-\$2,500

A gun safe protects its contents from the elements and allows owners to safely store multiple firearms in one place. Gun safes of all sizes are now available with biometric options to ensure only certain people have access.

**VEHICLE STORAGE** 

SECURE STORAGE ACCESSORIES



PROTECTS FROM DAMAGE



visit ProjectChildSafe.org

Project ChildSafe is a program of the National Shooting Sports Foundation®



ACCESSIBLE

PROTECTS FROM DAMAGE

#### **CONSOLE STORAGE** Price Range: \$250 - \$300

A solution for those who need a truly secure place to store their firearm in a vehicle. These custom-fitted devices provide concealment to deter prying eyes and would-be thieves. Various access options are available, including biometric.



 THEFT DETERRENT
ACCESSIBLE
PROTECTS FROM DAMAGE

#### CARGO AREA STORAGE

Price Range: \$500 - \$1,500

Effective for transporting firearms to the range or field, cargo area storage models are available for sedans, SUVs and trucks. These devices allow for locked storage, concealment and protection from bumps and jostling.



#### WIRELESS GUN SAFE MONITOR Price Range: \$150 - \$200

An electronic monitor can provide awareness and alert you if anyone is accessing your storage device or handling your firearm without your authorization. Some sound an audible alarm, others can be connected to your smartphone.



#### ELECTRONIC HOLSTERS

Price Range: \$200 - \$300

Electronic holsters are a new type of secure storage device that enable fast access along with security to prevent unauthorized access. Holsters can be mounted or used independent of a mounting system and feature a programmable finger or thumbprint scan.



#### **NSSF** The Firearm Industry Trade Association



## CALL TO ACTION:

## Advocate for gun safety

Image from the Vox

## SENATE BILL 543

• Sponsored by Senator Jamilah Nasheed of St. Louis

 Creates a "firearms restraining order" which prohibits the custody, purchasing, possessing, or receiving of firearms by a person believed to pose a danger of causing injury to themselves or others by use of a weapon.

#### Currently sitting in Committee

• Various other versions of this bill have been introduced since at least 2018 (SB 42 is one example)

#### SECOND REGULAR SESSION **SENATE BILL NO. 543 100TH GENERAL ASSEMBLY** INTRODUCED BY SENATOR NASHEED. Pre-filed December 1, 2019, and ordered printed ADRIANE D. CROUSE, Secretary 38315 011 AN ACT To repeal section 455.010, RSMo, and to enact in lieu thereof sixteen new sections relating to firearms restraining orders, with penalty provisions. Be it enacted by the General Assembly of the State of Missouri, as follows: Section A. Section 455,010, RSMo, is repealed and sixteen new sections 2 enacted in lieu thereof, to be known as sections 455.010, 455.100, 455.103, 3 455.106, 455.109, 455.112, 455.115, 455.118, 455.121, 455.124, 455.127, 455.130, 4 455.133, 455.136, 455.139, and 455.142, to read as follows: 455.010. As used in this chapter, unless the context clearly indicates 2 otherwise, the following terms shall mean: (1) "Abuse" includes but is not limited to the occurrence of any of the 3 4 following acts, attempts or threats against a person who may be protected 5 pursuant to this chapter, except abuse shall not include abuse inflicted on a child 6 by accidental means by an adult household member or discipline of a child, 7 including spanking, in a reasonable manner: 8 (a) "Assault", purposely or knowingly placing or attempting to place 9 another in fear of physical harm; 10 (b) "Battery", purposely or knowingly causing physical harm to another

11 with or without a deadly weapon;

(Missouri Legislative Information)

GET INVOLVED:

- Project ChildSafe
- Moms Demand Action Missouri
- Everytown for Gun Safety
- Grandparents Against Gun Violence
- AFFIRM

## Take Home Points

 Missouri's PTP law and concealed carry law changes had important impacts on rates of suicide and homicide by firearms in Missouri

• Rates of suicide and homicide by firearms are a growing problem in Missouri youth

• THIS IS OUR LANE.

