

The Effects of Fraternity Moratoriums on Alcohol Offenses and Sexual Assaults Advancement to Candidacy

Michael Topper
University of California, Santa Barbara
2022-02-09

Background: A wide-spread tradition

Benefits of Fraternities:

- Community service, volunteering, graduation rates, and future income (Mara, Davis, and Schmidt 2018; Hayek et. al. 2002; Asel, Seifert, Pascarella 2009)

Background: A wide-spread tradition

Benefits of Fraternities:

- Community service, volunteering, graduation rates, and future income (Mara, Davis, and Schmidt 2018; Hayek et. al. 2002; Asel, Seifert, Pascarella 2009)

Downsides of Fraternity Membership:

- Risky Behavior (e.g., hazing, sexual assault) (Hechinger 2017; Seabrook 2019; Minow and Einolf 2009)
- Binge drinking and college partying (DeSimone 2007; Routon and Walker 2014)
- Access to alcohol for lower classmen (Armstrong, Hamilton, and Sweeney 2006)

Background: A wide-spread tradition

Benefits of Fraternities:

- Community service, volunteering, graduation rates, and future income (Mara, Davis, and Schmidt 2018; Hayek et. al. 2002; Asel, Seifert, Pascarella 2009)

Downsides of Fraternity Membership:

- Risky Behavior (e.g., hazing, sexual assault) (Hechinger 2017; Seabrook 2019; Minow and Einolf 2009)
- Binge drinking and college partying (DeSimone 2007; Routon and Walker 2014)
- Access to alcohol for lower classmen (Armstrong, Hamilton, and Sweeney 2006)

Recently, campus administrators began to use temporary campus-wide bans of fraternity social events with alcohol (moratoriums) to change behavior.

Background: A wide-spread tradition

Benefits of Fraternities:

- Community service, volunteering, graduation rates, and future income (Mara, Davis, and Schmidt 2018; Hayek et. al. 2002; Asel, Seifert, Pascarella 2009)

Downsides of Fraternity Membership:

- Risky Behavior (e.g., hazing, sexual assault) (Hechinger 2017; Seabrook 2019; Minow and Einolf 2009)
- Binge drinking and college partying (DeSimone 2007; Routon and Walker 2014)
- Access to alcohol for lower classmen (Armstrong, Hamilton, and Sweeney 2006)

Recently, campus administrators began to use temporary campus-wide bans of fraternity social events with alcohol (moratoriums) to change behavior.

Question: How do these moratoriums affect alcohol offenses and sexual assaults?

Moratoriums

Moratoriums

Moratorium Definition:

A temporary *campus-wide* halt on fraternity social events with alcohol.

- Applies to Interfraternity Council fraternities (IFC) → primary type of social fraternity.

Moratoriums

Moratorium Definition:

A temporary *campus-wide* halt on fraternity social events with alcohol.

- Applies to Interfraternity Council fraternities (IFC) → primary type of social fraternity.

Sources of Enforcement:

- University Administration (62%)
- IFC Council → student enforced (38%)

How might a moratorium affect behavior?

How might a moratorium affect behavior?

Moratoriums may be beneficial:

- College partying leads to more rape and alcohol (Lindo, Siminski and Swensen 2018)
- Restricting alcohol + higher penalty leads to less drinking (Liang and Huang 2008)
- Alcohol increases mortality, poor academics, and crime. (Carpenter and Dobkin 2009; Carrell et. al. 2011; Ha and Smith 2019)

How might a moratorium affect behavior?

Moratoriums may be beneficial:

- College partying leads to more rape and alcohol (Lindo, Siminski and Swensen 2018)
- Restricting alcohol + higher penalty leads to less drinking (Liang and Huang 2008)
- Alcohol increases mortality, poor academics, and crime. (Carpenter and Dobkin 2009; Carrell et. al. 2011; Ha and Smith 2019)

Moratoriums may be detrimental:

- Displacement of crime
 - Partying in riskier places
- May cause large increases after moratorium is over → net effect could be worse due to pent up demand (Brassiolo 2016)

Research Question

Question:

- How do fraternity moratoriums affect campus-wide police reports of alcohol offenses and sexual assault?

Novel Data:

- Construct data set from Daily Crime Logs from university-specific police departments (2014-2019).

Identification:

- Exploit the variation in timing of the moratoriums using a difference-in-differences design.

Contribution

- First study to evaluate moratoriums.
- Novel data constructed.
 - Mitigates the shortcomings of other fraternity works using Campus Safety Security Data + survey data ([Raghav and Diette 2021](#); [DeSimone 2007](#); [Routon and Walker 2014](#)).
- Further the college partying literature (e.g., [Lindo, Siminski and Swensen 2018](#)).
 - Fraternities are a major partying source at universities → provides evidence what their impact on partying is.
 - Closely links [student](#) behavior to partying.
 - Represent decrease in partying → reason to expect asymmetries ([Cunningham and Shah 2018](#))

Sample Construction

Sample Construction

Criteria:

- Must have some media coverage (web-searchable by Google/Lexis-Nexis).
- Must have temporary campus-wide ban of alcohol from fraternity parties for IFC fraternities (can be more extensive).
- Moratorium must be in sample period of [2014-2019](#) → Daily Crime Log archive length + avoid pandemic.

