ARTICLES

THE MEANING, STATUS, AND FUTURE OF REPRODUCTIVE AUTONOMY: THE CASE OF ALCOHOL USE DURING PREGNANCY

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I. INTRODUCTION

A central concern of the second wave of the feminist movement was the right to secure birth control and abortion free from government restriction. These efforts resulted in successes in the 1960s and 1970s with two landmark US Supreme Court decisions: *Griswold v. Connecticut*[^4] and *Roe v. Wade*[^5], each of which recognized a privacy right in reproductive matters. Subsequent court decisions have eroded these rights creating disparate impacts on women depending on their race, age, class, and geographical location. Although feminists remain focused on these aspects of reproductive freedom, advocacy groups have failed to provide them sufficient protection. A less high-profile, but equally central component of reproductive freedom is the right to bear children free from governmental coercion and control. While not initially given a central place in the feminist agenda, it was soon viewed as crucial to the full panoply of reproductive rights.

In this article, we investigate the extent to which the erosion of rights in the most visible aspect of reproductive freedom—pregnancy prevention and termination—is replicated with respect to the right to bear children. Situating our research within the context of judicial and legislative activity on reproductive rights, we conduct an in depth analysis of governmental policy in an under-studied, but crucial policy topic—alcohol use during pregnancy. Based on both the evidence of scholarly literature as well as analysis of an original dataset, we find that feminist advocacy for bodily integrity has not resulted in comprehensive protection of either aspect of reproductive freedom. Moreover, poor women and women of color bear a disproportionate loss of autonomy in this area. The final section of the article explores the potential of a new strategy, one that moves beyond the confines of traditional advocacy, to reverse the erosion of these crucial rights. Original data analysis focused on the relationship between the proportion of women in legislatures and enactment of feminist-oriented reproductive policies on alcohol use during pregnancy indicates that women's level of representation is positively associated with enactment of statutes that facilitate reproductive autonomy. Therefore, those interested in furthering policies that facilitate women's reproductive freedom might consider focusing resources on electing more women to legisla-

tured—especially legislatures with low proportions of female representation.

II. Reproductive Autonomy: Securing and Protecting the Right to Birth Control and Abortion

Beginning just after the midpoint of the twentieth century, the second wave of the feminist movement grounded itself in the struggle to achieve women's reproductive autonomy. The central premise of this effort was that equality for women could not be achieved until control over their bodies was secured. Early advocacy efforts concentrated almost exclusively on creating a legal space for pregnancy prevention and termination rather than the full array of policies related to reproductive freedom. This section explores the success of this focus and the implications for protecting the other half of reproductive autonomy—the right to bear children.

A. Federal Judicial Decisions on Abortion

On June 7, 1965, in Griswold v. Connecticut, the U.S. Supreme Court established a right to privacy for individuals when it struck down a Connecticut law that prohibited provision of information, advice, and the sale of contraceptives. In 1972, in Eisenstadt v. Baird, the Court extended this right by striking down a Massachusetts law that prohibited provision of birth control to unmarried individuals.

It was with this duo of cases that the foundation for reproductive autonomy for American women with respect to pregnancy prevention substantially free from governmental interference was created. One year after Eisenstadt, the choice to abort a pregnancy was legally legitimized in Roe v. Wade. In both Roe and Doe v. Bolton, the Supreme Court ruled that the 14th Amendment of the United States Constitution contains a right of personal privacy with respect to a woman’s decision to terminate a pregnancy and that a state could not make securing

7. See id. at 69-99.
8. See Griswold, 381 U.S. at 479.
10. See Roe, 410 U.S. at 113.
abortion unnecessarily difficult. However, the Justices did not make this right absolute throughout pregnancy; after the first trimester, they concluded that the state’s interest in protecting maternal health justified state regulation of abortion.

The fact that Roe permitted state restriction of abortion in the face of a compelling state interest set the stage for later erosion of abortion rights, even in the first trimester. Since Griswold, Eizenstadt, Roe, and Doe, women’s reproductive freedom has been steadily limited by the courts and by state and federal governments. First, in a series of subsequent Supreme Court decisions, a variety of restrictions or exclusions relating to the right to secure an abortion have been upheld. The major categories of restrictions include informed consent or waiting periods prior to obtaining an abortion, parental consent for a minor to obtain an abortion, parental notification for a minor to obtain an abortion, restrictions on use of federal family-planning funds to counsel women about the option of abortion, and prohibitions on partial-birth abortions (the medical procedures usually equated to partial birth abortion is called D & X - dilation and extraction).

