

Update Heather

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## Warning: In version 0.8.0 of the 'modelsummary' package, the default significance mar
## This warning is displayed once per session.
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Update

Purpose of this update is to investigate why the trends were changing so much when I added in a university by academic year by semester fixed effect. Recall that when this was added in, while the results did not change too much, a seemingly linear trend appeared in the event studies.

I will split the data into two sections: moratorium schools that are below the median length of a moratorium (48 days) and those that are above. The hope is that by splitting this, I will be able to see that a lot of variation is going away from a specification with university by academic year and university by academic year by semester. This is likely because the moratoriums that “bleed” into other semesters are falling into an incorrect comparison group. For instance, with a university by academic year by semester fixed effect, I will have comparison groups for smaller moratoriums. However, in much larger ones, I will only be comparing the “tail” or “beginning ends” of each of these to non moratorium days.

As an example, consider a school with a moratorium that lasts throughout all of a 2014 Fall and 4 days in 2015 Spring. Hence, the comparison will only see the variation from the 4 days in 2015 spring to the rest of the Spring 2015 Semester. This might be misleading. On the other hand, a school that has a short moratorium lasting 20 days in 2014 Fall will be comparing only the Fall 2014 moratorium days to the Fall 2014 non-moratorium days at that university. This is much less misleading. Therefore, I do not think that there should be a university by academic year by semester fixed effect because the comparison groups could be misleading.

However, this logic can expand to any school that “bleeds across” into different academic years as well. There appears to be 6 schools that bleed into other academic years.

Because of this, it seems reasonable to use the baseline specification (1) as my preferred specification. This will alleviate the concerns of the controls groups bleeding in and out the time trends. I think there is utility in showing the other specifications, although final judgment left to the committee.

Table 1 shows the main specifications subset by median length of moratorium. Table 2 shows the main results with all schools in the sample.

Table 1: Effect of Moratoriums on Alcohol Offenses, Drug Offenses, and Sexual Assault by Moratorium Length.

	Greater than 48-day Moratorium			Less than 48-day Moratorium		
	(1)	(2)	(3)	(1)	(2)	(3)
<i>Panel A: Alcohol Offenses</i>						
In Moratorium	-0.169** (0.059)	-0.146* (0.064)	-0.161** (0.053)	-0.061 (0.066)	-0.096 (0.073)	-0.122 (0.086)
Observations	28049	28049	28049	28465	28465	28465
<i>Panel B: Drug Offenses</i>						
In Moratorium	-0.111* (0.049)	-0.023 (0.045)	-0.073+ (0.039)	-0.037 (0.055)	-0.002 (0.043)	-0.006 (0.055)
Observations	28049	28049	28049	28465	28465	28465
<i>Panel C: Sexual Assaults</i>						
In Moratorium	-0.009+ (0.005)	-0.010 (0.008)	-0.001 (0.006)	-0.010 (0.008)	-0.009 (0.011)	-0.016 (0.012)
Observations	28049	28049	28049	28465	28465	28465
<i>Controls for Panels A-C:</i>						
FE: Day of Week	X	X	X	X	X	X
FE: Holiday	X	X	X	X	X	X
FE: Semester (Spring/Fall)	X	X	X	X	X	X
FE: University	X			X		
FE: Academic Year	X			X		
FE: University by Academic Year		X			X	
FE: University by Academic Year by Semester			X			X

Note:

Standard errors are clustered by university.

Offenses are per-25000 enrolled students.

Moratorium is a temporary halt on fraternity-related activities with alcohol.

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

Event Studies

I test two separate types of event studies: the classic staggered adoption and a non-staggered adoption where period 0 is the entire moratorium period. For each of these, I want to have a pre and post period that is approximately equal to the length of a median moratorium (48 days). Hence, when using 7 day bins, I should have 7 pre and post periods. When using 14 day bins, I should have 3. Finally, when I use 48 day moratorium periods, I can use just 1 or 2.

Period 0 is the entire moratorium

Model 1

The Figures, 1, 2, and 3 show the event studies when period 0 is the entire moratorium period and the model used is model 1

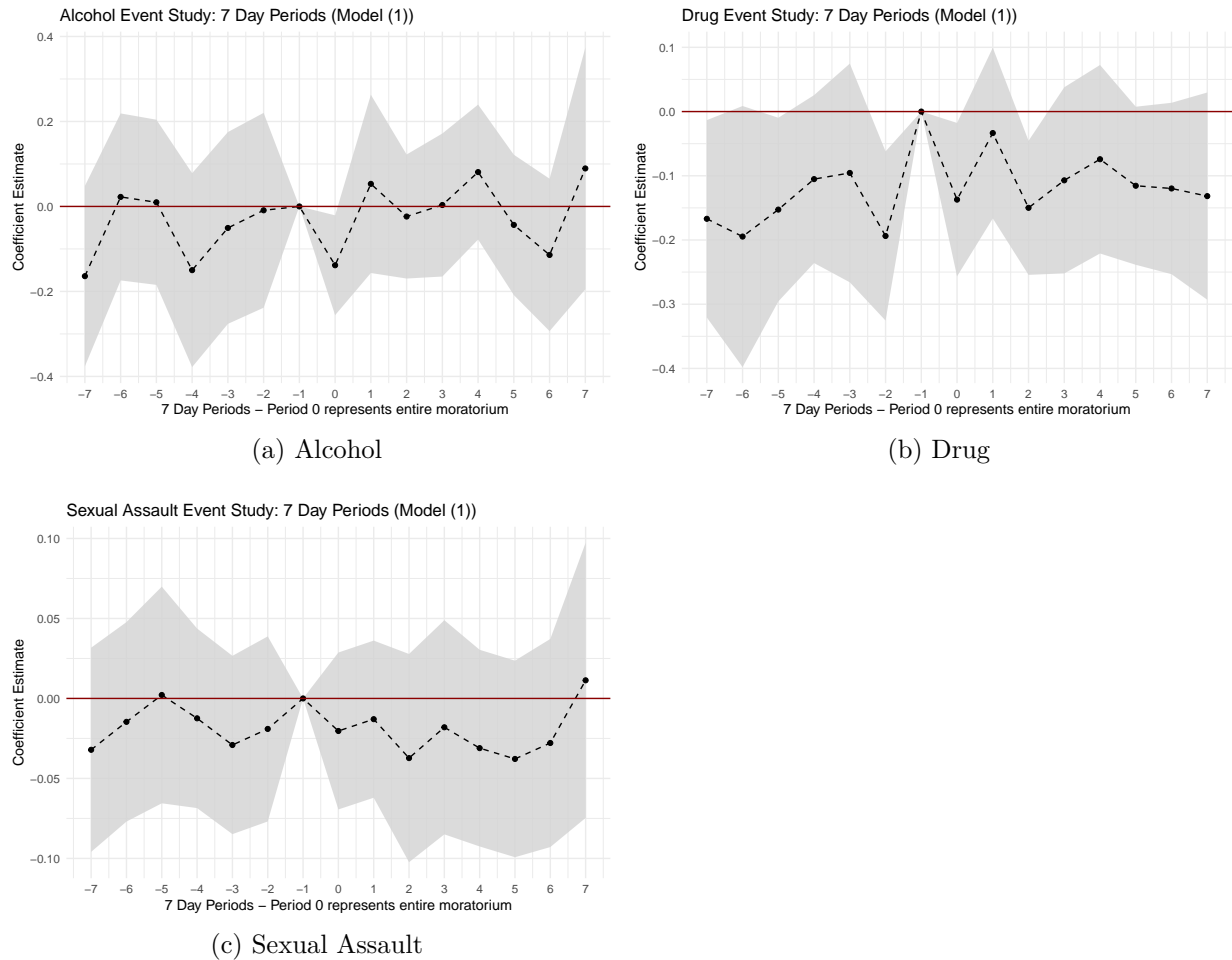


Figure 1: Event studies with 7-day periods. Period 0 represents the entire moratorium. This is Model (1) from main table.

Table 2: Effect of Moratoriums on Alcohol Offenses, Drug Offenses, and Sexual Assault.