Sample Construction

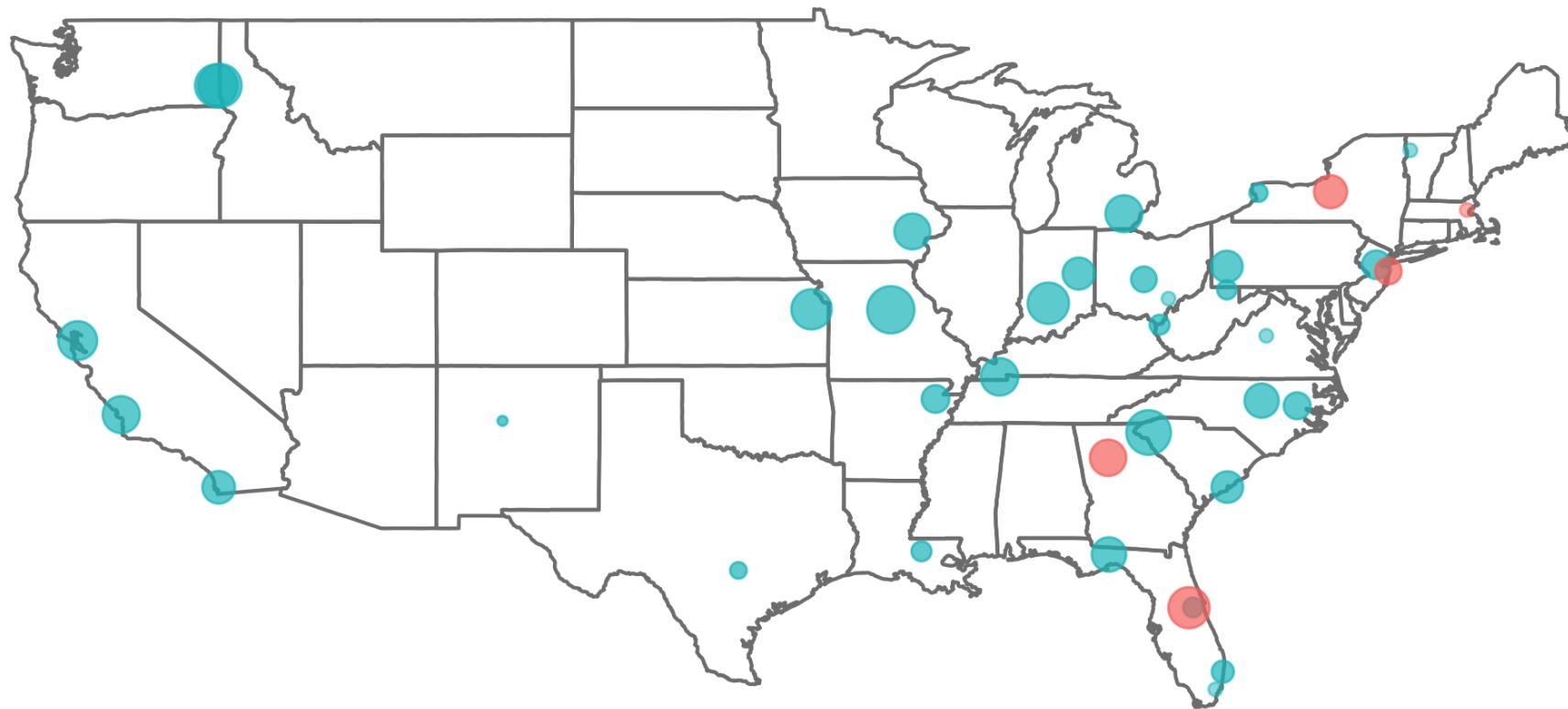
Criteria:

- Must have some media coverage (web-searchable by Google/Lexis-Nexis).
- Must have temporary campus-wide ban of alcohol from fraternity parties for IFC fraternities (can be more extensive).
- Moratorium must be in sample period of [2014-2019](#) → Daily Crime Log archive length + avoid pandemic.

Final Sample:

- 38 universities with 45 moratoriums total ([Mean: 1.36; Max = 3](#)).
 - Large universities ([Enrollment Mean: 28k, Min: 3k, Max: 60K](#))
 - Differences in selectivity ([Graduation Rate Mean: 70, Min: 39, Max: 95](#))
- Does not represent the universe of moratoriums (4 known missing).

