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ABSTRACT

Cooling off or Burdened?
The Effects of Mandatory Waiting Periods
on Abortions and Births[*]

I implement event study and difference-in-differences research designs to measure the causal effects of mandatory waiting periods for abortions, distinguishing between "one-trip" waiting periods that allow counseling and information to be provided remotely and "two-trip" waiting periods that require two in-person appointments. The results suggest that one-trip waiting periods do not have substantial effects on abortions or births. Two-trip waiting periods are estimated to reduce abortions and delay those that still occur, increasing second trimester abortions by 19.1%, reducing resident abortion rates by 8.9%, and increasing births by 1.5%. These effects are larger for young women and for women of color. These effects also are larger in counties that are far from abortion providers and in counties with high poverty and unemployment. These findings support a "burden" rather than a "cooling-off period" interpretation of the findings.

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1 Introduction

In the landmark decision in *Planned Parenthood v. Casey* (1992), the United States Supreme Court applied a new standard for analyzing abortion restrictions, one that asked whether a state regulation imposes an "undue burden," defined as a "substantial obstacle in the path of a woman seeking an abortion." In the last five years, the Supreme Court has reaffirmed the undue burden standard and clarified that when evaluating the constitutionality of an abortion restriction, the Courts must consider evidence-based findings that rest on reliable methodologies (*Whole Woman's Health v. Hellerstedt*, 2016; *June Medical Services, LLC v. Russo*, 2020).

In *Casey*, the Court considered five provisions of Pennsylvania's 1982 Abortion Control Act, one of which imposed a 24-hour mandatory waiting period on women seeking abortions. In upholding this waiting period, the Court ruled it helped "ensure that a woman's decision to abortion is a well-considered one" and that the requirement "may delay, but does not prohibit abortions" and "is surely a small cost to impose." Yet at the time the Court's determination rested on intuition rather than credible empirical measurement of the size of any costs, largely because previous attempts to legislate mandated waiting periods had been struck down before they were enforced for any substantial length of time (Lupfer and Silber, 1981), affording little opportunity to study their effects.

Since *Casey*, abortion regulations have proliferated, and the resulting variations in policies and abortion access have afforded credible natural experiments indicating that women seeking abortions are in fact quite responsive to costs generated by increased travel distances (Grossman et al., 2017; Quast et al., 2017; Fischer et al., 2018; Lindo et al., 2019; Venator and Fletcher, 2019; Brown et al., 2020; Myers, 2021), limited appointment availability (Lindo et al., 2019; Kelly, 2019), and clinic violence (Jacobson and Royer, 2011). For instance, the literature on travel distances suggests that even increases in travel distance from 5 to 30 miles—which may seem small relative to the potential costs of unintended childbearing—decrease abortion rates by 10 percent (Lindo et al., 2019). A potential explanation for the responsiveness of

women to logistical hurdles in obtaining abortions is the circumstances and limited resources that motivate women to seek to terminate their pregnancies in the first place. About 18 percent of pregnant women sought abortions in 2017 (Guttmacher Institute, 2019), and of these an estimated 59 percent had previously given birth, 75 percent were low-income, and 55 percent report a recent disruptive life event including the death of a close friend or family member, losing a job, breaking up with a partner, or falling behind on rent or a mortgage (Jones and Jerman, 2017a,b).

While the literature on the effects of travel distances and appointment availability suggests that regulations that policymakers might judge to be "low cost" may in fact pose burdens, little attention has been paid to mandatory waiting periods, which are currently enforced in 26 states (Guttmacher Institute, 2020). This paper seeks to fill this lacuna in the literature. I implement event study and difference-in-differences research designs that exploit state policy variation since 1992 to identify and measure the effects of mandatory waiting periods on abortions by gestational age, abortion rates, and birth rates. The findings suggest that "one-trip" mandatory waiting periods that do not require two in-person visits to a provider result in modest delays in abortion obtainment and small reductions in abortions and increases births. In contrast, mandatory waiting period policies that require women to make two in-person visits to a provider have much larger effects on all examined outcomes, increasing second trimester abortions by 19.1%, reducing total abortions by 8.9%, and increasing births by 1.5%.

These estimates for the aggregated population of women aged 15-44 mask substantial response heterogeneity within it. The effects of two-trip mandatory waiting periods on births are approximately 2.5 times larger for non-Hispanic black women than non-Hispanic white women, and 3 times larger for women in their twenties than women in their thirties. Models that exploit county-level variation in births further suggest that two-trip mandatory waits results in the largest increases in births in counties that are farther from the nearest abortion provider and in counties with high poverty or unemployment. This evidence supports a

"burdens" interpretation in which the waiting period poses an insurmountable obstacle rather than a "cooling off" interpretation in which the mandatory waits affords time for women to reflect and reconsider their decisions.

2 Policy and Existing Evidence

Medical providers in the United States have an ethical and legal obligation to obtain informed consent from patients prior to the provision of any type of medical care, including abortion services (American Medical Association, 2016; Guttmacher Institute, 2020). Informed consent requires that patients possess the capacity to make decisions about their medical treatment, that their decision is voluntary, and that they are given adequate and appropriate information on which to base their decision. Thirty-three states impose additional informed requirements on the information and counseling women receive prior to abortions, and 26 of these states require women to wait a specified period of time—most often 24 hours—between the receipt of the information and abortion procedure (Guttmacher Institute, 2020). Of the 26 states enforcing a mandatory waiting period, half require that the initial counseling be provided in person, necessitating two in-person trips to a provider. Table 1 describes this state-level policy variation, indicating the dates of enforcement of mandatory waiting period laws by state. This policy coding is based on my own review of historical annotated statutes, legislative bills, and judicial rulings, where I additionally cross-check dates of enforcement against newspaper accounts and policy fact-sheets published by The Guttmacher Institute. Appendix A provides a detailed state-by-state review of these policy changes.

Figure 1 presents a snapshot of the spatial variation in enforcement of mandatory waiting periods in 2018 and illustrates the spatial correlation between policies and population-weighted mean resident abortion and birth rates.[1] In 2018, the most recent year for which

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[1]Texas' two-trip mandatory waiting period includes an exemption for women living more than 100 miles from the nearest facility. Virginia had a similar exemption in a mandatory waiting period law that the state legislature repealed effective July 1, 2020. Based on county populations and abortion facility locations—data which I describe subsequently—I estimate that less than 10% of Texas residents reside in counties from

both abortion and birth rates have been reported by the National Centers for Health Statistics (NCHS), mandatory waiting abortion rates were significantly lower ($p = 0.01$) and birth rates significantly higher ($p < 0.01$) among women living in states enforcing two-trip mandatory waiting periods for abortion compared to states with no waiting periods.

Thus far, only a handful of studies have adopted credible research designs to extend this type of observational evidence to the identification and measurement of the causal effects of these policies, and the bulk of the evidence comes from two states: Mississippi (Altaus and Henshaw, 1994; Joyce et al., 1997; Joyce and Kaestner, 2000) and Tennessee (Lindo and Pineda-Torres, 2019).[2] Mississippi was one of the first states to begin enforcing a mandatory waiting period when its two-trip 24 hour waiting period requirement went into effect in 1992. Altaus and Henshaw (1994) compare changes in abortion rates in Mississippi when the law went into effect to changes the prior year, while Joyce et al. (1997) adopt a difference-in-differences strategy comparing changes in outcomes in Mississippi to those for Georgia and South Carolina, and reach similar conclusions. Finally, Joyce and Kaestner (2000) return to the policy change in Mississippi, this time adopting a difference-in-differences research design comparing changes in outcomes in Mississippi counties for which the closest abortion facility was in Mississippi to changes in counties for which the closest abortion facility was in a neighboring states, none of which were enforcing mandatory waiting periods at that time. All three studies of the Mississippi reach similar conclusions, estimating that the policy delayed abortions, as measured by a 17-26 percent increase in the share of abortions occurring in the second trimester, while also preventing other women from accessing abortions all together, as evidenced by a 10-19 percent reduction in the abortion rate for Mississippi residents.

More recently, Lindo and Pineda-Torres (2019) use a difference-in-difference strategy to estimate the effect of a two-trip 48-hour mandatory waiting period that went into effect in

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which the nearest abortion provider is both in Texas and more than 100 miles away, and that 0% of Virginia residents fall into this exemption category. I code both Texas and Virginia as having two-trip waiting periods.

[2]Joyce et al. (2009) review the literature measuring the impact of mandatory waiting periods as it stood in 2009.

2015 in Tennessee. They find that the policy resulted in a 62 percent increase in the share of abortions occurring in the second trimester, and obtain imprecise estimates that suggest a possible reduction in the abortion rate, but these lack statistical significance.

While the Mississippi and Tennessee studies provide the rigorous evidence on the causal effects of these policies, one can reasonably wonder the extent to which the results generalize to other contexts. Bitler and Zavodny (2001) adopt a difference-in-differences approach using state-level data and exploiting variation occurring between 1974 and 1997 in three types of abortion policies: mandatory waiting periods, parental involvement laws, and Medicaid funding. They estimate that mandatory waiting periods increased second trimester abortions by 41 percent and had no significant effect on the abortion rate. Joyce et al. (2009) opine that these results "strain credulity" given that mandatory waiting periods were not consistently enforced until after *Casey* in 1992, and hence few individuals in the authors' sample spanning 1974-1997 were exposed to the policies. Moreover, few of the laws enforced at this time required 2 trips, and hence the effects of the greater restriction could not yet be reliably measured at that point.

Since 1992 mandatory waiting periods have been repeatedly enacted, challenged, and judged constitutional by courts that have concluded there is insufficient evidence the policies burden a "large fraction" of the women to whom the regulation is relevant, the definition of undue burden enunciated by the Court in *Casey*. As the Ohio Supreme Court observes, this standard "invites the courts and the parties to engage in a number-crunching exercise to assess the impact of an abortion regulation," but finds its own such attempt was frustrated "by the lack of any data on the actual impact of the regulation," concluding that at best "the evidence on the effect of a statute regulating abortion can only be informed speculation" (*Cincinnati Women's Services v. Taft*, 2005).[3] Courts have reached similar conclusions in

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[3]The Ohio Supreme Court further rejected the evidence available at that time from Mississippi as "flawed" because it did not account for general decreases in the abortion rate and was not generalizable to Ohio due to differences in demographics between the two states. The first criticism appears to reflect a lack of understanding of the difference-in-difference research designs adopted in the Mississippi literature (Altaus and Henshaw, 1994; Joyce et al., 1997; Joyce and Kaestner, 2000), all of which credibly account for trends in abortion rates. The second criticism reflects a valid concern about external validity which can be addressed

other states, for instance concluding that an Arizona abortion provider challenging mandatory waiting periods "argues that in-person counseling imposes a burden of additional travel, expense and delay... [but that] speculation about the impact of these burdens is insufficient to support a conclusion as a matter of law that the requirement would operate effectively to deny a large fraction of affected woman their abortion rights" (*Planned Parenthood Arizona v. American Association of Pro-Life Obstetricians and Gynecologists*, 2011).

While this paper cannot provide an answer to the subjective question of the threshold at which a burden becomes "undue," it can provide objective measures of the fraction of women seeking abortions who are delayed or prevented from obtaining them due to mandatory waiting periods. In addition to addressing the fundamental policy question of whether one of the most popular and widespread abortion regulations currently enforced in the United States delays and prevents women seeking abortions, the results additionally inform broader efforts to understand trends in abortion and fertility and the role of regulation and access in obtainment of medical care, particularly for low-income populations.

3   Data

I combine data measuring abortion and birth outcomes with information on mandatory waiting periods and a rich set of controls for time-varying demographics, economics conditions, and state policies.

3.1   Mandatory waiting periods

Table 1 summarizes the years states began enforcing mandatory waiting periods based on my own state-by-state review of current and historical annotated statutes, judicial rulings, and news coverage, cross-checked with secondary sources offering snapshots of the policy

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by new evidence from other states (Lindo and Pineda-Torres, 2019) and the present study.

environment at various points in time.[4]

Multiple states began enforcing waiting periods in the 1990s following *Casey*, and all of these policies imposed 24-hour waits with the exception of an 18-hour waiting period in Indiana,[5]and most required one-trip, with the exception of two-trip policies in Louisiana, Mississippi, and Wisconsin. In the decades that followed multiple states enacted new one and two-trip mandatory waiting periods and by 2018 15 states were enforcing one-trip waits and 11 states were enforcing two-trip waiting periods. Figure 1 illustrates state mandatory waiting period policies as of 2018, the latest year for which data on abortion rates have been published and can be compared.

In the last decade 8 states also extended the mandated wait beyond 24 hours—South Dakota and Utah to 72 hours in 2012, Alabama to 48 hours in 2014, Missouri to 72 hours in 2014, and Arkansas, North Carolina, and Oklahoma to 72 hours in 2015. Tennessee enforced a waiting period for the first time in 2015 which was 48 hours, but this was enjoined between October 2020 and April 2021. Most of these changes occurred quite recently, and with the exception of Tennessee all of the longer waiting periods extended pre-existing 24-hour waiting periods. Both facts complicate an analysis of the potential interactive effects of the number of required trips and the length of the required delay. I primarily focus on estimating the effects of 1 and two-trip policies of any length, though I present and discuss results in Appendix A that further distinguish between waiting period lengths.

3.2 Abortions

The Centers for Disease Control (CDC) issues technical guidance and suggested reporting standards for state vital statistics agencies that compile and report information on legally induced terminations of pregnancy (ITOPs), also known as "induced abortion" or simply

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[4]Appendix B provides a detailed state-by-state review of the policy environment including additional information on the lengths of waiting periods and complete citations for sources.

[5]South Carolina enacted a 1-hour waiting period in 1995 which I do not code as a waiting period because it was a much shorter period of time than any other state's. South Carolina increased the wait to 24 hours in 2010.

"abortion."[6] The CDC also collects aggregate information on abortions, which are voluntarily submitted by state reporting agencies, and compiles and publishes this information in annual abortion surveillance reports for the United States, which include abortion counts by state of occurrence, abortions by state of residence, and abortions by state of occurrence disaggregated by gestational age (Kortsmit et al., 2020).

The CDC abortion surveillance data are subject to important limitations. Because there is no federal mandate that states collect or report this information to the CDC, reporting requirements and practices vary across states and over time. A handful of states—currently California, Maryland and New Hampshire—either do not surveil abortions or do not report to the CDC. Other states—currently the District of Columbia and New Jersey—do not require all medical providers to report abortions and so likely substantially undercount the number of occurrences. Still other states do have a legal requirement for medical providers to submit reports, but enforcement of the requirement varies and the CDC reports this may affect the completeness of reporting as well (Kortsmit et al., 2020). In addition, some states do not require abortion providers to report information on maternal demographics such as age and race, and others do so in a manner the CDC judges to be inconsistent with its standards (Kortsmit et al., 2020).

The Guttmacher Institute, an independent non-profit organization that advocates for abortion rights, provides a second major source of abortion statistics in the United States based on CDC statistics augmented by Guttmacher's own periodic surveys of abortion providers. The Guttmacher Institute captures approximately 20 percent more abortions in the United States than the CDC, primarily because Guttmacher's surveys capture providers in California, Maryland, and New Hampshire, which do not conduct comprehensive abortion surveillance. Guttmacher statistics are widely utilized and cited, including by the CDC which compares state health department counts to Guttmacher Institute counts as part of its approach to assessing the comprehensiveness of state reports (e.g., Kortsmit et al., 2020).

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[6]The medical term "induced abortion" distinguishes from "spontaneous abortion," also known as miscarriage. Throughout this paper, I use "abortion" to refer to induced abortion.

Hence the state-level abortion counts published by the CDC and the Guttmacher Institute each have advantages and limitations. The CDC statistics afford a panel of abortion counts for all years and most states, and these counts are additionally broken down by gestational age. The Guttmacher statistics afford a panel of abortion counts for all states covering some years, but do not include estimates by gestational age. Both sources publish estimates by state of occurrence and state of residence, though both sets of estimates of abortion counts by state of residence are subject to measurement error because a handful of states do not track state of residence.

I primarily employ CDC estimates of abortions, which provide measures of delay captured by gestational age and represent an annual panel which is better suited for event study analyses. Abortions by state of occurrence and residence are observed annually in the CDC data from 1992 through 2018. The CDC also reports abortions by gestational age throughout this period, but twice changes the scheme by which gestational ages are grouped, in 2007 and again in 2017. I harmonize the gestational age groupings for 1992 through 2016 into three categories: less than 8 weeks gestation, 9-12 weeks gestation, and 13 or greater weeks gestation, all measured since the date of the last menstrual period. The latest set of gestational age categorizations for 2017 and 2018 cannot be harmonized with the earlier two schemes, and so the gestational age analyses omit 2017 and 2018.

Table 2 reports summary statistics for the abortion outcomes used in the analyses. To construct abortion rates I use state-level estimates of the population of women aged 15-44 from SEER (2019). Measured by state of residence, the population-weighted average annual abortion rate is 13.7 abortions per 1,000 women aged 15-44. Over this period 59.5 percent of abortions occurred at 8 weeks gestation or less, 28.9 percent at 9 to 12 weeks gestation, and 11.6 percent at 13 weeks gestation or more.

3.3   Births

In contrast to the challenges in measuring abortions in the United States, CDC surveillance provides comprehensive individual-level data on births reliably measuring maternal residence. Per federal mandate, state health departments collect information on all births using standardized birth certificates, and submit these data to the National Center for Health Statistics (NCHS), which compiles and publishes the data. I use the resulting individual-level natality files (NCHS, 2020) to construct state-level birth counts by age and ethnicity for 1992-2019. I choose 1992 as the starting point for the analysis because this is the first year all states had adopted the 1989 revision of the standard birth certificate, which included substantial changes in the reporting of race and ethnicity. In addition to constructing state-level counts, I also construct county-level birth counts. These afford the possibility of more granular analyses testing for heterogeneous effects by county-level measures of distance to an abortion provider, poverty, household income, and unemployment. As I will discuss in detail, these tests for heterogeneous effects contribute to an assessment of whether the estimated effects of mandatory waits are more consistent with a "cooling-off period" or "undue burden" interpretation of the findings.

Table 2 reports summary statistics for the state-level birth outcomes used in the analyses. The population-weighted mean birth rates over this period is 64.5 births per 1,000 residents aged 15-44. Compared to the resident abortion rate of 13.7, there was approximately 1 abortion for every 5 live births in the United States over this period. Appendix Table A1 provides additional summary statistics for births by five-year age groupings and ethnicity, demonstrating that birth rates tend to be higher among Black and Hispanic women than among non-Hispanic white women, and that birth rates tend to peak among women in their late twenties.

3.4 Additional controls

Table 2 summarizes the additional controls used in the analyses. These include controls for the racial and ethnic composition of women of childbearing age (SEER, 2019), educational attainment and marital status of women of childbearing age (Manson et al., 2020), and population-wide urbanization rates (Manson et al., 2020), as well as economic controls for unemployment (BLS, 2020), poverty (U.S. Census Bureau, 2020), and household income (U.S. Census Bureau, 2020). These demographic and economic controls are observed at the state-year level or county-year level, depending on the unit of observation for the analysis.