	(1)	(2)	(3)
<i>Panel A: Alcohol Offenses</i>			
In Moratorium	-0.148** (0.049)	-0.132* (0.050)	-0.145** (0.046)
Observations	56514	56514	56514
Mean of Dependent Variable	0.497	0.497	0.497
<i>Panel B: Drug Offenses</i>			
In Moratorium	-0.076* (0.037)	-0.014 (0.032)	-0.046 (0.032)
Observations	56514	56514	56514
Mean of Dependent Variable	0.432	0.432	0.432
<i>Panel C: Sexual Assaults</i>			
In Moratorium	-0.009* (0.004)	-0.010 (0.006)	-0.007 (0.006)
Observations	56514	56514	56514
Mean of Dependent Variable	0.055	0.055	0.055
<i>Controls for Panels A-C:</i>			
FE: Day of Week	X	X	X
FE: Holiday	X	X	X
FE: Semester (Spring/Fall)	X	X	X
FE: University	X		
FE: Academic Year	X		
FE: University by Academic Year		X	
FE: University by Academic Year by Semester			X

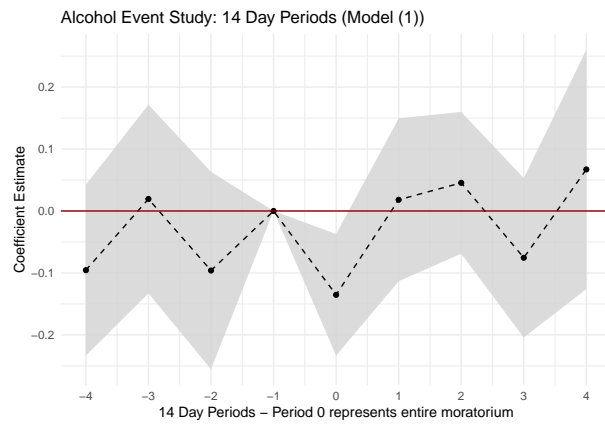
Note:

Standard errors are clustered by university.

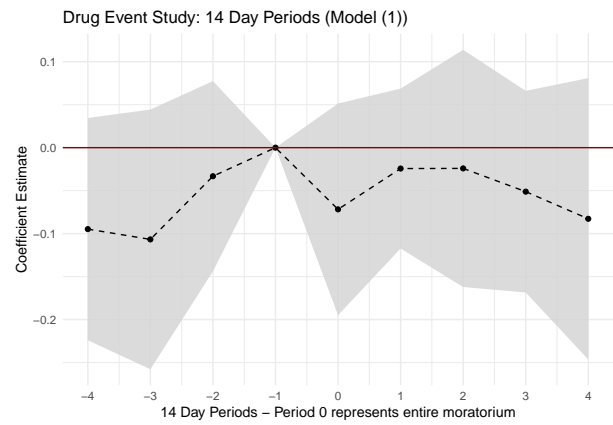
Offenses are per-25000 enrolled students.

Moratorium is a temporary halt on fraternity-related activities with alcohol.

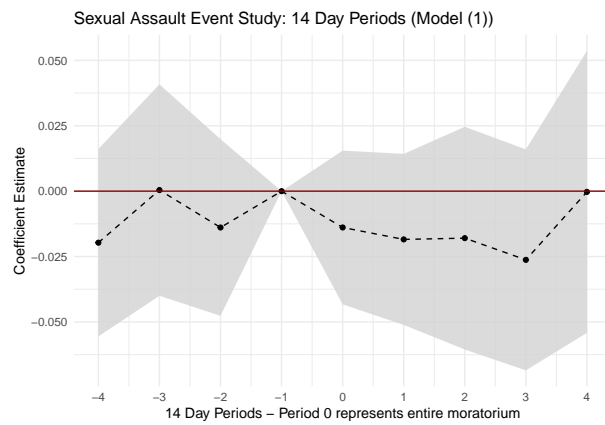
+ $p < 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$



(a) Alcohol



(b) Drug



(c) Sexual Assault

Figure 2: Event studies with 14-day periods. Period 0 represents the entire moratorium. This is Model (1) from main table.

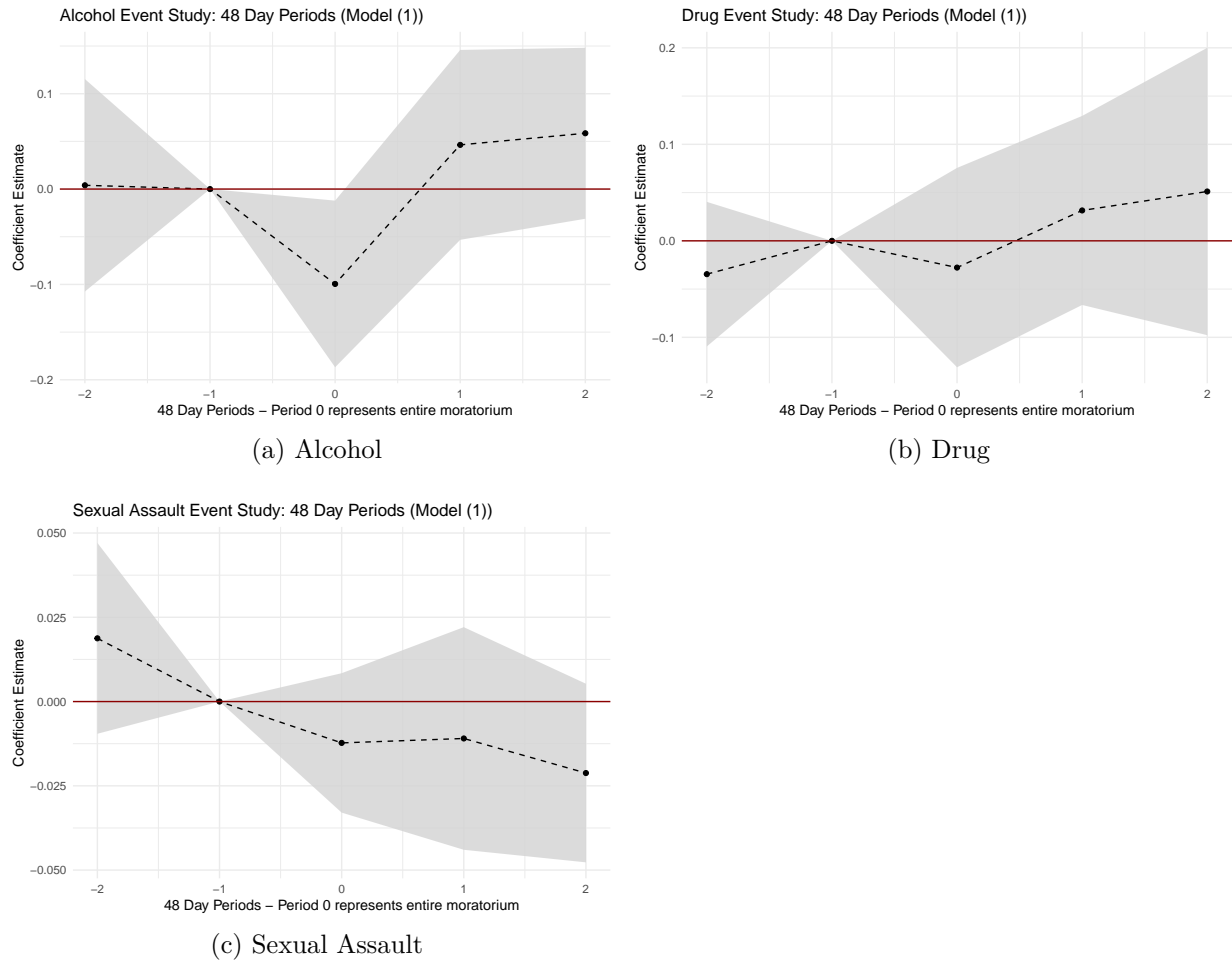
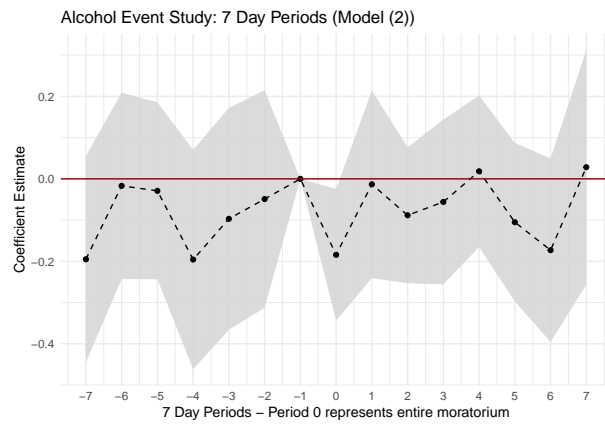


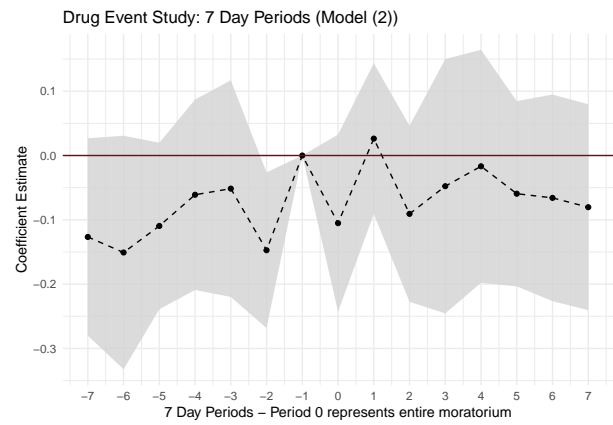
Figure 3: Event studies with 48-day periods. Period 0 represents the entire moratorium. This is Model (1) from main table.