### YOU CAN MAKE A DIFFERENCE.

- 1.AACAP. (n.d.-a). Firearms and Children. Retrieved October 25, 2020, from Aacap.org website: https://www.aacap.org/AACAP/AACAP/Families\_and\_Youth/Facts\_for\_Families/FFF-Guide/Children-And-Firearms-037.aspx
- 2.AACAP. (n.d.-b). Suicide safety: Precautions at home. Retrieved October 25, 2020, from Aacap.org website: https://www.aacap.org/AACAP/AACAP/Families\_and\_Youth/Facts\_for\_Families/FFF-Guide/suicide-safety-130.aspx
- 3. American Academy of Child and Adolescent Psychiatry. (2001). Summary of the practice parameters for the assessment and treatment of children and adolescents with suicidal behavior. Journal of the American Academy of Child and Adolescent Psychiatry, 40(4), 495–499.
- 4. Anestis, M. D., & Anestis, J. C. (2015). Suicide rates and state laws regulating access and exposure to handguns. American Journal of Public Health, 105(10), 2049–2058.
- 5. Anestis, M. D., Khazem, L. R., Law, K. C., Houtsma, C., LeTard, R., Moberg, F., & Martin, R. (2015). The association between state laws regulating handgun ownership and statewide suicide rates. American Journal of Public Health, 105(10), 2059–2067.
- 6.Barkin, S. L., Finch, S. A., Ip, E. H., Scheindlin, B., Craig, J. A., Steffes, J., ... Wasserman, R. C. (2008). Is office-based counseling about media use, timeouts, and firearm storage effective? Results from a cluster-randomized, controlled trial. Pediatrics, 122(1), e15-25.
- 7.Bhatt, A., Wang, X., Cheng, A.-L., Morris, K. L., Beyer, L., Chestnut, A., ... Metzner, J. (2020). Association of changes in Missouri firearm laws with adolescent and young adult suicides by firearms. JAMA Network Open, 3(11), e2024303–e2024303.
- 8.Boggs, J. M., Beck, A., Hubley, S., Peterson, E. L., Hu, Y., Williams, L. K., ... Ahmedani, B. K. (2018). General medical, mental health, and demographic risk factors associated with suicide by firearm compared with other means. Psychiatric Services (Washington, D.C.), 69(6), 677–684.
- 9. Crifasi, C. K., Meyers, J. S., Vernick, J. S., & Webster, D. W. (2015). Effects of changes in permit-to-purchase handgun laws in Connecticut and Missouri on suicide rates. Preventive Medicine, 79, 43–49.
- 10.Curtin SC. State suicide rates among adolescents and young adults aged 10–24: United States, 2000–2018. National Vital Statistics Reports; vol 69 no 11. Hyattsville, MD: National Center for Health Statistics. 2020.

- **11.** Effects of licensing and permitting requirements on suicide. (n.d.). Retrieved October 26, 2020, from Rand.org website: https://www.rand.org/research/gun-policy/analysis/license-to-own/suicide.html
- **12**. Grisso, T. (1980). Juveniles' capacities to waive Miranda rights: An empirical analysis. California Law Review, 68(6), 1134.
- **13**. Grisso, T., Steinberg, L., Woolard, J., Cauffman, E., Scott, E., Graham, S., ... Schwartz, R. (2003). Juveniles' competence to stand trial: a comparison of adolescents' and adults' capacities as trial defendants. Law and Human Behavior, 27(4), 333–363.
- 14. Hasegawa, R. B., Webster, D. W., & Small, D. S. (2019). Evaluating Missouri's handgun purchaser law: A bracketing method for addressing concerns about history interacting with group. Epidemiology (Cambridge, Mass.), 30(3), 371–379.
- 15. How to counsel. (2020, June 26). Retrieved January 3, 2021, from Bulletpointsproject.org website: https://www.bulletpointsproject.org/how-to-counsel/
- **16.** Kapusta, N. D., & Cramer, R. J. (2017). Firearm suicide in the United States from a broader preventive perspective. The American Journal of Psychiatry, 174(1), 77–78.
- 17. Kivisto, A. J., & Phalen, P. L. (2018). Effects of risk-based firearm seizure laws in Connecticut and Indiana on suicide rates, 1981-2015. Psychiatric Services (Washington, D.C.), 69(8), 855–862.
- 18. Kohrman, M. (2017, May 15). From armed rebellions to permitless carry: A brief history of guns in Missouri. Retrieved December 14, 2020, from Thetrace.org website: <u>https://www.thetrace.org/2017/05/armed-rebellions-permitless-carry-brief-history-guns-missouri/</u>
- **19**. Mascia, J. (2020, May 20). People keep shooting each other over Coronavirus restrictions. Retrieved December 20, 2020, from Thetrace.org website: https://www.thetrace.org/2020/05/coronavirus-restrictions-social-distancing-shootings-tracker/
- 20. McCourt, A. D., Crifasi, C. K., Stuart, E. A., Vernick, J. S., Kagawa, R. M. C., Wintemute, G. J., & Webster, D. W. (2020). Purchaser licensing, point-of-sale background check laws, and firearm homicide and suicide in 4 US states, 1985-2017. American Journal of Public Health, 110(10), e1–e7.