Additional controls capture time-varying state policies: parental involvement laws for minors seeking abortions (Myers and Ladd, 2020), over-the-counter access to emergency contraception (Zuppann, 2011), contraceptive mandates for private insurers (Yordán, 2014), Medicaid family planning expansions and Medicaid coverage for abortion, Medicaid expansions under the Affordable Care Act, and welfare generosity.[7]

4 Empirical strategy

I estimate the effects of mandatory waiting periods on abortions and births using difference-in-differences and event study research designs that exploit state-by-year variation in enforcement. Because all of the outcomes represent discrete counts, I implement these strategies using a Poisson model.[8]

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[7]Variables not accompanied by a citation were compiled by the author using multiple sources. These are described and documented in the replication package accompanying this paper.

[8]Like linear models, the Poisson model is not subject to the incidental parameters problem associated with fixed effects (Cameron and Trivedi, 2005). While the possibility of overdispersion is the main theoretical argument that might favor an alternative count model like the negative binomial, the conditional fixed effects negative binomial model is not a true fixed effects model as it does not control for all stable covariates (Allison and Waterman, 2002). I correct for potential overdispersion in the Poisson model by calculating sandwiched standard errors (Cameron and Trivedi, 2005). I also demonstrate that the results are robust to estimating a weighted least squares model with log rates as outcomes, dropping observations with 0 counts. See Table A2.

The simplest difference-in-differences specifications take the following form:

$$E\left[Y_{s,t} \mid \text{mandatory wait}_{s,t}, \boldsymbol{X_{st}}, \boldsymbol{v_s}, \boldsymbol{v_t}\right] =$$

$$exp\left(\boldsymbol{\beta}\text{mandatory wait}_{s,t} + \boldsymbol{\gamma}\boldsymbol{X_{s,t}} + ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}\right). \quad (1)$$

I estimate this specification for different abortion and birth outcomes represented by $Y_{s,t}$. These outcomes include abortions occurring in state s in year t at ≤ 8 weeks gestation, 9-12 weeks gestation, and ≥ 13 weeks gestation. These outcomes also include abortion counts by state of occurrence or, alternatively, by state of residence. And they include births by state of residence, which are specified as a lead (that is, as births in state s in year $t + 1$) to allow for gestation.

All of the Poisson models include an exposure variable corresponding to the denominators that would be use to construct rates. For models of abortion counts by gestational age, the exposure variable is the total number of abortions for which gestational age is reported, so that the results capture relative changes in the ratios of abortions occurring at different gestational ages. For models of abortion counts by state of occurrence or residence, the exposure variable is the resident population of women of childbearing age (15-44), the standard denominator for abortion rates. For models of birth counts by state of residence, the exposure variable is the resident population of women of childbearing age in year $t + 1$, matching the lead used in the outcome. Hence the models of total abortion and birth counts capture relative changes in abortion and fertility rates.

The explanatory variable of interest is Mandatory wait$_{s,t}$, which measures the fraction of year t during which state s enforced a mandatory waiting period for abortions, policy variation that is summarized in Table 1. The vector $\boldsymbol{X}_{s,t}$ includes an intercept, state demographic and economic conditions, and state-level policy controls, all of which are listed and summarized in Table 2. State fixed effects are represented by v_s and control for unobserved state characteristics with time-invariant effects on abortion or birth rates, while year fixed effects

are represented by υ_t and control for national shocks affecting abortion or birth rates similarly across all states.

A second set of models further differentiates mandatory waiting periods by the number of trips required:

$$E\left[Y_{s,t} \mid \text{one-trip mandatory wait}_{s,t}, \text{two-trip mandatory wait}_{s,t}, \boldsymbol{X_{st}}, \boldsymbol{v_s}, \boldsymbol{v_t}\right] =$$

$$exp\left(\beta_1 \text{one-trip mandatory wait}_{s,t} + \beta_2 \text{two-trip mandatory wait}_{s,t} + \boldsymbol{\gamma}\boldsymbol{X_{s,t}} + ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}\right).$$

(2)

In this model, one-trip mandatory wait$_{s,t}$ and two-trip mandatory wait$_{s,t}$ measure the fraction of year t in which state s enforced a 1 or two-trip mandatory wait.

As for any difference-in-difference specification, causal inference relies crucially on the common trends assumption. In this case that assumption is that conditional on the covariates, abortion and birth outcomes would have trended similarly across states but for differential enforcement of mandatory waiting requirements. An event study design allows one to evaluate the credibility of this assumption, as well as to identify and measure potential dynamic treatment effects in which any impact of mandatory waiting periods evolves with time since enforcement. However, in the context of mandatory waiting periods the implementation of an event study is complicated by the facts that not all states have enforced mandatory waits and that among those that have, states have begun and ceased enforcement (Table 1). I follow the approach laid out by Schmidheiny and Siegloch (2019) to generalize event study models to events of varying signs.

Consider abortion and birth outcomes observed over the window $[\underline{t}, ..., \overline{t}]$. Letting the potential effect window of mandatory waits range from $\underline{j} < 0$ periods prior to enforcement to $\overline{j} > 0$ periods afterwards, I estimate an event study of the following form:

$$E\left[Y_{s,t} \mid \boldsymbol{a_{s,t}}, \boldsymbol{X_{s,t}}, \boldsymbol{v_s}, \boldsymbol{v_t}\right] = exp\left(\sum_{j=\underline{j}}^{\overline{j}} \beta_j a_{s,t}^j + \boldsymbol{\gamma}\boldsymbol{X_{s,t}} + +ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}\right).$$

(3)

This Poisson specification corresponds to the difference-in-difference specification in Equation 2 except the explanatory variables of interest measuring enforcement of 1 and two-trip mandatory waits in year t have been replaced with a series of variables measuring changes in enforcement of each type of law, binning at the end-points:

$$
\boldsymbol{a_{st}^j} = \begin{cases} \sum_{k=t-\underline{j}}^{\bar{t}-\underline{j}-1} \boldsymbol{d_{s,k}} & \text{if} j = \underline{j} \\ \boldsymbol{d_{s,t-j}} & \text{if} \underline{j} < j < \bar{j} \\ \sum_{k=\underline{t}-\bar{j}+1}^{t-\bar{j}} \boldsymbol{d_{s,k}} & \text{if} j = \bar{j} \end{cases} \tag{4}
$$

Where

$$
\boldsymbol{d_{s,t}} = \begin{pmatrix} \text{one-trip mandatory wait}_{s,t} - \text{one-trip mandatory wait}_{s,t-1} \\ \text{two-trip mandatory wait}_{s,t} - \text{two-trip mandatory wait}_{s,t-1} \end{pmatrix} \tag{5}
$$

I implement this event study approach using an effect window from $\underline{j} = -5$ to $\bar{j} = 4$ and follow convention by setting $j = -1$, the period prior to the enactment of a mandatory waiting period as the reference period. The outcomes measuring abortion rates and the one-year lead of birth rates are observed from 1992 through 2018, while mandatory waiting period policy are observed from 1985 through 2021. Because the mandatory waiting period policy can only by observed through 2021, the observation window for the outcome in the event study must be limited to $\underline{t} = 1992$ through $\bar{t} = 2016$, dropping the last two years of outcomes in the difference-in-differences analyses from the event study analyses.

5   Results

5.1   Difference-in-differences estimates

Table 3 presents difference-in-differences estimates of the effects of any type of mandatory wait (Equation 1 presented in Panel A) and of 1 and two-trip mandatory waits separately (Equation 2 presented in Panel B).

A comparison of the results suggests that the effects of mandatory waiting periods depend crucially on whether the policies require in-person counseling necessitating two separate trips. The estimated effects of one-trip mandatory waiting periods do not suggest these policies cause substantial reductions or delays in abortions. In contrast, two-trip mandatory waits are estimated to reduce abortion rates by state of occurrence by 10.2% ($p < 0.01$) and by state of residence by 8.8% ($p < 0.01$).[9] Two-trip mandatory waiting periods also substantially delay those abortions that still take place, reducing the fraction of abortions occurring early in pregnancy before 9 weeks gestation by 8.1% ($p < 0.01$) and increasing the fraction occurring in the second-trimester by 19.1% ($p < 0.01$).

The "missing" abortions attributed to two-trip mandatory waits could theoretically be accounted for by several non-exclusive explanations including a behavioral response in which individuals substitute contraception for abortion and hence reduce unintended pregnancies, increases in spontaneous miscarriages, increases in self-induced abortions, and increases in pregnancies carried to term resulting in births. As a bounding exercise, if the reductions in abortions are accounted for in total by any combination of the first three explanations, there would be zero resulting increase in birth rates. At the other extreme, if the fourth explanation is the only one and the entirety of the foregone abortions result in births, one would expect a roughly 1.9% increase in births.[10] The difference-in-difference estimates of the net effect on resident birth rates indicate that two-trip mandatory waits increase birth rates by 1.5% ($p < 0.01$), a result that is plausible given the incidence of abortion and that suggests that approximately 3/4 of the "missing" abortions are accounted for by increases in births.[11]

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[9]All marginal effects reported in the text are calculated as $100 \times (\exp(\beta \Delta X) - 1)$ and the delta method is used to calculate standard errors and p-values.

[10]This back-of-the-envelope calculation is calculated using the estimated 8.9% reduction in resident abortions and sample mean abortion rate (13.68) and birth rate (64.53): $0.089 * 13.68/64.53 = 0.019$.

[11]Appendix A presents and discusses the results of alternative difference-in-differences specifications, demonstrating that conclusions based on Table 3 are robust to implementing a weighted OLS design (Table A2), to excluding various combinations of control variables (Table A3 and Table A4), to using abortion counts from the Guttmacher Institute rather than the CDC (Table A5), and to implementing the analyses with restricted samples for abortions by state of occurrence and births by state of residence that correspond to the more limited available sample for abortions by state of residence (Table A6).

The comprehensive individual-level data in the natality files allow for further exploration of the effects of mandatory waiting periods on births by age and ethnicity. Figure 2 plots the estimated effects of 1 and two-trip mandatory waiting periods from difference-in-difference models estimated separately by 5-year age groupings and by maternal race and ethnicity. The plotted coefficients at the top of the panel correspond to those reported in Panel B, Column 6 of Table 3, illustrating that total birth rates are estimated to increase by 0.5% ($p < 0.01$) in response to one-trip waiting periods and by 1.5% ($p < 0.01$) in response to two-trip waiting periods. The coefficient plots for models estimated separately by race and ethnicity illustrate that the estimated effects of two-trip mandatory waits are much larger for racial and ethnic minorities than for non-Hispanic white women, both in absolute terms and relative to the estimates of one-trip waiting periods. For non-Hispanic white women, births are estimated to increase by 0.7% ($p < 0.01$) in response to a one-trip waiting period and by 1.1% ($p < 0.01$) in response to a two-trip waiting period, versus by 1.1% ($p < 0.01$) and 2.7% ($p < 0.01$) for non-Hispanic black women and 0.6% ($p < 0.01$) and 4.4% ($p < 0.01$) for Hispanic women. The estimated effects of mandatory waits also are much larger for women under 30 years old than for older women. For instance, two-trip mandatory waits are estimated to increase births by 2.8% ($p < 0.01$) for women aged 15-19, 3.5% ($p < 0.01$) for women aged 20-24, and 3.7% ($p < 0.01$) for women aged 25-29 versus by 1.2% ($p < 0.01$) for women aged 30-34.

5.2   Event study estimates

Figures 3–5 present event study analyses of abortion delays, abortion rates, and birth rates. All of the event study results support the common trends assumption necessary for causal inference based on the difference-in-differences specifications. There is no evidence of substantial pre-trends in outcomes, and the models indicate that any effects of policies begin the year the policy begins to be enforced (time=0) and are amplified in the first full year of enforcement (time=1).

The event study results estimates of delay illustrated in Figure 3 confirm the difference-

in-differences findings that both 1 and two-trip mandatory waiting periods delay abortions, but that the two-trip laws have effects that are several orders of magnitude larger. For instance, the event study estimates of the effects of these policies in the first full year of enforcement (time=1) are that one-trip waiting periods increase second trimester abortions by 3.2% ($p < 0.01$) while two-trip waiting periods increase second-trimester abortions by 19.1% ($p < 0.01$).

The event study estimates of the effects on abortion rates in Figure 4 indicate that one-trip mandatory waiting periods caused initial reductions in abortions in the first two years of enforcement, but these appear to be substantially reduced or eliminated in later years. The event study estimates in Figure 5 further show no evidence that one-trip waiting periods substantially impact births. As a whole, the difference-in-differences estimates and event study models suggest one-trip mandatory wait policies cause modest delays in abortions but do not results in substantial long-term reductions in abortions or increases in births.

The findings are very different for two-trip mandatory waits, which not only substantially delay a large proportion of those abortions that still occur (Figure 3), but also results in substantial and persistent reductions in abortions (Figure 4) and increases in births (Figure 5). Moreover, the reductions in births and increases in abortions do not substantially evolve over time, supporting the validity and unbiasedness of the difference-in-difference approach to estimating treatment effects of these time-varying policies of varying signs (Goodman-Bacon, 2018) .

6   Cooling off or burden?

Governors signing recent bills into law argue that waiting periods afford a cooling-off period for a woman "to fully weigh her options and the implications of that decision" (Utah Governor Gary Herbert cited in Reuters, 2012) and "will help women get the information they need before making a decision they can't take back" (Oklahoma Governor Mary Fallin, 2015).

Counter to this view, in a decision enjoining Tennessee's two-trip mandatory waiting period in October 2020, a federal judge writes "Defendants' suggestion that women are overly emotional and must be required to cool off or calm down before having a medical procedure they have decided they want to have, and that they are constitutionally entitled to have, is highly insulting and paternalistic—and all the more so given that no such waiting periods apply to men" (*Adams and Boyle v. Slatery*, 2020). The American Civil Liberties Union (ACLU, 2021) opines that waiting periods "serve no purpose other than to make obtaining an abortion more difficult, dangerous, and expensive for the women who are least able to bear the burden of an unwanted pregnancy."

Viewed through the first lens, the estimated reductions in abortions are evidence that mandatory waits are effective cooling-off periods that achieve the "goal of reducing abortion by encouraging consideration of other alternatives" (South Dakota Governor Dennis Daugaard cited in Condon, 2011). Viewed through the second lens, those same reductions in abortions are evidence that two-trip mandatory waits increase the difficulties and expenses of obtaining an abortion to such an extent that the policies prevent approximately 1 in 10 women seeking an abortion from obtaining one, evidence of a burden. To evaluate these competing interpretations of the findings, I draw on the literature describing abortion patients' decision certainty and also conduct additional analyses of heterogeneous effects.

6.1 Survey evidence

Survey evidence suggest that at women initially contact an abortion provider to make an appointment, approximately 90% are confident about their decision (Foster et al., 2012; Roberts et al., 2017). As one abortion patient in Alabama said in response to a question about a mandatory wait, "if I did not want it, then I would not have come down there" (White et al., 2016). According to women's own reports, mandatory waiting periods do little to change the minds of either those who are confident of their decisions or the minority that feel conflicted (Roberts et al., 2017; Jovel et al., 2021). In a prospective cohort study of

500 women who received mandatory in-person counseling at Utah abortion facilities, less than 5% reported that the information visit and waiting period caused them to become less certain about their decision, a response that was concentrated among the small minority who reported being conflicted when they first presented at the clinic (Roberts et al., 2017).

The modal woman seeking an abortion is a low-income adult mother experiencing a disruptive life event such as falling behind on the rent (Jones and Jerman, 2017b,a). Evidence from patients matched to their Experian credit reports indicates that among patients obtaining abortions in the first trimester, 74% have sub-prime credit scores, and that this percent is even higher for patients approaching and in the second trimester when they seek an abortion (Miller et al., 2020). In a survey of Arizona abortion patients, half reported that even without a two-trip mandatory wait requirement, paying for the abortion was preventing them from paying for food, bills, or child care that month (Karasek et al., 2016). Lindo and Pineda-Torres (2019) estimate that a one-day delay due to Tennessee's two-trip requirement increased the cost of obtaining abortion by $282, a substantial amount of money for a low income household. In surveys, more than half of women confirm that two-trip mandatory waiting periods increase the financial costs and logistical challenges of obtaining abortions by requiring them to miss more work and forgo wages, miss school, and incur additional child care and travel costs (Karasek et al., 2016; Sanders et al., 2016; Roberts et al., 2016; White et al., 2016; Rouland et al., 2019). An Alabama abortion patient observes "it is very hard for me job-wise to get over there and speak with somebody face-to-face....Even though it is a 20-, 30-minute conversation, you have got to take out 4 to 5 hours of your day to just do it" (White et al., 2016). Tennessee abortion patients explain: "I had to take 2 days off work. A great deal of my [abortion] decision was based on financial issues and it did not help to miss an extra day because of this law;" "I had to take a pay day loan to make up for extra travel/childcare expenses and miss 2 days of class "; "it is awful with 2 kids to find a sitter twice to make 2 visits!"; and, "dealing with the money issue is the hardest" (Rouland et al., 2019).

These survey responses are based on those women who were able to get to an abortion facility. The results of the analysis in this paper suggest that approximately 9% of women are prevented from obtaining an abortion all together by the addition of a two-trip requirement. This is consistent with the predictions of Arizona women seeking abortions just prior to the enforcement of a two-trip mandatory waiting period in that state. In this survey, 31% predicted that the enforcement of the two-trip waiting period would delay them from obtaining an abortion as they tried to gather the additional needed resources and 9% predicted it would prevent them from obtaining one at all (Karasek et al., 2016).

6.2   Exploration of heterogeneous effects

While abortion and birth surveillance data used in this paper cannot afford direct insights into women's attitudes and decision-making, the objectively measured outcomes can offer evidence on whether the factors associated with abortion reductions are more consistent with a "cooling off" or a "burden" explanation. What is perhaps the most straightforward of this evidence has already been presented: two-trip policies are found to have large effects whereas one-trip policies are not. If women are simply using the mandatory waiting period as time to cool off and reflect, one would not expect the number of trips to be such an important factor.