Model 2

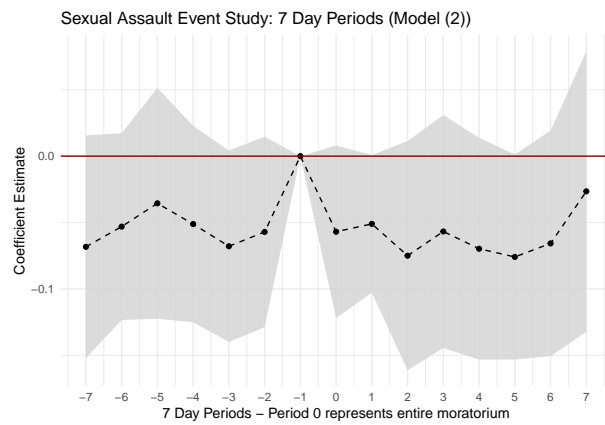
The Figures, 4, 5, and 6 show the event studies when period 0 is the entire moratorium period and the model used is model 2.



(a) Alcohol

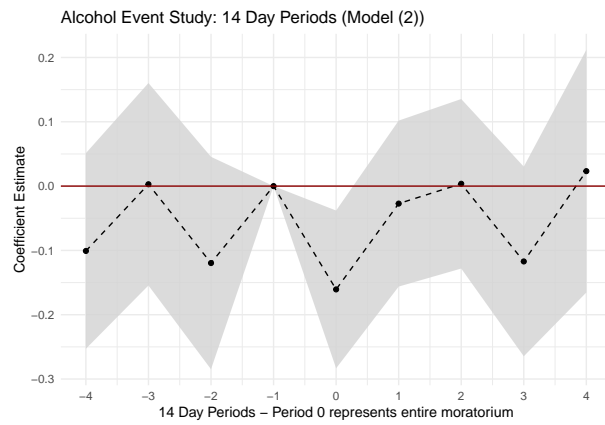


(b) Drug

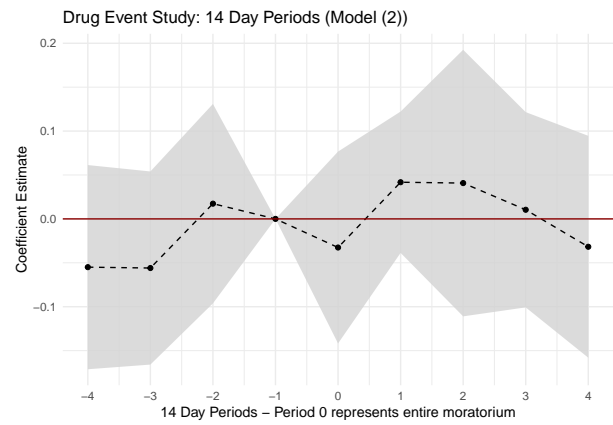


(c) Sexual Assault

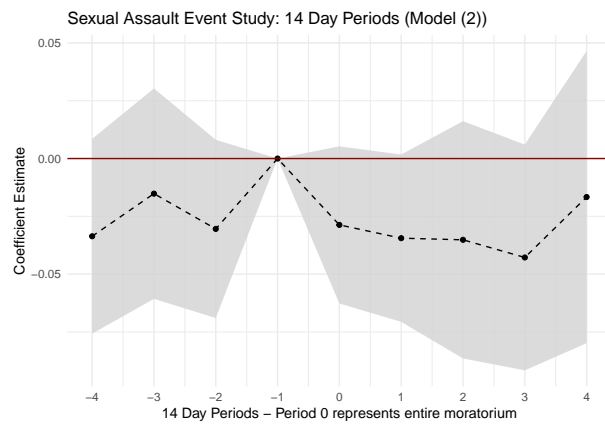
Figure 4: Event studies with 7-day periods. Period 0 represents the entire moratorium. This is Model (2) from main table.



(a) Alcohol



(b) Drug



(c) Sexual Assault

Figure 5: Event studies with 14-day periods. Period 0 represents the entire moratorium. This is Model (2) from main table.

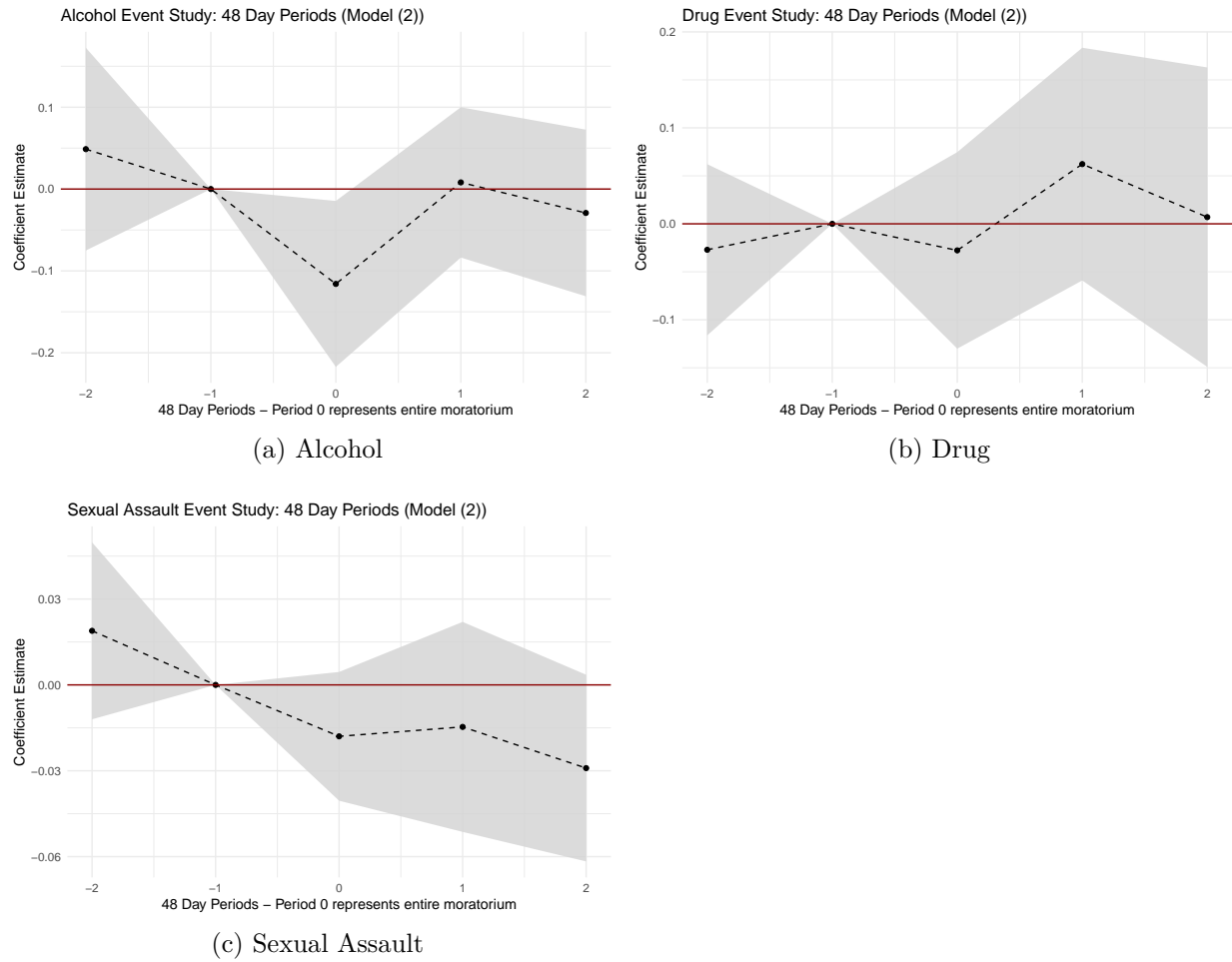
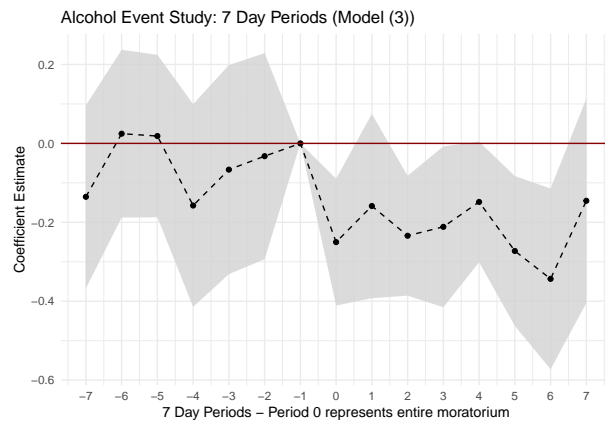