12. A strict scrutiny standard for state interference was applied. See Roe, 410 U.S. at 147-65. The Center for Reproductive Rights notes: “For the first time, Roe placed women’s reproductive choice alongside other fundamental rights, such as freedom of speech and freedom of religion, by conferring the highest degree of constitutional protection — “strict scrutiny” — to choice. Center for Reproductive Rights, Roe vs. Wade – Then and Now, Jan. 2003, http://www.crlp.org/crt_roe_jbroe.html.

13. See Roe, 410 U.S. at 163.

14. See id.


20. A number of additional U.S. Supreme Court decisions clarified issues related to abortion, but did not necessarily directly limit or burden a woman's right to choose — indeed, some protected it. These include upholding state statutes requiring doctors and health facilities to provide information to states regarding each abortion performed—as long as requirements relate to maternal health, reports are kept confidential, and the collection of information is not overbearing. See Roe, 410 U.S. at 147-165; Bigelow v. Virginia, 421 U.S. 809 (1975) (overturning statutes proscribing abortion services); Connecticut v. Menillo, 423 U.S. 9 (1975) (upholding statutes forbidding non-physicians from performing abortions); Simopoulos v. Virginia, 462 U.S. 506 (1983) (overturning statutes that proscribed abortions in outpatient facilities); Doe v. Bolton, 410 U.S. 179 (clarifying statutes related to viability, fetal test-
Two additional cases have been particularly important with respect to constraints on women's ability to secure abortions. In *Webster v. Reproductive Health Services*,\(^{21}\) the Court upheld elements of a Missouri law that prohibited public employees from performing or assisting in abortions not necessary to save the life of the mother, prohibited the use of public facilities for performing abortions even when no public funding was involved, and required doctors to perform viability tests if a doctor believed a woman was at least 20 weeks pregnant.\(^{22}\) Although this ruling did not apply to private doctors' offices or clinics, *Webster* implied that the Court was willing to reevaluate the framework of *Roe*.

Indeed, in 1992, in *Planned Parenthood of Southeastern Pennsylvania v. Casey*,\(^{23}\) while the Court reaffirmed *Roe*'s recognition of the constitutional right to abortion, it abandoned the trimester framework described in *Roe* and jettisoned the strict scrutiny standard of judicial review of abortion restrictions.\(^{24}\) Instead, it articulated an "undue burden" standard which it defined as "a substantial obstacle in the path of a woman seeking an abortion of a nonviable fetus."\(^{25}\) The provisions that the Court felt did not impose an undue burden were 24 hour waiting periods, informed consent, parental consent requirements for minors' abortions (as long as a judicial bypass was available), and requirements to report the number of abortions performed annually to the state.\(^{26}\) Only a spousal notification provision of the Pennsylvania statute was struck down as an undue burden.\(^{27}\)

Beyond general restrictions on the right to abortion, the availability of abortion for poor women has also been substantially restricted over time as a result of state and federal legislative action and Supreme Court decisions. In *Beal v. Doe*,\(^{28}\) *Maher v Roe*,\(^{29}\) and *Poelker v. Doe*,\(^{30}\) the Court held that states

\(^{22}\) See id. at 490, 509-10, 519-20.
\(^{24}\) See id. at 872.
\(^{25}\) Id. at 877.
\(^{26}\) See id. at 881-87, 899-902.
\(^{27}\) See id. at 900-01.
did not have a statutory or constitutional obligation to fund elective abortions or provide access to public facilities for abortions. Then, in 1980, in *Harris v. McRae*,\(^{31}\) the Court held that federal abortion funding restrictions were constitutional. The case arose due to the imposition of the Hyde Amendment (first applied in 1977), which prohibits the use of federal funds for abortions except when a woman's life is in danger or the pregnancy is the result of rape or incest (although the Amendment has been both more and less restrictive over time).\(^{32}\) As a result of these decisions, neither state nor federal governments have statutory or constitutional obligations to fund all medically necessary abortions.\(^{33}\)