- 21. McNiel, D. E., Weaver, C. M., & Hall, S. E. (2007). Base rates of firearm possession by hospitalized psychiatric patients. Psychiatric Services (Washington, D.C.), 58(4), 551–553.
- 22. Missouri concealed firearms, proposition B (April 1999). (n.d.). Retrieved December 3, 2020, from Ballotpedia.org website: https://ballotpedia.org/Missouri Concealed Firearms, Proposition B (April 1999)
- 23. Missouri Department of Health and Senior Services. Missouri Information for Community Assessment. Retrieved from <a href="https://healthapps.dhss.mo.gov/MoPhims/MICAHome">https://healthapps.dhss.mo.gov/MoPhims/MICAHome</a>. Accessed August 20, 2019.
- 24. Missouri law allows armed teachers; schools are using something else. (2018, March 27). Retrieved December 16, 2020, from Stlpublicradio.org website: <a href="https://news.stlpublicradio.org/education/2018-03-27/missouri-law-allows-armed-teachers-schools-are-using-something-else">https://news.stlpublicradio.org/education/2018-03-27/missouri-law-allows-armed-teachers-schools-are-using-something-else</a>
- 25. Missouri Legislative Information. Statute history: 571.030. Unlawful use of weapons-exceptions-penalties. Revised January 1, 2017. Accessed January 20, 2020. https://revisor.mo.gov/main/OneSection.aspx?section=571.030
- 26. Missouri Legislative Information. Statute history: 571.101(2012). Concealed carry permits, application requirements—approval procedures—issuance, when—information on permit—fees. Revised August 28, 2014. Accessed August 7, 2020. <a href="https://revisor.mo.gov/main/OneSection.aspx?section=571.101">https://revisor.mo.gov/main/OneSection.aspx?section=571.101</a>
- 27. Missouri Legislative Information. Bill history: SB-298. Lowers the minimum age for an applicant of a concealed carry endorsement from twenty-three to twenty-one. Accessed January 23, 2020. <u>https://www.senate.mo.gov/11info/BTS\_Web/Bill.aspx?SessionType=R&BillID=4154350</u>
- 28. Missouri voters defeat ballot measure to allow concealed handguns. (1999, April 7). Washington Post (Washington, D.C.: 1974). Retrieved from https://www.washingtonpost.com/archive/politics/1999/04/07/missouri-voters-defeat-ballot-measure-to-allow-concealed-handguns/3bc416c2-3fe4-4cd4-b964-3ded8ab4cba5/
- 29. Moyer, M. W. (2020, July 8). Early research links Coronavirus gun sales surge to increased shootings. Retrieved December 20, 2020, from Thetrace.org website: https://www.thetrace.org/2020/07/coronavirus-gun-sales-increased-shootings-study/
- 30. Norris, D. M., Price, M., Gutheil, T., & Reid, W. H. (2006). Firearm laws, patients, and the roles of psychiatrists. The American Journal of Psychiatry, 163(8), 1392–1396.
- **31.** Resnick, B. (2019, February 28). A promising new clue to prevent teen suicide: empower adults who care. Retrieved March 3, 2021, from Vox website: https://www.vox.com/science-and-health/2019/2/28/18234667/teen-suicide-prevention