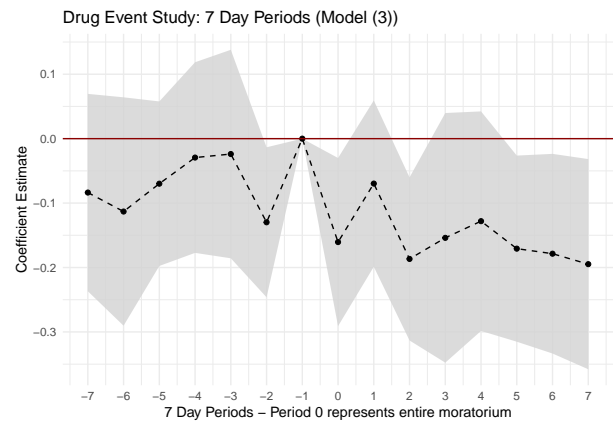
Figure 6: Event studies with 48-day periods. Period 0 represents the entire moratorium. This is Model (2) from main table.

Model 3

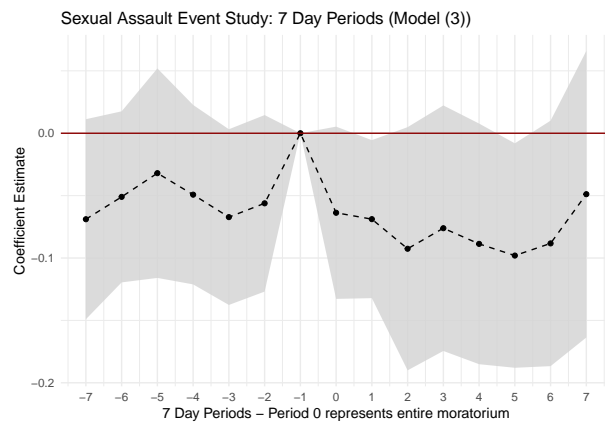
The Figures, 7, 8, and 9 show the event studies when period 0 is the entire moratorium period and the model used is model 3.



(a) Alcohol



(b) Drug



(c) Sexual Assault

Figure 7: Event studies with 7-day periods. Period 0 represents the entire moratorium. This is Model (3) from main table.

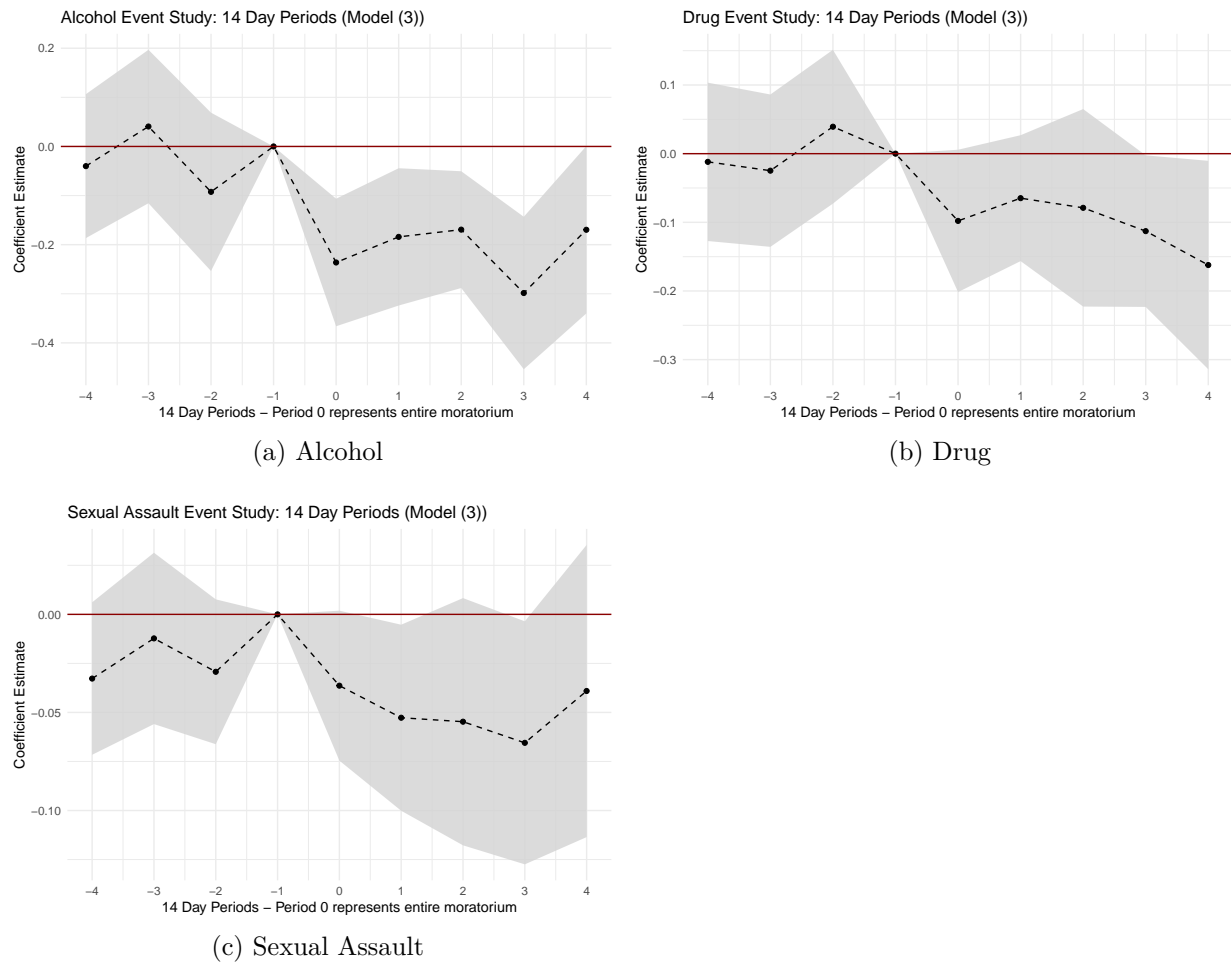


Figure 8: Event studies with 14-day periods. Period 0 represents the entire moratorium. This is Model (3) from main table.

