

Appendix A Appendix Figures and Tables

Figure A1: Michigan Department of Health Flyer for Breastfeeding and Safe Sleep

Breastfeeding & Safe Sleep

Both work together to lower your baby's risk of Sudden Infant Death Syndrome (SIDS) and Sleep-Related Infant Death.



Breastfeeding/Human Milk Feeding

- Human milk gives nutrients to your baby and helps keep them healthy. It is great for your health too!
- Babies who are fed human milk have a decreased risk for SIDS and sleep-related death.
- It is recommended to give only human milk for the first six months and continue to breastfeed or offer pumped milk for two years and beyond (with foods added at about six months).
- Giving your baby a pacifier can reduce the risk for SIDS and sleep-related infant death, but you should wait to use a pacifier until you and your baby are comfortable with breastfeeding.



Safe Sleep

- Always place your baby on their back for all sleep times until their first birthday.
- Place your baby in a crib, bassinet, portable crib or play yard with a firm mattress and tight-fitting sheet.
- Keep pillows, blankets, soft toys or crib bumpers out of your baby's sleep area.
- Dress your baby in a sleep sack or pajamas to match the temperature of the room.
- Make sure no one smokes around your baby.



Share the room, not the bed

- Keep your baby's safe sleep space within view and reach from where you sleep, ideally for six months.
- Being near your baby can help you learn signs for when your baby is hungry and helps support breastfeeding.
- You can breastfeed your baby in your own bed. When finished feeding, put your baby back into their own separate safe sleep space.

This information applies to healthy, full-term infants. For questions about your baby, ask your doctor, health care provider or home visitor.

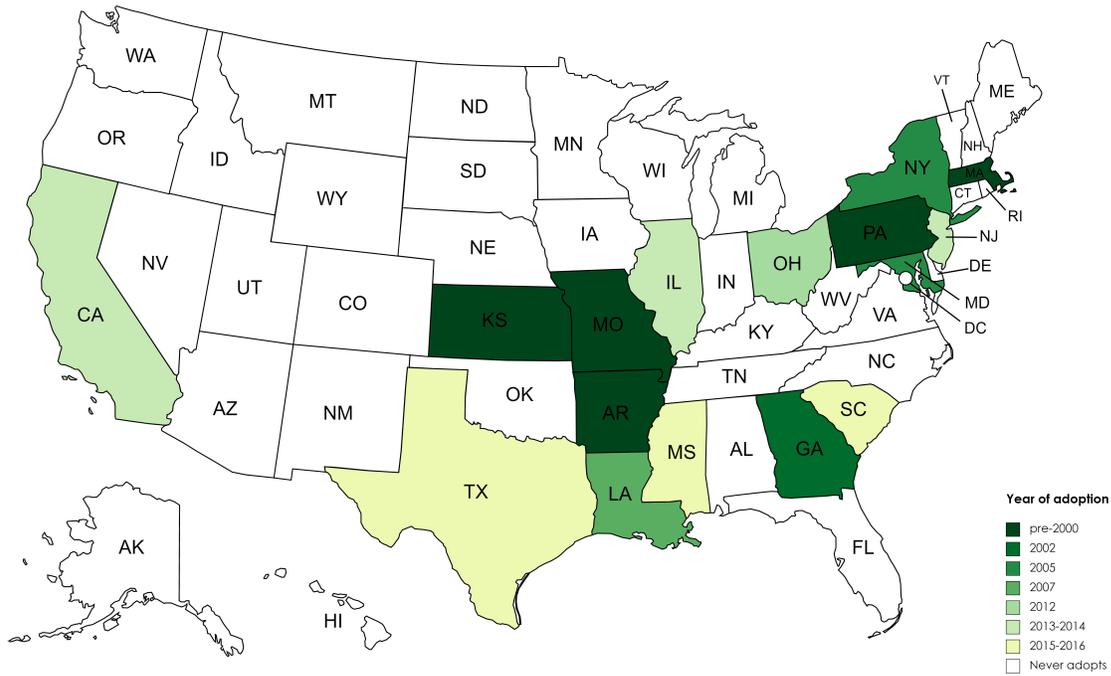
Learn more about safe sleep on the [Infant Safe Sleep Website](https://www.michigan.gov/SafeSleep) (URL: [Michigan.gov/SafeSleep](https://www.michigan.gov/SafeSleep)) and breastfeeding at [Ready, Set Baby](https://www.readysetbabyonline.com) (URL: <https://www.readysetbabyonline.com>).



The Michigan Department of Health and Human Services (MDHHS) will not exclude from participation in, deny benefits of, discriminate against any individual or group because of race, sex to include sexual orientation and gender identity and expression, religion, age, national origin, color, height, weight, marital status, partisan considerations, or disability.
MDHHS-Pub 1377 (Rev. 4-23)

Source: <https://www.michigan.gov/mdhhs/keep-mi-healthy/maternal-and-infant-health/breastfeeding/breastfeeding-and-safe-sleep>. Last accessed: 09/10/2023.

Figure A2: Timing of Adoption of State Hospital Breastfeeding Policies



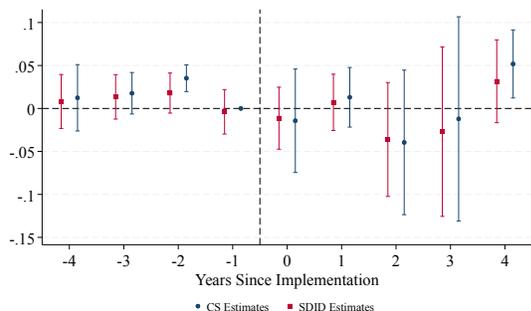
Created with mapchart.net

Note: The map shows the timing of adoption of state-level hospital breastfeeding policies. See Appendix Table A1 for exact month and year of adoption. In the empirical analysis, the year a policy is considered to be in effect may differ from the legal adoption year and is defined as follows. A state is considered to have an effective hospital policy in a given calendar year if they adopted the policy by June of that year. For states that adopt policies in the latter half of the calendar year, the effective year is defined as the following calendar year. Therefore, in the empirical analysis, Missouri's policy effective year is coded as 2000, Georgia's as 2003, New York's as 2006, and Mississippi's as 2017.

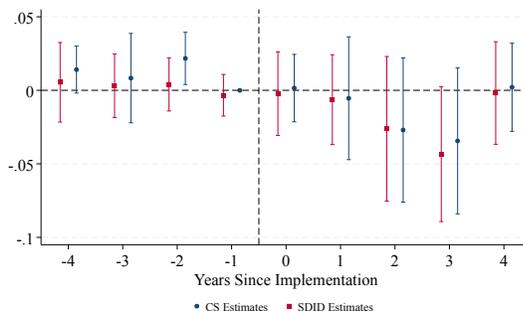
Figure A3: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Breastfeeding Outcomes by Race/Ethnicity, NIS-Child (2003-2017)