- **32.** Resource library. (2020, May 25). Retrieved January 3, 2021, from Projectchildsafe.org website: https://projectchildsafe.org/resource-library/
- **33**. Resources and tools Be smart. (2015, April 16). Retrieved January 3, 2021, from Besmartforkids.org website: https://besmartforkids.org/resources/
- 34. Robertson, E. L., Frick, P. J., Walker, T. M., Kemp, E. C., Ray, J. V., Thornton, L. C., ... Cauffman, E. (2020). Callous-unemotional traits and risk of gun carrying and use during crime. The American Journal of Psychiatry, 177(9), 827–833.
- **35.** Rodrick, S. (2019, May 30). All-American Despair. Retrieved December 21, 2020, from Rollingstone.com website: https://www.rollingstone.com/culture/culture-features/suicide-rate-america-white-men-841576/
- 36. Rudolph, K. E., Stuart, E. A., Vernick, J. S., & Webster, D. W. (2015). Association between Connecticut's permit-to-purchase handgun law and homicides. American Journal of Public Health, 105(8), e49-54.
- 37. Sacks, C. A., & Bartels, S. J. (2020). Reconsidering risks of gun ownership and suicide in unprecedented times. The New England Journal of Medicine, 382(23), 2259–2260.
- 38. SB543 Creates new provisions relating to firearm restraining orders. (n.d.). Retrieved January 4, 2021, from Senate.mo.gov website: https://www.senate.mo.gov/20info/BTS\_Web/Bill.aspx?SessionType=R&BillD=26838183
- **39**. SB656 Modifies provisions relating to firearms and corporate security advisors. (n.d.). Retrieved March 3, 2021, from Senate.mo.gov website: https://www.senate.mo.gov/14info/BTS\_Web/Bill.aspx?SessionType=R&BillID=28098814
- 40. Simonetti, J. A., & Brenner, L. A. (2020). Promoting firearm safety as a suicide prevention strategy within health care systems: Challenges and recommendations. Psychiatric Services (Washington, D.C.), 71(3), 298–300.
- **41.** Steinberg, L., Cauffman, E., Woolard, J., Graham, S., & Banich, M. (2009). Are adolescents less mature than adults?: minors' access to abortion, the juvenile death penalty, and the alleged APA "flip-flop." The American Psychologist, 64(7), 583–594.
- 42. Studdert, D. M., Zhang, Y., Swanson, S. A., Prince, L., Rodden, J. A., Holsinger, E. E., ... Miller, M. (2020). Handgun ownership and suicide in California. The New England Journal of Medicine, 382(23), 2220–2229.

- 43. Suicide rates among young people spiked after Missouri loosened gun laws, study finds. (2020, November 30). Retrieved December 21, 2020, from Stlpublicradio.org website: https://news.stlpublicradio.org/health-science-environment/2020-11-30/suicide-rates-among-young-people-spiked-after-missouri-loosened-gun-laws-study-finds
- 44. Swanson, J. W. (2020). Preventing suicide through better firearm safety policy in the United States. Psychiatric Services (Washington, D.C.), appips202000317.
- **45.** Swanson, J. W., Norko, P. M. A., Lin, M. H.-J., Alanis-Hirsch, P. K., Frisman, P. L. K., Baranoski, P. M. V., ... Bonnie, R. J. (n.d.). Implementation and effectiveness of Connecticut's risk-based gun removal law: Does it prevent suicides? Retrieved October 25, 2020, from Duke.edu website: https://scholarship.law.duke.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=4830&context=lcp
- **46.** Vars, F., & Ayres, I. (2020, October 14). Suicide accounts for most gun deaths. A libertarian approach could help. Wall Street Journal (Eastern Ed.). Retrieved from https://www.wsj.com/articles/suicide-accounts-for-most-gun-deaths-a-libertarian-approach-could-help-11602717798
- **47.** Webster, D., Crifasi, C. K., & Vernick, J. S. (2014). Effects of the repeal of Missouri's handgun purchaser licensing law on homicides. Journal of Urban Health: Bulletin of the New York Academy of Medicine, 91(2), 293–302.
- 48. Wikipedia contributors. (2020, November 14). 1999 Missouri Proposition B. Retrieved December 3, 2020, from Wikipedia, The Free Encyclopedia website: https://en.wikipedia.org/w/index.php?title=1999\_Missouri\_Proposition\_B&oldid=988576231

## Thank you!

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