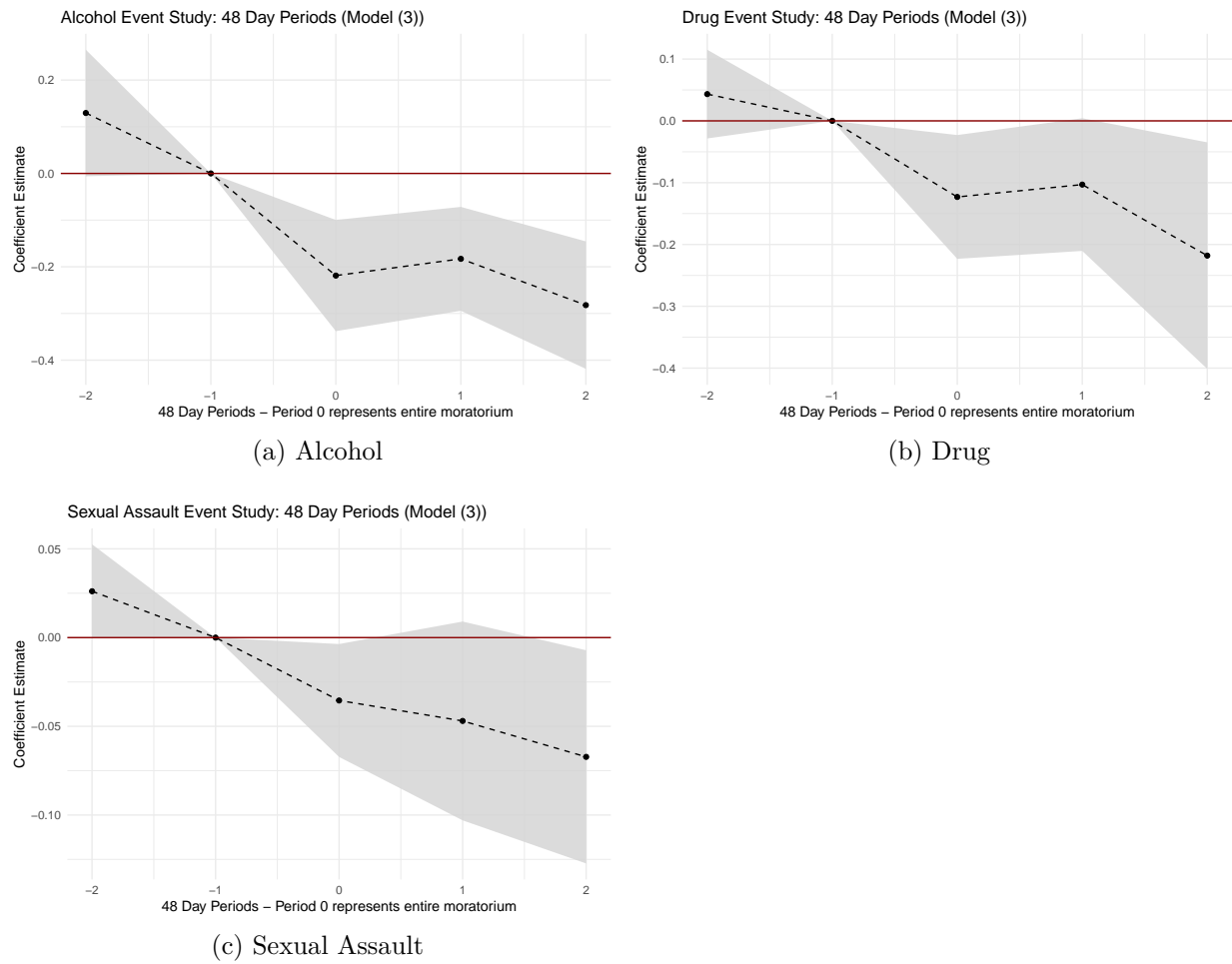
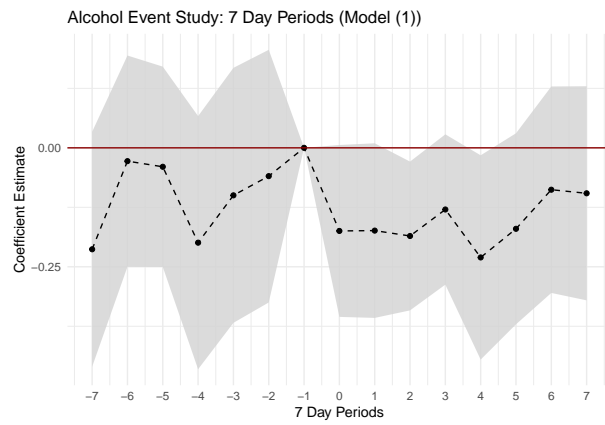


Figure 9: Event studies with 48-day periods. Period 0 represents the entire moratorium. This is Model (3) from main table.

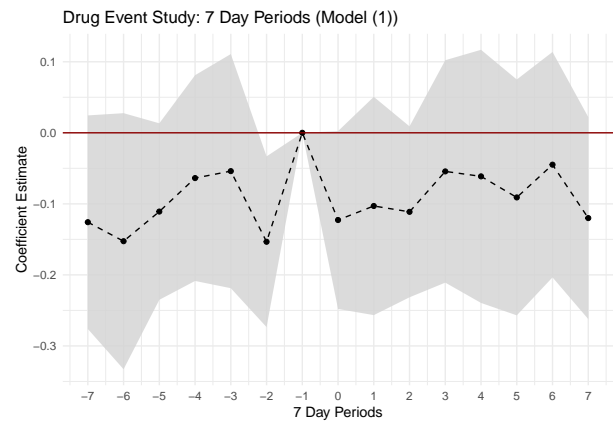
Staggered Adoption

Model 1

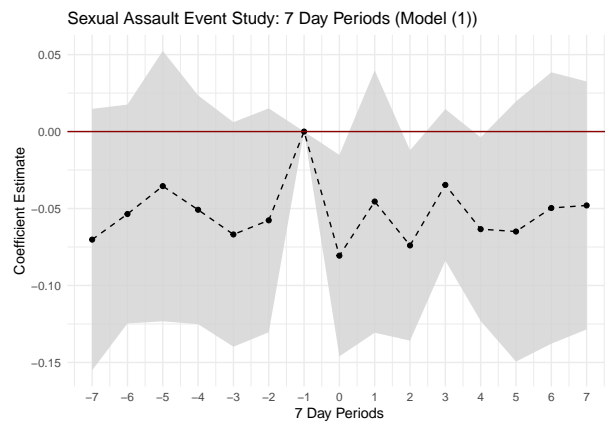
The Figures, [10](#), [11](#), and [12](#) show the staggered event study and the model used is model 1



(a) Alcohol

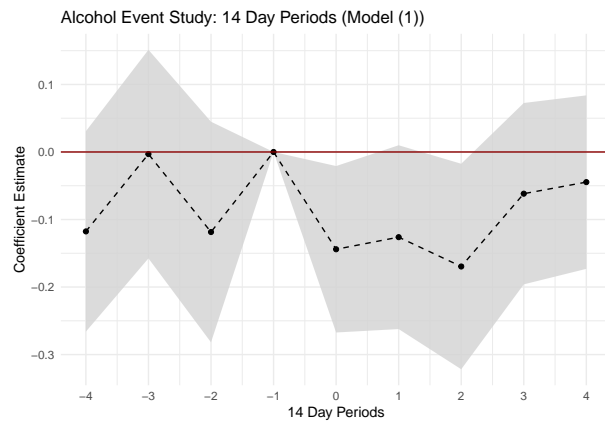


(b) Drug

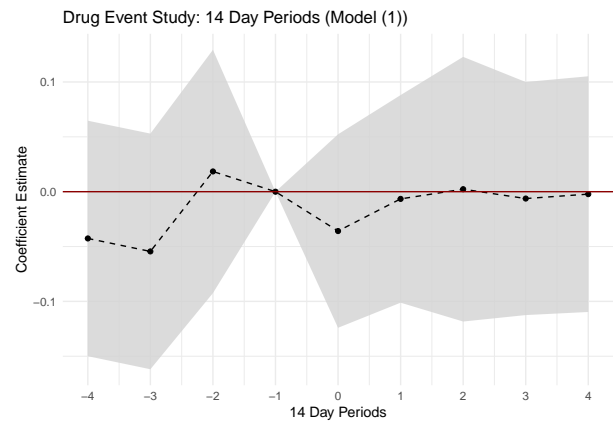


(c) Sexual Assault

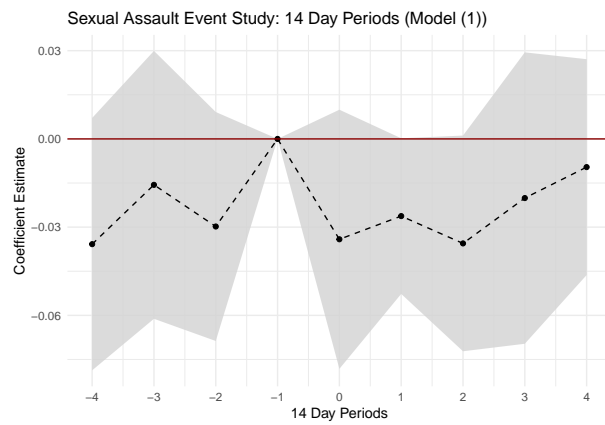
Figure 10: Event studies with 7-day periods. Staggered. This is Model (1) from main table.



(a) Alcohol



(b) Drug



(c) Sexual Assault

Figure 11: Event studies with 14-day periods. Staggered. This is Model (1) from main table.

