



# CHALLENGING THE INEVITABILITY OF SUICIDE

THE EFFECT OF GUN REGULATION ON OVERALL SUICIDE RATES AND PORTFOLIO OF PREVENTATIVE MEASURES

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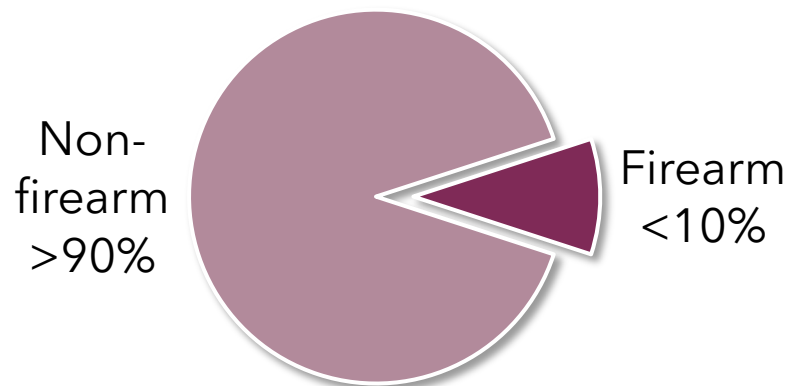
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# THE BURDEN OF FIREARM SUICIDES