### B. State Legislative Responses to U.S. Supreme Court Decisions

The post-*Roe* Supreme Court abortion decisions have been followed by the enactment of variety of restrictions at the state level that have not only limited women's opportunity to choose abortion, but also resulted in differential access depending on age, economic status, and state of residence. For example, thirty-two states require that women receive counseling before an abortion may be performed, and twenty-four require that women wait a specified period of time (usually twenty-four hours) between counseling and the procedure itself.\(^{34}\) This means that a woman who must travel (a common occurrence) to seek an abortion must either return after the counseling and the waiting period, stay in the area (thereby incurring additional cost), or abandon the decision to obtain an abortion.\(^{35}\) Thus, poor women face greater barriers to securing abortions than women of higher socio-economic status.

As a result of the annual Hyde Amendment, which prohibits the use of federal funds for abortions except in limited circum-

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33. *See* id. at 6.
stances, and *Harris v. McRae*, which upheld the constitutionality of the Amendment, public funding has been limited, thereby doubly disadvantaging poor women. At present, thirty-two states and the District of Columbia follow the federal standard and provide abortions only in cases of life endangerment, rape, and incest. In contrast, seventeen states use state funds to provide for most medically necessary abortions, with four of those states providing the funds voluntarily, and thirteen providing them as a result of a court order. These restrictions fall particularly heavily on women of color. Speaking about the worst case scenario for women of color, six Black women political leaders advocating against prohibiting federal funding for abortions noted that since Black women’s proportion of women in poverty is higher than that for White women, “...a bill that prevented federal funding for abortion would result in the deaths of women of color. To prove that an anti-abortion bill put women of color at risk, they asserted further that ‘the vast majority’ of women who died at the hands of incompetent practitioners in the days before abortion was legal were Black and Brown.”

Differences across states in minors’ access to abortion also result in a patchwork of rights. Thirty-four states require some parental involvement in a minor’s decision to choose abortion. Even though all these states except Utah require parental in-

36. See *Harris*, 448 U.S. at 297.
37. See id.
39. See id.
40. Another way in which abortion funding has been limited is that a small number of states prohibit private insurers from covering abortion services except in cases of life endangerment (although additional coverage may be purchased at an additional charge). Idaho, Kentucky, Missouri, North Dakota all have such provisions. Additionally, eleven states restrict abortion coverage in insurance plans for public employees with two states (Colorado and Kentucky) prohibiting outright any insurance coverage of a portion for public employees. See *The Guttmacher Institute, State Policies in Brief: Restricting Insurance Coverage of Abortion* (2006), http://www.guttmacher.org/statecenter/spibs/spib_RICA.pdf.
42. Most states that require parental involvement also make exceptions under certain circumstances. For example, twenty-eight states permit a minor to obtain an abortion in a medical emergency, and eleven states permit a minor to obtain the abortion in cases of abuse, assault, incest, or neglect. See *The Guttmacher Institute, State Policies in Brief: Parental Involvement in Minors’ Abortions* (2006), http://www.guttmacher.org/statecenter/spibs/spib_PIMA.pdf.
volvement statutes to have an alternative process for minors seeking an abortion (such as judicial bypass or the involvement of a grandparent or other adult relative), variation across jurisdictions means that some minors have greater opportunities to exercise their rights than others.43

Additional ways in which state governments have limited women’s reproductive autonomy include permitting health care professionals to refuse to provide some kinds of reproductive health care. For example, forty-six states allow some health-care providers to refuse to provide abortion services.44 Thirteen states allow some health-care providers to refuse to provide contraceptive services, thereby eroding the impact of Griswold and Eizenstadt.45 State of residence, thus, determines the range of services afforded to women.46

Beginning with Roe and clarified in a later decisions, the Court has ruled that even after fetal viability, states may not prohibit abortions “necessary to preserve the life or health of the mother;” that health includes physical and mental health; that only a physician can define what constitutes health and when a fetus is viable; and that states cannot require additional physicians to confirm the judgment of the first physician with respect to whether the woman’s life or health is at risk.47 Nevertheless, reproductive freedom has been curtailed in such circumstances as seventeen states currently prohibit some post-viability abortions that do not appear to meet these core requirements.48