To further test whether travel costs play a role, I turn to a county-level analysis of effects on births (for which county-level counts can be constructed) to test for heterogeneous effects in travel distance. I focus this analysis on births to women aged 15-29, the age group that has the highest rates of unintended pregnancy and abortion and was found to be most responsive to mandatory waiting periods in the previous section.[12]

Using confidential data from the Guttmacher Institute's county-by-year panel of abortion provider locations (Guttmacher Institute, 2018) and the Stata geonear module (Picard, 2010), I calculate the geodesic distance from the population centroid of each U.S. county to the

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[12]I report and discuss estimates for 30-44 year-olds in Appendix A. As found and discussed in the previous section, the estimated effects of mandatory waiting periods on births to this group are much smaller in magnitude than for women aged 15-29. Heterogeneous effects by distance follow a similar pattern to younger women, but heterogeneous effects by income do not exhibit a consistent pattern.

population centroid of the nearest county with an abortion provider. I then divide counties into quartiles by travel distance, and estimate the following model:

$$E\left[births1529_{c,s,t+1} \mid \text{one-trip mandatory wait}_{s,t}, \text{two-trip mandatory wait}_{s,t}, distance_{c,s,t}, \boldsymbol{X_{c,s,t}}, \boldsymbol{v_s}, \boldsymbol{v_t}\right] =$$
$$exp(\sum \beta_{1,q}\left(\text{one-trip mandatory wait}_{s,t} * I(distancequartile_{c,s,t} = q_t)\right)+$$
$$\sum \beta_{2,q}\left(\text{two-trip mandatory wait}_{s,t} * I(distancequartile_{c,s,t} = q_t)\right)+$$
$$\sum \beta_q\left(I(distancequartile_{c,s,t} = q_t) + \boldsymbol{\gamma X_{c,s,t}} + ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}\right). \quad (6)$$

This model controls for distance to the nearest provider with four quartile indicators, while also interacting travel distance quartile with each type of mandatory waiting period to allow the effects of 1 and two-trip mandatory waits to vary with distance to the nearest abortion provider. The coefficients on these interaction terms are plotted in Figure 6. The effects of one-trip mandatory waiting periods do not vary substantially with distance to the nearest provider, while the effects of two-trip mandatory waiting periods are increasing with distance, with two-trip mandatory waits estimated to increase births to women under 30 by 2.3% in counties in the first (lowest) quartile of travel distance, by 2.8% in counties in the second quartile of travel distance, by 4.9% in counties in the third quartile of travel distance, and by 7.8% in counties in the fourth (highest) quartile of travel distance.[13] The finding that two-trip mandatory waits result in much larger increases in births when the nearest provider is farther away is more in keeping with a "burden" story as one might reasonably expect distance to have little relationship to "cooling off" but a substantial one to the logistical and financial costs of a second trip.

As a second approach to differentiating between "cooling off" and "burdens" stories, I also explore heterogeneous policy effects by county income characteristics. A large social science literature demonstrates that fertility is pro-cyclical, with good economic times lowering the costs of childbearing and increasing fertility (Buckles et al., 2018, 2019). If mandatory waiting

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[13]All of the reported estimated marginal effects are statistically significant, with a p-value of less than 0.01.

periods afford a period of reflection and "cooling off," one should therefore expect this to result in more women changing their minds and carrying pregnancies to term when economic times are good. On the other hand, if mandatory waiting periods represent a burden, one might reasonably expect this burden to be less in times and places where economic times are good and fewer women experience the increased costs imposed by two-trip waiting periods as substantial obstacles. Hence, a "cooling off" interpretation suggests that two-trip waiting periods will increase births more when time are good, while a 'burdens" interpretation suggests two-trip waiting period will increase births by less when times are good.

Using data from the Census Bureau's Small Area Income and Poverty Estimates program (U.S. Census Bureau, 2020), I divide counties into quartiles by poverty and estimate a model interacting poverty quartiles with mandatory waiting policies, analogous to the model for travel distance presented in Equation 6. I also use these data to divide counties into quartiles by median income and estimate a separate model of heterogeneous effects by household income. As a third model, I also use county-level unemployment rates from the Bureau of Labor Statistics, Local Area Unemployment Program (BLS) (2020) to explore the relationship between unemployment and mandatory waits. The results of these explorations of heterogeneous effects are plotted in Figure 6 and tell the same story: the effects of two-trip mandatory waits are much smaller in locations and times where economic conditions are good, consistent with the "burdens" prediction. For instance, a two-trip mandatory waiting period is estimated to increase births to young women by 1.6% in the least poor counties, but by 4.5% in the most poor. Similarly, a two-trip mandatory waiting period is estimated to increase births to young women by 3.2% in counties with the lowest unemployment rates but by 4.7% in counties with the highest unemployment rates.[14]

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[14]Each of these estimated effects is statistically significant ($p < 0.01$), and the effects estimated in the most economically disadvantaged and least economically disadvantaged counties are statistically significantly different from each other ($p < 0.01$).

7   Conclusion

When the Supreme Court ruled a two-trip mandatory waiting period "is surely a small cost to impose" (*Planned Parenthood v. Casey*, 1992), it perhaps seemed a safe assumption that any logistical and financial costs of a second trip would be dwarfed by those of unintended parenthood, and that women who wanted abortions would find a way. This assumption seems less certain when one when one considers that approximately 75% of women seeking abortions are low-income and credit-constrained, and 60% are experiencing disruptive life events (Jones and Jerman, 2017b,a; Miller et al., 2020).

Nearly 30 years after the *Casey* ruling, the proliferation of mandatory wait policies affords the opportunity to credibly identify and measure the fraction of women who are substantially delayed or prevented from obtaining an abortion. The results of the event study and difference-in-differences analyses suggest that one-trip mandatory waits have at most modest effects, while two-trip waiting periods increase second-trimester abortions by an estimated 19% and prevent 9% of women seeking abortions from obtaining one at all, resulting in a commensurate 1.5% increase in births. The increases in births are greatest when travel distances to the nearest provider is high and in counties where economic conditions are poor, observations which support the view that these policies serve as "burdens" rather than as "cooling off" periods.

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Figure 1

Mandatory waiting period laws are associated with lower resident abortion rates and higher resident birth rates
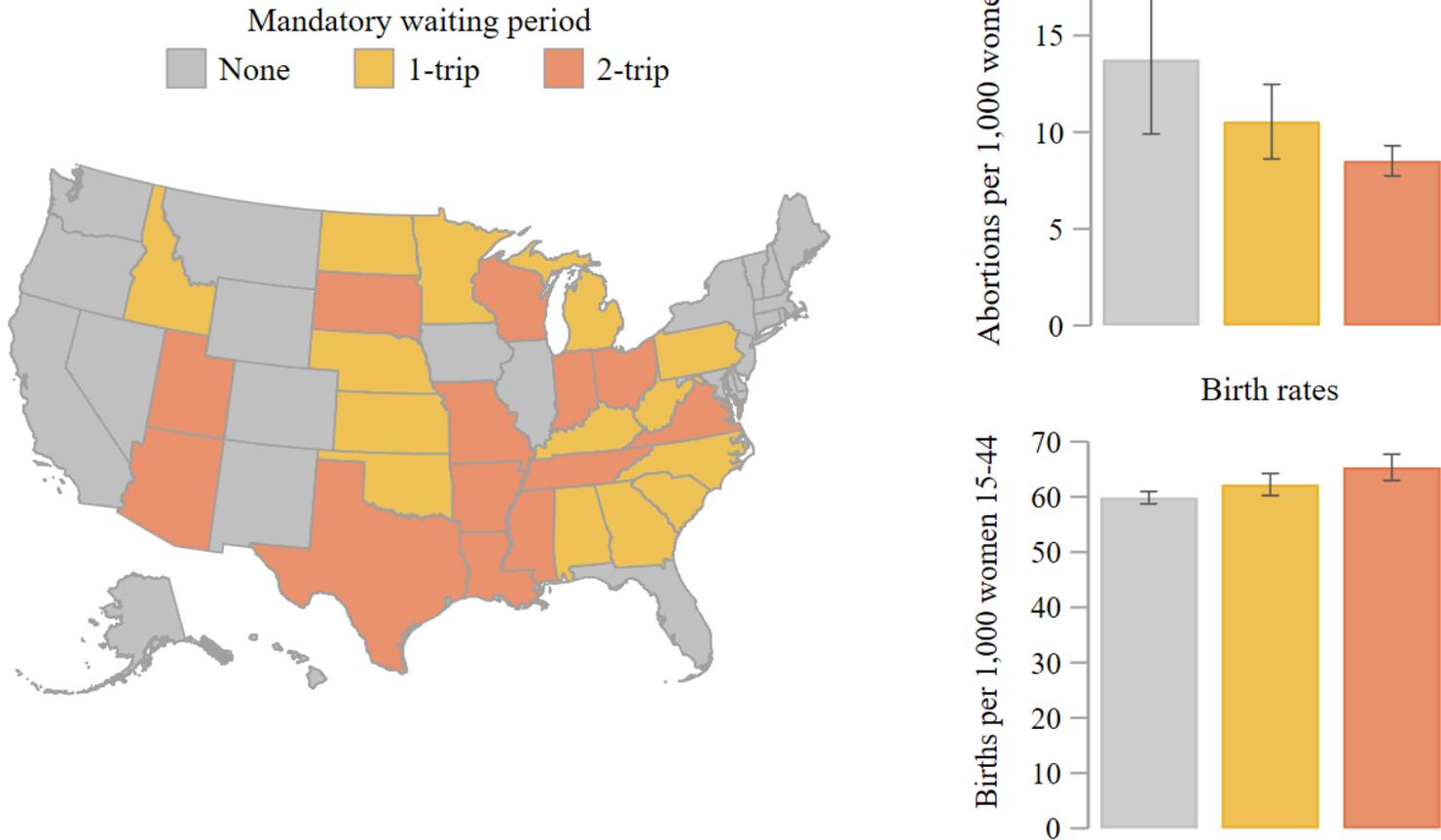
Notes: Policies and outcomes summarized for calendar year 2018, the latest year for which abortion statistics are available. Bar charts describe population-weighted mean resident abortion and birth rates published by the NCHS, with 95% confidence intervals. Sources: Kortsmith et al. (2020); NCHS (2020); SEER (2019). See text for full information regarding definitions and sources.

Figure 2

Heterogeneous effects on births: Comparisons of coefficients for models estimated by race, ethnicity, and age
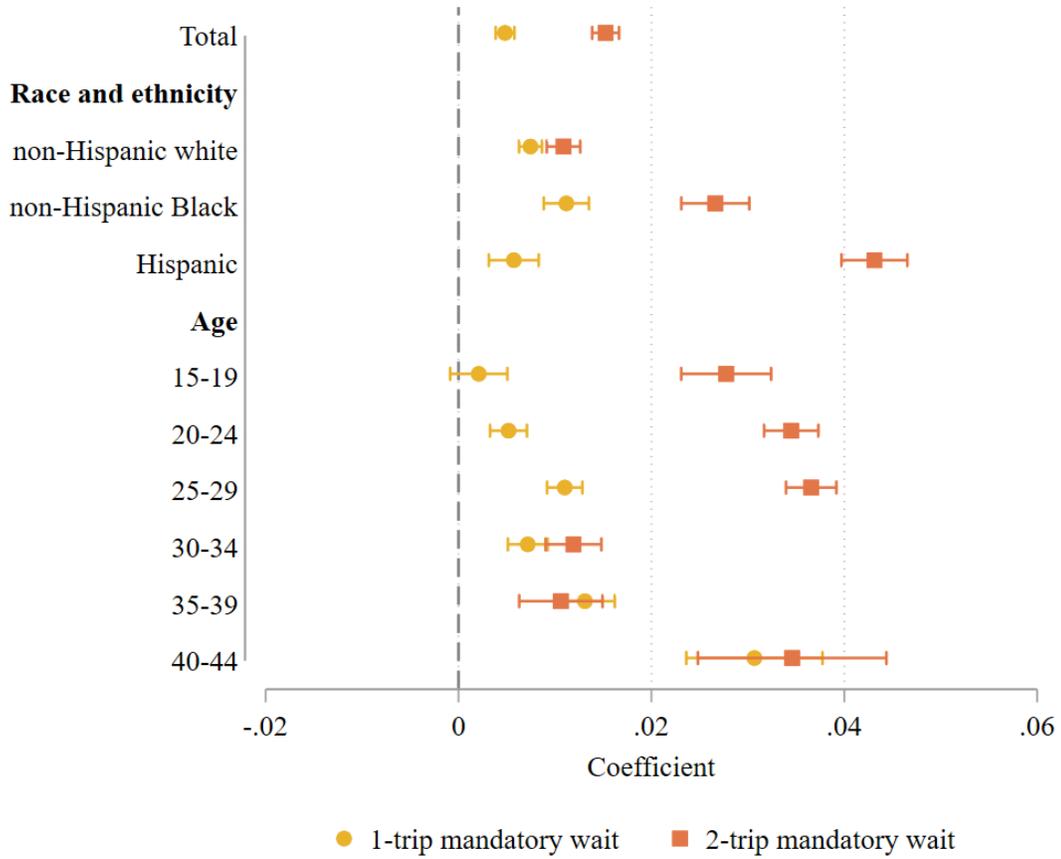
Notes: Each row of the coefficient plot figure depicts coefficients and 95% confidence intervals from a difference-in-difference Poisson model estimated for the indicated age or racial/ethnic group. All specifications correspond to Column 6 in Table 3 with an exposure variable for the population of women in the relevant group.

Figure 3
Event study estimates of effects of mandatory waiting periods on abortion timing

Panel A: Fraction of abortions ≤8 weeks

Panel B: Fraction of abortions 9-12 weeks

Panel C: Fraction of abortions ≥13 weeks

— 1-trip mandatory wait   ---■--- 2-trip mandatory wait
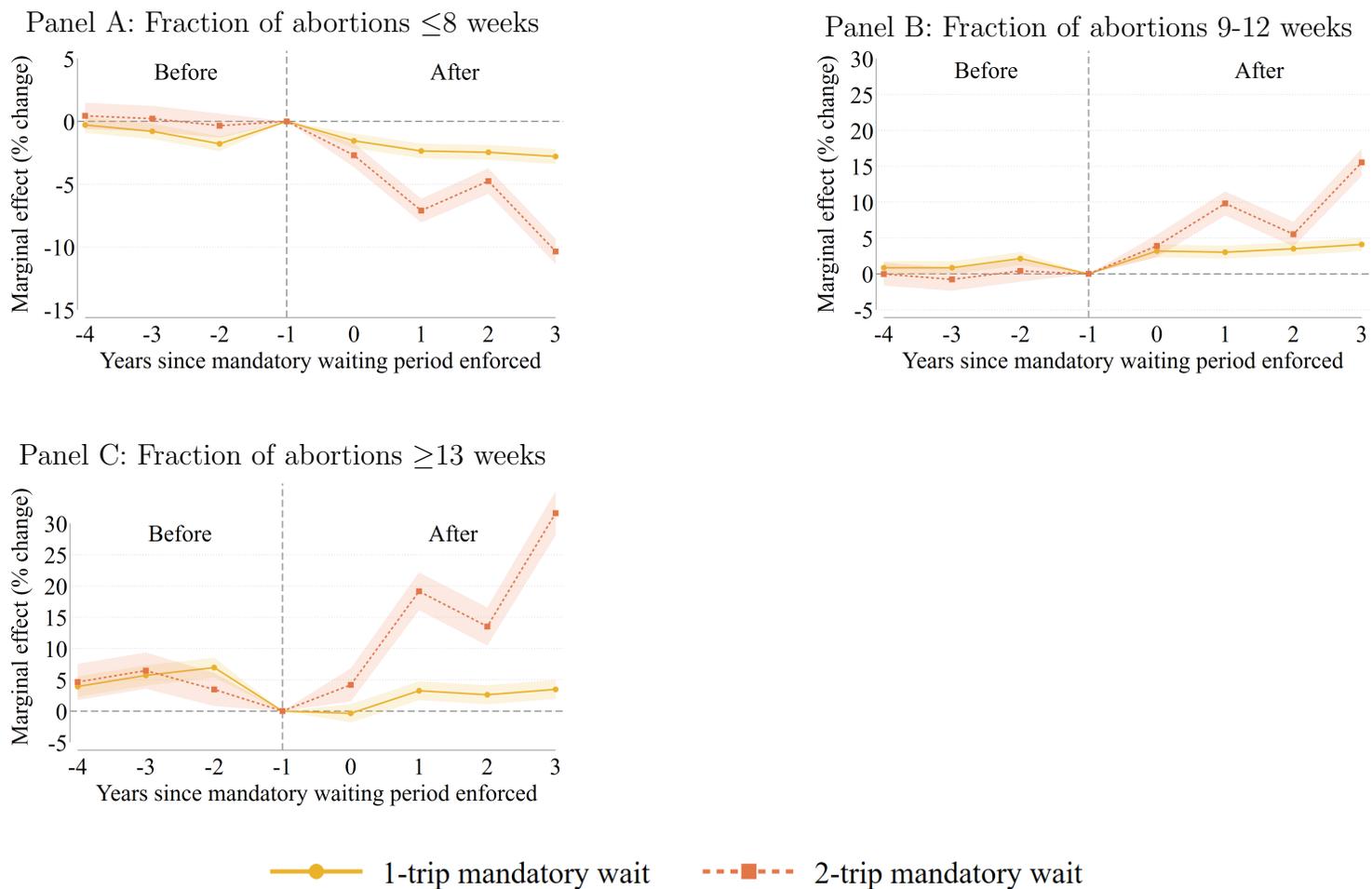
Notes: Event study estimates of the effects of 1 and two-trip mandatory waiting periods on the percents of abortions occurring in three gestational age categories: ≤ 8 weeks, 9-12 weeks, or ≥ 13 weeks. Results are based on Poisson specification of abortions by gestational age with an exposure variable for total abortions occurring in a state for which gestational age is known. All models include state and year fixed effects and the full set of control variables in Table 2. Shaded areas represent 95% confidence intervals. See text for full information regarding definitions and sources.