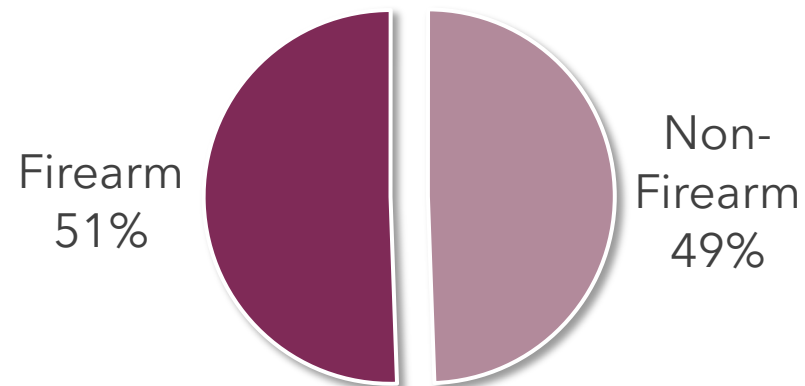
## Burden of Firearm Suicides

### Est. Suicide Attempts



Est. number of suicide attempts in 2017 = 1.4m

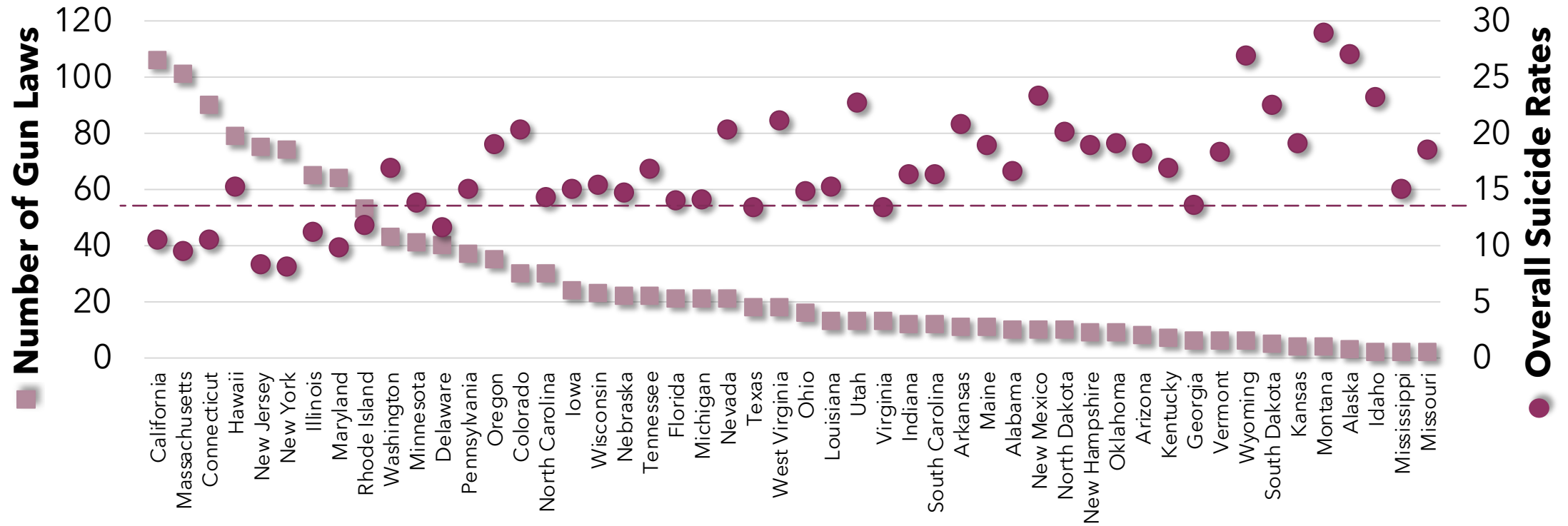
### Suicide Fatalities



Number of suicides in 2017 = 47,173

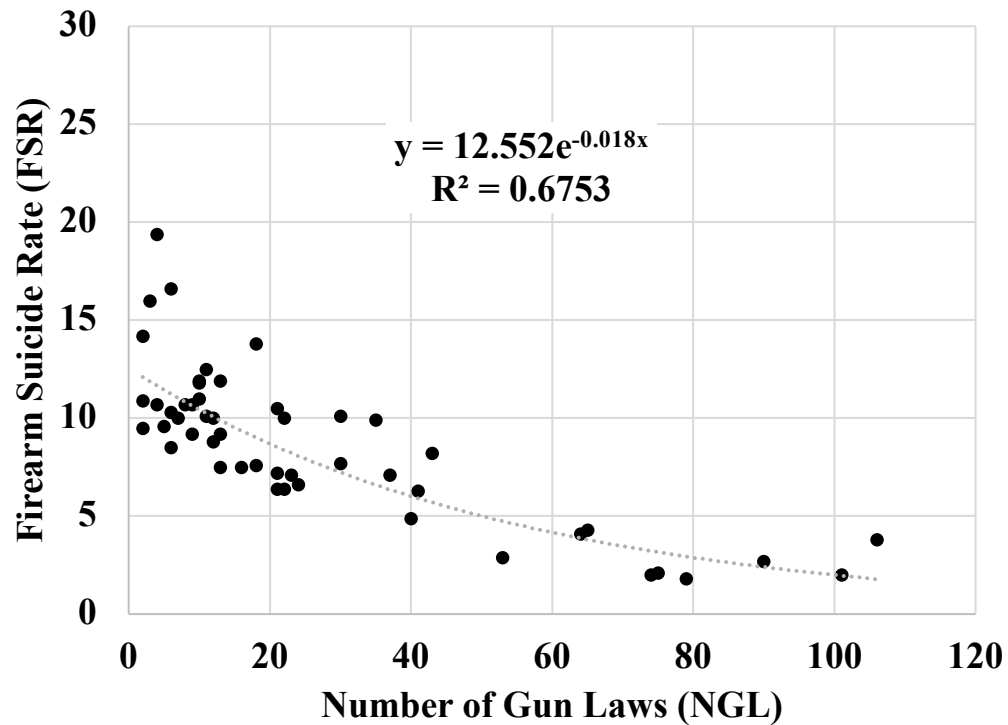
- ❖ The vast majority of suicide attempts are committed using non-firearm methods (e.g., suffocation, poisoning, cutting etc.); **only about 10% of attempters use a gun**. However, firearm-suicides account for over half of all suicide fatalities—nearly 24,000 lives in 2017.