43. See id.
45. See id.
46. Ms. Magazine reports that four states also require or permit health care facilities that provide abortion to inform women that abortion is related to an increased risk of breast cancer. Texas and Mississippi have requirements that women seeking abortion must read and sign a consent form stating that they understand this connection. Kansas and Louisiana law makes provision of this information optional. Additionally, fourteen states are considering making information dissemination about this link mandatory. These laws fly in the face of medical evidence indicating that no such association exists. Further, in both Minnesota and Montana, mandatory warnings of this type were struck down by the Supreme Court of each state. See Sarah Gonzales, Clinics Refute Scare Tactics, Ms., Winter 2004/2005, at 16, 17.
47. See Abortion Issues, supra note 32.
C. Congressional Efforts to Limit Reproductive Autonomy

In addition to the United States Supreme Court decisions and state legislative actions that have limited the effects of feminist victories in *Griswold, Eizenstadt, Roe* and *Doe*, and resulted in differential access to abortion based on class, age, race, age, and geography, more than a thousand separate legislative proposals addressing the right to abortion have been introduced in the U.S. Congress since 1973. Most have been unsuccessful, but significant limitations have been enacted.49

The large majority of bills introduced in United States Congress have sought to restrict the availability of abortion, including a series of proposed constitutional amendments to overturn *Roe v. Wade*.50 Successful efforts include bans on the use of federal funds to pay for abortions including monies appropriated for Medicaid, foreign assistance, the military, prisons, the Federal Employee Health Benefits program, and the District of Columbia budget.51 Additionally, congressional action has restricted the use of funds for programs in which abortion is a method of family planning.52 Restrictions on attorneys have also been enacted including prohibiting lawyers in federally funded legal aid programs from providing legal assistance to women to obtain elective abortions,53 and prohibiting them from participating in proceedings to compel performance of abortion or provide facilities for abortion.54 The most recent successful congressional action to limit abortion is the Partial-Birth Abortion Ban Act of 2003.55 This Act forbids doctors to perform a partial-birth abortion except to save the life of the woman as a result of physical illness or injury.56 Federal courts in three states have since issued

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50. In contrast, some measures to protect reproductive autonomy have been introduced or passed in the years since *Roe v. Wade*. The Freedom of Choice Act was introduced in 102nd 103rd Congresses, but never enacted. This bill would have codified *Roe* legislatively. One successful effort was the Freedom of Access to Clinic Entrances Act of 1994, which made it a federal crime to use force or the threat of force to intimidate abortion clinic workers or women who seek abortions. *Id.*
51. *See id.*
52. *See id.*
53. *See id.*
54. *See id.*
56. *See id.*
injunctions on partial-birth abortion laws and appeals are pending.  

In sum, the early efforts of feminists to protect the elements of reproductive autonomy concerning pregnancy prevention and termination were initially successful. However, these newly established rights eroded quickly, and the results fell most heavily on those in the least privileged positions. What is more, heavy focus on half the spectrum of reproductive freedom has resulted in little public attention to the right to bear children. In the following section, we explore the dimensions of this right, its current status, and the extent to which its political trajectory has mirrored the right to prevent or terminate pregnancy.

III. THE SECOND STAGE OF REPRODUCTIVE AUTONOMY: THE RIGHT TO BEAR CHILDREN

Reproductive freedom means the freedom to have as well as not to have children. Policies that restrict women's rights to have and raise children . . . are directly related to policies that compel women to have children, on the view that this is their primary human function. Both kinds of policies constitute reproduction control by the state and affect the rights of all women insofar as women are the reproducers of children. But state-sponsored reproduction control also affects different groups of women differently. In a period of economic crisis, many white middle-class and working-class women are pressured to resume the "woman's role" of full-time motherhood and housework. At the same time, low income women — particularly those on welfare and those who are black, Hispanic, and Native American — are targets of systematic, heavily funded programs of "population control" as well as programs that aim to remove their children from them and into "foster care" or state institutions.