Figure 4
Event study estimates of effects of mandatory waiting periods on abortion rates
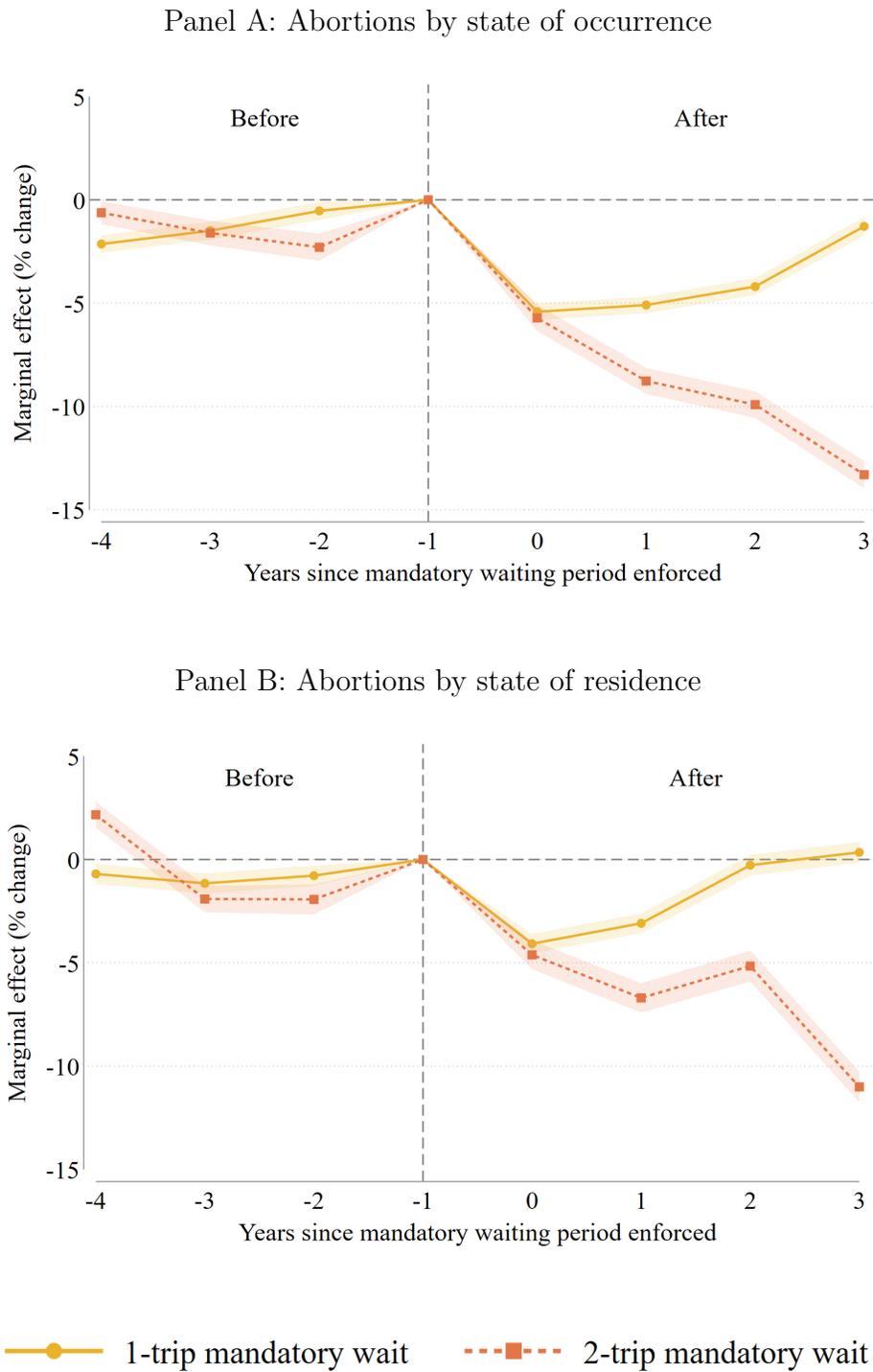
Panel A: Abortions by state of occurrence

Panel B: Abortions by state of residence

Notes: Event study estimates of the effects of 1 and two-trip mandatory waiting periods on abortion rates. Results are based on a Poisson specification of abortion counts by state of occurrence (Panel A) and residence (Panel B) with an exposure variable for the population of women aged 15-44. All models include state and year fixed effects and the full set of control variables in Table 2. Shaded areas represent 95% confidence intervals. See text for full information regarding definitions and sources.

Figure 5

Event study estimates of effects of mandatory waiting periods on birth rates

Births by state of residence

Notes: Event study estimates of the effects of 1 and two-trip mandatory waiting periods on birth rates. Results are based on a Poisson specification of birth counts by state of residence with an exposure variable for the population off women aged 15-44. All models include state and year fixed effects and the full set of control variables in Table 2. Shaded areas represent 95% confidence intervals. See text for full information regarding definitions and sources.
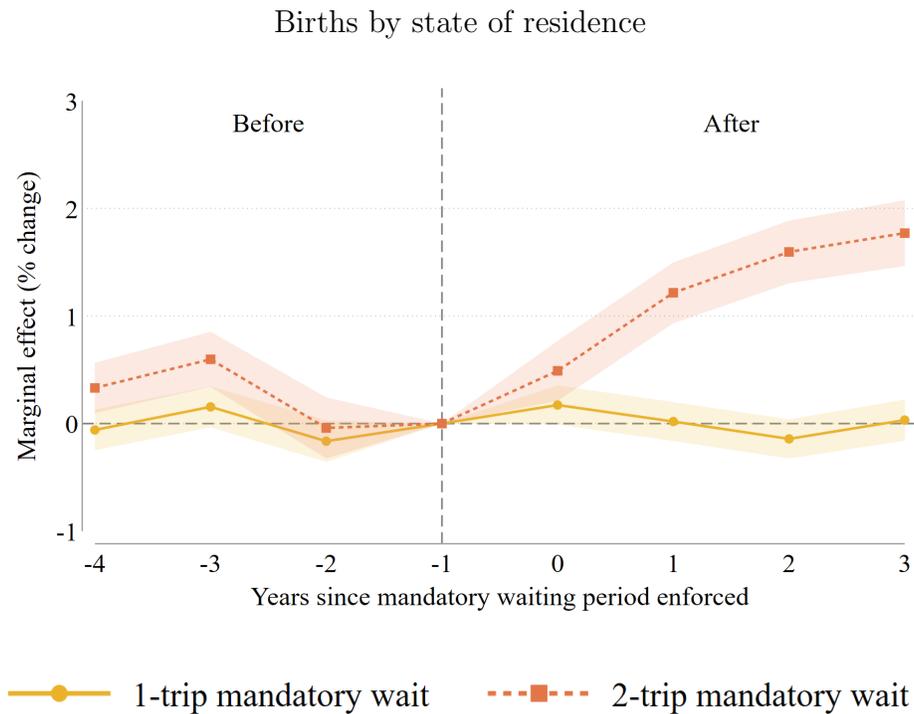
Figure 6
Heterogeneous effects on births: Interactions of policy environment with county-level
measures of abortion access and economic conditions, births to women aged 15-29
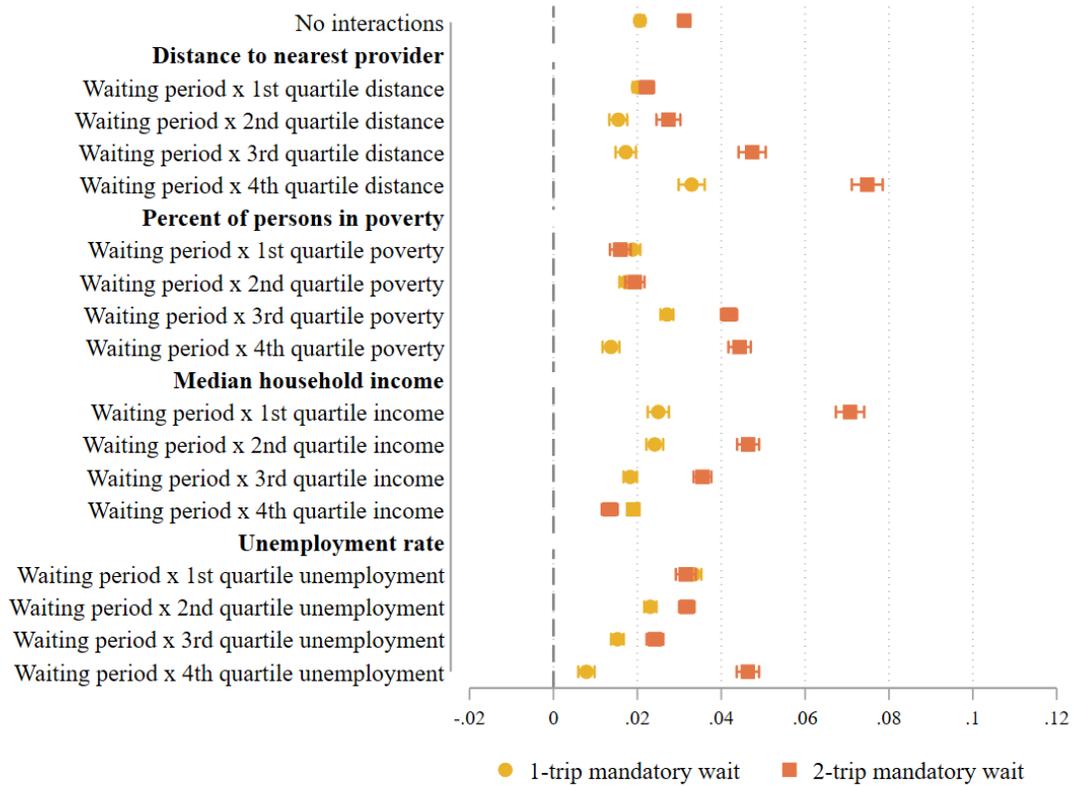
Notes: Each group of the coefficient plot figure depicts coefficients and 95% confidence intervals from separate difference-in-difference Poisson models of county-level birth rates. In each set of models, exposure to waiting periods is fully interacted with indicators of the county's position in the national distribution of county-level distance to the nearest abortion provider, poverty rates, unemployment rates, and median household income.

Table 1

Enforcement of mandatory waiting periods, 1985-2021

State	1-Trip	2-Trip	State	1-Trip	2-Trip
Alabama	10/14/2002		Montana		
Alaska			Nebraska	9/9/1993	
Arizona	9/30/2009	8/13/2011	Nevada		
Arkansas	5/1/2001	4/6/2015	New Hampshire		
California			New Jersey		
Colorado			New Mexico		
Connecticut			New York		
D.C.			North Carolina	10/26/2011	
Delaware			North Dakota	3/7/1994	
Florida			Ohio	3/14/1994	9/22/2005
Georgia	5/10/2005		Oklahoma	5/20/2005	
Hawaii			Oregon		
Idaho	2/10/1993		Pennsylvania	3/21/1994	
Illinois			Rhode Island		
Indiana	11/14/1997	5/1/2003	South Carolina	6/24/2010	
Iowa			South Dakota	8/23/1994	7/1/2012
Kansas	7/1/1997		Tennessee		5/19/2015- 10/14/2020
Kentucky	3/1/2001		Texas	1/1/2004	9/1/2011
Louisiana		9/25/1995	Utah		2/1/1994
Maine			Vermont		
Maryland			Virginia	10/1/2001	7/1/2012- 6/30/2020
Massachusetts			Washington		
Michigan	9/15/1999		West Virginia	3/6/2003	
Minnesota	7/1/2003		Wisconsin		5/31/1998
Mississippi		8/8/1992	Wyoming		
Missouri	11/30/2005	8/28/2010			

Notes: Two-trip mandatory waiting periods enacted after one-trip waiting periods supersede the former. See Appendix B for a detailed state-by-state review including additional documentation of the lengths of mandated waiting periods.

Table 2

Summary Statistics: Explanatory variables

	Source	Mean	S.D.
Outcomes			
Abortions by gestational age by state of occurrence (%)			
≤8 weeks	NCHS	59.48	7.22
9-12 weeks	NCHS	28.89	6.12
≥13 weeks	NCHS	11.63	4.05
Abortion rate (per 1,000 women)			
Total, state of occurrence	NCHS, SEER	15.20	7.03
Total, state of residence	NCHS, SEER	13.68	5.43
Birth rate (per 1,000 women)	NCHS, SEER	64.53	6.31
Demographic Controls			
Percent of female population aged 15-44 that is			
White, non-Hispanic	SEER	63.18	16.33
Black, non-Hispanic	SEER	14.06	9.04
Hispanic	SEER	16.20	13.64
Age 15-19	SEER	16.10	1.32
Age 20-24	SEER	16.21	1.34
Age 25-29	SEER	16.43	1.18
Age 30-34	SEER	16.85	1.23
Age 35-39	SEER	17.21	1.27
Age 40-44	SEER	17.19	1.35
Percent of population in urbanized area	Census	69.79	16.70
Percent of population aged 25+ with education			
Less than high school	Census	13.01	4.24
High school degree	Census	24.80	4.26
Some college	Census	36.10	3.31
College degree	Census	26.09	6.03
Economic controls			
Unemployment rate	BLS	5.92	1.93
Poverty rate	SAIPE	13.74	3.00
Median household income (10,000 $2018)	SAIPE	6.07	8.52
Reproductive Policy Controls			
I(1-Trip mandatory waiting period)	Author	0.22	0.41
I(2-Trip mandatory waiting period)	Author	0.12	0.32
I(Parental involvement law)	Myers and Ladd	0.55	0.49
I(Medicaid coverage for abortion)	Various	0.39	0.49
I(Medicaid family planning expansion)	Myers	0.43	0.49
I(Emergency contraception available OTC)	Zuppann	0.50	0.50
I(Insurance mandate for contraception)	Yordan	0.46	0.49
Policy Controls			
I(Medicaid Expansion)	KFF	0.11	0.31
I(Welfare reform)	Various	0.89	0.31
Max welfare benefit for family of 3 (100 $2018)	Various	5.58	2.32
I(Family cap)	Various	0.40	0.49

Notes: Population-weighted summary statistics calculated for United States states ($n = 51$) for 1992-2018 with the exception of abortion rates by gestational age, which are observed for 1992-2016. Appendix Table A1 providers additional detail on outcome variables. See the documentation included in the replication materials for additional information.

Table 3

Effect of mandatory waiting periods on abortion delays, abortion rates, and birth rates

	Ratios (% of all abortions)			Rates (per 1,000 women aged 15-44)		
	$\leq$8 weeks	9−12 weeks	$\geq$ 13 weeks	Abortions by Occurrence	Abortions by Residence	Births by Residence
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Mandatory wait	-0.015***	0.019***	-0.019***	-0.016***	0.001	0.006***
	(0.002)	(0.003)	(0.004)	(0.001)	(0.001)	(0.000)
Panel B						
1-trip mandatory wait	-0.016***	0.019***	-0.014***	-0.011***	0.007***	0.005***
	(0.002)	(0.003)	(0.004)	(0.001)	(0.001)	(0.000)
2-trip mandatory wait	-0.084***	0.104***	0.175***	-0.108***	-0.093***	0.015***
	(0.003)	(0.004)	(0.007)	(0.002)	(0.002)	(0.001)
Exposure variable	Number of abortions			Population of women aged 15-44		
No. of states	44	44	44	49	48	51
N	957	957	957	1279	1018	1377

Notes: Estimated coefficients for difference-in-difference Poisson models of state-level abortion and birth outcomes. Abortion timing outcomes are the number of abortions by estimated length of gestation occurring within state s in year t with an exposure variable measuring the total number of abortions occurring in state s in time t for which gestational age is known. Exposure for abortion and birth counts is the resident population of women aged 15-44. All models include state and year fixed effects as well as the following time-varying state control variables: the fraction of the 15-44 female population that falls into grouping by age and ethnicity; the unemployment rate, poverty rate, and median household income; state policies governing parental involvement for minors seeking abortions, over-the-counter access to emergency contraception, Medicaid family expansion waivers, Medicaid funding for abortions, and contraceptive mandates for private insurers. These control variables are listed and summarized in Table 2, and all variables and sources are described and documented in the text and replication package. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$.

Appendix A

Additional summary statistics

Table A1 provides summary statistics for births by five-year age groupings and by race and ethnicity. These are the mean outcome variables for models estimated and presented in Figure 2.

Alternative specifications of the difference-in-differences models

Table 3 presents the results of difference-in-difference Poisson models specified in Equations 1 and 2. Here I present and describe the results of a series of alternative specifications.

Table A2 explores the robustness of the results in Table 3 to a weighted ordinary least squares (WOLS) specification rather than a Poisson model. In the WOLS specification, the outcomes are log rates using the exposure variable from the Poisson model as a denominator. All estimates are weighted using state populations, and the estimated coefficients are comparable to Poisson coefficients. A comparison of Table 3 and Table A2 shows that the results are substantively the same regardless of whether estimated with a Poisson model or a WOLS model. For instance, two-trip mandatory waiting periods are estimated to reduce abortions by state of residence by 9.9% ($p < 0.01$) based on the weighted OLS specification, versus by 8.8% ($p < 0.01$) based on the Poisson specification.[15]

Table A3 and Table A4 explore the robustness of the results in Table 3 to using alternative sets of control variables. These results demonstrate that the results in Table 3 are substantially unchanged if all of demographic, economic, and policy controls are excluded or, alternatively, the economic and policy controls are excluded. For instance, the effect of a two-trip mandatory waiting period on abortions by state of residence is estimated to be an 11.0% reduction ($p < 0.01$) if no control variables are included and a 13.5% reduction ($p < 0.01$) if only demographic controls are included.

Table A5 explores the robustness of the results in Table 3 to using an alternative source of abortion surveillance data. Columns 1-2 present estimates based on the CDC panel, which are identical to those presented in Table 3. Columns 5-6 present alternative estimates using Guttmacher estimates of abortion counts. The estimated effects of mandatory waiting periods on abortions by state of occurrence are nearly identical using the two data sources, but the estimated effects on abortions by state of residence are somewhat smaller when estimated using the Guttmacher data—a 5.5% ($p < 0.01$) reduction—but also less precisely estimated. The smaller estimated effects appear to arise in part from the more limited number of years available in the Guttmacher data. Columns 3-4 present results estimated with CDC data for a sample limited to years present in the Guttmacher data, and the estimated effect of two-trip waiting periods on abortions by state of residence is a 7.1% ($p < 0.01$) reduction.

Table A6 explores the robustness of the results in Table 3 to the selection of alternative samples. The models in Table 3 is estimated using all available state and year observations

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[15]All marginal effects are calculated as $100 \times (\exp(\beta \Delta X) - 1)$ and the delta method is used to calculate standard errors and p-values.

in the CDC abortion and birth surveillance data. As described in the paper, the CDC birth surveillance data afford a balanced panel of annual state-level births from 1992 through 2019, for 1326 observations in total. The abortion surveillance data, however, are an unbalanced panel because a handful of states do not report in any given year. In addition, the CDC did not begin reporting abortions by state of residence until 1997 and the CDC reports abortions by state of residence but not by state of occurrence for Wyoming in several years. As a result of these combined factors, the sample size for the model of abortions by state of occurrence is 1,193 and that for abortions by state of residence is 923. Columns 4-6 of Table A6 report results for models estimated using the sample of states and years for which all three outcomes—abortions by state of residence and occurrence and births by state of residence—are observed. These models all utilize the same sample of 999 state-by-year observations for which all three outcomes can be observed. The estimated effects on abortions are quite similar with this sample limitation, while the estimated effects on two-trip waiting periods on births are half the magnitude with the more limited sample: a 0.7% increase in births ($p < 0.01$). The sensitivity of these coefficients to a more limited panel that begins in a later year is a known feature of difference-in-difference estimators (Goodman-Bacon, 2018). In the context of this study, in which treatment has different signs as laws are enforced but also enjoined, repealed, or replaced, the event study analyses offers an appropriate approach to evaluating the magnitudes of the effects. The event study estimates (Figure 5) suggest modestly dynamic effects of two-trip mandatory waiting periods that increase over time, from 0.5% in the first partial year of enforcement to 1.6% in the third year of enforcement.

Length of the mandated wait

The analyses presented in the main text distinguish between 1 and two-trip mandatory waiting periods. In this appendix I explore additional heterogeneous effects by the length of the waiting periods. However, I do so with the strong caveat that available data at the time of this analysis afford a limited window in which to observe any effects of waiting periods in excess of 24 hours. Recall that 8 states have extended pre-existiing mandated waiting periods beyond 24 hours—South Dakota and Utah enacted 72 hour two-trip waiting periods in 2012, Alabama a 48-hour one-trip wait in 2014, Missouri a 72-hour two-trip wait in 2014, Arkansas a 72-hour two-trip wait in 2015, and North Carolina and Oklahoma 72-hour one-trip waits in 2015. Tennessee enforced a waiting period for the first time in 2015 which was a 48-hour two-trip policy, but this was enjoined between October 2020 and April 2021. Most of these changes occurred quite recently, and with the exception of Tennessee all of the longer waiting periods extended pre-existing 24-hour waiting periods.