Panel A: *Non-Hispanic White Infants*

(a) Breastfeeding at 6 Months

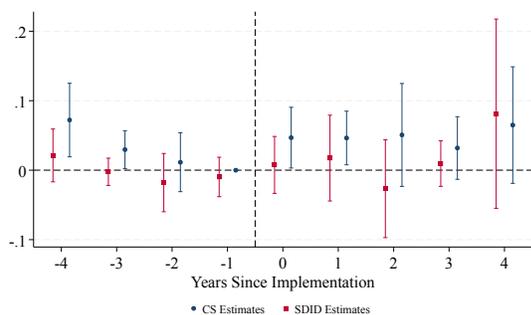


(b) Breastfeeding at 1 Year

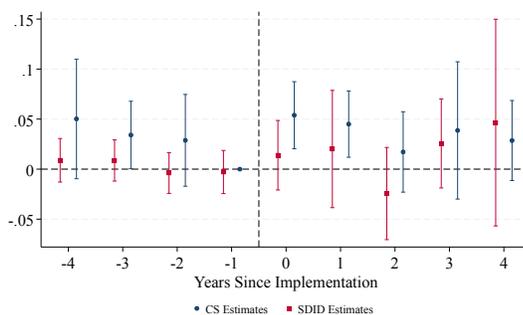


Panel B: *Black, Hispanic, and Other Race/Ethnicity Infants*

(c) Breastfeeding at 6 Months

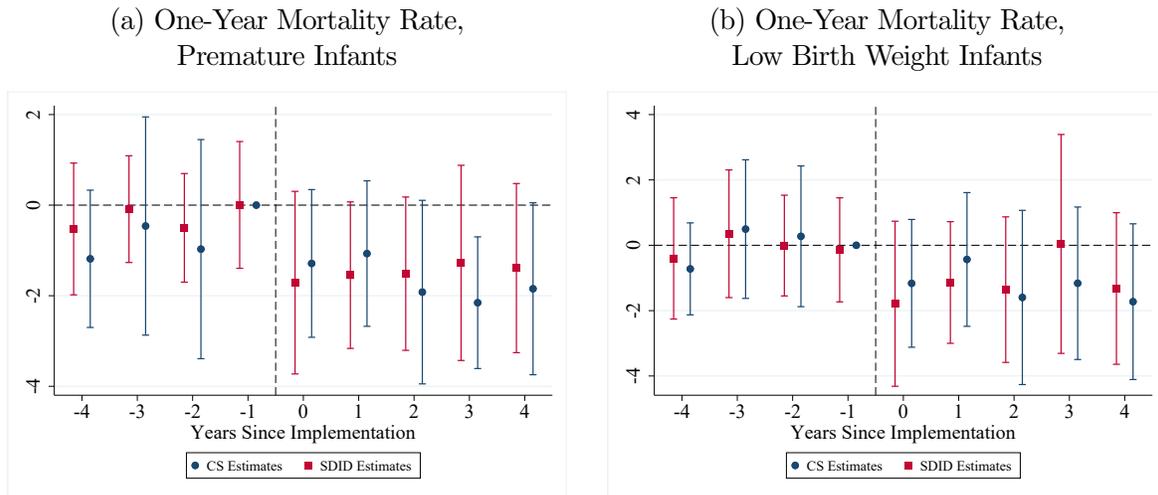


(d) Breastfeeding at 1 Year



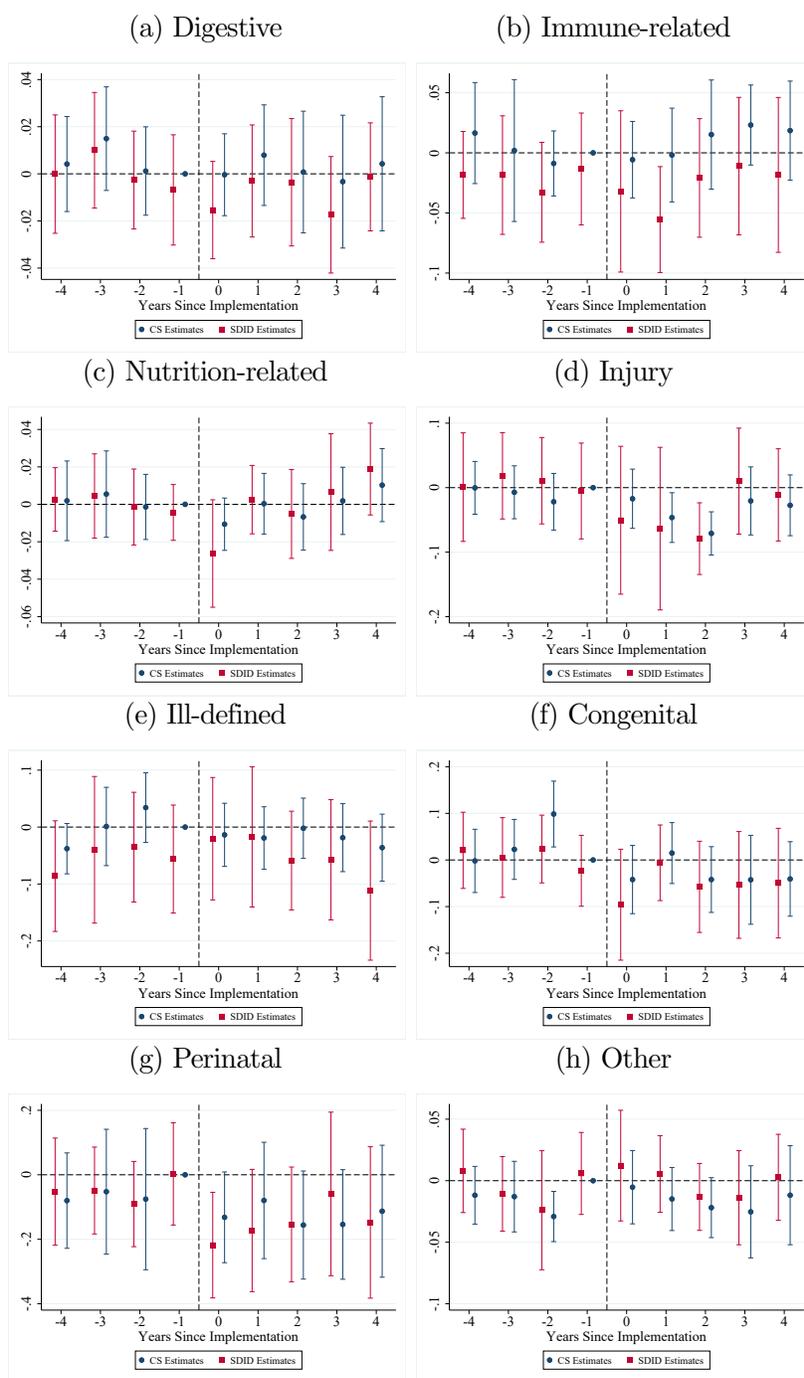
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-birth/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by NIS-Child sampling weights. The outcome variable is described in the panel label. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-birth level.

Figure A4: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on One-Year Mortality by Infant Health at Birth, Cohort Linked Birth-Infant Death Data (1995-2018)



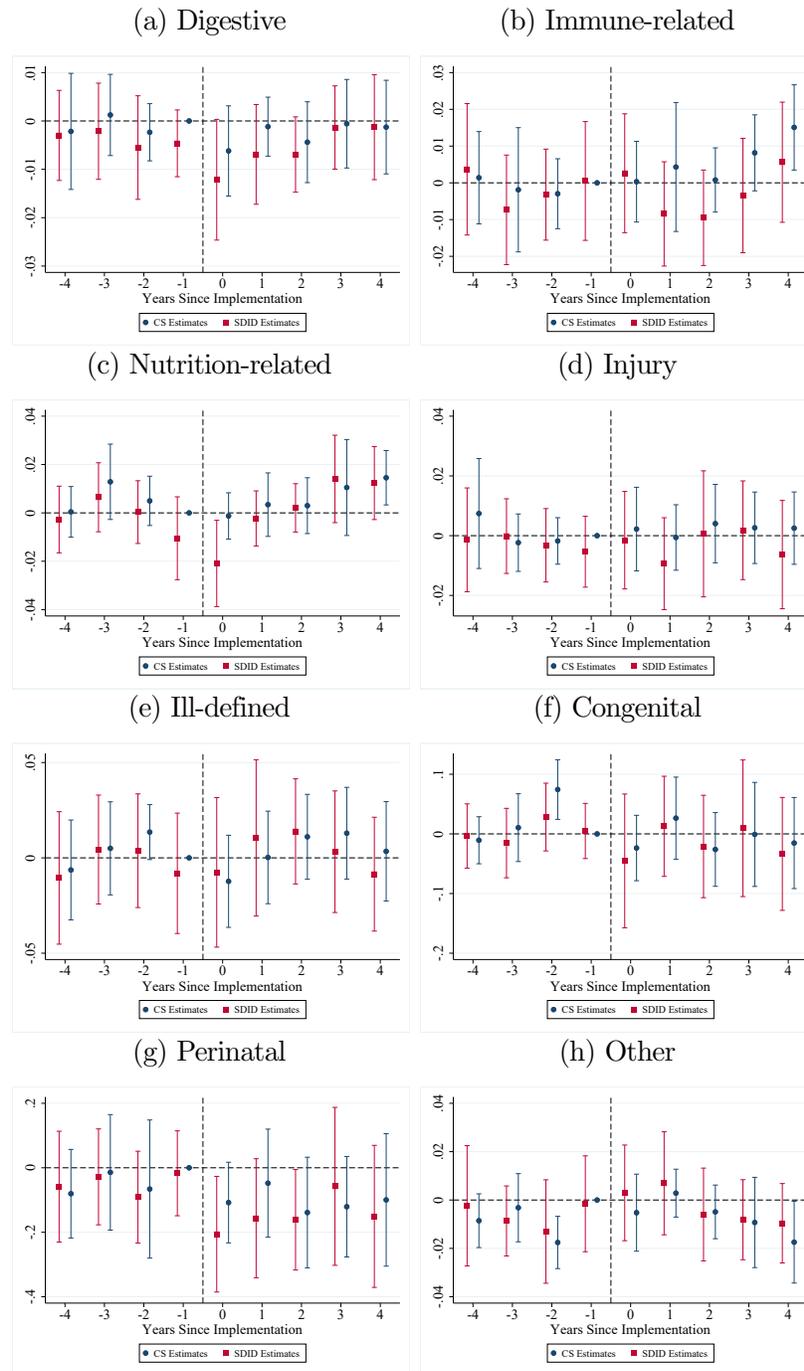
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and the SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcome in panel (a) is the number of deaths within the first year of life among infants born premature (less than 37 weeks gestation) per 1,000 live premature births in that cell. The outcome in panel (b) is the number of deaths within the first year of life among infants born low weight (less than 2500 grams) per 1,000 live low-weight births in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A5: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on One-Year Mortality by Cause of Death, Cohort Linked Birth-Infant Death Data (1995-2018)



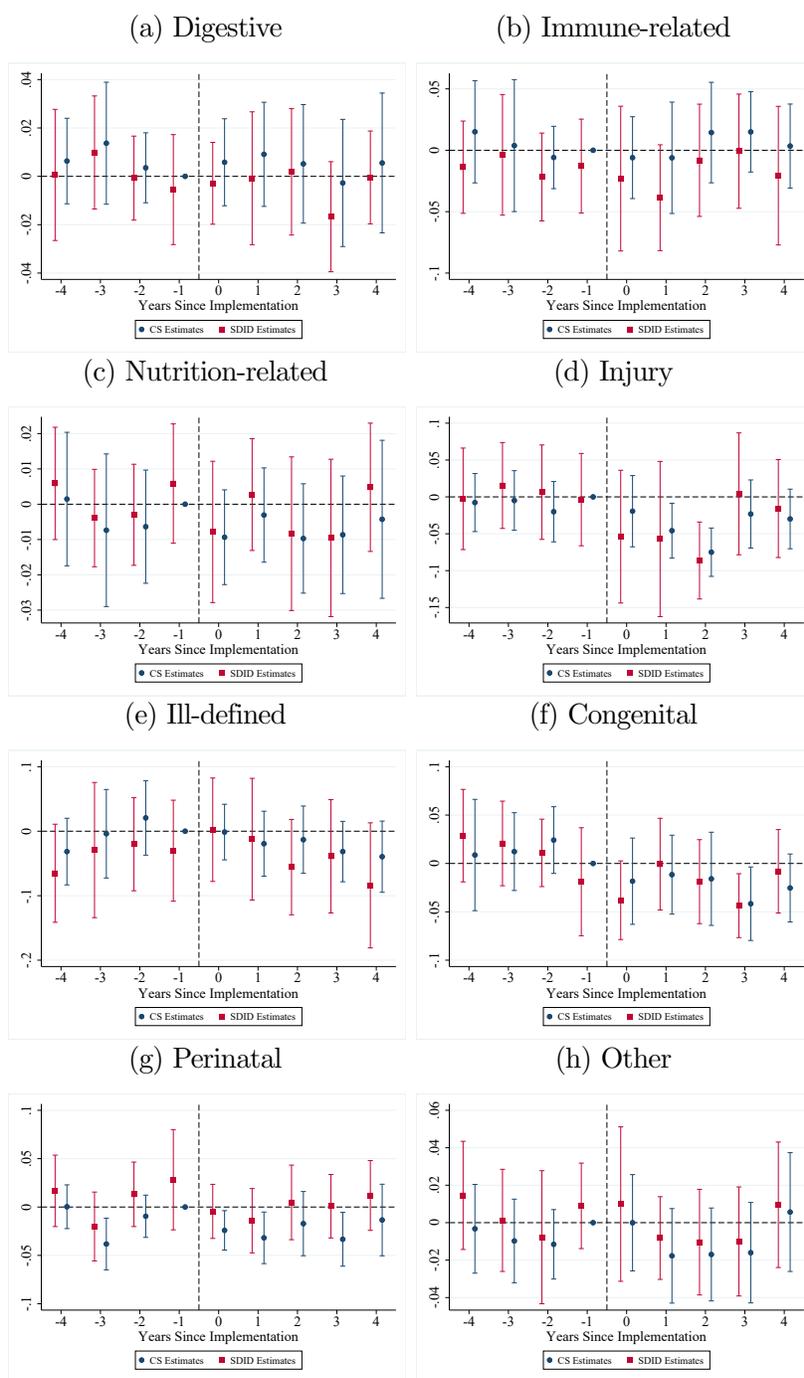
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcome variable is the number of deaths within the first year of life in a cell due to the cause described in the panel label per 1,000 live births in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A6: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Neonatal Mortality by Cause of Death, Cohort Linked Birth-Infant Death Data (1995-2018)



Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcome variable is the number of deaths within the first 28 days of life in a cell due to the cause described in the panel label per 1,000 live births in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence level.