Locations of Moratoriums



University Type: ● Private not-for-profit ● Public

Fraction of Total Enrollment in IFC Fraternities: ● 0.025 ● 0.050 ● 0.075 ● 0.100

The Pathway to a Moratorium

Triggering Event → Announcement/Implementation of Moratorium → End Date.

- Small delay between triggering event and implementation.
- Announcement/Enforcement can be from one of two sources of jurisdiction:
 - University Administration
 - IFC council → students from fraternities at university

Summary Statistics of Moratoriums

	Mean	SD	Median	Min	Max
Number of Moratoriums per-University	1.36	0.61	1.00	1	3
Length of Moratoriums	63.89	79.98	46.00	6.00	541.00

- Academic-calendar days vs. calendar days.

Triggering Events



Data Construction

Data Construction

Indiana University, Bloomington Police Department Student Right To Know CAD Daily Log			
From Jan 20, 2014 to Jan 20, 2014.			
Date Reported:	01/20/14 - MON at 12:22	Location :	EIGENMANN HALL Event #: 14-01-20-001434
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 17:03	Location :	ALL OTHER ROADWAYS/INTERNS Event #: 14-01-20-001446
Date and Time Occurred From - Occurred To	01/20/14 - MON at 17:02 - 01/20/14 - MON at 17:03		
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140154
Disposition:	CLOSED BY ARREST		
Date Reported:	01/20/14 - MON at 19:30	Location :	EIGENMANN HALL Event #: 14-01-20-001464
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:22	Location :	EIGENMANN HALL Event #: 14-01-20-001466
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:45	Location :	FOSTER HARPER HALL Event #: 14-01-20-001468
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 21:38	Location :	ALL OTHER NON-UNIVERSITY Event #: 14-01-20-001476
Date and Time Occurred From - Occurred To			
Incident :	ALL OTHER OFFENSES - HARASSMENT/INTIMIDATION		Report #:
Disposition:	NO CASE REPORT		
Date Reported:	01/20/14 - MON at 21:53	Location :	ROSE AVE RESIDENCE HALL Event #: 14-01-20-001479
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 22:30	Location :	COLLINS COMMON AREA Event #: 14-01-20-001486
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:02	Location :	FOREST QUAD Event #: 14-01-20-001487
Date and Time Occurred From - Occurred To	01/20/14 - MON at 22:45 - 01/20/14 - MON at 23:02		
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140157
Disposition:	CLOSED NO ARREST.		
Date Reported:	01/20/14 - MON at 23:07	Location :	FOSTER JENKINSON HALL Event #: 14-01-20-001491
Date and Time Occurred From - Occurred To			
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:35	Location :	ALL OTHER OPEN AREAS Event #: 14-01-20-001494
Date and Time Occurred From - Occurred To	01/20/14 - MON at 23:35 - 01/20/14 - MON at 23:41		
Incident :	ASSAULT - OTHER ASSAULTS - SIMPLE, NOT AGGRAVATED		Report #: 140159
Disposition:	CLOSED BY ARREST.		

11 Incidents Listed.

Data Construction

Indiana University, Bloomington Police Department Student Right To Know CAD Daily Log			
From Jan 20, 2014 to Jan 20, 2014.			
Date Reported:	01/20/14 - MON at 12:22	Location :	EIGENMANN HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001434
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 17:03	Location :	ALL OTHER ROADWAYS/INTERNS
Date and Time Occurred From - Occurred To	01/20/14 - MON at 17:02 - 01/20/14 - MON at 17:03		Event #: 14-01-20-001446
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140154
Disposition:	CLOSED BY ARREST		
Date Reported:	01/20/14 - MON at 19:30	Location :	EIGENMANN HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001464
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:22	Location :	EIGENMANN HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001466
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 20:45	Location :	FOSTER HARPER HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001468
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 21:38	Location :	ALL OTHER NON-UNIVERSITY
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001476
Incident :	ALL OTHER OFFENSES - HARASSMENT/INTIMIDATION		Report #:
Disposition:	NO CASE REPORT		
Date Reported:	01/20/14 - MON at 21:53	Location :	ROSE AVE RESIDENCE HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001479
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 22:30	Location :	COLLINS COMMON AREA
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001486
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:02	Location :	FOREST QUAD
Date and Time Occurred From - Occurred To	01/20/14 - MON at 22:45 - 01/20/14 - MON at 23:02		Event #: 14-01-20-001487
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #: 140157
Disposition:	CLOSED NO ARREST.		
Date Reported:	01/20/14 - MON at 23:07	Location :	FOSTER JENKINSON HALL
Date and Time Occurred From - Occurred To			Event #: 14-01-20-001491
Incident :	NARCOTIC/DRUG LAWS - POSSESSION - MARIJUANA		Report #:
Disposition:	FAILED TO LOCATE		
Date Reported:	01/20/14 - MON at 23:35	Location :	ALL OTHER OPEN AREAS
Date and Time Occurred From - Occurred To	01/20/14 - MON at 23:35 - 01/20/14 - MON at 23:41		Event #: 14-01-20-001494
Incident :	ASSAULT - OTHER ASSAULTS - SIMPLE, NOT AGGRAVATED		Report #: 140159
Disposition:	CLOSED BY ARREST.		
11 Incidents Listed.			
Print Date and Time 1/21/2014 12:23:52PM at Page No. 1			