Using this recent and somewhat limited policy variation, I estimate the following difference-in-differences specification:

$$E\left[Y_{s,t} \mid .\right] = exp(\beta_1 \text{one-trip 24hr mandatory wait}_{s,t} + \beta_2 \text{one-trip} > \text{24hr mandatory wait}_{s,t} +$$
$$\beta_3 \text{two-trip 24hr mandatory wait}_{s,t} + \beta_4 \text{two-trip} > \text{24hr mandatory wait}_{s,t} +$$
$$\boldsymbol{\gamma X_{s,t}} + ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}). \quad \text{(A1)}$$

Table A7 reports the results of difference-in-differences specification corresponding to Table 3

but distinguishing but four categories of mandatory waiting periods. The results in Columns 1-3 unambiguously support the conclusion that additional trips and additional waiting times both delay abortions. For example, one-trip mandatory waits of 24-hours or less are estimated to reduce abortions taking place before 9 weeks gestation by 1.3% ($p < 0.01$), one-trip mandatory waits of more than 24 hours by 3.5% ($p < 0.01$), two-trip mandatory waits of 24-hours or less by 7.1% ($p < 0.01$), and two-trip mandatory waits of 24-hours or more by 17.1% ($p < 0.01$). Two-trip mandatory waits of 24-hours or less are estimated to increase second trimester abortions by 15.3% ($p < 0.01$), while lengthier two-trip waiting periods are estimated to increase them by 56.4% ($p < 0.01$).

The results in Columns 4-5 of Table A7 suggest that one-trip mandatory waits of less than 24-hours do not substantially affect abortion rates, but that abortion rates decline by 5.6% ($p < 0.01$) if the one-trip wait extends beyond 24 hours and by 8.1% ($p < 0.01$) for two-trip waits of 24 hours or less, and by 13.0% ($p < 0.01$) for two-trip waits of more than 24 hours. These estimated reductions in abortion correspond to estimated increase in births (Column 6), though the estimated effect of one-trip waiting periods in excess of 24 hours is implausibly large compared to the estimated effect on abortions. However, there is very little variation in the sample period identifying these coefficients, which are identified by extensions of 1-period waits in Alabama in 2014 and North Carolina and Oklahoma in 2015.

I additionally implement an event study model extending Equation 3 in the text to account for the length of the wait:

$$E\left[Y_{s,t} \mid \boldsymbol{a_{s,t}}, \boldsymbol{X_{s,t}}, \boldsymbol{v_s}, \boldsymbol{v_t}\right] \; = \; exp\left(\sum_{j=-5}^{4} \boldsymbol{\beta_j} \boldsymbol{a_{s,t}^j} + \boldsymbol{\gamma} \boldsymbol{X_{s,t}} + + ln(exposure_{s,t}) + \boldsymbol{v_s} + \boldsymbol{v_t}\right). \quad \text{(A2)}$$

As in the text, I set the event window at $\underline{j} = -5$ to $\bar{j} = 4$, and the explanatory variables of interest measure changes in enforcement of each type of law, binning at the end-points:

$$\boldsymbol{a_{st}^j} = \begin{cases} \sum_{k=t+5}^{\bar{t}} \boldsymbol{d_{s,k}} & \text{if } j = -5 \\ \boldsymbol{d_{s,t-j}} & \text{if } -5 < j < 4 \\ \sum_{k=\underline{t}}^{t-4} \boldsymbol{d_{s,k}} & \text{if } j = 4 \end{cases} \quad \text{(A3)}$$

I classify mandatory waiting periods into four categories: one-trip 24-hour mandatory waits, one-trip >24 hour mandatory waits, one-trip 48-hour mandatory waits, and one-trip >24-hour mandatory waits. Hence,

$$\boldsymbol{d_{s,t}} = \begin{pmatrix} \text{one-trip 24-hour mandatory wait}_{s,t} - \text{one-trip 24-hour mandatory wait}_{s,t-1} \\ \text{one-trip >24-hour mandatory wait}_{s,t} - \text{one-trip >24-hour mandatory wait}_{s,t-1} \\ \text{two-trip 24-hour mandatory wait}_{s,t} - \text{two-trip 24-hour mandatory wait}_{s,t-1} \\ \text{two-trip >24-hour mandatory wait}_{s,t} - \text{two-trip >24-hour mandatory wait}_{s,t-1} \end{pmatrix} \quad \text{(A4)}$$

These event study models allow for dynamic effects over a period of 10 years for four mutually exclusive and collectively exhaustive policies, which estimates 36 coefficients in a state-by-year panel of counts. One might reasonably wonder if such a model can be estimated with precision, but in fact there is a greater obstacle to estimated an event study specification,

which is that the >24-hour mandatory waiting periods have only been enforced for 1 to 4 years in the observation window. Therefore the event study can only be estimated using outcomes observed through 2016 (because we do not know policies past 2021), which means that very few state-by-year cells identify the separate effects of lengthier waits, and that identification is based on an unbalanced panel of states. For instance, the effects of >24-hour waits in the first full year of enforcement are identified by all 8 states that have extended their waiting periods, but the effects at 3 and 4+ years of enforcement are identified only by Utah and South Dakota, the only states we can as yet observe 3 and 4 years post enforcement in the observation window.

Hence, the event study results for these models, which are presented in Figure A1 through Figure A3, should be interpreted with considerable caution as it is yet too soon to reliably estimate dynamic effects. Still, the event study estimates largely support the common trends assumption and conclusions based on the difference-in-difference specifications. As illustrated in Figure A1 in the first full year of enforcement, two-trip mandatory waits with the lengthiest waiting period appear to cause the greatest delays in abortions, followed by two-trip 24-hour waiting periods and one-trip >24-hour waiting periods, which have statistically indistinguishable estimated effects on delay. One-trip waiting periods of 24-hours appear to cause small if any measurable delay (Figure A1). Turning to abortion rates, two-trip mandatory waiting periods in excess of 24 hours again appear to have the largest effects on abortions by state of occurrence, but measured by state of residence their effects are indistinguishable from two-trip 24-hour waiting periods (Figure A2). There is no evidence that one-trip 24-hour mandatory waiting periods increase births, while the other three policies appear to increase births but with imprecisely estimated effects (Figure A2).

Given the statistical demands of these models and the as yet very limited window in which to observe effects of recently-enacted longer wait times, it is as yet too soon to reliably evaluate the effects of the waiting period length. However, the results of these models are generally in keeping with the findings reported in the main text regarding the salience of the number of trips, and support the conclusions presented there.

Heterogeneous effects for 30-44 year-olds

Women under 30 have higher rates of unintended pregnancy and higher rates of abortions than older women (Table A1), and make up nearly three-quarters of abortion patients (Jones and Jerman, 2017b). As presented and discussed in the text, births to younger women are found to be much more responsive to mandatory waiting periods than births to older women (Figure 2), which is why I focus on this group when estimating heterogeneous effects by county characteristics (Figure 6).

Figure A4 presents heterogeneous effects of mandatory waiting periods by county characteristics on births to women aged 30-44, corresponding to Figure 6 save for being estimated for an older age group. The estimated effects on births are much smaller in magnitude, as already observed. As for younger women, the estimated effects of two-trip mandatory waiting periods are increasing in distance. However, for older women there is no clear relationship between county economic conditions and the effects of mandatory waiting periods.

Figure A1

Event study estimates of effects of mandatory waiting periods on abortion timing
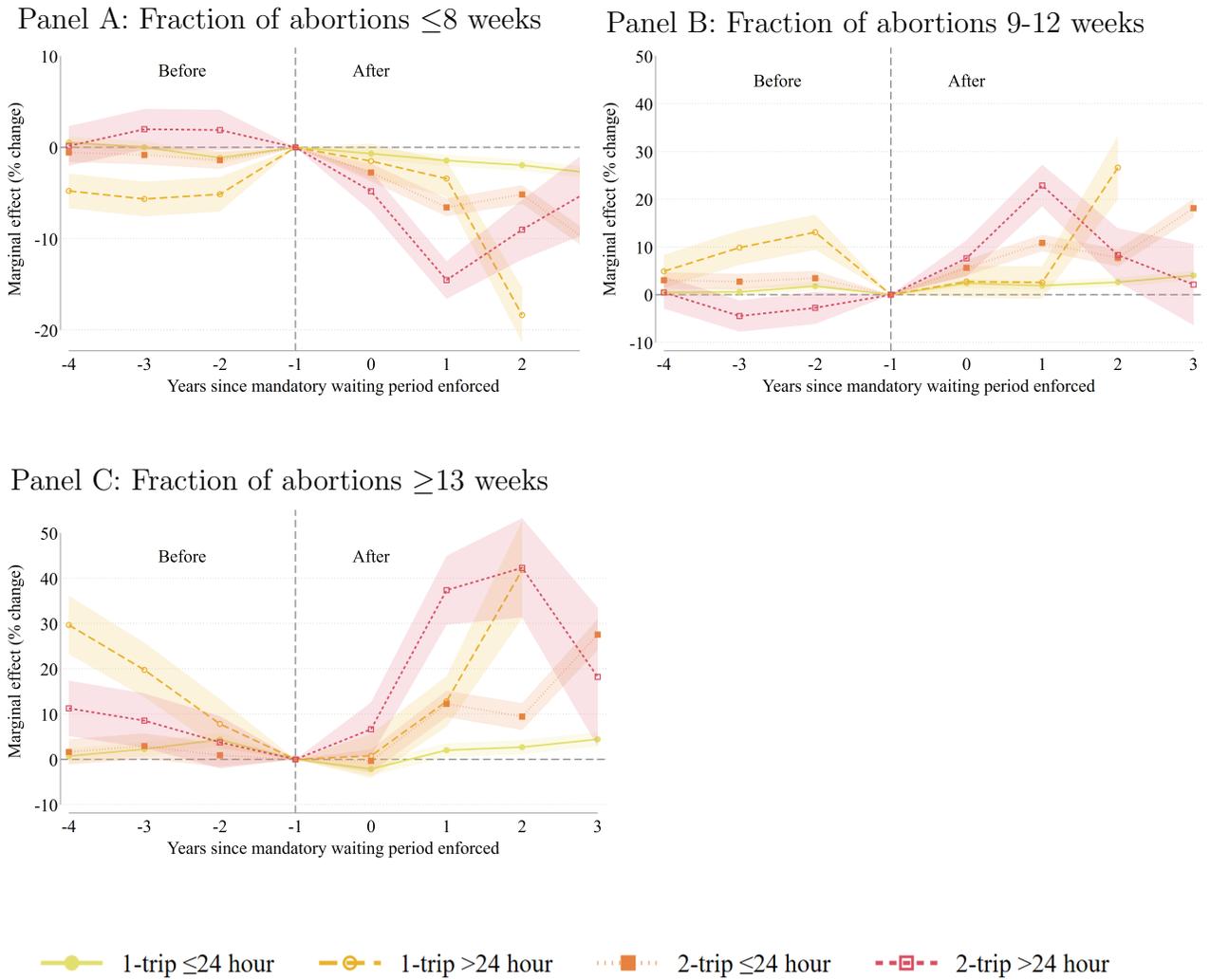
Notes: Alternative specification corresponding to Figure 3 but further differentiating laws by the length of the waiting period. Note that because most of the extended waiting periods have been enacted recently and the gestational age outcomes can only be observed through 2016, there is very little variation identifying differential effects beyond one year post-enactment. The results should therefore be interpreted with caution. Shaded areas represent 95% confidence intervals. See notes to Figure 3 and text for full information regarding policy changes, definitions, and sources.

Figure A2
Event study estimates of effects of mandatory waiting periods on abortion rates

Panel A: Abortions by state of occurrence

Panel B: Abortions by state of residence

Legend: 1-trip ≤24 hour · 1-trip >24 hour · 2-trip ≤24 hour · 2-trip >24 hour

Notes: Alternative specification corresponding to Figure 4 but further differentiating laws by the length of the waiting period. Shaded areas represent 95% confidence intervals. See notes to Figure 4 and text for full information regarding policy changes, definitions, and sources.

Figure A3
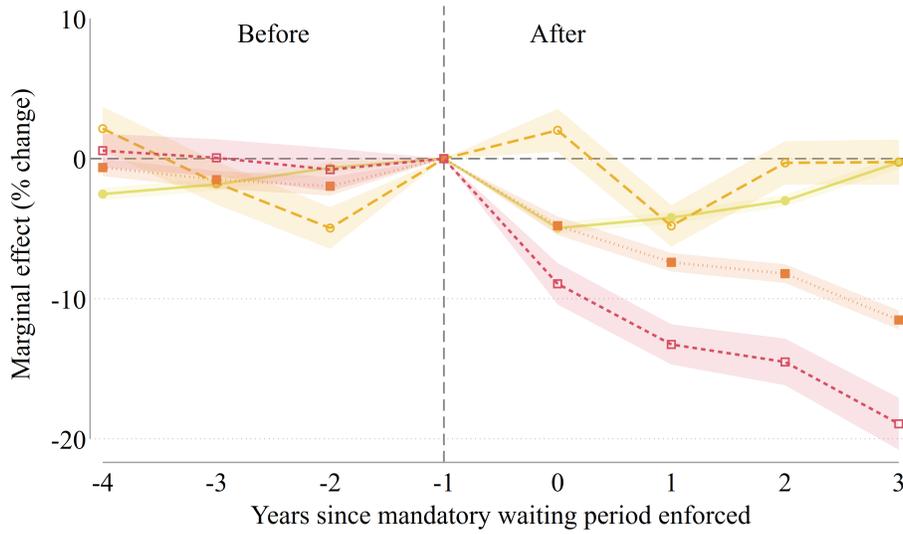## Event study estimates of effects of mandatory waiting periods on birth rates

Births by state of residence
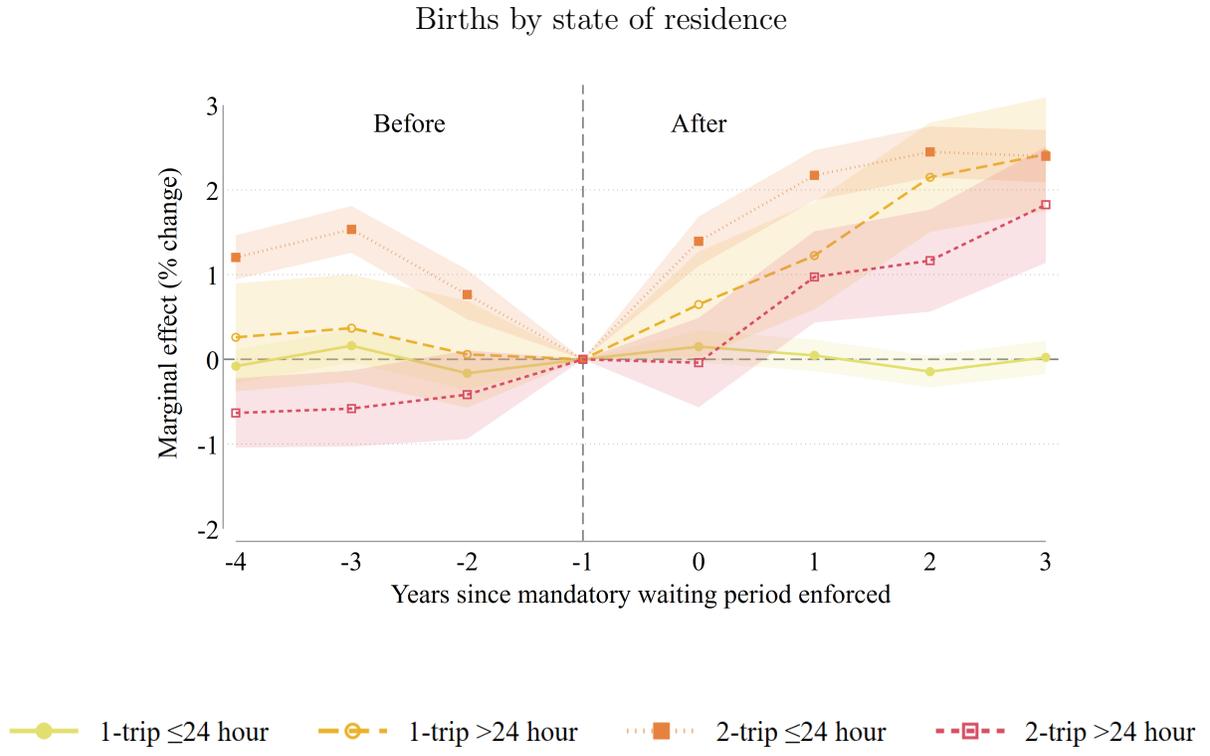
Notes: Alternative specification corresponding to Figure 5 but further differentiating laws by the length of the waiting period. Shaded areas represent 95% confidence intervals. See notes to Figure 5 and text for full information regarding policy changes, definitions, and sources.

Figure A4

Heterogeneous effects on births: Interactions of policy environment with county-level measures of abortion access and economic conditions, births to women aged 30-44

Notes: Equivalent to Figure 6 except estimated for ages 30-44 instead of 15-29. See notes to Figure 6.