# GUN LAWS AND SUICIDE RATES ACROSS THE UNITED STATES



# FIREARM SUICIDE RATES AND NUMBER OF GUN LAWS

1



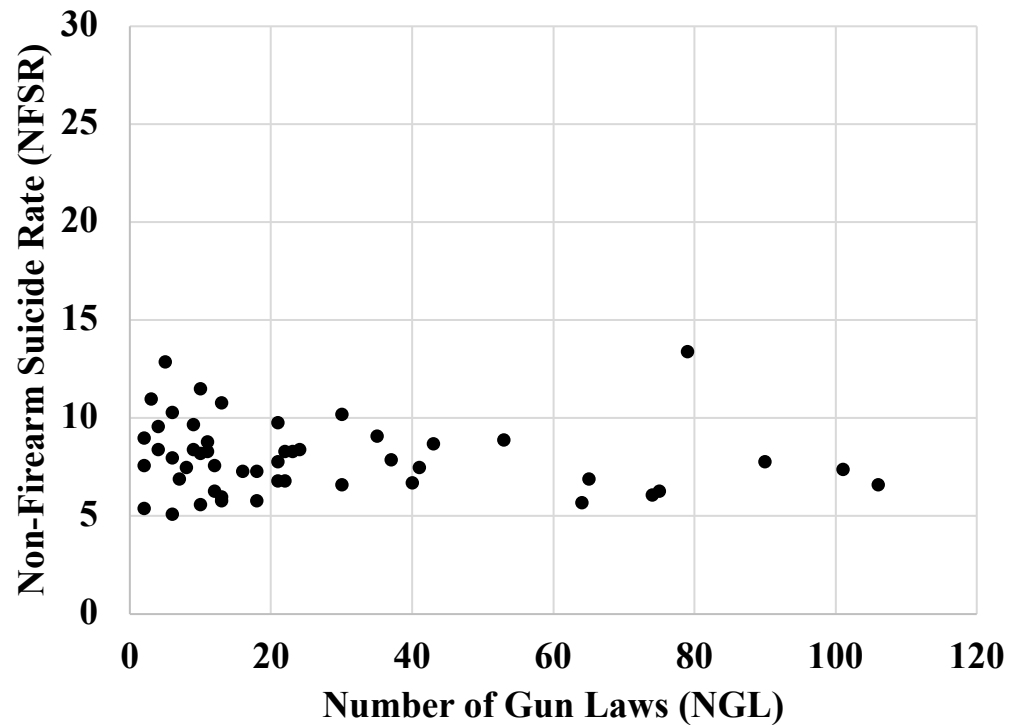
Source	SS	dof	MS	No. of Obs.	= 50
Model	12.434	1	12.434	F(1,48)	= 171.20
Residual	3.4860	48	0.0726	Prob > F	= 0.0000
Total	15.920	49	0.3249	R-squared	= 0.7810
				Root MSE	= 0.26949

$\ln(\widehat{FSR})$	Coef.	Std. Err.	t	P >  t	[95% Conf. Interval]	
$\hat{b}$	-0.0184	0.0014	-13.08	0.000	-0.0212	-0.0156
$\ln(\hat{a})$	2.5299	0.0539	46.93	0.000	0.0291	2.6382

# NON-FIREARM SUICIDE RATES AND NUMBER OF GUN LAWS

2

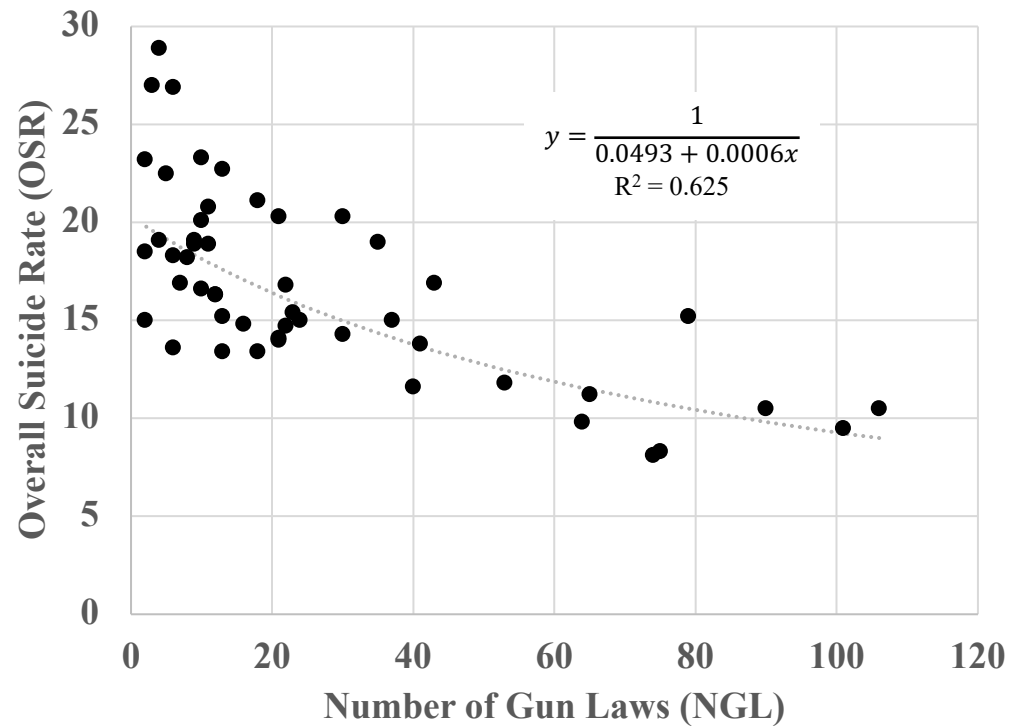


Source	SS	dof	MS	No. of Obs.	
Model	<b>2.2609</b>	<b>1</b>	<b>2.2609</b>	F(1,48)	= <b>0.65</b>
Residual	<b>166.18</b>	<b>48</b>	<b>3.4622</b>	Prob > F	= <b>0.4230</b>
Total	<b>168.45</b>	<b>49</b>	<b>3.4377</b>	R-squared	= <b>0.0134</b>
				Root MSE	= <b>1.8607</b>