Benefits + Construction:

- University police departments only.
- Incidence-level reports mandated by Federal government.
- All reports—caveat: needs harmonization.
- Match on specific offenses using regular expressions
- Merge with moratorium dates (public records requests/news articles/fraternity advisers), IPEDS, and academic-calendars.

Matching Process:

Words and Phrases used to Pattern Match	
Outcome	Words to Match
Alcohol Violations	alcohol, dwi, intox, drink, dui, drunk, liquor, driving under the influence, dip, abcc, underage, dwi, underage, pula, owi, mip, under age, beer, wine, booze, minor in possession, ovi
Sexual Assault	sex, rape, fondling, fondle

Matching Process:

Words and Phrases used to Pattern Match	
Outcome	Words to Match
Alcohol Violations	alcohol, dwi, intox, drink, dui, drunk, liquor, driving under the influence, dip, abcc, underage, dwi, underage, pula, owi, mip, under age, beer, wine, booze, minor in possession, ovi
Sexual Assault	sex, rape, fondling, fondle

Example of the Matching Process:

- East Carolina Crime Logs:
 - Incident Report 1: "Underage Possession of Liquor (1)"
 - Incident Report 2: "Consume Alcohol < Age 21"
- Change to lowercase, match on word:
 - Incident Report 1: "**underage** possession of **liquor** (1)" → counts as 1.
 - Incident Report 2: "consume **alcohol** < age 21"

Empirical Strategy

Baseline specification (OLS):

$$Y_{u,t} = \beta Moratorium_{u,t} + \gamma_u + \lambda \mathbb{X}_t + \epsilon_{u,t}$$

- $Y_{u,t}$ is an outcome of alcohol offenses or sexual assaults per-25000 enrolled students per academic-calendar day at university u in time t .
- $Moratorium_{u,t}$ is an indicator variable equal to one when university u is undergoing a moratorium at time t .
- γ_u is a university-specific fixed effect.
- \mathbb{X}_t is a vector of time-varying controls that are shared across universities.
- Standard errors clustered by university.

Intuition: comparing academic-calendar days with a moratorium to academic calendar-days without a moratorium, while adjusting for fixed differences in universities and times of the year.

Main Results:

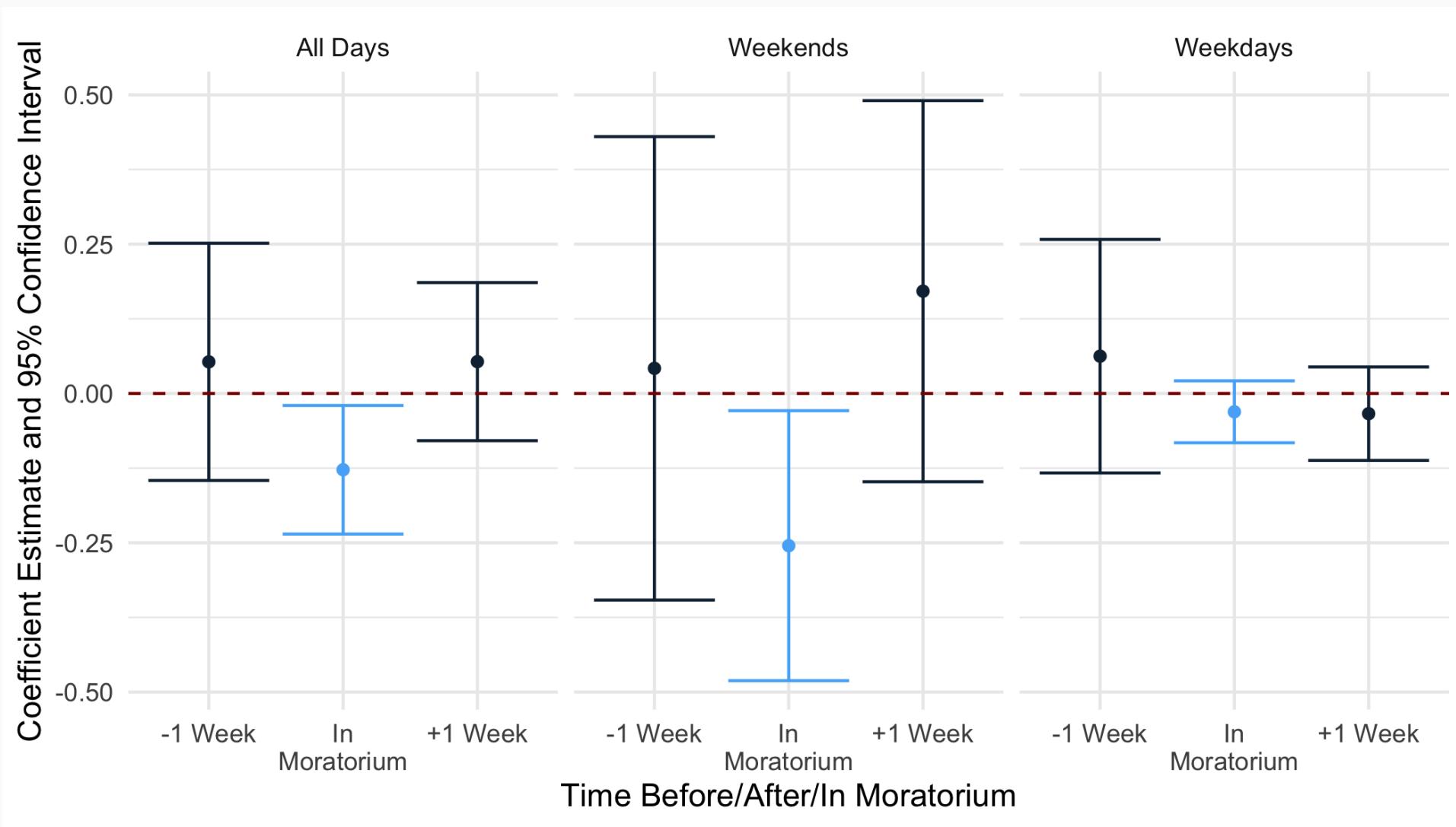
Alcohol Offenses

- Large decreases in reports of alcohol offenses during moratoriums (27%).
 - Driven by the weekends (Friday-Sunday).
 - Transient effects.

Sexual Assaults

- Weaker evidence of decreases in sexual assault
 - Large decreases (26%) of 10% significance on weekends only.
 - Likely lacking power.

Alcohol Offenses: Main Results



Sexual Assaults: Weekend vs. Weekday

Effect of Moratoriums on Sexual Assaults by Weekend/Weekdays (OLS)

	Days of the Week		
	All Days	Weekends	Weekdays
In Moratorium	-0.010 (0.006)	-0.017+ (0.010)	-0.004 (0.006)
Observations	56514	24244	32270
Mean of Dependent Variable	0.055	0.064	0.047
FE: Day of Week	X	X	X
FE: Holiday	X	X	X
FE: Semester (Spring/Fall)	X	X	X
FE: University by Academic Year	X	X	X

Standard errors are clustered by university and each offense is defined as per-25000 enrolled students. The column 'All Days' represents specification (2) from the main results table. Weekends consist of Fridays, Saturdays, and Sundays. Weekdays consist of Monday through Thursday. Holiday controls include controls for Veterans Day, Thanksgiving, Labor Day, Halloween, and MLK Day. Christmas/New Years/July 4th are not included since no university's academic calendar contains them. A moratorium is a temporary halt on fraternity-related activities with alcohol.

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Assumptions:

Assumptions:

1. Timing of moratoriums is as-good-as-random

- "Multiple Event" Event Study

Assumptions:

1. Timing of moratoriums is as-good-as-random

- "Multiple Event" Event Study

2. Reporting behavior does not change

- Indirect test: Changes in proportion of crimes reported with a lag?

Assumptions:

1. Timing of moratoriums is as-good-as-random

- "Multiple Event" Event Study

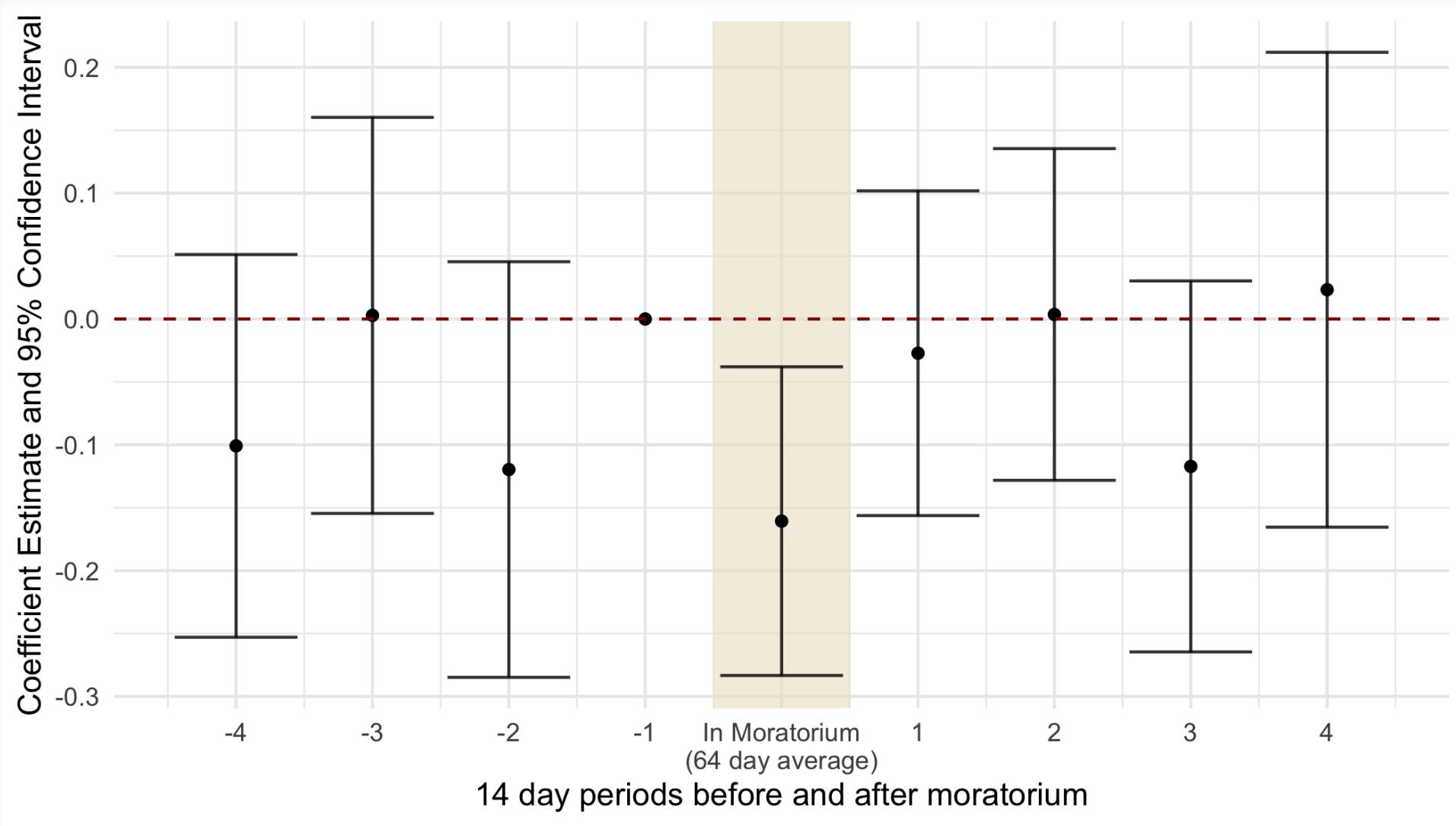
2. Reporting behavior does not change

- Indirect test: Changes in proportion of crimes reported with a lag?