Table A1

Summary Statistics: Birth rates by age and race

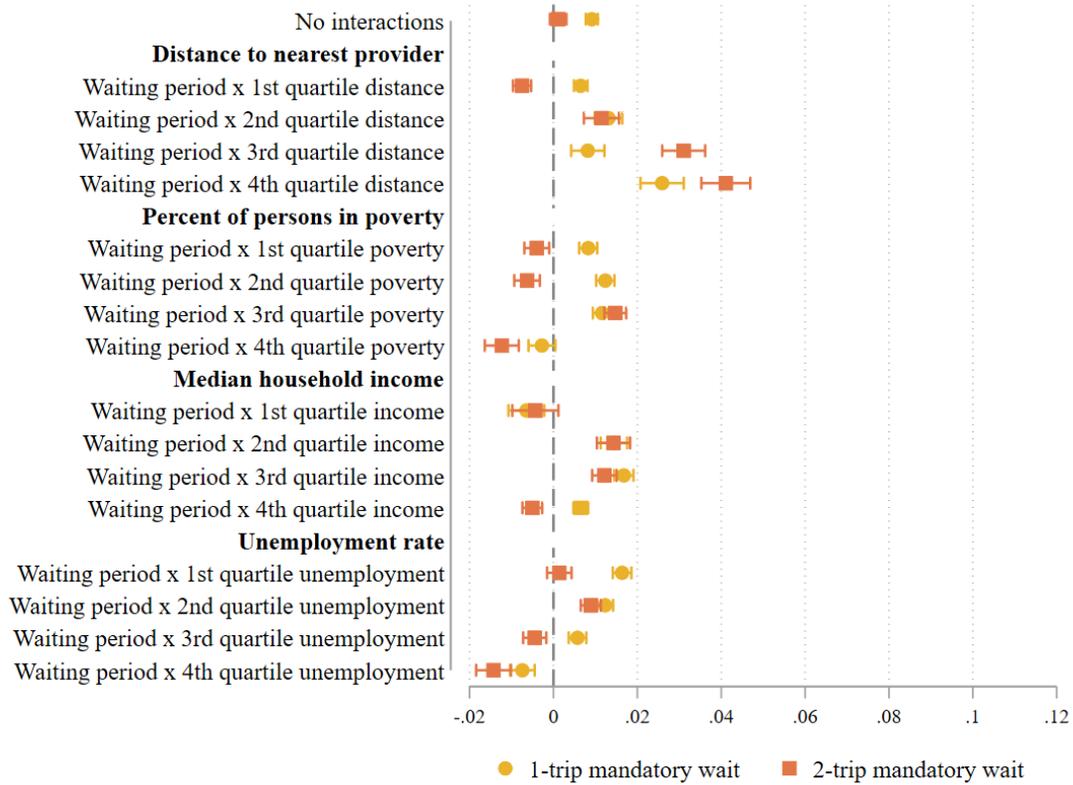|	source	no. of states	years	mean	s.d.
Birth rate (per 1,000 women)					
Total	NCHS, SEER	51	1992-2019	64.53	6.21
White, non-Hispanic	NCHS, SEER	51	1992-2019	58.49	4.92
Black, non-Hispanic	NCHS, SEER	51	1992-2019	68.65	8.09
Hispanic	NCHS, SEER	51	1992-2019	84.96	17.80
Age 15-19	NCHS, SEER	51	1992-2019	38.48	16.63
Age 20-24	NCHS, SEER	51	1992-2019	94.81	23.63
Age 25-29	NCHS, SEER	51	1992-2019	109.26	14.38
Age 30-34	NCHS, SEER	51	1992-2019	93.04	12.74
Age 35-39	NCHS, SEER	51	1992-2019	43.62	11.02
Age 40-44	NCHS, SEER	51	1992-2019	9.03	3.15

Notes: All statistics are weighted averages for the state-year panel. Birth rates by racial, ethnic, and age groups are weighted by the population of women of childbearing age in the relevant category.

Table A2

Effect of mandatory waiting periods on abortion delays, abortion rates, and birth rates, Alternative estimates using weighted OLS models

	Abortion timing (%)			Abortion Rate		Birth Rate
	≤8 weeks	9−12 weeks	≥ 13 weeks	Occurrence	Residence	Residence
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Mandatory wait	-0.015*	0.020	-0.012	-0.038**	-0.006	0.007***
	(0.009)	(0.013)	(0.026)	(0.016)	(0.018)	(0.002)
Panel B						
1-trip mandatory wait	-0.015*	0.020	-0.012	-0.026*	0.002	0.005**
	(0.009)	(0.013)	(0.026)	(0.016)	(0.018)	(0.002)
2-trip mandatory wait	-0.088***	0.101***	0.193***	-0.136***	-0.103***	0.015***
	(0.015)	(0.022)	(0.044)	(0.023)	(0.026)	(0.004)
Denominator	Number of abortions			Population of women aged 15-44		
No. of states	44	44	44	49	48	51
N	957	957	957	1279	1018	1377

Notes: Alternative estimates corresponding to Table 3 estimated via weighted OLS models with log ratios and rates as outcomes. For Columns 1-3, the outcome is the log of the ratio of abortions in each gestational age grouping to total abortions and the weights are total abortions. For Columns 4-6, the outcome is the log of the ratio of abortions or births to total population and the weights are total population. All models include state and year fixed effects as well as the following time-varying state control variables: the fraction of the 15-44 female population that falls into grouping by age and ethnicity; the unemployment rate, poverty rate, and median household income; state policies governing parental involvement for minors seeking abortions, over-the-counter access to emergency contraception, Medicaid family expansion waivers, Medicaid funding for abortions, and contraceptive mandates for private insurers. These control variables are listed and summarized in Table 2, and all variables and sources are described and documented in the text and replication package. $*p < 0.10$ $**p < 0.05$ $***p < 0.01$.

Table A3

Effect of mandatory waiting periods on abortion delays, abortion rates, and birth rates,
Alternative estimates with no control variables

	Ratios (% of all abortions)			Rates (per 1,000 women aged 15-44)		
	≤8 weeks	9−12 weeks	≥ 13 weeks	Abortions by Occurrence	Abortions by Residence	Births by Residence
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Mandatory wait	0.010***	0.001	-0.075***	-0.039***	-0.016***	0.030***
	(0.001)	(0.002)	(0.003)	(0.001)	(0.001)	(0.000)
Panel B						
1-trip mandatory wait	0.015***	-0.009***	-0.082***	-0.010***	0.005***	0.030***
	(0.001)	(0.002)	(0.003)	(0.001)	(0.001)	(0.000)
2-trip mandatory wait	-0.041***	0.095***	-0.011**	-0.144***	-0.118***	0.030***
	(0.002)	(0.003)	(0.005)	(0.001)	(0.002)	(0.001)
Exposure variable	Number of abortions			Population of women aged 15-44		
No. of states	44	44	44	49	48	51
N	957	957	957	1279	1018	1377

Notes: Alternative estimates corresponding to Table 3 estimated without control variables. All models include state and year fixed effects only. See notes to Table 3 for further information. $*p < 0.10$ $**p < 0.05$ $***p < 0.01$.

Table A4

Effect of mandatory waiting periods on abortion delays, abortion rates, and birth rates,
Alternative estimates with only demographic control variables

	Ratios (% of all abortions)			Rates (per 1,000 women aged 15-44)		
	≤8 weeks	9−12 weeks	≥ 13 weeks	Abortions by Occurrence	Abortions by Residence	Births by Residence
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Mandatory wait	-0.008***	0.011***	-0.036***	-0.056***	-0.032***	0.009***
	(0.002)	(0.002)	(0.004)	(0.001)	(0.001)	(0.000)
Panel B						
1-trip mandatory wait	-0.007***	0.007***	-0.035***	-0.037***	-0.016***	0.006***
	(0.002)	(0.002)	(0.004)	(0.001)	(0.001)	(0.000)
2-trip mandatory wait	-0.069***	0.114***	0.061***	-0.173***	-0.146***	0.023***
	(0.003)	(0.004)	(0.007)	(0.002)	(0.002)	(0.001)
Exposure variable	Number of abortions			Population of women aged 15-44		
No. of states	44	44	44	49	48	51
N	957	957	957	1279	1018	1377

Notes: Alternative estimates corresponding to Table 3 estimated without controls for economic conditions and policy changes. All models include state and year fixed effects and controls for the racial and age composition of the population interacted with quadratic time trends. See notes to Table 3 for further information. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$.

Table A5

Effect of mandatory waiting periods on abortion rates,

Comparison of estimates using CDC and Guttmacher abortion surveillance data

	CDC				Guttmacher	
	All years		Guttmacher years			
	Occurrence (1)	Residence (2)	Occurrence (3)	Residence (4)	Occurrence (5)	Residence (6)
Panel A						
Mandatory wait	-0.016***	0.001	-0.005***	0.005**	-0.022***	-0.011***
	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)
Panel B						
1-trip mandatory wait	-0.011***	0.007***	-0.005***	0.008***	-0.019***	-0.009***
	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)
2-trip mandatory wait	-0.108***	-0.093***	-0.095***	-0.074***	-0.107***	-0.056***
	(0.002)	(0.002)	(0.003)	(0.004)	(0.003)	(0.003)
Exposure variable	Population of women aged 15-44					
No. of states	49	48	49	48	51	51
N	1279	1018	521	417	561	561

Notes: Alternative estimates corresponding to Table 3 but only using a state$x$year observation if all abortion and birth outcomes are reported in that year. See notes to Table 3 for further iformation. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$.

Table A6

Effect of mandatory waiting periods on abortion and birth rates: Comparison of year and state selection

	All possible observations			Limited to years and states for which abortions by residence reported by NCHS		
	Abortions by Occurrence (1)	Abortions by Residence (2)	Births by Residence (3)	Abortions by Occurrence (4)	Abortions by Residence (5)	Births by Residence (6)
Panel A						
Mandatory wait	-0.016***	0.001	0.006***	-0.009***	0.000	-0.002**
	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
Panel B						
1-trip mandatory wait	-0.011***	0.007***	0.005***	-0.002	0.006***	-0.002***
	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
2-trip mandatory wait	-0.108***	-0.093***	0.015***	-0.130***	-0.093***	0.007***
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.001)
Exposure variable	Population of women aged 15-44					
No. of states	49	48	51	49	49	49
N	1279	1018	1377	999	999	999

Notes: Estimated coefficients for difference-in-difference Poisson models of state-level abortion and birth counts published in CDC surveillance reports. All models control for the population of women aged 15-44 as an exposure variable and also include state and year fixed effects. All models include the control variables described in the footnote of Table 3. $*p < 0.10$ $**p < 0.05$ $***p < 0.01$.

Table A7

Effect of mandatory waiting periods on abortion delays, abortion rates, and birth rates,
Alternative estimates categorizing policies by both duration of wait and number of trips

| | Ratios (% of all abortions) | | | Rates (per 1,000 women aged 15-44) | | |
| | ≤8 weeks | 9−12 weeks | ≥ 13 weeks | Abortions by Occurrence | Abortions by Residence | Births by Residence |
	(1)	(2)	(3)	(4)	(5)	(6)
1-trip ≤24 hour wait	-0.013***	0.017***	-0.017***	-0.007***	0.010***	0.004***
	(0.002)	(0.003)	(0.004)	(0.001)	(0.001)	(0.000)
1-trip >24 hour wait	-0.036***	0.049***	-0.038**	-0.061***	-0.057***	0.026***
	(0.007)	(0.011)	(0.017)	(0.004)	(0.004)	(0.001)
2-trip ≤24 hour wait	-0.074***	0.093***	0.142***	-0.098***	-0.085***	0.016***
	(0.003)	(0.005)	(0.008)	(0.002)	(0.002)	(0.001)
2-trip >24 hour wait	-0.187***	0.219***	0.447***	-0.189***	-0.140***	0.013***
	(0.008)	(0.012)	(0.018)	(0.004)	(0.004)	(0.001)
Exposure variable	Number of abortions			Population of women aged 15-44		
No. of states	44	44	44	49	48	51
N	957	957	957	1279	1018	1377

Notes: Alternative estimates corresponding to Table 3 that classify mandatory waits by both the number of required trips and the length of the waiting period. All models include state and year fixed effects only. See notes to Table 3 for further information. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$.

Appendix B

This appendix presents an overview of state mandatory waiting periods from 1980 through 2021, providing detailed documentation of the policy coding I present in Table 1 of "Cooling off or burden? The effects of mandatory waiting periods on abortions and births."

Definitions

Medical ethics and laws require that a patient provide "informed consent" before undergoing medical treatment (American Medical Association, 2016; Guttmacher Institute, 2020). Many states impose additional informed consent requirements targeted specifically at abortion services. These regulations require the provision of state-mandated information or materials and stipulate when and how these materials are provided. Some regulations additionally stipulate when and how an ultrasound is performed prior to an abortion and/or impose a specified waiting period—most often 24, 48, or 72 hours—between receipt of mandated informational materials and the procedure (Guttmacher Institute, 2020).

I provide a state-by-state review of mandatory counseling and waiting period laws that have been enacted and/or enforced since 1980. My focus is on those laws that impose specified waiting periods, which are often called "mandatory waiting periods" or "mandatory waiting period laws" (see, e.g., Guttmacher Institute, 2020; Kaiser Family Foundation, 2020; NARAL Pro-Choice America, 2020). I provide information on the length of the required waiting period as well as whether the law requires information or services be provided in person prior to the onset of the waiting period, a de facto requirement that person undertake two trips to obtain an abortion. I refer to such policies as "two-trip mandatory waiting period" laws.

Overview of key U.S. Supreme Court rulings

Since Roe v. Wade (410 U.S. 113) was decided in 1973, a series of U.S. Supreme Court decisions have informed and shaped state policies governing informed consent for abortion. In 1976 in Planned Parenthood of Southern Missouri v. Danforth, the Supreme Court upheld a portion of a challenged Missouri statute requiring a patient's written consent prior to the provision of an abortion. The court provided the following rationale:

> "It is true that Doe and Roe clearly establish that the State may not restrict the decision of the patient and her physician regarding abortion during the first stage of pregnancy. Despite the fact that apparently no other Missouri statute...requires a patient's prior written consent to a surgical procedure, the imposition... of such a requirement for termination of pregnancy even during the first stage, in our view, is not, in itself, an unconstitutional requirement. The decision to abort, indeed, is an important and often a stressful one, and it is desirable and imperative that it be made with full knowledge of its nature and consequences. The woman is the one primarily concerned, and her awareness of the decision and its significance may be assured, constitutionally, by the State to the extent of requiring her prior written consent." (Planned Parenthood of Southern Missouri v. Danforth, 428 U.S. 52, 1976)

Two years after this ruling, the city of Akron, Ohio enacted an ordinance establishing multiple regulations on the provision of abortion, including a two-trip 24-hour mandatory waiting period, an additional provision that had not been part of the challenged informed consent law in Danforth. The Supreme Court struck down the mandatory waiting period on June 15, 1983, concluding that

> "Akron has failed to demonstrate that any legitimate state interest is furthered by an arbitrary and inflexible waiting period. There is no evidence that the abortion procedure will be performed more safely. Nor does it appear that the State's legitimate concern that the woman's decision be informed is reasonably served by requiring a 24-hour delay as a matter of course." (City of Akron v. Akron Center for Reproductive Health, 462 U.S. 416, 1983)

At the time Akron was decided, at least 13 states—Delaware, Idaho, Illinois, Indiana, Kentucky, Massachusetts, Maine, Nebraska, Nevada, North Dakota, Pennsylvania, South Dakota, and Utah—had enacted waiting periods for abortions, though only Delaware and Indiana were enforcing the requirement in June 1983. The Akron decision was widely interpreted as invalidating these laws (see, e.g., Bush, 1983). Following Akron, the Attorneys General of Delaware and Indiana issued statements that waiting period requirements had been nullified by the ruling, and the state legislatures repealed the requirements (see documentation below). Waiting period requirements were repealed in other states as well.

Six years after Akron, the Supreme Court decision in Webster v. Reproductive Health Services (492 US 490, 1989) signaled a shift and increasing fracturing of the Supreme Court on the question of abortion. A divided court upheld a Missouri law imposing restrictions on the use of state resources in providing abortions, and four justices signaled a desire to reconsider Roe. Justice Blackmun wrote "For today, at least, the law of abortion stands undisturbed. . . . But the signs are evident and very ominous, and a chill wind blows." Webster marked the beginning of a dramatic increase in bills introduced in state legislatures to impose additional restrictions on abortion access.

Three years after Justice Blackmun's prediction, a suite of Pennsylvania abortion restrictions originally enacted in 1982 and including a mandatory waiting period requirement made their way to the Supreme Court, which issued a landmark ruling in Planned Parenthood v. Casey (505 U.S. 833, 1992). In Casey, the court reaffirmed Roe while applying for the first time the undue burden standard to evaluating state restrictions on abortion access. In doing so, the Court upheld many of the restrictions in the Pennsylvania statute, including the 24-hour mandatory waiting period. The Casey decision opened the door to mandatory waiting periods, and in its wake multiple courts upheld restrictions that had previously been enjoined while state legislatures acted to impose new ones.

In this review of state policies, I begin with 1980, noting the mandatory waiting periods that were enacted in the late 1970s and early 1980s, but never enforced or enforced only briefly prior to the Akron decision. I then note additionally policies enacted since Akron—nearly all following Casey—and their provisions regarding the length of the mandated wait and whether the provisions of the law required women seeking abortions to make two in-person trips to see a provider. For each state, I provide a suggested "coding" of the dates the law was enforced, which are those implemented in the accompanying paper, along with primary and secondary sources supporting this coding.

State-by-state review

Alabama

The state of Alabama enacted "The Women's Right to Know Act" codified as Ala. Code §§ 26-23A-1 to -13 on 4/17/2002. This act included an informed consent provision by which providers of abortions are required to provide a woman seeking an abortion with a designated set of printed informational materials at least twenty-four hours prior to an abortion procedure, either in person or by certified mail. A group of health care facilities filed a lawsuit challenging the law requesting a preliminary injunction preventing the law from going taking effect. A district court ruling allowed the 24-hour waiting period to take effect as scheduled on 10/14/2002, although it temporarily enjoined a requirement related to delivery of printed materials. The law was amended effective 5/10/2014 to increase the waiting period to 48 hours. Neither version of the law requires two trips. Coding: I code Alabama as having a 24-hour mandatory waiting period law effective 10/14/2002 and a 48-hour mandatory waiting period law effective 5/10/2014. Statute: Ala. Code §§ 26-23A-1 to -13 Judicial rulings: Summit Med. Cir. V. Siegelman, 227 F. Supp. 2d 1194 (M.D.Ala.2002) Newspapers: The Associated Press "Abortion regulation kicks in" The Montgomery Advisor, October 15, 2002. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Medoff and Dennis (2014); New (2014) Alaska Alaska has not enacted a waiting period for abortion services. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020) /nocitelawatlas2020

Arizona

The state of Arizona enacted House Bill 2564 and Senate Bill 1175 on 7/13/2009. The bills amended Arizona's abortion regulatory scheme codified as Ari. Rev. Stat. §§ 36-2151 through -2155, with a scheduled effect date of 9/30/2009. Among the requirements, revised §§ 36-2153 required women seeking abortions to receive counseling orally and in person at least 24 hours prior to the performance of the abortion. Abortion providers filed suit and a state superior court blocked portions of the bill, including the provision for counseling materials to be provided in person, thereby eliminating the requirement for two trips but allowing the waiting period to otherwise take effect. On 8/11/2011, an appellate court in lifted the temporary injunction, allowing the full law to go into effect on 8/13/2011. The law was then amended in 2012, but did not change the delay period. Coding: I code Arizona as having an 24-hour mandatory waiting period law effective 9/30/2009 and an 24-hour two-trip mandatory waiting period law effective 8/13/2011. Statute: Ari. Rev. Stat. §§ 36-2153 Cited judicial rulings: Planned Parenthood of Arizona v. American Association of Pro Life Obstetricians Gynecologists Nos. 1 CA-CV 09-078, CA-CV 10-0274 (8/11/2011) Newspapers: Paul Davenport "Judge blocks key parts of new Arizona abortion law" Aiken Standard (Aiken, SC) 10/1/2009. Howard Fischer. "New restrictions on abortion start today." Arizona Daily Sun (Flagstaff, AZ) 9/13/2011. Archived webpages: I checked archived webpages of Arizona providers to confirm that the 24-hour waiting period (without twop trips) went into effect in 2009. E.g., http://www.camelbackfamilyplanning.com/ added a note to their website between 12/3/2009 and 1/8/2010 informing patients they "must read information 24 hours prior to obtaining an abortion." Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Arkansas

The state of Arkansas enacted Ark. Code Ann. §§ 20-16-901 to -908 effective 5/1/2001 that required counseling to be given in person or over the phone the day prior to receiving an abortion. Effective 4/6/2015, the law was repealed and replaced with Ark. Code Ann. §20-16-1703 that increased the waiting period to 48 hours and required two trips. This law was subsequently amended to increase the waiting period from 48 to 72 hours effective 7/24/2019 Coding: I code Arkansas as having a 24-hour mandatory waiting period law effective 5/1/2001; a 48-hour two-trip mandatory waiting period law effective 4/6/2015; and, a 72-hour two-trip mandatory waiting period law effective 7/24/2019. Statute: Ark. Code Ann. §§ 20-16-901 to -908, -1101 to -1111 (Enacted 2001, Repealed and replaced 2015); Ark. Code Ann. §20-16-1703 (Enacted 2015, Amended 2017 and 2019) Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020) ; Medoff and Dennis (2014); New (2014)

California

California has not enforced a waiting period for abortion services. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Colorado

Colorado has not enacted a waiting period for abortion services. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Connecticut

Connecticut has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Delaware

In 1979, Delaware enacted a waiting period law that required a woman to receive counseling before providing her written consent, and then wait 24 hours after giving her written consent before obtaining an abortion. On 7/27/1983 the Delaware Attorney General issued an opinion that the informed consent provision was constitutional but that the 24 hour delay provision was not in light of the Supreme Court ruling in City of Akron v. Akron Center for Reproductive Health. The AG opinion confirms Delaware will not enforce the 24-hour delay. The state of Delaware did not enforce the law for 20 years. Then during the week of 1/27/2003, the Board of Medical Practice issued a letter to abortion providers that it would begin enforcing the law. On 1/30/2003 Planned Parenthood of Delaware filed a challenge to the law and the court issued a temporary restraining order followed by a preliminary injunction barring enforcement. On 6/9/2003 the court permanently enjoined the law. On 6/8/2017, the Governor John Carney Jr. signed into effect an act to amend title 24 §§ 1794 of the Delaware code to ensure abortion rights remain legal in the state under the new presidency. This act deleted Section 1794 b which mandated a 24 hour delay after giving written consent. Coding: I do not code Delaware as enforcing a mandatory waiting period law Statute: 24 Del. Code Ann. §§ 1794 [Repealed effective 6/8/2017] Attorney General Opinion: Delaware Attorney General Opinion No. 83-I023 dated 7/27/1983. Cited judicial rulings: Planned Parenthood of Delaware v. Brady Civil Action No. 03-153-SLR D. Del.