-Committee for Abortion Rights and Against Sterilization Abuse (CARASA)

As the quote above illustrates, a less recognized, but equally important aspect of reproductive autonomy is the freedom to bear children. By the late 1970s and early 1980s, sterilization abuse, pre-and postnatal health care, and childcare were elements of the feminist agenda. Somewhat differently from the right to prevent and terminate pregnancy, the trajectory for this
aspect of reproductive autonomy was from outright abuse of women to increased rights – although there was also loss in some sectors and gains in others. Like abortion and contraceptive rights, the burden of abuse and limitations on rights has disproportionately fallen on those least privileged in society, particularly women of color.\(^{60}\) Issues of involuntary sterilization are illustrative of this point.

As the CARASA quotation at the beginning of this section highlights, the issue of reproductive “choice” means very different things to different populations. No better example exists of this point than the degree to which women of color, especially southern women of color, were involuntarily sterilized throughout the 1960s and 1970s.\(^{61}\) A prominent scholar of this era explained: “During the 1970s sterilization became the most rapidly growing form of birth control in the United States, rising from 200,000 cases in 1970 to over 700,000 in 1980. It was a common belief among Blacks in the south that Black women were routinely sterilized without their informed consent and for no valid medical reason . . . this sort of abuse was so widespread in the south that these operations came to be known as ‘Mississippi appendectomies.’”\(^{62}\) Another scholar elaborated, “Black women are often afraid to permit any kind of necessary surgery because they know from bitter experience that they are more likely than not to come out of the hospital without their insides.”\(^{63}\) One particularly egregious case involved a fourteen-year-old Alabama girl named Minnie Lee Relf and her 12-year-old sister, Mary Al-

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\(^{60}\) See Nelson, supra note 41, at 2.

\(^{61}\) Involuntary sterilizations predated the 1960s and 1970s. “Between 1929 and 1941, more than 2,000 eugenic sterilizations were performed each year in the United States. It has been estimated that a total of over 70,000 persons were involuntarily sterilized” Dorothy Roberts, Killing the Black Body: Race, Reproduction, and the Meaning of Liberty 89 (1997). These were undertaken using eugenics sterilization laws that were passed in the early part of the 20th century. Roberts reports that, in the 1930s, publicly funded birth-control clinics were created in some southern states to lower the birth rate among Blacks. Id. at 4. By World War II, involuntary sterilizations in southern states were conducted on Blacks who were institutionalized in prisons, mental health facilities, and hospitals. Id. at 89-90. State legislatures including California, Connecticut, Delaware, Georgia, Illinois, Iowa, Louisiana, Maryland, Mississippi, Ohio, South Carolina, Tennessee, and Virginia entertained legislative proposals to institute sterilization to reduce welfare cases in the 1960s. Fortunately, none of these laws was passed. See Nelson, supra note 41, at 185.

\(^{62}\) See Roberts, supra note 61, at 90.

\(^{63}\) Nelson, supra note 41, at 55.
In 1973, public health workers from a publicly funded Montgomery community action agency asked the girls' parents to include their two youngest children in a program to inject the experimental contraceptive Depo-Provera. Their mother, who was illiterate, signed a consent form with an X. It was only later that the Relfs discovered that their daughters had been permanently sterilized.

What is especially disconcerting about this information is the double standard that existed—while women of color were subjected to an involuntary sterilization, White women, particularly middle-class women, had a hard time obtaining reproductive sterilization. The “120 formula” used by the American College of Obstetricians and Gynecologists recommended sterilization only if the woman’s age multiplied by the number of her children totaled 120. That women of color and White women were treated so differently with respect to sterilization leaves little room for an interpretation other than attempts to control minority populations and increase the White population.