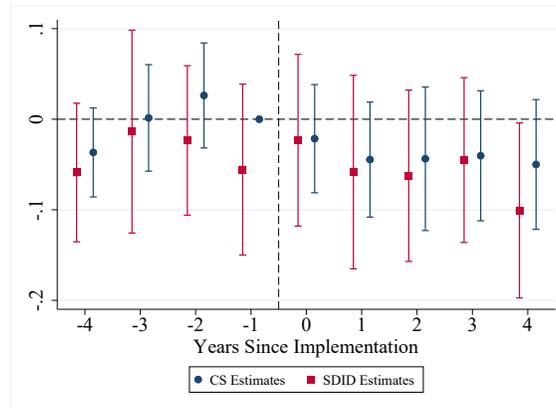
Figure A7: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Postneonatal Mortality by Cause of Death, Cohort Linked Birth-Infant Death Data (1995-2018)



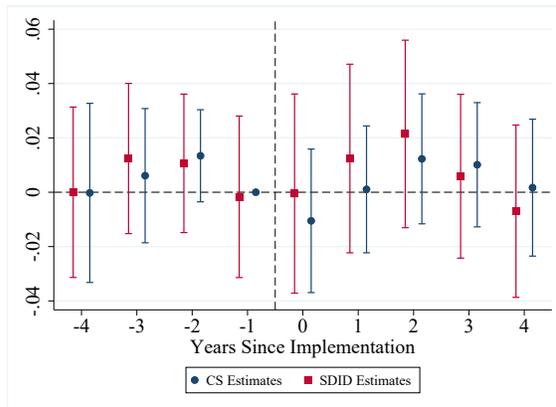
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcome variable is the number of deaths within the first 28–364 days of life in a cell due to the cause described in the panel label per 1,000 live births in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A8: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Sleep-Related Infant Mortality, Cohort Linked Birth-Infant Death Data (1995-2018)

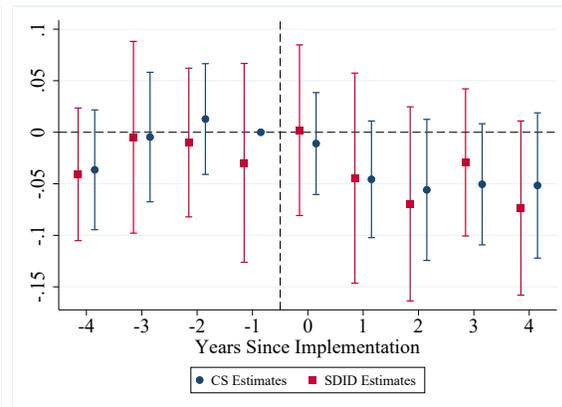
(a) One-Year SUID Mortality Rate



(b) Neonatal SUID Mortality Rate

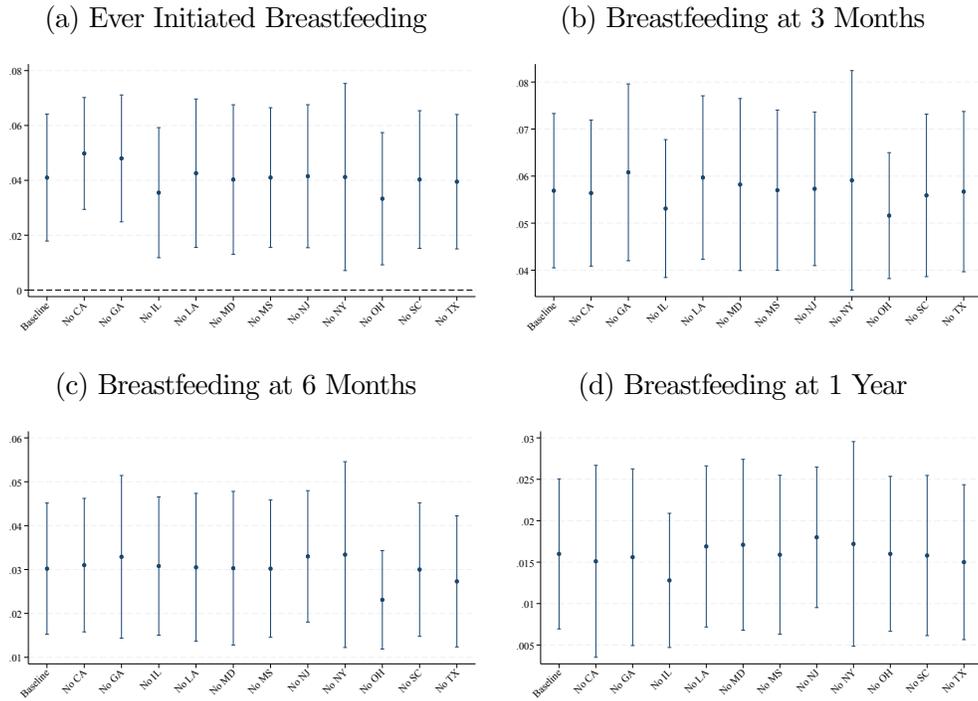


(c) Postneonatal SUID Mortality Rate



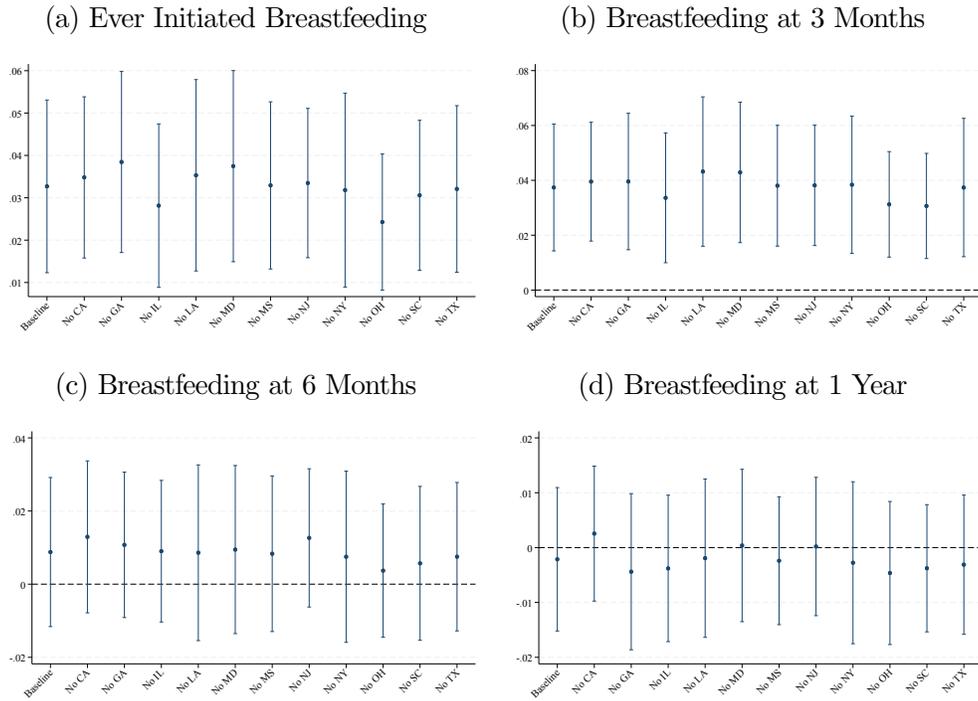
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcomes in panels (a), (b), and (c) are the one-year, neonatal, and postneonatal mortality rates, respectively, due to Sudden Unexpected Infant Death (SUID) and scaled per 1,000 live births in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A9: Robustness of Callaway and Sant’Anna Effects of Hospital Breastfeeding Support Policies on Breastfeeding Outcomes from Leave-One-Out Exercise, NIS-Child (2003-2017)



Note: Each figure presents the simple average of the event-time effects obtained using the Callaway and Sant’Anna (2021) estimator over event periods 0 through 4 (inclusive) in the baseline specification and when iteratively dropping each treated state at a time. The vertical bars represent the corresponding 95% confidence intervals. The unit of observation is a state-of-birth/year-of-birth cell and observations are weighted by NIS-Child sample weights. Never-treated states are the control group. The outcome variable is described in the panel label. Bootstrap standard errors are clustered at the state-of-birth level.

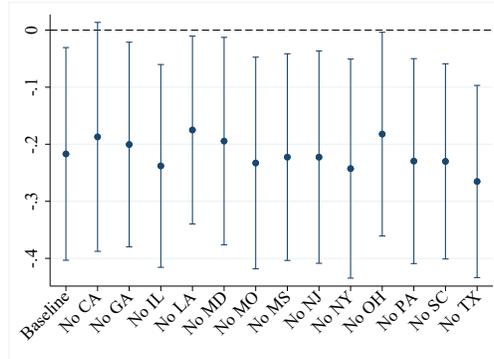
Figure A10: Robustness of Synthetic Difference-in-Differences Effects of Hospital Breastfeeding Support Policies on Breastfeeding Outcomes from Leave-One-Out Exercise, NIS-Child (2003-2017)



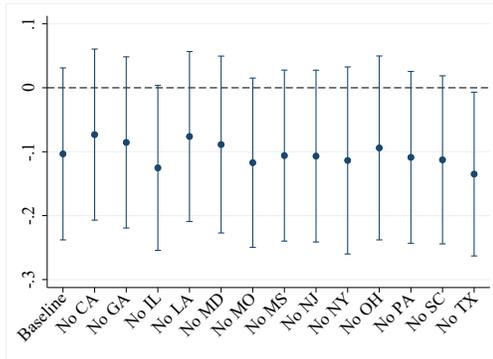
Note: Each figure presents the simple average of the event-time effects obtained using the synthetic difference-in-differences estimator over event periods 0 through 4 (inclusive) in the baseline specification and when iteratively dropping each treated state at a time. The vertical bars represent the corresponding 95% confidence intervals. The unit of observation is a state-of-birth/year-of-birth cell and never treated states are the control group. The outcome variable is described in the panel label. Bootstrap standard errors are clustered at the state-of-birth level.