6/9/2003 Newspapers: Nathan Gorenstein "Del. Law requiring 24-hr. wait for abortion ruled invalid" The New Journal (Wilmington, DE) 7/29/1983. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

District of Columbia

Washington D.C. has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Florida

Florida enacted the Women's Right to Now Act in 1997, imposing an informed consent provision for women seeking abortions but not adding any associated mandatory waiting period between receipt of printed materials and the provision of abortion services. Following a lengthy legal battle and review, the provisions of the act took effect on 4/6/2006. On 6/10/2015, Governor Rick Scott signed House Bill 633 to amend Florida §§ 390.0111 to impose a 24-hour waiting period requiring two trips scheduled to take effect 7/1/2015. On 6/30/2015, in Gainesville Woman Care and Medical Students for Choice v. Florida, a state court enjoined the law. Florida subsequently appealed the injunction and on 2/26/2016 a Florida appellate court reversed the decision, briefly allowing the law to go into effect. The Florida Supreme Court granted a request to reinstate the injunction effective 4/22/2016 and permanently enjoined enforcement on 1/9/2018. Coding: Florida had a 24-hour two-trip mandatory waiting period law from 2/26/2016 through 4/22/2016. Given its brief enforcement, I do not enter this in the policy tables. Statute: Fla. Stat. Ann. §§ 390.011 Cited judicial rulings: Crist v. Presidential Women's Ctr. 884 So. 2d 526 (Oct. 13, 2004. Gainesville Woman Care, LLC v. Florida, Case No: 2015-CA-001323 (Jan. 9, 2018)) Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Georgia

Georgia enacted a 24-hour waiting period law effective 5/10/2005. The law allows consent to be given over phone or in person, and therefore does not require two-trips. Coding: I code Georgia as having an 24-hour mandatory waiting period law effective 5/10/2005. Statute: Ga. Code Ann. §§31-9A-3 Cited judicial rulings: Newspapers: James Salzer. "24-hour wait for abortion" The Atlanta Constitution 5/11/2005. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Medoff and Dennis (2014); New (2014) Hawaii Hawaii has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Idaho

Idaho enacted an informed consent statute in 1973 and amended it in 1982 and 1983, the last amendment adding a 24-hour mandatory waiting period took effect 7/1/1983. On 8/2/1983 the Idaho Attorney General issued an opinion that the 24-hour waiting period required by the law was unconstitutional and "not permissible" under Akron. Later in 1991 the AG of Idaho again issued a letter to a state representative stating the same. But following the Supreme Court decision in Casey, the Idaho AG issued an opinion in 1993 in response to a request from the State Department of Health and Welfare, which is responsible for distributed informed consent materials. The Attorney General opined that "given this recent Supreme

Court holding, our office now believes that Idaho's informed consent provision contained in Idaho Code § 18-609 does not violate the United States Constitution....As to the 24-hour waiting period, this office believes it is also valid." The AG went on to note that the "if reasonably possible" language suggested "it is not an inflexible requirement." However, the opinion also observed that it was not entirely clear whether the informed consent provision carried with it any criminal penalties. Newspaper coverage of this letter suggests that the law had not been enforced in recent years "pending challenges of similar laws outside Idaho." In 2006 the Idaho legislature amended the statute to remove "if reasonably possible." The law does not appear to have ever required two trips. Coding: I code Idaho as enforcing a 24-hour mandatory waiting period requirement as of 2/10/1993, the date of the Idaho AG's second opinion. However, I caution that the record is unclear on if or when this law was enforced prior to 1993. New (2014) codes Idaho's informed consent provisions as taking effect 7/1/2006. Statute: Idaho Code Ann. § 18-609 AG opinion: Idaho Attorney General Opinion No. 218 (8/2/1983); Idaho Attorney General Opinion No. 93-1 (2/10/1993) Newspapers: UPI "Abortion bill wins majority support in Senate" The Times-News (Twin Falls, ID) 3/19/1983; Mark Shenefelt "House toughens 'informed consent' abortion measure" The Times-News (Twin Falls, ID) 3/30/1983; AP "Law on abortion must be revised" South Idaho Press 8/3/1983; AP "AG holds out little hope for pro-lifers" South Idaho Press 2/11/1993; AP "Abortion ruling limits available restrictions" The Times-News (Twin Falls, Idaho) 2/11/1993. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Medoff and Dennis (2014); New (2014)

Illinois

The Illinois Abortion Law of 1975 (S.B. 47) was enacted as amended on October 30, 1979 over a veto from the governor. Sections 3.2, 3.5, and 6 of the law addressed informed consent, requiring a mandatory two-trip 24-hour waiting period. Enforcement of the waiting period was enjoined before it took effect and the Seventh Circuit Court of Appeals affirmed. The provision was subsequently repealed. Coding: I do not code Illinois as enforcing a mandatory waiting period law. Judicial rulings: Charles v. Carey, 627 F.2d 772 7/29/1980 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Indiana

Indiana enacted Indiana Public Law 143, codified as Ind. Code Ann. § 35-1-58.5-1, in 1978. The law required a 24-hour "cooling-off" period between the time a patient received a consent form from her physician and the time she returned the form to the physician. Following the U.S. Supreme Court decision in Akron in June 1983, the Indiana Attorney General indicated the waiting period would probably not survive a challenge, but news reports indicate in the immediate aftermath of the ruling Planned Parenthood continued to adhere to the 24-hour waiting period requirement. The Indiana legislature amended the statute in 1984 and repealed the 24-hour waiting period requirement. Over a decade later following the Casey decision, the Indiana legislature reinstituted a waiting period requirement codified as 187, Ind. Code § 16-37-2-1.1 in 1995. The new waiting period required that at least 18 hours before a pregnant woman may have an abortion, she must be given certain medical information and information concerning alternatives to abortion. The law further required that the information must be given "in the presence" of the woman, hence imposing

a "two trip" requirement. An Indiana abortion provider filed suit and received a preliminary injunction barring enforcement of the law. On 10/14/1997 a district court modified the injunction to enjoin only the portion of the law requiring the materials be provided in person as applied to abortions beginning 11/14/1997 In 2003 a superior court judge refused to extend this injunction, and the two-trip requirement took effect on 5/1/2003, although press reports indicate abortion clinic plaintiffs and the state agreed informally that abortions already scheduled that week could proceed without the requirement. Coding: I code Indiana as having an 18-hour mandatory waiting period law effective 11/14/1997 and an 18-hour two-trip mandatory waiting period law effective 5/1/2003. Statute: Ind. Code Ann. § 16-34-2-1.1 ; Ind. Code Ann. § 35-1-58.5-1 [Repealed in March 1984] Cited judicial rulings: A Woman's Choice-East Side Women's Clinic v. Newman, 980 F. Supp. 962 (1997) Newspapers: Associated Press "24-hour 'cool-off' proposed for abortion form decision" Journal and Courier (Lafayette, IN) 1/12/1978. Associate Press "Indiana's abortion law meets most standards" Journal and Courier 6/16/1983. Gregory Lewandowski "Abortion rule reaction mixed" The Times (Munster, IN) 6/17/1983. Jan Carroll "Orr approves supplmental budget, pay raises for state officials" South Bend Tribune 3/6/1984. Amanda Beeler "18-hour waiting period for abortion takes effect" The Times (Munster, IN) 11/14/1997; The Associated Press "Judge refuses to extend injunction on state's abortion law" The Times (Indianapolis, IN) 5/1/2003 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Iowa

The Iowa legislature enacted Iowa Code § 146A.1 on 4/18/2017 requiring that at least 72 hours before a pregnant woman may have an abortion, she be provided information and undergone an ultrasound. The law was scheduled to take effect on 5/5/2017, but enforcement was enjoined and the state Supreme Court ruled it unconstitutional in 2018. Coding: I do not code Iowa as enforcing a mandatory waiting period law Statute: Iowa Code § 146A.1 Cited judicial rulings: Planned Parenthood of the Heartland v. Reynolds ex re. State, 915 N.W. 2d 206 (6/29/2018) Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Kansas

Kansas enacted the Women's Right to Know Act, a 24-hour waiting period law that does not require two-trips effective 7/1/1997. Coding: I code Kansas as enforcing a 24 hour mandatory waiting period law effective 7/1/1997 Statute: Kan. Stat. Ann. §§ 65-6709 Newspapers: Associated Press. "State not complying with abortion law." The Iola Register (Iola, KS), 8/11/1997. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Kentucky

Kentucky enacted an abortion regulation scheme codified as Ky. Rev. Stat. 311.710 et seq., 436.023 on March 29, 1974 that included a 24-hour mandatory waiting period. This requirement was initially enjoined by a district court, but that ruling was overturned and the requirement upheld by a federal appeals course on 8/18/1976. In 1982 the Kentucky legislature enacted H.B. 339, which was scheduled to take effect on 7/15/1982. This law included a 2-hour mandatory waiting period. On 7/9/1982 a district court issued a temporary

restraining order barring enforcement and on 9/11/1984 the court held the law was invalid following Akron. Kentucky enacted Ky. Rev. Stat. Ann. § 311.725 in 1998 requiring that that physicians inform women about certain specific medical and social information and offer them two state published pamphlets at least twenty-four hours before any abortion procedure. The law was scheduled to take effect on 1/1/1999, but a Kentucky provider filed a lawsuit, and the judicial opinion in this lawsuit notes that both parties agreed to delay enforcement of the statute until after the court ruled on its constitutionality (Eubanks v. Schmidt 126 F. Supp. 2d 451 (W.D. Ky. 2000) December 21, 2000, footnote 3). The opinion further states that plaintiffs and defendants in the case disagreed on whether the statute required one or two trips to the abortion provider. The court ruling states "The Court cannot say that the Statute actually requires two visits. Its plain language may allow some telephone consultations. Based on the evidence, however, the Court concludes that some women would find it extraordinarily difficult to comply with the Statute without two personal visits if they ask to review the pamphlets. Absent a federal constitutional challenge, this Court would have no reason to clarify the Statute's potential ambiguity." A separate order prohibits the state from enforcing the law to require in-person receipt of the mandated materials (Eubanks v. Schmidt, No. 01CI01440 (Ky. Cir. Ct. Jefferson County Jan. 11, 2002)) and Naral indicates the Kentucky Board of Medical Licensure interpreted this law to allow phone counseling and mail receipt of the materials per a cited unpublished letter. The law began to be enforced on 3/1/2001 per newspaper reports, which also indicate it did not require in-person counseling. Coding: I code Kentucky as having an 24-hour mandatory waiting period law effective 3/1/2001. Statute: Ky. Rev. Stat. Ann. § 311.725; Cited judicial rulings: Wolfe v. Schroering 541 F.2d 523 8/18/1976; Eubanks v. Brown 604 F. Supp. 141 9/11/1984; Eubanks v. Schmidt 126 F. Supp. 2d 451 (W.D. Ky. 2000) December 21, 2000 Newspapers: Matt Batcheldor. "Abortion-information rule barred in Kentucky." The Courier-Journal (3/1/2001). Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Louisiana

Louisiana enacted a 24-hour waiting period law in 1978 that requires two trips. The law was repealed in 1980 because the legislature determined a court decision rendered it unconstitutional. The legislature reenacted a waiting period law that required two trips. The law went into effect on 9/25/1995 after the state printed the necessary materials. The state subsequently expanded the waiting period to 72 hours—but added an exception for women living more than 150 miles from the nearest abortion facility that lowered the wait to 24 hours- but it has been challenged and is not currently in effect. Coding: I code Louisiana as having a two-trip 24-hour mandatory waiting period law effective 9/25/1995. Statute: La. Rev. Stat. Ann. § 40:1299.35.6 Cited judicial rulings: Newspapers: David Westerfield. "New, stricter abortion law begins today." The Times (Shreveport, LA) 9/25/1995. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Maine

In 1979 the Maine legislature enacted several bills imposing additional restrictions on abortion services, including one that imposed a 48-hour mandatory waiting period. This provision was challenged an enforcement was enjoined before it went into effect. The Maine

legislature subsequently repealed the requirement. Maine Me. Rev. Stat. tit. 22 § 1599-requires a physician to obtain informed written consent, but this requirement does not impose any waiting period. Coding: I do not code Maine as enforcing a mandatory waiting period. Statute: Me. LD 318 "An Act to protect reproductive privacy in Maine" 1993; Me. Rev. Stat. tit. 22 § 1599- Judicial rulings: Women's Community Health Center v. Cohen 477 F. Supp 542 9/13/1979. Newspapers: "Maine lawmakers drop abortion waiting period" The Orlando Sentinel 4/7/1993. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Maryland

Maryland has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Massachusetts

In 1980 the Massachusetts legislature revised Mass. Gen. Laws Ann. ch. 112, § 12S to add the requirement that women seeking abortions sign an informed consent statement 24 hours prior to receiving the abortions. Because the law required a hand signature, it required two trips to the abortion provider. An appeals court held that the 24 hour waiting period was unconstitutional on 2/9/1981 and the law never went into effect. Coding: I code Massachusetts as not enforcing a mandatory waiting period law. Statute: Mass. Gen. Laws Ann. ch. 112, § 12S Cited judicial rulings: Planned Parenthood League of Massachusetts et al. v. Bellotti et al. 641 F.2d 1006 (1981) Newspapers: William Doherty. "Court lets abortion consent law stand." The Boston Globe, February 10, 1981. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Michigan

Mich. Comp. Laws Ann. § 333.17015 requires a 24-hour waiting period. This law does not require two trips. The law was enacted in March 1994 and originally scheduled to take effect on 4/1/1994, but legal challenges delayed enforcement until a settlement was reached and the law went into effect on 9/15/1999. Coding: I code Michigan as having a 24-hour mandatory waiting period law effective 9/15/1999. Statute: Mich. Comp. Laws Ann. § 333.17015 as amended by Pub Acts 1993, No. 133, eff April 1, 1994 Cited judicial rulings: Newspapers: Associated Press. "U.S. judge to rule on abortion waiting period." The Times Herald (Port Huron, Michigan) 3/24/1999. Dee-Ann Durbin. "Clinics ready for Law change" The Lansing State Journal 9/13/1999. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Minnesota

Minnesota enacted a 24-hour waiting period law effective 7/1/2003. The law was last amended in 2006. No versions require two trips. Coding: I code Minnesota as having a 24-hour mandatory waiting period law effective 7/1/2003. Statute: Minn. Stat. Ann. § 145.4242 Cited judicial rulings: Newspapers: Jean Hopfensperger. "'Right to know' abortion rules to become law." Star Tribune (Minneapolis, MN) 4/15/2003. Associate Press. "Abortion guide goes online." St. Cloud Times 7/1/2003. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Mississippi

In March 1991 the Mississippi legislature enacted H.B. 982, the Informed Consent to Abortion Act, establishing a 24-hour waiting period following the provision of information orally and in person. The law was scheduled to take effect 7/1/1991. Mississippi abortion providers filed suit in April of 1991 and the Mississippi Attorney General agreed to suspended enforcement of the law until 9/1/1991. On 8/30/1991 a district court issued a preliminary injunction, further suspending enforcement. On 8/5/1992 the Fifth Circuit Court of Appeals vacated the injunction, and on 8/17/1992 it remanded the case to a district court for entry of an order of dismissal. The requirement took effect on 8/8/1992 and was interpreted at the time as requiring in-person provision of the information and hence two trips to the clinic. Coding: I code Mississippi as having a two-trip 24-hour two-trip mandatory waiting period law effective 8/8/1992. Statute: Miss. Code Ann. §§ 41-41-33, 41-41-35 Cited judicial rulings: Barnes v. Moore 970 F.2d 12 (5th Cir. 1992); Pro-choice Mississippi v. Fordice 95 CA 960 (Miss. 1998) Newspapers: Associated Press. "Mississippi to enforce 24-hour abortion wait." The Pantagraph (Bloomington, IL) 8/8/1992. Secondary sources: Althaus and Henshaw (1994); CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Missouri