$\widehat{NFSR}$	Coef.	Std. Err.	t	P >  t	[95% Conf. Interval]	
$\hat{b}$	<b>-0.0078</b>	<b>0.0097</b>	<b>-0.081</b>	<b>0.423</b>	<b>-0.0273</b>	<b>0.0117</b>
$\hat{a}$	<b>8.2347</b>	<b>0.3722</b>	<b>22.12</b>	<b>0.000</b>	<b>7.4864</b>	<b>8.9830</b>

# OVERALL SUICIDE RATES AND NUMBER OF GUN LAWS

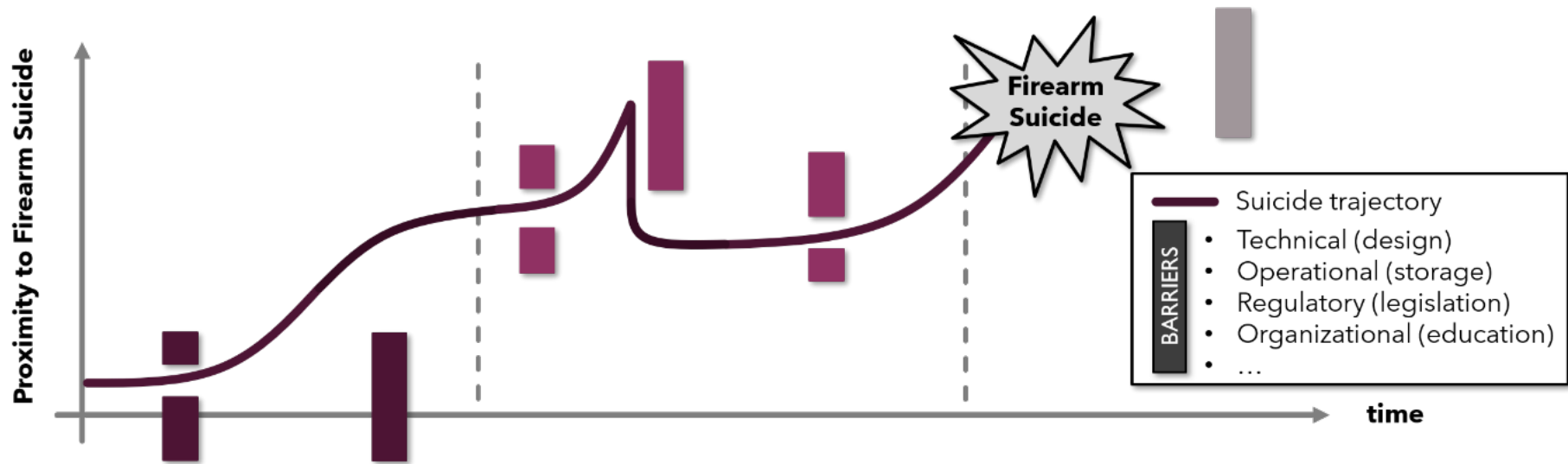


Source	SS	dof	MS	No. of Obs.	= 50
Model	<b>0.0125</b>	<b>1</b>	<b>0.0125</b>	F(1,48)	= <b>79.99</b>
Residual	<b>0.0075</b>	<b>48</b>	<b>0.0002</b>	Prob > F	= <b>0.0000</b>
Total	<b>0.0201</b>	<b>49</b>	<b>0.0004</b>	R-squared	= <b>0.6250</b>
				Root MSE	= <b>0.01252</b>

$1/\widehat{OSR}$	Coef.	Std. Err.	t	P >  t	[95% Conf. Interval]	
$\hat{b}$	<b>0.0006</b>	<b>0.0001</b>	<b>8.94</b>	<b>0.000</b>	<b>0.0005</b>	<b>0.0007</b>
$\hat{a}$	<b>0.0493</b>	<b>0.0025</b>	<b>19.68</b>	<b>0.000</b>	<b>0.0443</b>	<b>0.0543</b>

# DEFENSE-IN-DEPTH AGAINST FIREARM SUICIDES



## Prevention functions

### Prevent the suicide sequence from initiating

- Mental health screening
- Prohibitions for high-risk gun possession
- Emotional-/self-awareness
- ...

## Blocking functions

### Block escalation of suicide sequence

- Secure gun storage
- Authorized user identification
- Suicide support lifelines
- ...

## Mitigation functions

### Mitigate the consequences of suicide

- Reducing the lethality of the firearm
- Support for victim's friends and family
- ...



THANK YOU