Figure A11: Robustness of Callaway and Sant’Anna Effects of Hospital Breastfeeding Support Policies on Infant Mortality from Leave-One-Out Exercise, Cohort Linked Birth-Infant Death Data (1995-2018)

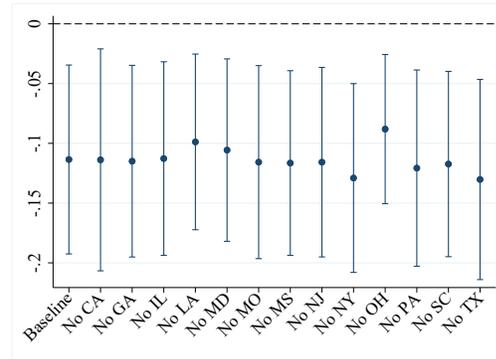
(a) One-Year Mortality Rate



(b) Neonatal Mortality Rate



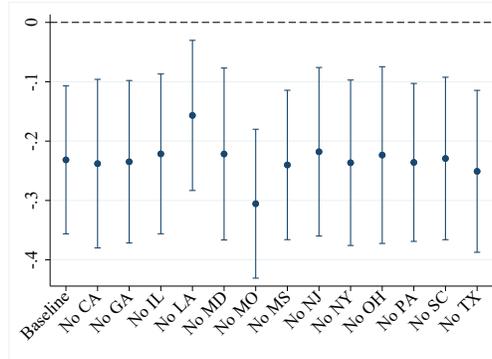
(c) Postneonatal Mortality Rate



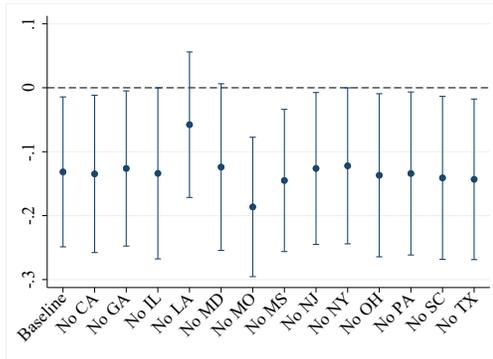
Note: Each figure presents the simple average of the event-time effects obtained using the Callaway and Sant’Anna (2021) estimator over event periods 0 through 4 (inclusive) in the baseline specification and when iteratively dropping each treated state at a time. The vertical bars represent the corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell and observations are weighted by the number of births in that cell. Never-treated states are the control group. The outcomes are described in detail in the note to Figure 3. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A12: Robustness of Synthetic Difference-in-Differences Effects of Hospital Breastfeeding Support Policies on Infant Mortality from Leave-One-Out Exercise, Cohort Linked Birth-Infant Death Data (1995-2018)

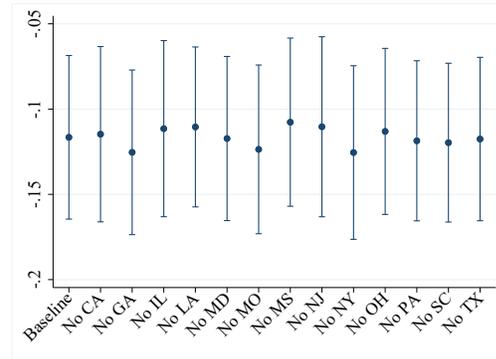
(a) One-Year Mortality Rate



(b) Neonatal Mortality Rate

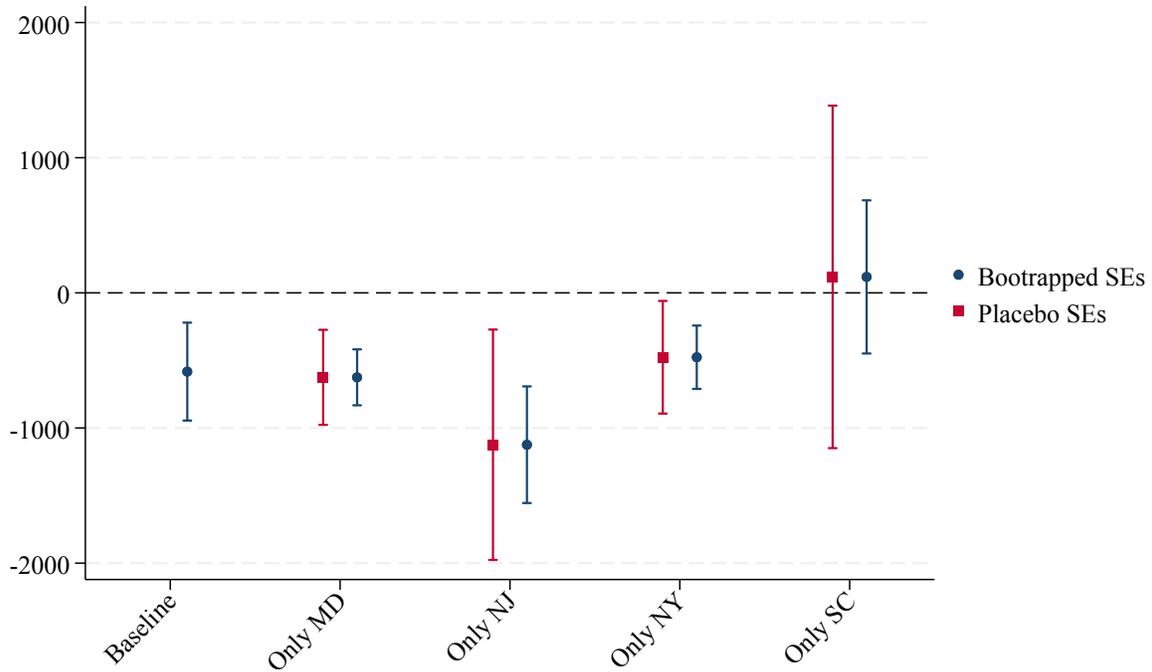


(c) Postneonatal Mortality Rate



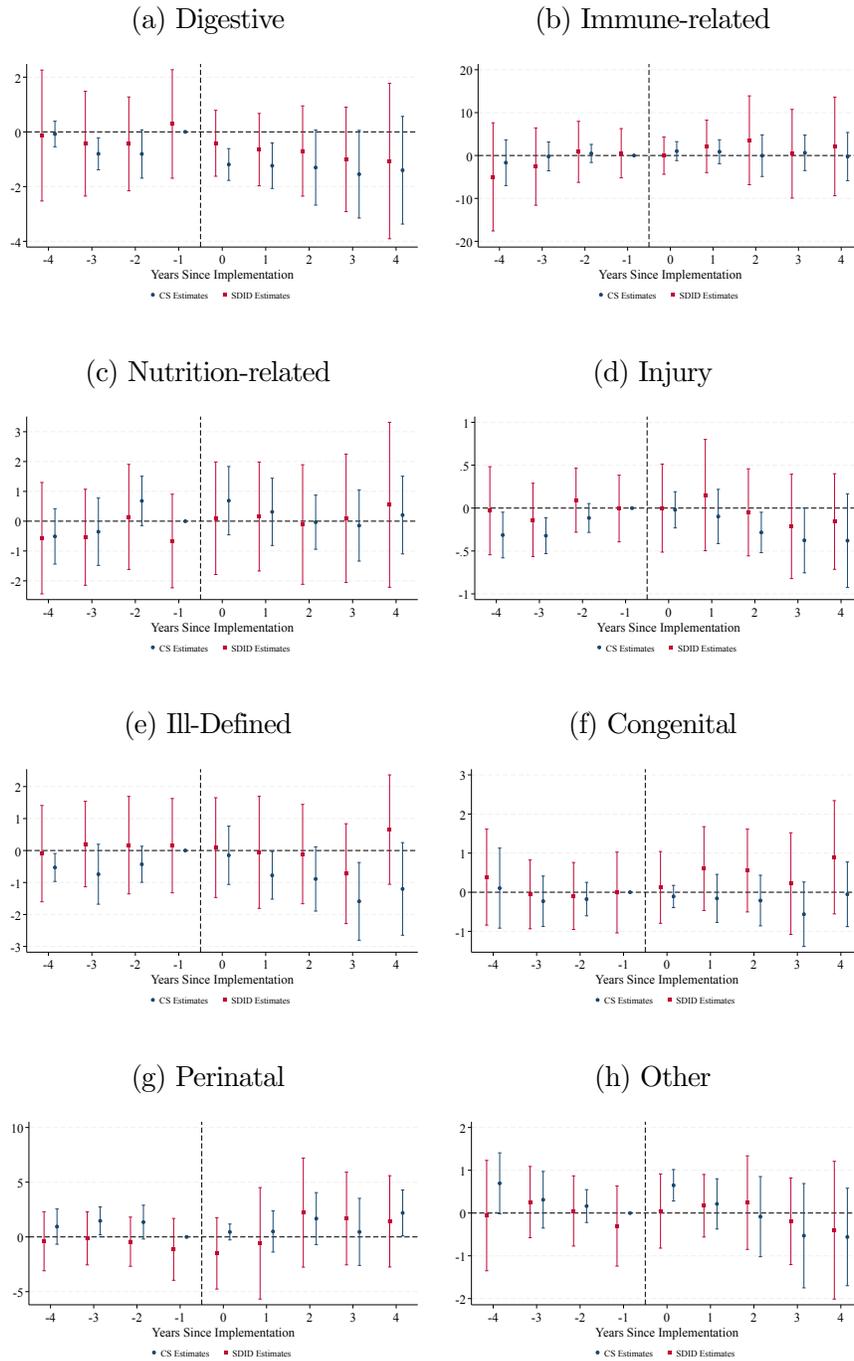
Note: Each figure presents the simple average of the event-time effects obtained using the synthetic difference-in-differences estimator over event periods 0 through 4 (inclusive) in the baseline specification and when iteratively dropping each treated state at a time. The vertical bars represent the corresponding 95% confidence intervals. The unit of observation is a state-of-residence/year-of-birth cell, and never-treated states are the control group. The outcomes are described in detail in the note to Figure 3. Bootstrap standard errors are clustered at the state-of-residence level.