On September 11, 2003 the Missouri legislature enacted H.B. 156 establishing a 24-hour waiting period following the provision of information. The law was scheduled to go into effect 1/1/2004. A district court issued a temporary restraining order before the law went into effect which was lifted by a federal appeals court on 5/28/2004. But on 6/22/2004 the same district judge again blocked enforcement. The 8th U.S. Circuit Court of Appeals allowed the law to take effect 11/30/2005. In 2010 the Missouri legislature amended the law to a sonogram requirement that effectively required two trips effective 8/28/2010. On September 10, 2014, the Missouri state legislature voted to override Governor Jay Nixon's veto of an amendment to the law that maintained the two-trip requirement and increased the wait-time from 24 to 72 hours effective 10/10/2014. The law was last amended October 24, 2017, but no changes were made to the two-trip requirement or 72-hour wait time. Coding: I code Missouri as having a 24-hour mandatory waiting period law effective 11/30/2005 and a 24-hour two-trip mandatory waiting period law effective 8/28/2010 and a 72-hour two-trip mandatory waiting period law effective 10/10/2014. Statute: Mo. Rev. Stat. Ann. § 188.039 Cited judicial rulings: Planned Parenthood of the St. Louis Region v. Nixon 185 S.W.3d 685 2/28/2006. Newspapers: Jeremy Kohler "Judge suspends 24-hour wait for abortions" The Post-Dispatch (St. Louis) 6/23/2004. David Lieb "Judge allows abortion waiting period to take effect." The Springfield News-Leader 12/1/2005 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Montana

Montana enacted the "Women's Right to Know" Act in 1995 to add a 24-hour waiting period period, but did not add a two-trip requirement. Enforcement was enjoined by a district court on 11/28/1995, but newspaper reports suggest the law was not enforced in the short period between its effective date and this ruling. In 1999, the court in Planned Parenthood of Missoula v. State held that the law was unconstitutional under the state constitution and

issued a permanent injunction. Coding: I do not code Montana as enforcing a mandatory waiting period law. Statute: Mont. Code Ann. §§ 50-20-106 Judicial rulings: Planned Parenthood of Missoula v. State Cause No.BDV-95-722 11/28/1995; Planned Parenthood v. State Cause No. BDV 95-722 3/12/1999. Newspapers: AP "State defends abortion wait" Great Falls Tribune 7/15/1995; Paula Clawson "Abortion statute overturned" The Independent-Record (Helena, MT) 3/16/1999. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Nebraska

Nebraska enacted LB 316 on March 22, 1979 effective immediately but scheduled to become operative on April 21, 1979. A provision of the bill codified as codified as Neb. Rev. Stat. § 28-327 instituted a 48-hour mandatory waiting period. Enforcement of this provision was preliminarily enjoined before the law became operative, a decision affirmed by a federal appellate court. Following Casey, Nebraska enacted Neb. LB 110 in 1993, amending Neb. Rev. Stat. § 28-327 to change provisions related to informed consent and add a 24-hour waiting period. The new law was signed by the governor on 6/8/1993 and went into effect 90 days later on 9/9/1993. The statute has subsequently been amended several times, but all versions have continued to require a 24-hour waiting period without a two-trip requirement. Coding: I code Nebraska as having a 24-hour mandatory waiting period law effective 9/9/1993. Statute: Neb. Rev. Stat. § 28-327 Judicial rulings: Womens Services v. Thone 636 F.2d 206 12/8/1980. Newspapers: J.L. Schmidt "24-hour waiting period for abortion becomes law" Beatrice Daily Sun (Beatrice, Nebraska) 9/7/1993. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Nevada

Nevada enacted an informed consent statute as part of a broader abortion package scheduled to take effect 7/1/1981. This statute included a 24-hour mandatory waiting period. The law was challenged, and enforcement enjoined prior to it taking effect and remained enjoined at the time Akron was decided in 1983. The law was struck down in 1984. The legislature repealed the provision sometime prior to 1991 and Nevada has not enacted other mandatory waiting periods. Coding: I do not code Nevada as enforcing a mandatory waiting period law Statute: Cited judicial rulings: Newspapers: Lee Adler "State sends tough abortion bill to governor" Reno Gazette-Journal 6/3/1981. "Challenge to Nevada abortion law" Reno Gazette-Journal 6/25/1981. Michael Phillis "Judge stalls abortion law" Reno Gazette-Journal 6/26/1981; Lee Adler "Doctor challenging Nevada law says state's regulations unconstitutional" Reno Gazette-Journal (Reno, NV) 6/16/1983 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

New Hampshire New Hampshire has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

New Jersey New Jersey has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

New Mexico New Mexico has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

New York New York has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

North Carolina

North Carolina enacted the "Women's Right to Know Act" 7/28/2011. The law, which went into effect 10/26/2011, required patients to wait at least 24 hours between receiving information—which can provided online—and obtaining an abortion. The law was amended effective 10/1/2015 to increase the delay to 72 hours. Neither version of the law requires two trips. Coding: I code North Carolina as having a 24-hour mandatory waiting period law effective 10/26/2011 and a 72-hour mandatory waiting period law effective 10/1/2015. Statute: N.C. Gen. Stat. Ann. § 90-21.80-92 Newspapers: Craig Jarvis "Ultrasound rule struck from N.C. abortion law" The Charlotte Observer 10/26/2011. AP "New State laws cover health to food services" Rocky Mount Telegram (Rock Mount, North Carolina) 10/2/2015. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

North Dakota

North Dakota enacted the North Dakota Abortion Control Act, codified as N.D. Cent. Code § 14-02.1 et seq., in 1979. The law included a 48-hour waiting period, but the district court enjoined enforcement of this provision before it took effect and a federal appellate court ultimately held that the law was unconstitutional. North Dakota enacted a 24-hour waiting period law on 4/2/1991. The law was scheduled to take effect 7/1/1992, but a district court granted an injunction and the parties agreed to hold the case in abeyance pending the Supreme Court's decision in Planned Parenthood v. Casey. After the Casey decision, the district court granted summary judgment to the State and vacated the injunction. However, the next day the plaintiff appealed and the appellate court granted a stay of enforcement. On 3/30/1993 the 8th Circuit vacated the stay. On 3/31/1993 Justice Blackmun issued a stay pending a full Supreme Court decision on the stay application. On 4/2/1993 the U.S. Supreme Court denied the stay but directed the lower courts to conduct an inquiry as to undue burden. The 8th Circuit did so and granted a stay. But then it vacated that stay on 2/10/1994 pending appeal and subsequently upheld the law. In doing so, the Court interpreted the law as allowing information to be provided by telephone and not to require two trips. The law began to be enforced 21 days following the ruling. Coding: I code North Dakota as having a 24-hour mandatory waiting period law effective 3/7/1994 Statute: N.D. Cent. Code §§ 14-02.1-02 Judicial rulings: Leigh v. Olson 497 F. Supp. 1340 9/26/1980; Fargo Women's Health Org. v. Schafer 18 F.3d 526 2/10/1994 Newspapers: "Legislative bills discourage abortion" The Bismarck Tribune 10/24/1979; Kristine Donatelle "Abortion consent survives" The Bismark Tribune 2/11/1994.).Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Ohio

Ohio enacted an informed consent law 8/21/1991 that required specified materials be provided to a woman at least 24 hours prior to an abortion. The law was scheduled to take effect on 5/28/1992 but was challenged and enjoined pending litigation. The law took effect on 3/14/1994. The first version of the law did not require two trips. An amendment to the law effective 5/6/1998 required the informational materials to be given in person, and thereby added a two-trip requirement. The court in Cincinnati Women's Services v. Taft, No. 1:98-CV-289 (S.D. Ohio Apr. 29, 1998) issued a preliminary injunction to the enforcement of the statue with the new amendment, and allowed the previous version to remain in effect. However, in Cincinnati Women's Servs. v. Taft, 466 F.Supp.2d 934 (S.D. Ohio Sept. 8, 2005), the court lifted the injunction and found the waiting period aspect of the statute constitutional, allowing the two-trip requirement to take effect on 9/22/2005. Coding: I code Ohio as having a 24-hour mandatory waiting period law effective 3/14/1994 and a two-trip 24-hour mandatory waiting period law effective 9/22/2005 Statute: Ohio Rev. Code Ann. § 2317.56 Judicial rulings: Cincinnati Women's Services v. Taft, No. 1:98-CV-289, Cincinnati Women's Servs. v. Taft, 466 F.Supp.2d 934 Newspapers: Patti Steele "Abortion law starts Monday" The News-Messenger (Freemont, OH) 3/12/1994. AP "Abortion law will force shutdown of clinic, director says" Chilicothe Gazette 9/22/2005 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Oklahoma

Oklahoma enacted the "Women's Right to Know Act" codified as Okla. Stat. Ann. tit. 63, §§ 1-738.2 on 5/20/2005. (The law was approved by the governor on 5/20/2005 and included a provision to take effect immediately upon passage and approval.) The new law imposed a 24-hour waiting period that allowed information to be provided via telephone. Abortion providers filed suit challenging the parental involvement provisions of the act, but did not challenged the waiting period requirement, which took effect immediately. In 2015 the legislature amended the statute to increase the waiting period to 72 hours effective 11/1/2015. A state court ruled the delay constitutional but issued a temporary injunction against other provisions. Coding: I code Oklahoma as having a 24-hour mandatory waiting period law effective 5/20/2005 and a 72-hour mandatory waiting period law effective 11/1/2015 Statute: Okla. Stat. Ann. tit. 63, §§ 1-738.2 Judicial rulings: Nova Health Sys. v. Edmondson, 373 F. Supp. 2d 1234 (N.D. Okla. May 27, 2005), Nova Health Sys. v. Edmondson, 373 F. Supp. 2d 1234 (10th Cir. July 20, 2005), Nova Health Sys. v. Pruitt, cv-2015-1838 (Dist. Court Okla. County Oct. 14, 2015) Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Oregon

Oregon has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Pennsylvania

The Pennsylvania Abortion Control Act of 1982 required that a woman seeking an abortion receive information orally at least 24 hours before the abortion is obtained. Amendments

in 1988 and 1989 preserved this requirement. Enforcement of the law was enjoined pending litigation that culminated in the landmark Supreme Court ruling in Planned Parenthood v. Casey issued 6/29/1992. The law went into effect on 3/21/1994. Coding: I code Pennsylvania as having a 24-hour mandatory waiting period law effective 3/21/1994 Statute: 18 Pa. Cons. Stat. Ann. §§ 3205 Judicial rulings: Planned Parenthood of S.E. Pa. v. Casey, 505 U.S. 833 (1992) Newspapers: Pamela Sampson "Pennsylvania abortion law takes effect today" The Evening Sun (Hanover, PA) 3/20/1994.). Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Rhode Island

Rhode Island does have an informed consent statute for abortion services, but that statute does not impose a waiting period following receipt of materials. Coding: I do not code Rhode Island as enforcing a mandatory waiting period law Statute: R.I. Gen. § 23-4.7-2 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

South Carolina

South Carolina enacted S.B. 88, "The Woman's Right to Know Act" in 1995. The original version of the law required a 1 hour waiting period following receipt of written materials and took effect on approval by the governor, which occurred on 1/3/1995. In 2010 the law was amended by H.B. 3245 to extend the waiting period requirement to 24 hours. The new law took effect upon approval by the governor, which took place on 6/24/2010. Neither version of the law requires two trips Coding: I code South Carolina as having a 24-hour mandatory waiting period law effective 6/24/2010 Statute: S.C. Code Ann. §§ 44-41-30, § 44-41-310 to -380 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

South Dakota

South Dakota enacted a 24-hour waiting period on 2/14/1980. The law was challenged and enforcement was enjoined. Following Akron, a federal judge ruled the law was unconstitutional on 9/30/1983. Following Casey, South Dakota enacted a new waiting period law requiring one trip scheduled to take effect 6/15/1993. Enforcement was temporarily enjoined but the District court issued a ruling on 8/22/1994 that the requirement could take effect. South Dakota subsequently repealed and replaced this law with one requiring an in-person consultation to take place at least 72 hours prior to the abortion. This law was blocked by a legal challenge before going into effect. The following year the legislature amended the law, dropping a requirement that a pregnancy woman receive counseling at an anti-abortion clinic but retaining the two-trip 72 hour waiting period. The law went into effect on 7/1/2012. The following year the legislature again amended the law to exclude Saturdays, Sundays, and annually recurring holidays from calculation of the 72 hour time period, effective 7/1/2013 Coding: I code South Dakota as having a 24-hour mandatory waiting period law effective 8/23/1994 and a 72-hour two-trip mandatory waiting period effective 7/1/2012 Statute: S.D. Codified Laws § 34-23A-10.1 Judicial rulings: Planned Parenthood Sioux Falls v. Miller 860 F. Supp. 1409 8/22/1994, Planned Parenthood Minnesota, North Dakota, South Dakota, and Carol E. Ball v. Daugaard CIV. 11-4071-KES 6/30/2011 Newspapers: Chet Brokaw "Doctor testifies abortion is safe procedure" Rapid City Journal 12/8/1981. Randy Bradbury "Judge

rules abortion wait unconstitutional" Rapid City Journal 9/30/1983. Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Tennessee

In 1978 the Tennessee legislature enacted Pub. Acts ch. 847 amending Tenn. Code Ann. § 39-302 imposing an informed consent requirement and two-day waiting period requiring two trips. The law read "There shall be a two-day waiting period after the physician provides the required information, excluding the day on which such information was given. On the third day following the day such information was given, the patient may return to the physician and sign a consent form." This provision took effect 8/31/1979. On 3/23/1981 a district court issued an injunction barring enforcement. The legislature recodified the statutes in 1989 as part of a re-enactment of Tennessee's criminal code, but Tennessee did not enforce the law as it awaiting the Supreme Court ruling in Casey. Following the Casey ruling, Tennessee abortion providers filed a lawsuit to bar enforcement, and enforcement continued to be enjoined. Abortion providers again filed suit and the Tennessee Supreme Court ruled in 2000 that the waiting period was an undue burden and violated the state constitution, observing "While the statute refers to a "two-day waiting period," the waiting period is actually a three-day waiting period because the patient may not sign the consent form until the "third day following the day [the required] information was given." The Tennessee legislature subsequently amended the state constitution and enacted a new statute with a 48-hour waiting period requiring two trips, which went into effect on 5/19/2015. This law was challenged and enjoined on October 14, 2020. The 6th Circuit Court of Appeals lifted this injunction on April 23, 2020. Coding: I code Tennessee as having a 48-hour two-trip mandatory waiting period law effective 5/19/2015 Statute: Tenn. Code Ann. § 39-15- 202 Judicial rulings: Planned Parenthood v. Alexander 1981 U.S. Dist. No. 78-2310 3/23/1981; Planned Parenthood of Middle Tennessee v. Sundquist 35 S.W. 3d 1 9/15/2000. Adams and Boyle v. Slatery 3:15-cv-00705 10/14/2020. Newspapers: Allison Taylor "Judge strikes down Tennessee law requiring abortion waiting period" The Daily Tar Heel (Chapel Hill, NC) 11/18/1992. AP "Court strikes down part of abortion law" The Daily News-Journal (Murfreesboro, TN) 9/17/2000. Anita Wadhwani "Abortion waiting period now law" The Tennessean 5/19/2015 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Texas

Texas first enacted a 24-hour waiting period law on 6/20/2003 that did not require two trips. The last went into effect on 1/1/2004 after the State Department of Health prepared the required written materials. Effective 9/1/2011 Texas added a sonogram requirement that effectively required two trips. The amended law included an exception for women who certified they lived more than 100 miles from the nearest abortion provider or a facility that performs more than 50 abortions in any 12-month period. Coding: I code Texas as enforcing a 24-hour mandatory waiting period effective 1/1/2004 and a 24-hour two-trip mandatory waiting period effective 9/1/2011. Statute: Tex. Health and Safety Code Ann. §§ 171.012 David Paztor "Women now must wait before abortion" Austin-American Statesman 1/1/2004 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020);

Dennis and Medoff (2014); New (2014)

Utah

In 1974 the Utah legislature repealed and re-enacted sections of the criminal code governing abortions to comply with Roe. The amended law required informed consent of the woman seeking an abortion. In 1981 the informed consent provision was expanded to include a 24-hour waiting period "if possible" between the provision of written materials and the abortion. However, enforcement of this required was enjoined before it took effect and the Utah legislature repealed the provision in 1985 in the wake of Akron. In the wake of Casey, the Utah legislature enacted Senate Bill no. 60, the Utah Abortion Act Revision, to add a 24-hour waiting period following oral provision of information. The new requirement was scheduled to take effect 5/3/1993, but enforcement was stayed until a District Court ruling upheld the law and allowed it to go into effect on 2/1/1994. Utah amended the law to increase the waiting period to 72 hour effective 5/8/2012. Both versions of the law are interpreted to require two trips. Coding: I code Utah as having a two-trip 24-hour mandatory waiting period effective 2/1/1994 and a 72-hour two-trip mandatory waiting period effective 5/8/2012 Statute: Utah Code Ann. §§ 76-7-305 Judicial rulings: Utah Women's Clinic v. Leavitt 844 F. Supp. 1482 2/1/1994 Newspapers: UPI "Judge okays enforcement" The Daily Spectrum (St. George, UT) 10/2/1981; AP "Around the nation; federal judge blocks Utah abortion law" The New York Times 10/7/1981 Secondary sources: Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014) Utah Law Review 471

Vermont

Vermont has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Virginia

Virginia enacted a 24-hour waiting period law effective 10/1/2001 that required abortion facilities to provide printed materials in person or via mail. The legislature amended the statute in 2012 to add a requirement that a fetal ultrasound be provided at least 24 hours prior to the abortion. The requirement included an exemption for women living more than 100 miles from the facility where the abortion was performed. This effectively added a two-trip requirement for women less than 100 miles from the facility. The requirement went into effect 7/1/2012. On 4/11/2020 Virginia repealed this law effective 7/1/2020. Coding: I code Virginia as having a 24-hour mandatory waiting period effective 10/1/2001 and a 24-hour two-trip mandatory waiting period effective 7/1/2020 Statute: Va. Code § 18.2-76 Newspapers: AP "State late with fetal fliers" Daily Press (Newport News, Virginia) 10/2/2001). Secondary sources: Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020); Dennis and Medoff (2014); New (2014)

Washington

Washington has not enforced a mandatory counseling and waiting period law related to abortion Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

West Virginia

West Virginia enacted a 24-hour waiting period law effective 3/6/2003. The law was last amended effective 6/11/2010. No versions require two trips. Coding: I code West Virginia as having a 24-hour mandatory waiting period effective 3/6/2003 Statute: W. VA. Code Ann. §§ 16-2I-2 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Wisconsin

Wisconsin enacted a 24-hour waiting period law requiring two trips on 5/1/1996. Enforcement was enjoined pending a legal challenge, and the law went into effect on 5/31/1998. Coding: I code Wisconsin as having a 24-hour two-trip mandatory waiting period effective 5/31/1998 Statute: Wis. Stat. Ann. § 253.10 Judicial rulings: Karlin v. Faust 188 F.3d 446 8/8/1999 News: AP "Abortion waiting period law takes effect" The Post-Crescent (Appleton, WI) 5/31/1998 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)

Wyoming

Wyoming does have an informed consent statute for abortion services, but the law does not impose a mandatory waiting period. Coding: I do not code Wyoming as enforcing a mandatory waiting period law Statute: Wyo. Stat. § 35-6-119 Secondary sources: CRR (2020); NARAL (2020); Guttmacher (2020); Law Atlas (2020)