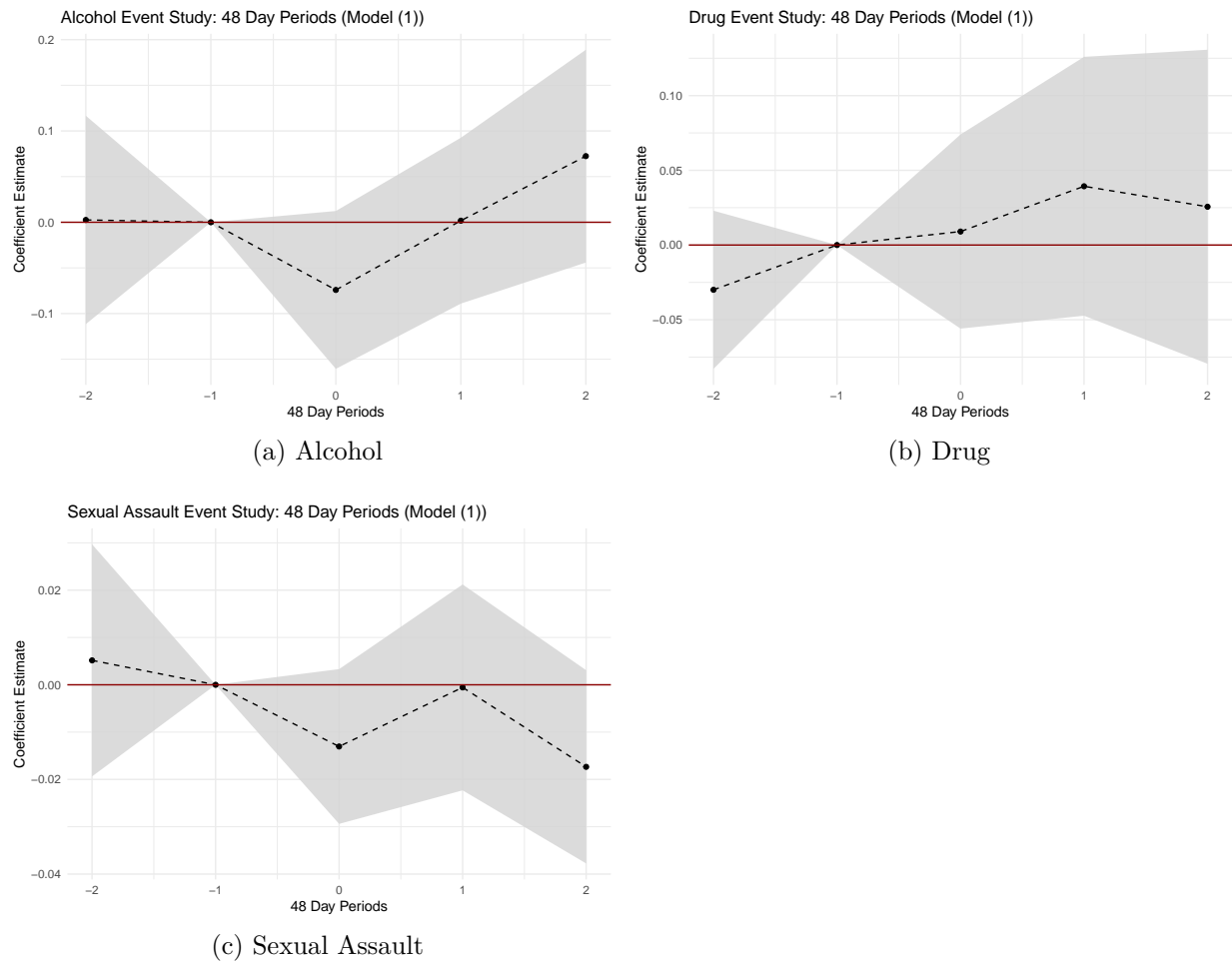
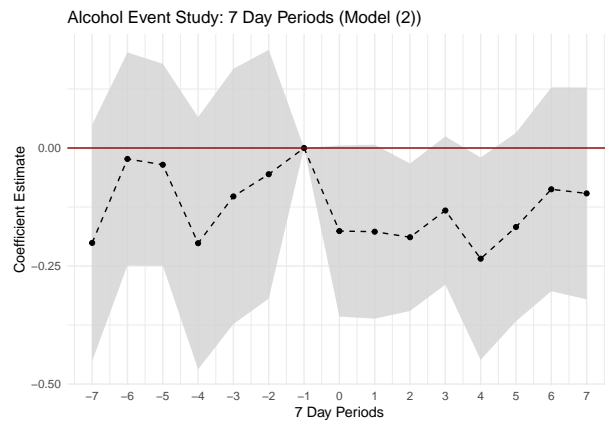


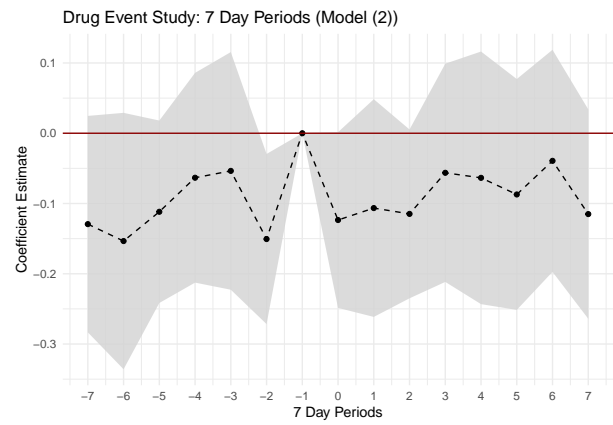
Figure 12: Event studies with 48-day periods. Staggered. This is Model (1) from main table.

Model 2

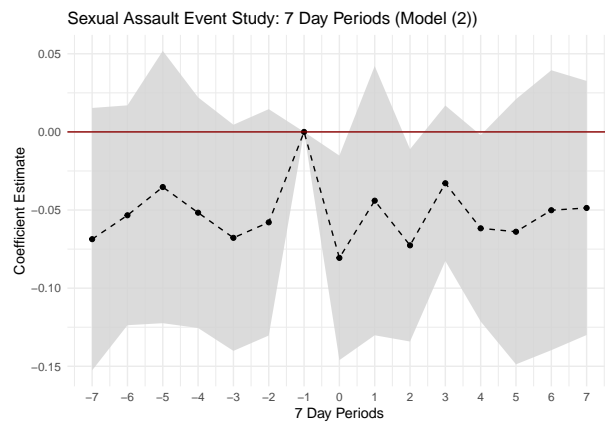
The Figures, [13](#), [14](#), and [15](#) show the staggered event study and the model used is model 2.



(a) Alcohol



(b) Drug



(c) Sexual Assault

Figure 13: Event studies with 7-day periods. Staggered. This is Model (2) from main table.