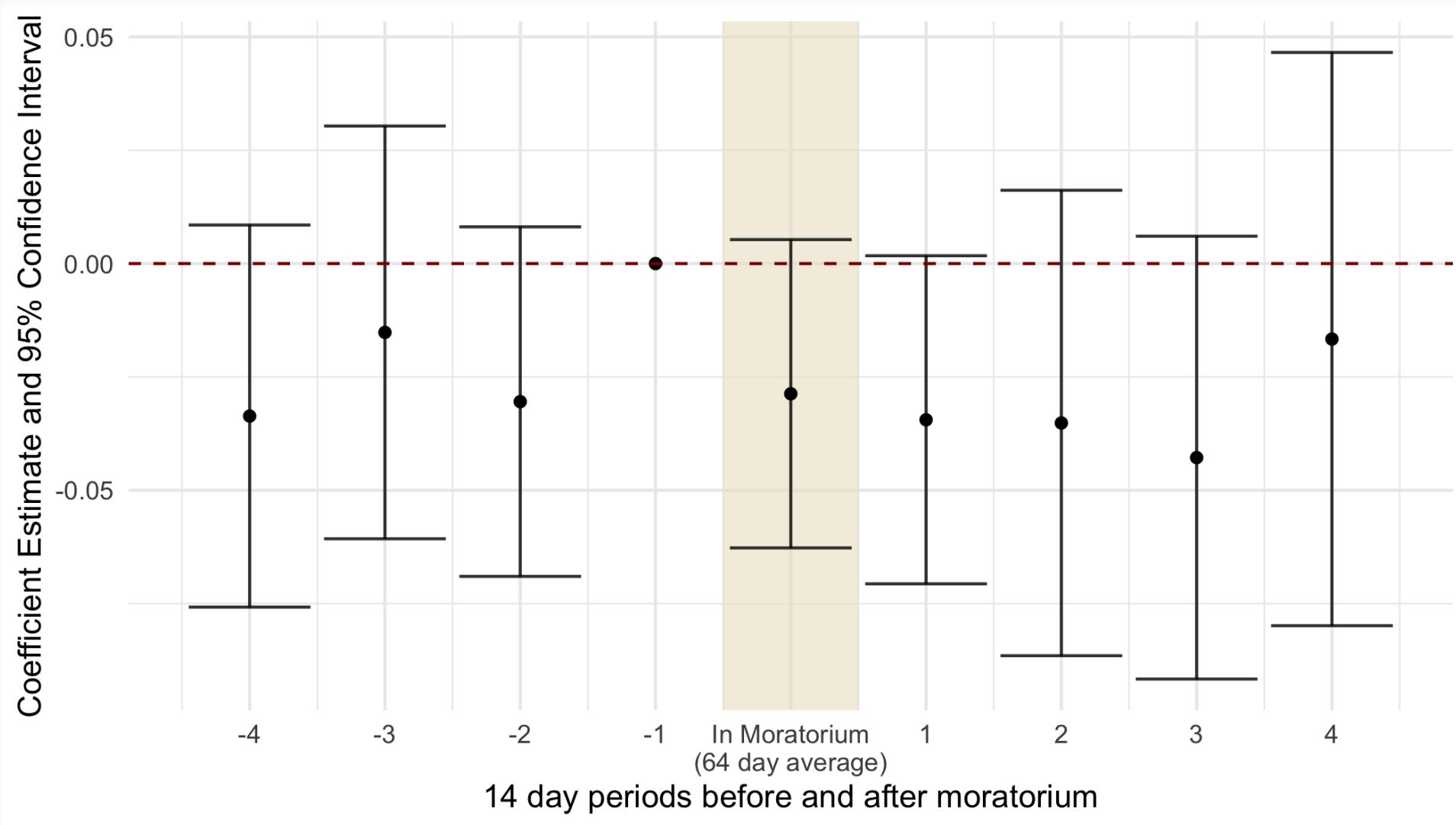
3. No lasting effects of the moratorium

- Event studies + Analysis shown

Event Study: Alcohol Offenses



Event Study: Sexual Assaults



Robustness:

Poisson Estimation

- Good for count-data with non-negative outcomes.

Leave-one-out Estimation

- Makes certain not one university is driving the results.

TWFE Literature

- Heterogeneous treatment effects likely → estimate a new model that has 0 negative weights.

Inclusion of Never-Treated

- Read about in the paper!

Potential Mechanism

Is the moratorium displacing crime?

- Difficult to answer with the Daily Crime Logs.

Indirect Test:

- Use the Campus Safety and Security Data (CSS)
 - Downfall: Calendar year aggregation.
 - Benefits: Contains good location data: delineate between where on-campus crimes occur.
- Slightly change the treatment definition: fraction of days in year that contains moratorium.

Potential Mechanism

Is the moratorium displacing crime?

- Difficult to answer with the Daily Crime Logs.

Indirect Test:

- Use the Campus Safety and Security Data (CSS)
 - Downfall: Calendar year aggregation.
 - Benefits: Contains good location data: delineate between where on-campus crimes occur.
- Slightly change the treatment definition: fraction of days in year that contains moratorium.

This is not causal, only speculative!

Potential Mechanism: Results

Effect of Moratoriums on Alcohol Offenses and Sexual Assaults: Comparison of Daily Crime Logs and Campus Safety and Security (OLS).

	Daily Crime Logs		Campus Safety and Security
	Full Sample	Full Sample	Residence Halls
Panel A: Alcohol Offenses			
In Moratorium	-0.142+	0.282*	0.249*
	(0.077)	(0.111)	(0.119)
Observations	226	228	228
Mean of Dependent Variable	0.388	1.042	0.979
Panel B: Sexual Assaults			
In Moratorium	-0.015	-0.049	-0.035*
	(0.011)	(0.040)	(0.014)
Observations	226	228	228
Mean of Dependent Variable	0.043	0.081	0.041
FE: University	X	X	X
FE: Year	X	X	X

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Heterogeneity:

What type of triggering event causes the largest effects?

- Behavior Violation
- Sexual Assault
- Fraternity-related Death → shows largest effects for decreases in alcohol.

How long until a moratorium is effective?

- Split into 3 quantiles: [0, 32 days], [33, 57 days], [58, 541 days].

What type of oversight works best?

- University vs. IFC Council

Conclusion

Main Takeaways:



- First study to estimate the causal effects of fraternity moratoriums.
 - Find 27% decrease in alcohol offenses → effects are transient.
 - Find weaker evidence of decreases in reports of sexual assaults (10% significance), although large magnitude (26%) on weekends.
 - Possible mechanism is displacement of crime to safer areas (e.g., residence halls).
- I construct a novel dataset.
 - Mitigates issues with commonly used data such as NIBRS/UCR.
- Potential research → deferred recruitment/barring of singular fraternities.
- This study does not advocate for removal of fraternities.

