

Supplementary Online Content

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eTable 1. Motorcycle Rally Locations and Dates

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eFigure 1. Comparison of Observed Effect Sizes to Effect Sizes Obtained From a Simulation of Randomly Assigned “Pseudo-Rally” Dates

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Motorcycle Rally Locations and Dates

Event	Sturgis Motorcycle Rally	Daytona Bike Week	Laconia Motorcycle Week	Myrtle Beach Bike Week Spring Rally	Atlantic Beach Bikefest (Black Bike Week)	Republic of Texas Biker Rally	Bikes Blues & BBQ
Location	Sturgis, SD	Daytona Beach, FL	Laconia, NH	Myrtle Beach, SC	Myrtle Beach, SC	Austin, TX	Fayetteville, AR
Attendance*	500,000	500,000	400,000	500,000	400,000	200,000	400,000
Year							
2021	8/6-8/15	3/5-3/14	6/12-6/20	5/7-5/16	None	6/10-6/13	9/22-9/25
2020	8/7-8/16	3/6-3/15	8/22-8/30	7/13-7/19	None	None	None
2019	8/2-8/11	3/8-3/17	6/8-6/16	5/10-5/19	5/24-5/27	6/13-6/16	9/25-9/28
2018	8/3-8/12	3/9-3/18	6/9-6/17	5/11-5/20	5/25-5/28	6/7-6/10	9/26-9/29
2017	8/4-8/13	3/10-3/19	6/10-6/18	5/12-5/21	5/26-5/29	6/8-6/11	9/20-9/23
2016	8/8-8/14	3/4-3/13	6/11-6/19	5/13-5/22	5/27-5/30	6/9-6/12	9/21-9/24
2015	8/3-8/9	3/6-3/15	6/13-6/21	5/12-5/16	5/22-5/25	6/11-6/14	9/22-9/25
2014	8/2-8/9	3/7-3/16	6/14-6/22	5/12-5/18	5/23-5/26	6/12-6/15	9/24-9/27
2013	8/5-8/11	3/8-3/17	6/8-6/16	5/10-5/19	5/24-5/27	6/13-6/16	9/18-9/21
2012	8/4-8/12	3/9-3/18	6/9-6/17	5/11-5/20	5/25-5/28	6/7-6/10	9/26-9/29
2011	8/8-8/14	3/4-3/13	6/11-6/19	5/12-5/22	5/26-5/31	6/9-6/12	9/28-10/1
2010	8/9-8/15	2/26-3/7	6/12-6/20	5/10-5/16	5/27-5/31	6/10-6/13	9/29-10/2
2009	8/3-8/9	2/27-3/8	6/13-6/21	None	5/21-5/25	6/11-6/14	9/23-9/26
2008	8/4-8/10	2/29-3/10	6/14-6/22	5/9-5/18	5/23-5/26	6/12-6/15	9/24-9/27
2007	8/6-8/12	3/2-3/11	6/9-6/17	5/11-5/20	5/24-5/27	5/31-6/3	10/3-10/6
2006	8/7-8/13	3/3-3/12	6/10-6/18	5/12-5/21	5/26-5/29	6/1-6/4	9/27-9/30
2005	8/8-8/14	3/4-3/13	6/11-6/19	5/16-5/22	5/27-5/30	6/2-6/5	9/28-10/1

Notes: *Attendance is estimated annual attendance.

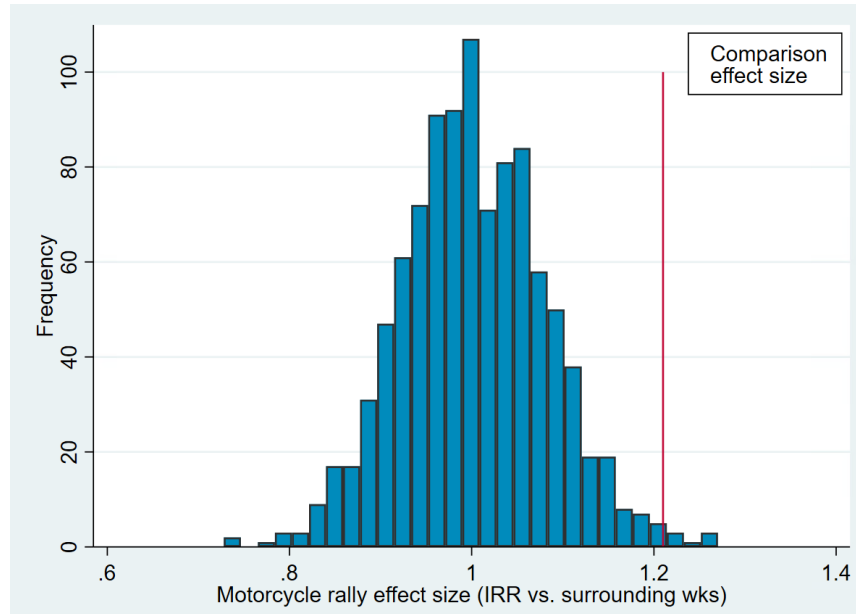
eTable 2. Adjusted Number of Organ Donors and Organ Transplants Per Day Per Region, For Motorcycle Rally Dates Compared With Non-Rally Dates