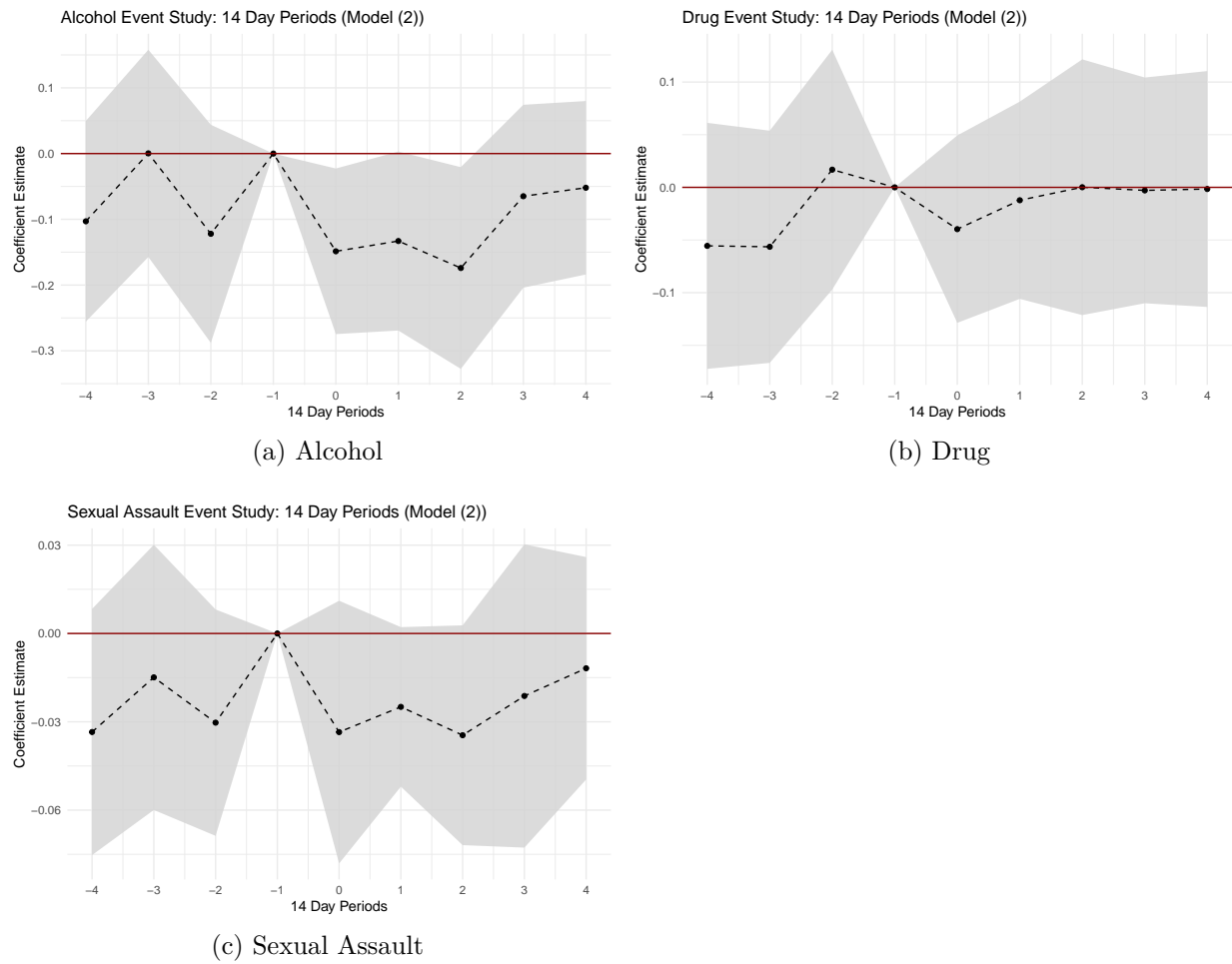


Figure 14: Event studies with 14-day periods. Staggered. This is Model (2) from main table.

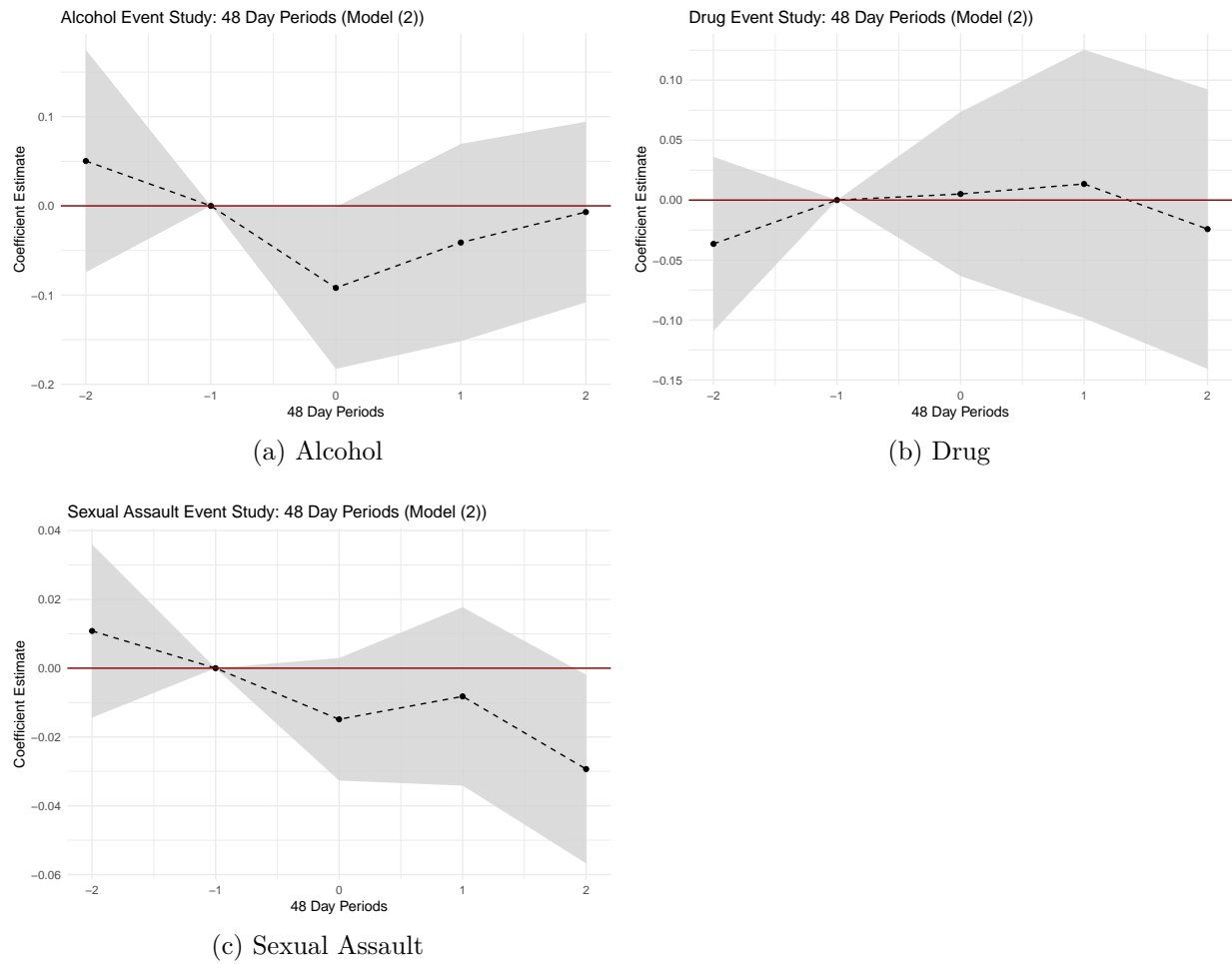


Figure 15: Event studies with 48-day periods. Staggered. This is Model (1) from main table.

Model 3

The Figures, 16, 17, and 18 show the staggered event study and the model used is model 3.

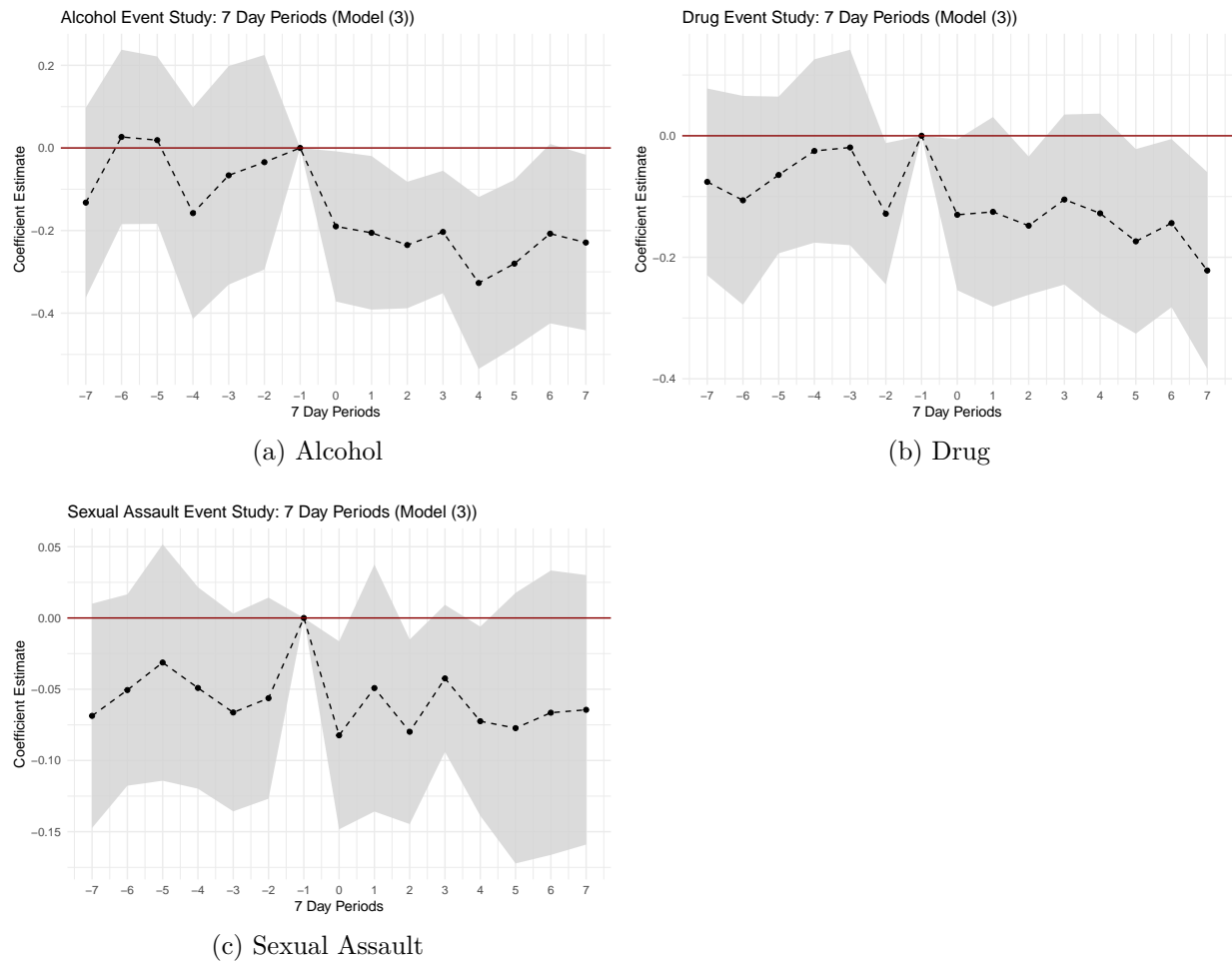


Figure 16: Event studies with 7-day periods. Staggered. This is Model (3) from main table.