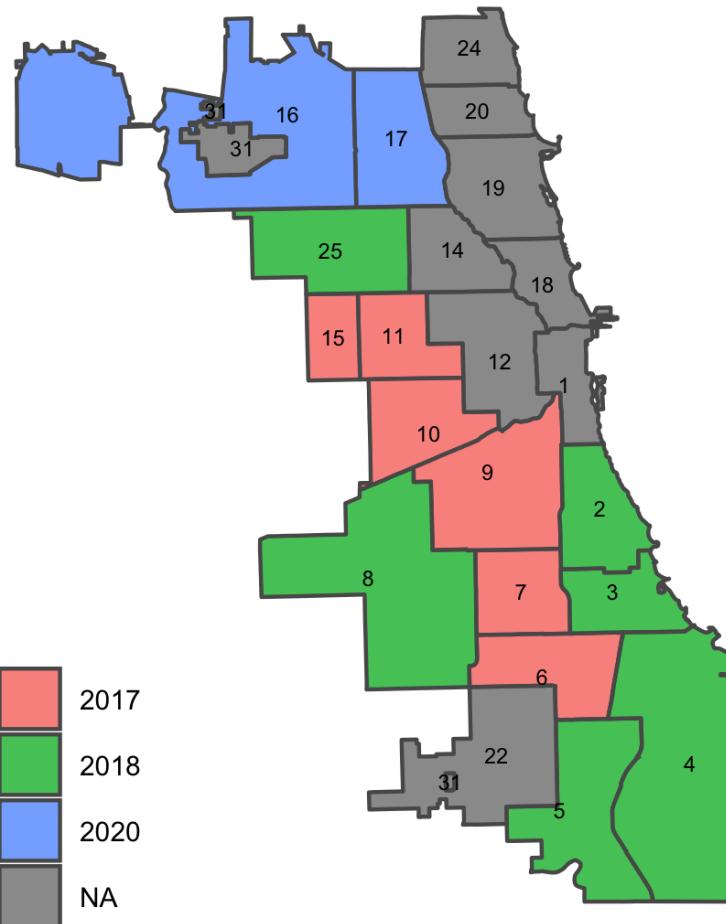
Gunshot Violence and Birth Outcomes

Gunshot Violence and Birth Outcomes with Anna Jaskiewicz

- **Motivation:** Maternal stress during gestation can have negative effects such as pre-term delivery and low birth weight ([Aizer et. al. 2015](#))
- **Question:** How does exposure to gunshot violence affect birth outcomes?
- **Setting:** Chicago, IL
- **Data:**
 - ShotSpotter: uses microphones to identify exact location of gunshots. Rollout in 2017.
 - Illinois Birth Data: Contains mother characteristics + home address
- **Main Idea:** Match mothers to exposure of gunshot violence and compare birth outcomes from mothers on one street who received more exposure to those on a street slightly further away that did not receive as much exposure.

District Rollouts:

Chicago Police Districts: Rollout of Shotspotter



Police Shifts and Use of Force

Police Shifts and Use of Force with Toshio Ferrazares

- Motivation: Previous work has shown how shift length can affect performance (Brachet et. al 2012).
- Question: How does length of police shift affect police use-of-force?
 - Setting: Chicago Police Department + Louisville Metro Police + LAPD (pending decision)
 - Variation: 12 hour shifts vs. 8 hour shifts.
 - Variation: Multiple shifts in a row (e.g., 3 days) vs. fewer shifts in a row (2 days).
- Data: Universe of police shift lengths beginning in 2014 in addition to use-of-force reports.
 - Detailed use-of-force incidents allows for positional analysis.

Example of Use of Force Report

Incident Officers
Police Officer Donald Styles - 5166
Assignment at time of incident: Police Officer Patrol Bureau/4th Division/4th Division/2nd Platoon [None Entered]
Role: [None Entered]

Force used by this Officer against Citizen

- De-escalation Techniques - Force Effective: No
- Verbal Directions - Force Effective: No
- Empty Hand Control - Force Effective: No
- Take Down - Force Effective: Yes
- Come-along - Force Effective: No

Less lethal force used by this Officer against Citizen

Force Used	Force Effective	Region	Point of Contact
De-escalation Techniques	No	1	4
Verbal Directions	No	1	1
Empty Hand Control	No	4	2
Take Down	Yes	7	3
Come-along	No	6	5

FRONT **BACK**

The diagram illustrates the front and back of a human figure for mapping injuries. The front view shows points 1 through 13 numbered around the body. The back view shows lettered regions A through L. A large rectangular box containing an 'X' is placed over point 12 on the front figure.

Injuries Sustained By Officer	Injury	Region	Injury Location