Figure A13: Synthetic Difference-in-Differences Single State Estimates of the Effect on Inpatient Hospitalization Charges Using Placebo Inference, HCUP (2000-2019)



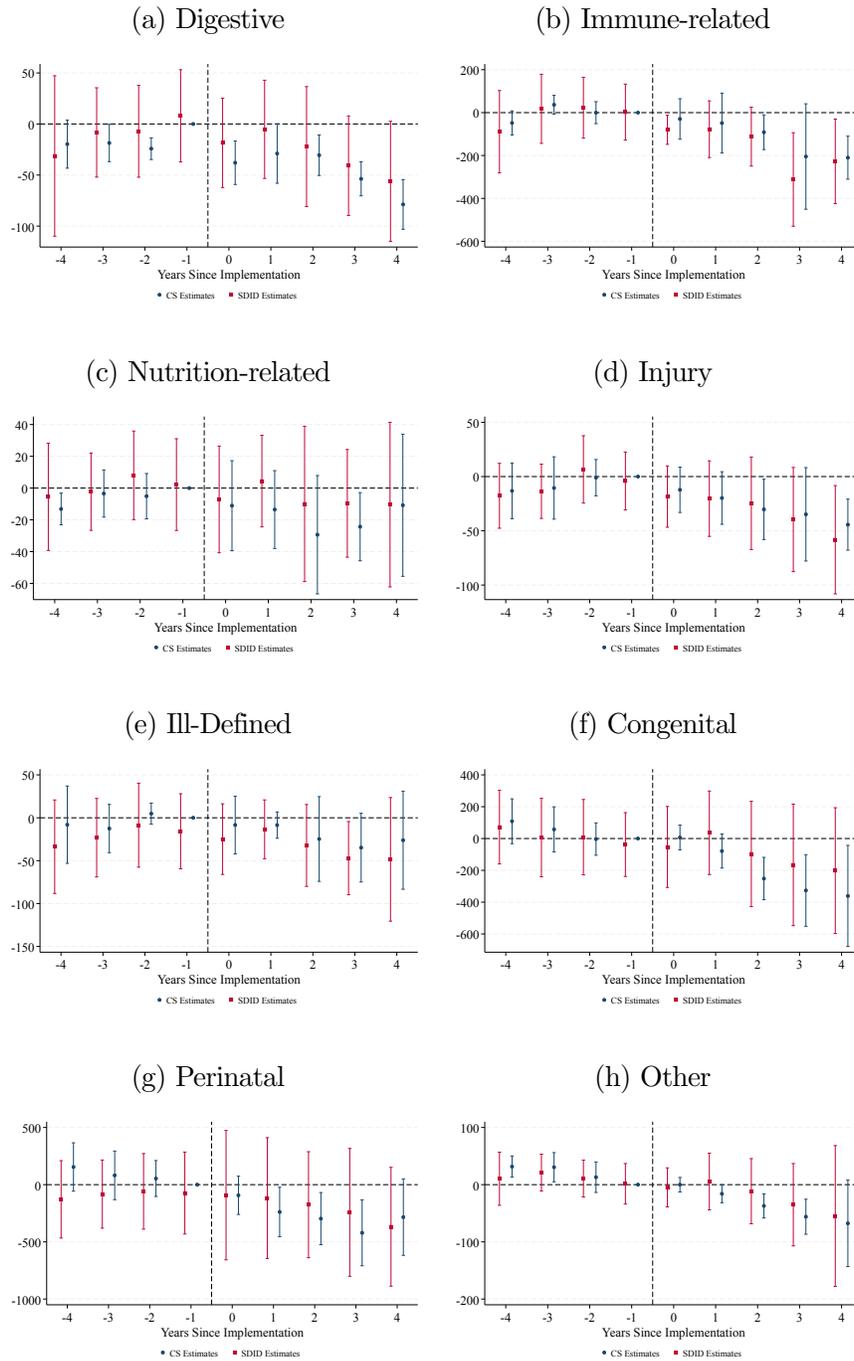
Note: Each point within the figure represents the simple average of the event-time effects over event periods 0 through 4 (inclusive) and their corresponding 95% confidence intervals obtained using the SDID estimator with bootrapped (blue circles) and placebo-based (red squares) standard errors clustered at the state-of-residence/hospital-state level. The unit of observation is a state-of-residence/hospital-state/discharge-year cell. The outcome variable is average charges per birth observed in that cell. The x -axis denotes which treated state is included in the specification.

Figure A14: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Inpatient Hospitalization Rates, HCUP (2000-2019)



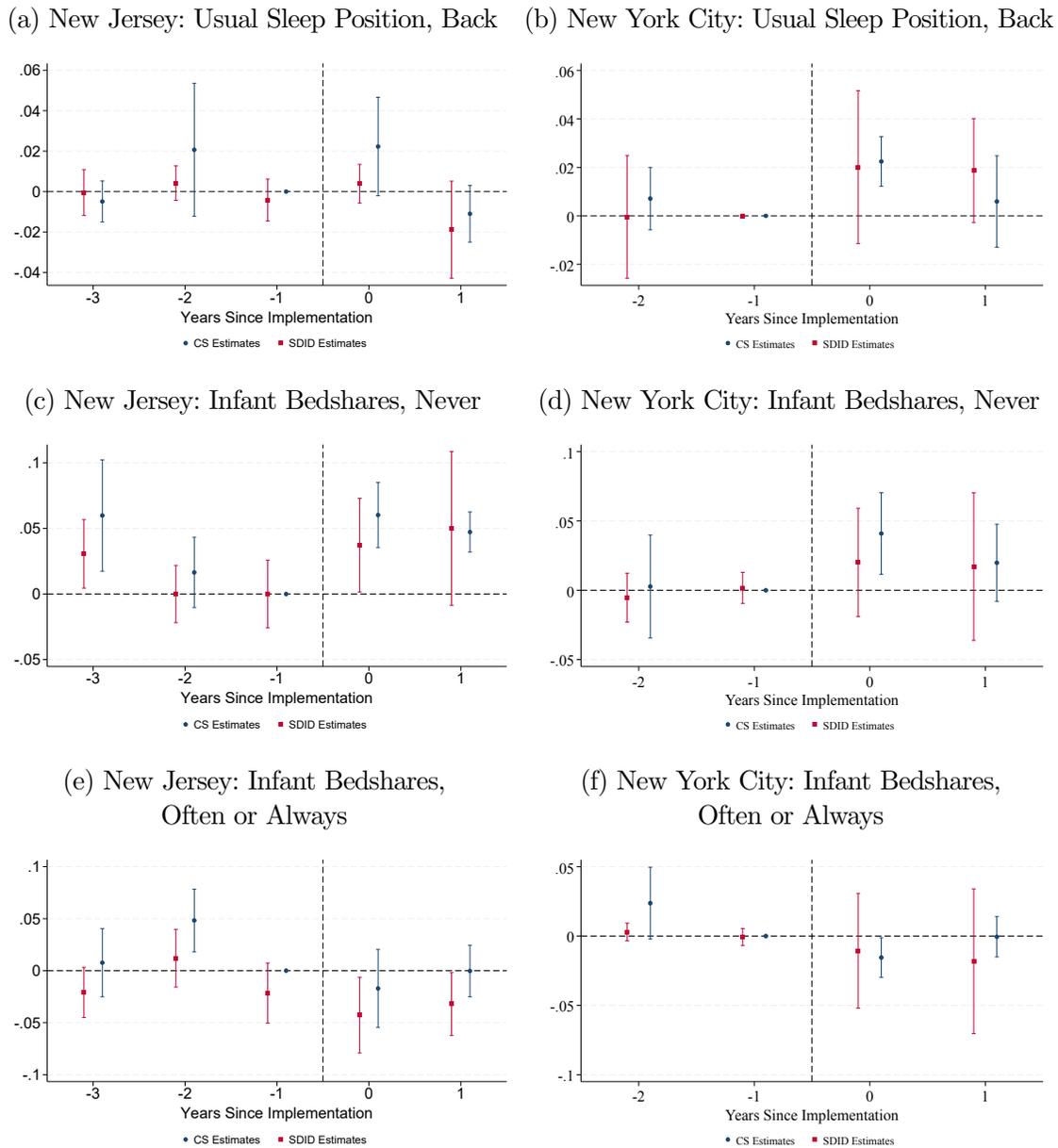
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/hospital-state/discharge-year cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of deliveries in that cell. The outcome variable is the hospitalization rate for the subgroup of hospitalizations with a primary diagnosis as denoted in the panel header. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence/hospital-state level.

Figure A15: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Inpatient Charges, HCUP (2000-2019)



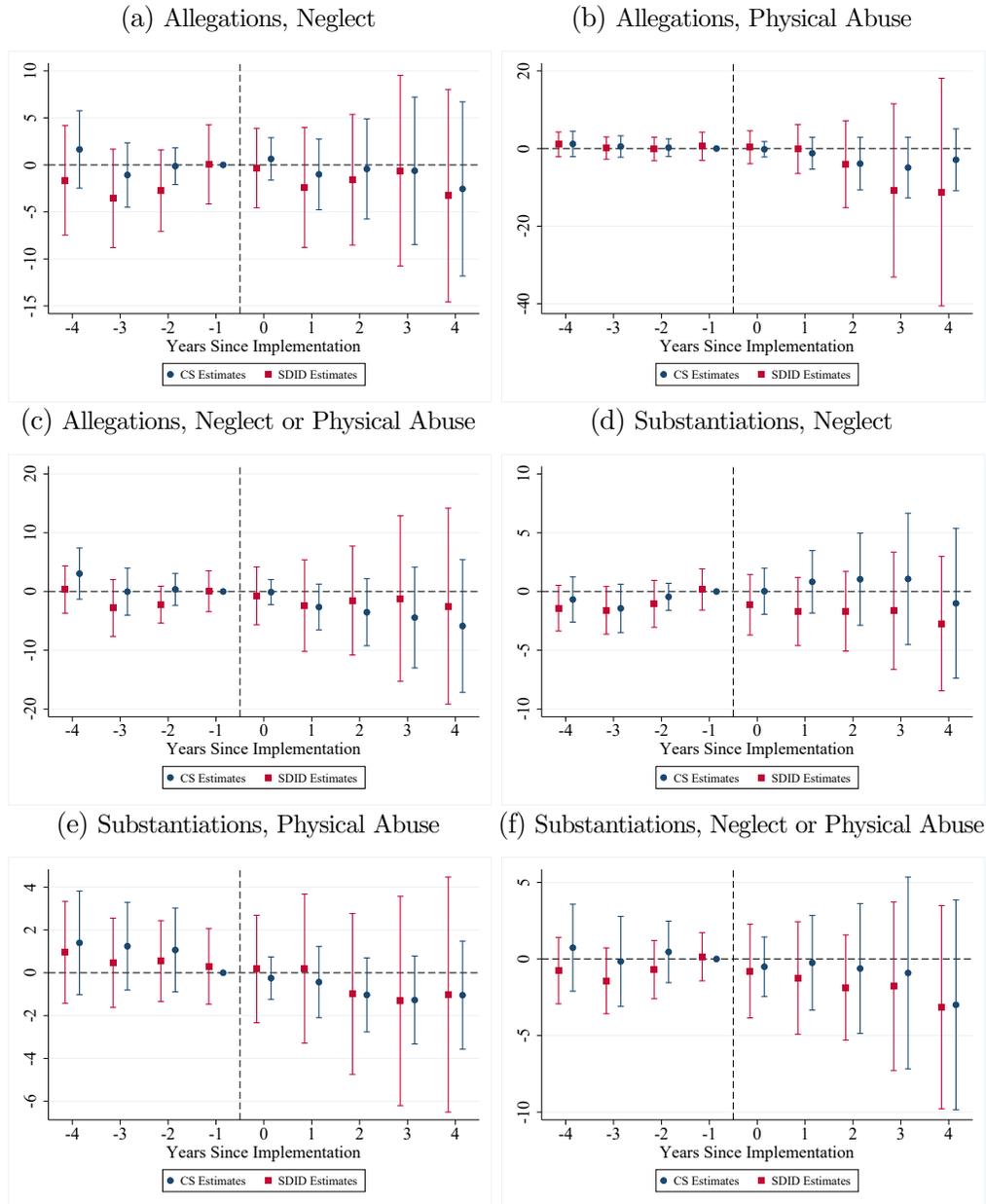
Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-residence/hospital-state/discharge-year cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of deliveries in that cell. The outcome variable is average charges for the subgroup of hospitalizations with a primary diagnosis as denoted in the panel header. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the state-of-residence/hospital-state level.