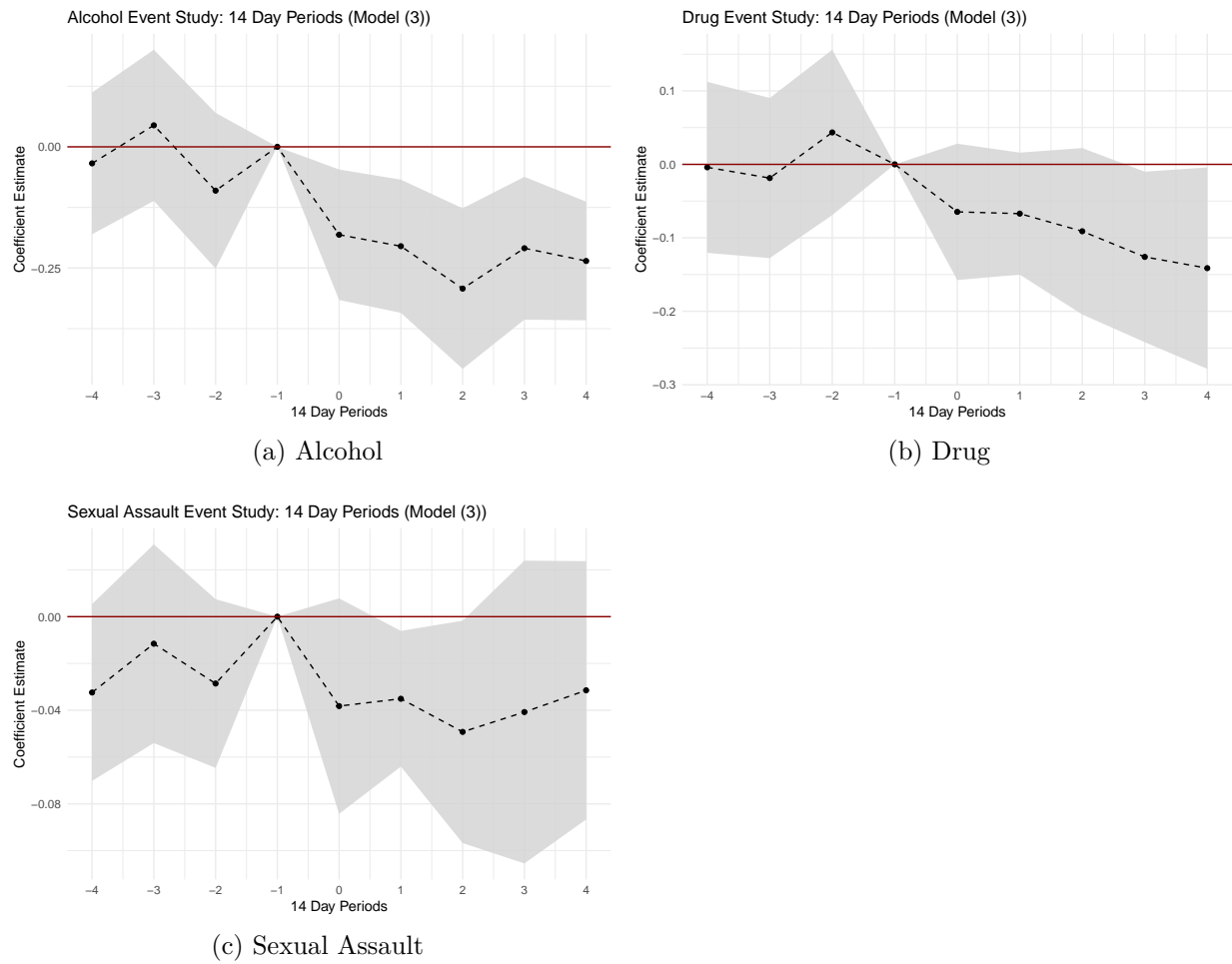


Figure 17: Event studies with 14-day periods. Staggered. This is Model (2) from main table.

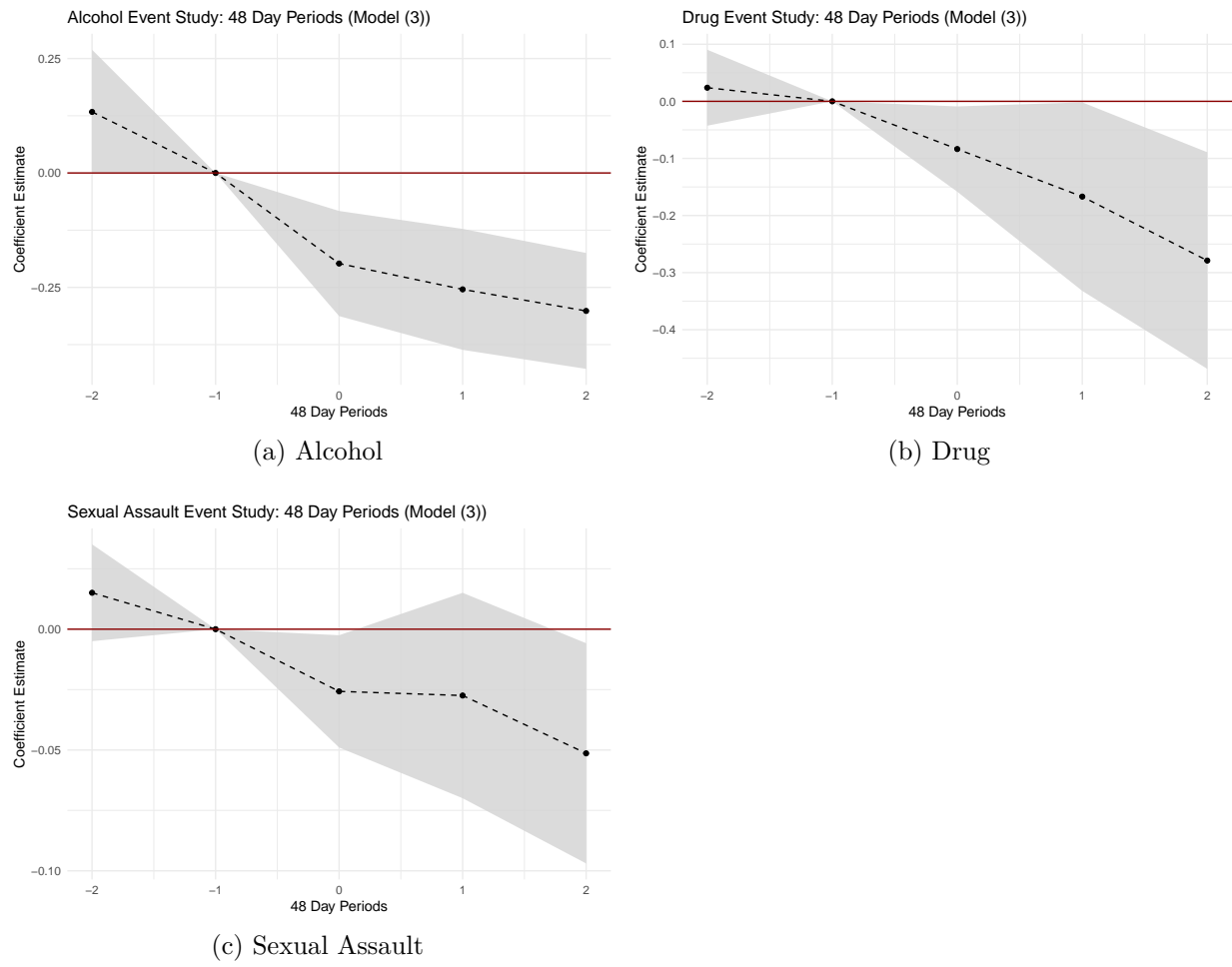


Figure 18: Event studies with 48-day periods. Staggered. This is Model (1) from main table.