Variable	Outcome: # organ donors per region per day						Outcome: # transplant recipients per region per day					
	Rally regions			Control regions			Rally regions			Control regions		
	Estimate	95% CI	P-value	Estimate	95% CI	P-value	Estimate	95% CI	P-value	Estimate	95% CI	P-value
Weeks relative to Bike Week												
4 weeks before	0.34	(0.30, 0.38)	0.01	0.31	(0.29, 0.34)	0.45	1.14	(0.99, 1.29)	<0.01	1.09	(0.99, 1.18)	0.58
3 weeks before	0.33	(0.29, 0.37)	<0.01	0.32	(0.30, 0.35)	0.90	1.14	(0.99, 1.28)	<0.01	1.10	(1.01, 1.19)	0.70
2 weeks before	0.34	(0.30, 0.39)	0.02	0.30	(0.28, 0.32)	0.16	1.11	(0.97, 1.26)	<0.01	1.05	(0.96, 1.13)	0.22
1 week before	0.34	(0.30, 0.38)	<0.01	0.31	(0.29, 0.33)	0.32	1.15	(1.00, 1.30)	<0.01	1.06	(0.97, 1.14)	0.25
Motorcycle rally (Ref.)	0.42	(0.37, 0.46)	---	0.32	(0.30, 0.35)	---	1.47	(1.31, 1.64)	---	1.12	(1.03, 1.21)	---
1 week after	0.36	(0.32, 0.40)	0.07	0.30	(0.28, 0.32)	0.13	1.21	(1.05, 1.36)	0.02	1.04	(0.95, 1.13)	0.18
2 weeks after	0.36	(0.32, 0.40)	0.05	0.31	(0.28, 0.33)	0.35	1.24	(1.08, 1.39)	0.04	1.07	(0.98, 1.17)	0.46
3 weeks after	0.34	(0.30, 0.37)	<0.01	0.30	(0.27, 0.32)	0.08	1.21	(1.06, 1.36)	0.02	1.03	(0.94, 1.11)	0.14
4 weeks after	0.32	(0.28, 0.36)	<0.01	0.30	(0.27, 0.33)	0.18	1.12	(0.98, 1.26)	<0.01	1.06	(0.97, 1.16)	0.40

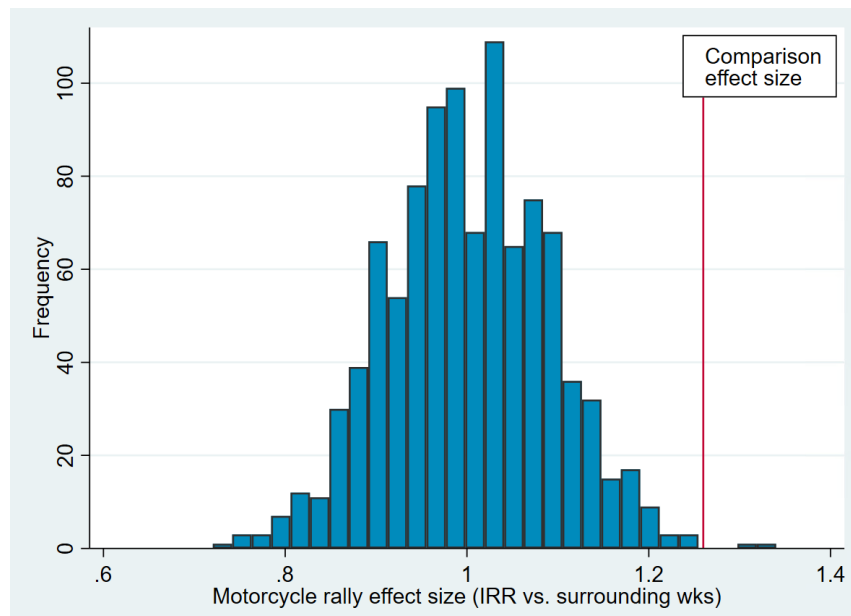
Notes: Estimates were obtained from a single multivariable Poisson regression model adjusting for OPTN region, day of week, week of year, and year. The main independent variables were indicators for week relative to rally week in a given region, and an interaction term was included to estimate the effects for rally vs. control regions. The p-values compare each estimate to the reference (motorcycle rally week). Control regions were the OPTN regions not sharing a border with a motorcycle rally's region. These estimates were used to make Figures 2A and 2B in the main article.

eFigure 1. Comparison of Observed Effect Sizes to Effect Sizes Obtained From a Random Permutation Simulation of Randomly Assigned “Placebo Rally” Dates

A. Distribution of random permutation effect sizes for number of organ donors



B. Distribution of random permutation effect sizes for number of transplant recipients



Notes: These figures show the results of a random permutation sensitivity analysis in which we assigned random “placebo rally” weeks to motorcycle rally-containing regions and estimated our baseline models (the effect size of motorcycle rally on number of organ donors or transplant recipients) for 1,000 iterations. Panel A shows the distribution of adjusted incidence rate ratios (IRRs) produced from this simulation for the outcome of number of organ donors per region-day. Panel B shows the distribution of adjusted IRRs produced from this simulation for the outcome of number of transplant recipients per region-day. The vertical line in each figure shows our observed

effect size for comparison. This simulation produced an effect size greater than our observed effect size in only 7 out of 1,000 iterations for number of organ donors and 2 out of 1,000 iterations for number of transplant recipients.