Figure A16: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Infant Sleep Practices, PRAMS (2000-2018)



Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state-of-birth/year-of-birth cell, and never-treated states are the control group. For the CS estimator, observations are weighted by PRAMS sampling weights. The outcome variable is described in the panel label. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. For the CS estimator we report robust standard errors; for the SDID estimator we report placebo-based standard errors. All standard errors are clustered at the state level. We report a restricted set of event-time effects due to the limited set of state-years that included the sleep-related questions in their survey. The analyses for which New Jersey (New York City) is the treated unit also use a restricted sample that is balanced around an event window from three (two) years prior to one year after policy implementation. See Appendix Table A2 for information on the full set of state-years that are available in the PRAMS sample.

Figure A17: Event-Study Estimates of the Effect of Hospital Breastfeeding Support Policies on Infant Maltreatment, NCANDS (2004-2019)



Note: Each figure presents the event-time effects obtained using the CS (blue circles) and SDID (red squares) estimators and their corresponding 95% confidence intervals. The unit of observation is a state/report-year cell, and never-treated states are the control group. For the CS estimator, observations are weighted by the number of children less than one year old in that cell. The outcome variable is the number of children less than one year old with a report (or substantiation) of the type described in the panel header in the state-report year per 1,000 children less than one year old in that cell. The x -axis measures event time relative to when a state adopts a hospital breastfeeding support policy. For the CS estimator, estimated effects are relative to the year prior to policy adoption; SDID estimates are calculated relative to a weighted average of the pre-treatment period. Bootstrap standard errors are clustered at the reporting state level.

Table A1: Components of State Breastfeeding Policies

State	Month and Year of Hospital Policy Adoption	Lactation Consultant	Staff Training	Inform Patients	Written/Communicated	Rooming In	Non Breastmilk	Group/Resources Info	Initiate BF	How to BF	On Demand BF	No Pacifiers	Total Components (out of 11)
Pennsylvania	06/1998				X								1
Missouri	08/1999	X		X				X					3
Georgia	12/2002					X							1
Maryland	06/2005	X	X										2
New York	09/2005	X	X	X	X	X	X	X	X	X	X	X	11
Louisiana	02/2007	X											1
Ohio	01/2012	X		X									2
Illinois	01/2013	X	X	X	X		X	X	X				7
California	01/2014	X		X	X	X		X					5
New Jersey	01/2014	X	X	X	X	X	X	X	X	X			9
South Carolina	06/2015	X											1
Texas	06/2016	X											1
Mississippi	07/2016		X	X	X		X						4
Total States (out of 13)		10	5	7	6	4	4	5	3	2	1	1	

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Note: In the empirical analysis, the year a policy is considered to be in effect may differ from the legal adoption year and is defined as follows. A state is considered to have an effective hospital policy in a given calendar year if they adopted the policy by June of that year. For states that adopt policies in the latter half of the calendar year, the effective year is defined as the following calendar year. Therefore, in the empirical analysis, Missouri's policy effective year is coded as 2000, Georgia's as 2003, New York's as 2006, and Mississippi's as 2017. States that adopted a hospital policy before June 1998 are excluded. We use the policy component categorizations developed by the LawAtlas Policy Surveillance Program database, detailed below. Lactation consultant: state policy requires that hospitals must make a breastfeeding consultant available to maternity patients. Staff training: state policy requires that healthcare staff be trained in the skills necessary to implement practices that support breastfeeding among maternity patients. Inform patients: state policy requires hospitals to inform patients about breastfeeding (whether it be general, about the benefits and/or disadvantages, about initiation, or management). Written/communicated: state policy require hospitals' breastfeeding policy be written and/or communicated (whether it be to staff, to patients, posted, or provided directly). Rooming in: state policy requires hospitals to permit rooming-in, where the baby's crib is kept by the side of the mother's bed. Non-breastmilk: state policy includes requirements about when infants may be given food or drink other than breast milk. Group/resources info: state policy requires hospitals to foster the establishment of breastfeeding groups and/or refer mothers to them. Initiate BF: state policy requires hospitals to help mothers initiate breastfeeding within one hour of birth. How to BF: state policy require hospitals to provide mothers with instruction on how to breastfeed, and how to maintain lactation. On demand BF: state policy requires that hospitals allow mothers to breastfeed on demand. No pacifiers: state policy prohibits hospitals from giving pacifiers or artificial nipples (e.g., bottle feeding) to breastfeeding infants.

Table A2: PRAMS Data Availability

Site	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	2000
Alabama		o		o	o											•	•	•	•
Alaska	o	o	o	•	•	•	•		o	o	•	•	•	•	•	•	•	•	•
Colorado	o	o	o	o		o	o	o	o	o	o	o	o	o	o	o	o	o	o
Connecticut	o	o	o	•	•														
Delaware	o	o	o	•	•	•	•	•	•	•	•	•							
Florida														•	•	o	o	o	o
Georgia	o	o				•	•	•	•	•	•	•	•	•	•				
Hawaii			o	o	o	o	o	•	•	•	o	o	o	o	o	o	o	o	o
Illinois		o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Iowa		o	o	o	o	o													
Kentucky	o	o																	
Louisiana	o	o	o	•											•	•	•	•	•
Maine		o	o	•	•	•	•	o	o	o	•	•	•	•	•	•	•	•	•
Maryland		o	o	o	o	o	o	•	•	•	o	o	o	o	o	o	o	o	o
Michigan	o	o	o	o		o	o	o	o	o	•	•	•	•	•	•	•	•	
Minnesota						o	o	•	•	•	•	•	•	•	•	•	•		
Mississippi										o	o		o		o	o			
Montana		o																	
Nebraska	o		o	•	•	•	•	•	•	•	•	•	•	•	•	o	o	o	o
New Hampshire		o	o	o	o	o													
New Jersey	o	o	o	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
New Mexico	o	o	o	o	o	o	o	o	o					o	o	o	o	o	o
New York		o	o	o	o	o	o	o	o		o	o	o	o	o	o	o	o	o
New York City	o	o	o	o	o	o	o	o	o			•	•	•	•				
North Carolina		o									o	o		o	o	o	o	o	o
North Dakota		o																	
Ohio				o	o		o		o	o	•	•	•	•		•	•	•	•
Oklahoma		o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o	o
Oregon			o			o	o	o	o	o	•	•	•	•	•	o			
Rhode Island	o	o	o		•	•	•	o	o	o	o	o	o	o	o	o	o	o	o
South Carolina												•	•	•	•	o	o	o	o
South Dakota	o	o																	
Tennessee				•	•	•	•			•	•								
Texas			o	•					•	•									
Utah	o	o	o	o	o	o	o	o	o	o	•	•	•	•	•	o	o	o	o
Vermont	o	o	o	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Virginia	o	o	o	•															
Washington	o	o	o	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
West Virginia	o	o	o	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wisconsin	o	o	o	•	•	•	•	•		•	•	•							
Wyoming	o	o	o	o	o	o	o	o	o	o	•								

Note: • indicates data are available and survey includes bed-sharing questions in that year; o indicates data are available but bed-sharing questions unavailable. A blank cell means data are not available for that state-year. If a state is not listed, they do not have data available for any of the years, or it had adopted a hospital breastfeeding support policy prior to 2000 (Arkansas, Kansas, Massachusetts, Missouri, and Pennsylvania). Gray shaded cells represent state-years in which we consider there to be a state hospital breastfeeding support policy in effect.

Table A3: NCANDS Data Availability

State	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Alabama	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Alaska	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Arizona	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
California	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Colorado	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Connecticut	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Delaware	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	○
District of Columbia	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Florida	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hawaii	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Idaho	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Illinois	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Indiana	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Iowa	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Kentucky	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Louisiana	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Maine	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Maryland	•	•	•	•	•	•	•	•	•	•	•	•	•			
Michigan	•	•	•	•	•	•	•	•	•	•	•	•				
Minnesota	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Mississippi	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Montana	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Nebraska	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Nevada	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
New Hampshire	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
New Jersey	•	•	•	•	•	•	•	•	•	•	•	•	•	○	○	○
New Mexico	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
New York	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
North Carolina	•	•	•	•	•	•	•	•	•	•	•	•	•	•	○	
North Dakota	•	•	•	•	•	•	•	•	•	•						
Ohio	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Oklahoma	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Oregon	•	•	•	•	•	•	•									
Rhode Island	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
South Carolina	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
South Dakota	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Tennessee	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Texas	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Utah	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Vermont	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Virginia	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Washington	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
West Virginia	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wisconsin	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Wyoming	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Note: • indicates substantiation and allegations by maltreatment type available for that report year; ○ indicates substantiation by maltreatment available for that report year but allegations by maltreatment type unavailable. A blank cell means substantiations and allegations by maltreatment type are not available for that state-year. If a state is not listed it had adopted a hospital breastfeeding support policy prior to 2005 (Arkansas, Georgia, Kansas, Massachusetts, Missouri, and Pennsylvania). Gray shaded cells represent state-report years in which we consider there to be a state hospital breastfeeding support policy in effect.

Table A4: Hospital Breastfeeding Support Policy Effects on Infant Mortality by Cause of Death, Cohort Linked Birth-Infant Death Data (1995-2018)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Digestive	Immune-related	Nutrition-related	Injury	Ill-defined	Congenital	Perinatal	Other
<i>Panel A: One-Year Mortality</i>								
CS ATT	0.002 (0.012)	0.010 (0.014)	-0.001 (0.006)	-0.037** (0.018)	-0.018 (0.022)	-0.030 (0.033)	-0.127** (0.064)	-0.016 (0.013)
SDID ATT	-0.008 (0.006)	-0.028** (0.012)	-0.001 (0.006)	-0.039* (0.021)	-0.053** (0.025)	-0.053** (0.024)	-0.150*** (0.049)	-0.001 (0.009)
Pre-Treatment Mean	0.072	0.343	0.077	0.330	0.719	1.237	3.231	0.205
<i>Panel B: Neonatal Mortality</i>								
CS ATT	-0.003 (0.003)	0.006 (0.004)	0.006 (0.005)	0.002 (0.005)	0.003 (0.012)	-0.008 (0.028)	-0.103 (0.063)	-0.007 (0.005)
SDID ATT	-0.006** (0.002)	-0.003 (0.003)	0.001 (0.004)	-0.003 (0.004)	0.002 (0.008)	-0.016 (0.022)	-0.146*** (0.048)	-0.003 (0.004)
Pre-Treatment Mean	0.016	0.036	0.026	0.032	0.087	0.879	3.071	0.066
<i>Panel C: Postneonatal Mortality</i>								
CS ATT	0.005 (0.012)	0.004 (0.013)	-0.007 (0.007)	-0.039** (0.017)	-0.021 (0.018)	-0.023 (0.018)	-0.024** (0.010)	-0.009 (0.011)
SDID ATT	-0.004 (0.005)	-0.018 (0.012)	-0.004 (0.004)	-0.042** (0.019)	-0.038* (0.020)	-0.022** (0.010)	-0.000 (0.007)	-0.002 (0.007)
Pre-Treatment Mean	0.056	0.307	0.051	0.298	0.632	0.359	0.160	0.139

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). The first row in a panel reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/year-of-birth cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the number of births in that cell. Each outcome is the number of deaths in a cell due to the cause described in the column header per 1,000 live births in that cell, and more detail is provided in the note to Figure 3. Bootstrap standard errors are clustered at the state-of-residence level.

Table A5: Hospital Breastfeeding Support Policy Effects on One-Year Infant Mortality among Premature Infants by Cause of Death, Cohort Linked Birth-Infant Death Data (1995-2018)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Digestive	Immune-related	Nutrition-related	Injury	Ill-defined	Congenital	Perinatal	Other
CS ATT	0.035 (0.070)	0.114 (0.080)	0.001 (0.036)	-0.109** (0.045)	-0.184** (0.086)	-0.207 (0.154)	-1.265** (0.565)	-0.040 (0.089)
SDID ATT	-0.028 (0.032)	-0.036 (0.069)	0.002 (0.027)	-0.043 (0.047)	-0.157** (0.075)	-0.146 (0.136)	-1.103*** (0.330)	-0.049 (0.045)
Pre-Treatment Mean	0.419	1.576	0.281	0.639	1.629	5.513	25.562	0.932

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). The first row reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/year-of-birth cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the number of births in that cell. Each outcome is the number of deaths among premature infants in a cell due to the cause described in the column header per 1,000 live premature births in that cell. Bootstrap standard errors are clustered at the state-of-residence level.

Table A6: Robustness of Breastfeeding Estimates to Specification Choices, NIS-Child (2003-2017)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: Breastfeeding Initiation</i>								
CS ATT	0.0410*** (0.0118)	0.0415*** (0.0120)	0.0381*** (0.0111)	0.0375*** (0.0112)	0.0388*** (0.0108)	0.0453*** (0.0101)	0.0485** (0.0205)	0.0421*** (0.0101)
SDID ATT	0.0327*** (0.0104)		0.0298*** (0.0075)	0.0298*** (0.0089)	0.0255*** (0.0075)	0.0337*** (0.0087)	0.0219 (0.0211)	
<i>Panel B: Breastfeeding, 3 Months</i>								
CS ATT	0.0569*** (0.0084)	0.0544*** (0.0083)	0.0502*** (0.0076)	0.0523*** (0.0074)	0.0625*** (0.0098)	0.0503*** (0.0121)	0.0761*** (0.0212)	0.0476*** (0.0084)
SDID ATT	0.0374*** (0.0118)		0.0309*** (0.0089)	0.0347*** (0.0100)	0.0387*** (0.0079)	0.0359*** (0.0118)	0.0155 (0.0166)	
<i>Panel C: Breastfeeding, 6 Months</i>								
CS ATT	0.0302*** (0.0076)	0.0291*** (0.0075)	0.0217*** (0.0064)	0.0285*** (0.0072)	0.0411*** (0.0087)	0.0212* (0.0111)	0.0251* (0.0140)	0.0225*** (0.0067)
SDID ATT	0.0088 (0.0104)		-0.0016 (0.0095)	0.0094 (0.0094)	0.0264*** (0.0084)	0.0075 (0.0108)	-0.0048 (0.0172)	
<i>Panel D: Breastfeeding, 1 Year</i>								
CS ATT	0.0160*** (0.0046)	0.0135** (0.0054)	0.0151** (0.0061)	0.0129*** (0.0041)	0.0121** (0.0053)	0.0123** (0.0061)	0.0128 (0.0145)	0.0087 (0.0054)
SDID ATT	-0.0021 (0.0067)		-0.0070 (0.0070)	-0.0044 (0.0058)	0.0004 (0.0053)	-0.0026 (0.0068)	0.0038 (0.0141)	
Post-treatment aggregation?	0-4	0-4	0-3	0-5	0-12	0-4	0-4	0-4
Use never and not-yet treated?	No	Yes	No	No	No	No	No	No
Alternative treatment timing?	No	No	No	No	No	Yes	No	No
HCUP sample?	No	No	No	No	No	No	Yes	No
NIS-Child sample weights (CS only)?	Yes	No						

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: Each cell presents the simple average of the event-time effects over different event periods. The first row in a panel reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-birth/year-of-birth cell. For the CS estimator, observations are weighted by the NIS-Child sampling weights (except in column 8). Infants are observed at ages 19–35 months, between 2003 and 2017. The outcomes are described in each panel label. Bootstrap standard errors are clustered at the state-of-birth level.

Table A7: Robustness of Infant Mortality Estimates to Specification Choices, Cohort Linked Birth-Infant Death Data (1995-2018)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: One-Year Mortality</i>							
CS ATT	-0.217** (0.093)	-0.215** (0.098)	-0.222** (0.097)	-0.217** (0.108)	-0.313* (0.167)	-0.252*** (0.097)	-0.392** (0.154)
SDID ATT	-0.232*** (0.064)		-0.236*** (0.074)	-0.230*** (0.060)	-0.267*** (0.064)	-0.225*** (0.067)	-0.481*** (0.093)
<i>Panel B: Neonatal Mortality</i>							
CS ATT	-0.103 (0.068)	-0.109* (0.065)	-0.105 (0.072)	-0.093 (0.078)	-0.222* (0.126)	-0.130* (0.077)	-0.215** (0.102)
SDID ATT	-0.132** (0.059)		-0.127* (0.067)	-0.137** (0.064)	-0.253*** (0.053)	-0.107* (0.062)	-0.347*** (0.076)
<i>Panel C: Postneonatal Mortality</i>							
CS ATT	-0.114*** (0.043)	-0.106** (0.045)	-0.117*** (0.041)	-0.124*** (0.045)	-0.092* (0.054)	-0.122*** (0.040)	-0.178** (0.075)
SDID ATT	-0.117*** (0.025)		-0.121*** (0.028)	-0.113*** (0.023)	-0.061*** (0.022)	-0.121*** (0.028)	-0.095** (0.037)
Post-treatment aggregation?	0-4	0-4	0-3	0-5	0-12	0-4	0-4
Use never and not-yet treated?	No	Yes	No	No	No	No	No
Alternative treatment timing?	No	No	No	No	No	Yes	No
NIS-Child birth cohorts only?	No	No	No	No	No	No	Yes

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over different event periods. The first row in a panel reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/year-of-birth cell. For the CS estimator, observations are weighted by the number of births in that cell. The outcomes are listed in each panel label and are described in detail in the note to Figure 3. Bootstrap standard errors are clustered at the state-of-residence level.

Table A8: Hospital Breastfeeding Support Policy Effects on Maternal Characteristics in NIS-Child (2003-2017)

	(1)	(2)	(3)	(4)	(5)	(6)
	Maternal Education: At Least Some College	Non-Hispanic White	Hispanic	Non-Hispanic Black	Married	Maternal Age: ≤ 29 years
CS ATT	0.0060 (0.0067)	0.0058 (0.0097)	-0.0023 (0.0099)	0.0069 (0.0071)	-0.0055 (0.0119)	-0.0009 (0.0080)
SDID ATT	0.0015 (0.0086)	-0.0020 (0.0090)	-0.0028 (0.0084)	0.0017 (0.0067)	-0.0141 (0.0088)	0.0120 (0.0111)
Pre-Treatment Mean	0.551	0.393	0.337	0.150	0.622	0.415

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). The first row reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-birth/year-of-birth cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the NIS-Child sampling weights. The outcomes are described in the column header. Infants are observed at ages 19–35 months, between 2003 and 2017. Bootstrap standard errors are clustered at the state-of-birth level.

Table A9: Hospital Breastfeeding Support Policy Effects on Maternal Characteristics in Cohort Linked Birth-Infant Death Data (1995-2018)

	(1)	(2)	(3)
Maternal Characteristic	CS ATT	SDID ATT	Pre-Treatment Mean
Share Non-Hispanic White	0.003 (0.003)	-0.002 (0.002)	0.480
Share Non-Hispanic Black	-0.002 (0.002)	-0.000 (0.001)	0.161
Share Hispanic	-0.005 (0.004)	0.000 (0.002)	0.282
Share Under 20	-0.001 (0.001)	-0.000 (0.000)	0.082
Share Aged 20-29	0.000 (0.002)	0.002 (0.001)	0.498
Share Aged 30-39	0.000 (0.002)	-0.001 (0.001)	0.389
Share Less than High School	-0.005 (0.005)		0.182
Share High School	0.000 (0.003)		0.273
Share Some College	-0.000 (0.004)		0.262
Share College or More	0.005 (0.003)		0.283
Share Married	0.003 (0.002)		0.602
Share Giving Birth Out of State	-0.000 (0.001)	-0.000 (0.001)	0.019

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). Column (1) reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; column (2) uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/year-of-birth cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcomes are described in the first column of each row. Bootstrap standard errors are clustered at the state-of-residence level.

Table A10: Hospital Breastfeeding Support Policy Effects on Delivery and Birth Characteristics in Cohort Linked Birth-Infant Death Data (1995-2018)

	(1)	(2)	(3)
Delivery Characteristic	CS ATT	SDID ATT	Pre-Treatment Mean
Share Late Prenatal Care (PNC)	-0.001 (0.004)		0.050
Share PNC in First Trimester	-0.022 (0.043)		0.746
Share PNC Initiation Missing	0.039 (0.085)		0.047
Share Premature	0.000 (0.001)	0.000 (0.001)	0.115
Share Low Birth Weight	-0.001* (0.001)	-0.001* (0.000)	0.082
Share Very Low Birth Weight	-0.000 (0.000)	-0.000 (0.000)	0.015
Share Macrosomia	-0.000 (0.000)	-0.000 (0.000)	0.011
Share Born in a Hospital	0.000 (0.000)	0.000 (0.000)	0.990
Share Born via C-Section	-0.002 (0.003)	0.001 (0.002)	0.316
Share Multiple Births	-0.001 (0.000)	-0.000 (0.000)	0.034
Share Admitted to NICU	-0.000 (0.001)		0.078

* significant at 10%; ** significant at 5%; *** significant at 1%

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). Column (1) reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; column (2) uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/year-of-birth cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the number of births in that cell. The outcomes are described in the first column of each row. Bootstrap standard errors are clustered at the state-of-residence level.

Table A11: Descriptive Statistics, HCUP (2000-2019)

	(1)	(2)	(3)
	Full Sample	Ever-Treated States	Never-Treated States
<i>Hospitalization Outcomes</i>			
Non-Delivery Stays per 1,000 Births	137.806 (33.878)	131.651 (26.482)	150.437 (42.826)
Non-Delivery Charges per Birth	5,085.832 (2,670.269)	4,647.992 (2,073.804)	5,984.342 (3,432.625)
State-of-Residence/Hospital-State/Year Obs.	471	162	309

Note: The unit of observation is a state-of-residence/hospital-state/year-of-discharge cell. Each cell reports a weighted mean with standard deviations in parentheses, where each observation is weighted by the number of observed deliveries in the cell. Discharges represent the universe of inpatient admissions for hospitals in the following state-years: Arizona: 2000-2018; California: 2003-2011; Florida: 2000-2019; Kentucky: 2000-2019; Maryland: 2000-2019; New Jersey: 2000-2019; New York: 2000-2018; Rhode Island: 2002-2019; South Carolina: 2000-2019. Residents from always-treated states are dropped from the sample. Ever-treated states with residents in the sample include California, Georgia, Illinois, Maryland, New Jersey, New York, Ohio, and South Carolina.

Table A12: Robustness of Inpatient Hospitalization Estimates to Specification Choices, HCUP (2000-2019)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Panel A: Non-Delivery Stays per 1,000 Births</i>							
CS ATT	2.005 (2.914) [2.901]	-0.774 (3.206) [3.193]	1.997 (2.538) [2.715]	1.762 (3.156) [3.030]	10.56*** (3.227) [2.836]	1.328 (3.759) [3.716]	2.302 (2.932) [2.844]
SDID ATT	3.702 [4.061]		3.426 [4.023]	4.760 [3.569]	12.162*** [2.721]	3.350 [3.703]	3.702 [3.820]
<i>Panel B: Non-Delivery Charges per Birth</i>							
CS ATT	-676.1*** (185.4) [198.7]	-732.1*** (175.1) [207.0]	-576.8*** (142.3) [141.9]	-770.8*** (198.9) [224.7]	-813.3* (484.4) [460.6]	-647.0*** (183.0) [145.8]	-677.5*** (188.7) [203.3]
SDID ATT	-582.7*** [165.9]		-478.7*** [183.1]	-623.7*** [176.0]	-728.4*** [222.8]	-575.3*** [164.1]	-582.7*** [192.0]
Post-treatment aggregation?	0-4	0-4	0-3	0-5	0-12	0-4	0-4
Use never and not-yet treated?	No	Yes	No	No	No	No	No
Alternative treatment timing?	No	No	No	No	No	Yes	No
Hospital state residents only?	No	No	No	No	No	No	Yes

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over different event periods. The first row in a panel reports estimates using the Callaway and Sant'Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state-of-residence/hospital-state/discharge-year cell. For the CS estimator, observations are weighted by the number of deliveries observed in that cell. The outcome in Panel A is the hospitalization rate per 1,000 births in that cell. The outcome variable in Panel B is average charges per birth in that cell. Robust and asymptotic standard errors clustered at the state-of-residence/hospital-state level are reported in parentheses; standard errors from a multiplicative bootstrap procedure clustered at the state-of-residence/hospital-state level are reported in square brackets.

Table A13: Hospital Breastfeeding Support Policy Effects on Infant Maltreatment, NCANDS (2004-2019)

	(1)	(2)	(3)
	Neglect	Physical Abuse	Neglect or Physical Abuse
<i>Panel A: Allegations</i>			
CS ATT	-0.797 (2.710)	-2.633 (2.706)	-3.314 (3.119)
SDID ATT	-1.641 (1.942)	-5.181 (4.554)	-1.676 (2.425)
Pre-Treatment Mean	47.824	14.170	54.061
<i>Panel B: Substantiations</i>			
CS ATT	0.392 (1.889)	-0.806 (0.829)	-1.054 (2.069)
SDID ATT	-1.775* (0.958)	-0.590 (0.771)	-1.763 (1.210)
Pre-Treatment Mean	18.975	4.546	22.060

* significant at 10%; ** significant at 5%; *** significant at 1%.

Note: Each cell presents the simple average of the event-time effects over event periods 0 through 4 (inclusive). The first row in a panel reports estimates using the Callaway and Sant’Anna (2021) (CS) estimator; the second row uses the synthetic difference-in-differences (SDID) estimator. The unit of observation is a state/report-year cell, and all specifications use never-treated states as the control group. For the CS estimator, observations are weighted by the number of children less than one year old in that cell. In Panel A, the outcome is the number of children less than one year old with at least one report of the maltreatment type listed in the column heading in the state-report year per 1,000 children less than one year old in a given state-report year. In Panel B, the outcome is the number of children less than one year old with at least one substantiated report of the maltreatment type listed in the column heading in the state-report year per 1,000 children less than one year old in a given state-report year. Bootstrap standard errors are clustered at the reporting state level.

Appendix B Breastfeeding and Related Policies

In terms of the broader policy landscape in the US, several other national- and state-level policies explicitly aim to improve breastfeeding outcomes, such as the Affordable Care Act (ACA)⁵⁷ and laws regarding breastfeeding rights in the workplace or mothers’ legal rights to breastfeed in particular locations (Hawkins et al., 2013).⁵⁸ The US has also seen a growth in hospitals participating in

⁵⁷For example, the ACA requires that employers provide adequate break time and space for employees to express milk, and that insurers cover lactation support and equipment rental with no cost sharing (Hawkins et al., 2015).

⁵⁸Nearly all states currently allow breastfeeding in any public or private location; the majority also exempt breastfeeding mothers from public indecency laws.

the Baby-Friendly Hospital Initiative’s (BFHI) “Ten Steps to Successful Breastfeeding” program, launched by the World Health Organization (WHO) and UNICEF in 1991 (UNICEF, 2005). The BFHI program outlines ten hospital-level initiatives designed to increase breastfeeding, such as having a written breastfeeding policy and training healthcare staff to help women breastfeed (see Appendix Table B1 for all ten steps).⁵⁹ Hospitals that implement all of the recommended policies are designated as Baby-Friendly[®]. These ten hospital-level initiatives closely overlap with the components of the state-level regulations we study, and during our sample period, the BFHI program became increasingly widespread. Between 2007 and 2019, the percent of births occurring in a Baby-Friendly facility increased from less than 3% to nearly 28%. However, the majority of the state-level hospital regulations require implementation of only a relatively small subset of the BFHI ten steps, and many require that hospitals have a full-time lactation consultant on staff, which is not a requirement of the BFHI program.

Importantly, Lawler and Yewell (2023) show that the adoption of a state hospital breastfeeding policy is not significantly related to the share of that state’s live births that occur in a Baby-Friendly facility or the number of Baby-Friendly certified facilities. In addition, in Appendix Table B2, we show that adoption of state hospital breastfeeding policies did not occur at the same time as related state policies, such as paid family leave, requirements that hospitals provide new parents information about SUID prevention and safe sleep, implementation of state Perinatal Quality Collaboratives, and other breastfeeding support policies. Together, this body of evidence mitigates concerns that the estimated effects of the adoption of state-level hospital breastfeeding support policies may reflect differential changes in the probability that hospitals achieve the Baby-Friendly designation or combined effects of breastfeeding policies adopted in bundles.

⁵⁹See <https://www.babyfriendlyusa.org/about/>

Table B1: WHO/UNICEF “Ten Steps to Successful Breastfeeding”

-
1. Have a written breastfeeding policy that is routinely communicated to all healthcare staff.
 2. Train all healthcare staff in skills necessary to implement this policy.
 3. Inform all pregnant women about the benefits and management of breastfeeding.
 4. Help mothers initiate breastfeeding within one half-hour of birth.
 5. Show mothers how to breastfeed and maintain lactation, even if they should be separated from their infants.
 6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
 7. Practice rooming in - that is, allow mothers and infants to remain together 24 hours a day.
 8. Encourage breastfeeding on demand.
 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
 10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.
-

Notes: These represent the “Ten Steps to Successful Breastfeeding” as of 2017. WHO/UNICEF published a revised guide in 2018, however, our sample period corresponds to these earlier guidelines. Guidelines were obtained from <https://www.who.int/nutrition/publications/infantfeeding/bfhi-national-implementation2017/en/>

Table B2: Timing of Adoption of Parental Leave, Infant Health, and Breastfeeding Policies for Treated States

State	State hospital breastfeeding policy	Paid family leave+	Perinatal Quality Collab.±	SUID/Safe Sleep Info in Hospital‡	Provision of break time and private space by employers§	Employers prohibited from discriminating against breastfeeding employees	Breastfeeding permitted in any public/private location	Breastfeeding exempt from public indecency laws	Breastfeeding mothers exempt from jury duty
CALIFORNIA	2014	2004	2006	1998	2002	2013	1997		2000
GEORGIA*	2002		2012		1999**		1999		
ILLINOIS	2013		2012	2011, 2015	2001		2004	1995	2005
LOUISIANA	2007		2018	2016			2001	2001	
MARYLAND	2005		2006				2003		
MISSISSIPPI*	2016		2014			2006	2006	2006	2006
MISSOURI*	1999		2018				1999	2014	2014
NEW JERSEY	2014	2009	2017			2018	1997		
NEW YORK*	2005	2018	2010	2017	2007	2007	1994	1994	
OHIO	2012		2007	2015			2005		
PENNSYLVANIA	1998		2019	2010			2007	2007	
SOUTH CAROLINA	2015		2011	2018			2008	2008	
TEXAS	2016		2013	2009					1995

Note: *In the empirical analysis, the year a policy is considered to be in effect may differ from the legal adoption year and is defined as follows. A state is considered to have an effective hospital policy in a given calendar year if they adopted the policy by June of that year. For states that adopt policies in the latter half of the calendar year, the effective year is defined as the following calendar year. Therefore, in the empirical analysis, Missouri's policy effective year is coded as 2000, Georgia's as 2003, New York's as 2006, and Mississippi's as 2017.

+ Only 1 other state required PFL during our sample period: Rhode Island (2014). Two states took effect in 2020 (D.C. and Washington). Other state programs providing access to leave following childbirth (Temporary Disability Insurance and unpaid leave more generous than FMLA) did not change during our sample period.

± Perinatal Quality Collaboratives are initiatives aimed at improving maternal and infant health. State adoption dates generously shared by Jessica Kiser.

‡ These laws require hospitals to provide parents with information about SUID prevention and/or safe infant sleep prior to discharge from the hospital. Information obtained from [Morcelle \(2017\)](#) and author review of state statutes and regulations.

§ Under the Affordable Care Act, all employers with 50 or more employees are required to provide break time and private space for mothers, effective March 2010.

** GA law simply encourages employer provision.