Although widespread abuses of the sort referred to above have been curtailed since the 1970s, voluntary sterilization among women of color is still greater than among White women. In 1990, twenty-four percent of Black women were sterilized compared to seventeen percent of White women. This

64. See Nelson, supra note 41, at 65-66; Roberts, supra note 61, at 93.
65. The public health workers perceived the Relf girls, no matter their age or other circumstances, as in danger of an unwanted pregnancy. See Nelson, supra note 41, at 66.
66. See Nelson, supra note 41, at 66; Roberts, supra note 61, at 93.
67. See Roberts, supra note 61, at 95.
68. See id.
69. See Alexandra Minna Stern, Sterilized in the Name of Public Health: Race, Immigration, and Reproductive Control in Modern California, 95 (7) Am. J. of Pub. Health, 1128-38 (2005). Stern documents the passage and effects of the California sterilization law, the third passed in the nation. It resulted in the performance of about one third of the procedures performed in the United States in the 20th Century. Involuntary sterilizations were initially justified by linking them to the public health movement, but the justification rapidly became openly punitive. Women who were deemed to have too many children or who needed family assistance were often coerced into the procedures. Moreover, involuntary sterilizations were performed disproportionately on poor women and women of color. Tellingly, the California Law (though an amendment to the original statute) shielded physicians from liability for performing these procedures. And a court case at the federal level upheld these surgeries. See Buck v. Bell, 274 U.S. 200 (1927).
70. See Roberts, supra note 61, at 97.
71. See id.
disparity persisted across education and income groups.\textsuperscript{72} Indeed, the rates of sterilization were greater among poor, uneducated Black women.\textsuperscript{73} Among women without high school education, 31.6 percent of those sterilized were Black while 14.5 percent were White.\textsuperscript{74} These results are likely due, in part, to the fact that funding for abortion through programs such as Medicaid has been severely curtailed while Medicaid pays for sterilization.\textsuperscript{75} That decisions about public funding for individual reproductive policies are made in isolation and without consideration of how one set of policies affects the totality of all women’s choices is both obvious and indefensible. One consequence of governmental action in this area is that permanent forms of birth control are advanced while choices that protect women’s future fertility are diminished. This patchwork of policies has disparate effects on Black, Latino, and Native American communities.

As the analysis presented in this article demonstrates, incomplete, partial, or eroded freedom is emblematic of both halves of the spectrum of reproductive autonomy. In the case of birth control and abortion, establishment of these rights has not resulted in their continued strength. Protection of the desire to bear children free from government coercion or control in the form of sterilization abuse or its elevation as a viable economic choice has increased since the early days of the feminist movement, but it is neither complete, comprehensive, nor evenly applied.

\textsuperscript{72} See id.
\textsuperscript{73} See id.
\textsuperscript{74} See id. Evidence indicates that the African American Population remains highly distrustful of governmental information about birth control methods. A recent study reported by the Health Behavior News Service finds that only half of African Americans surveyed believed that the government tells the truth about the side effects and safety of new birth control methods. One third believe that medical community uses poor and minority people as “guinea pigs” to test new methods, and almost a quarter believed that poor and minority women are sometimes forced to be sterilized by the government. Twenty-two percent agreed that “the government’s family planning policies are intended to control the number of black people.” See Becky Ham, CTR. FOR THE ADVANCEMENT OF HEALTH, CONSPIRACY THEORIES AFFECT BIRTH CONTROL USE BY BLACK MEN AND WOMEN (2005), http://www.hbns.org/news/birthcontrol08-09-05.cfm; See generally Sheryl Thorburn & Laura M. Bogart, Conspiracy Beliefs About Birth Control: Barriers to Pregnancy Prevention Among African Americans of Reproductive Age, 32 HEALTH EDUC. & BEHAV. 474 (2005).
\textsuperscript{75} See Roberts, supra note 61, at 97-98.
IV. Alcohol Use During Pregnancy: The Implications for Reproductive Autonomy

Another key component of the right to bear children is governmental interference with pregnant women's behavior and health choices, such as ingestion of legal substances. An increasingly legislated but little explored area is the case of alcohol use during pregnancy. Previous literature in law, political science, public health, and health policy sheds only limited light on these questions. Consequently, in-depth policy studies across multiple dimensions of the right to bear children are largely unavailable.76 In this section, we offer analysis of a unique dataset created to shed light on current policy and evolution of this issue area. By doing so, we can compare the paths of reproductive autonomy for both ends of the spectrum and assess the potential for future protection for women.

That alcohol use or abuse during pregnancy can be detrimental to a fetus is little disputed. Scientific research has established that adverse health consequences can occur throughout pregnancy.77 Fetal Alcohol Spectrum Disorders (FASD) is the term used to describe the range of birth defects caused by alcohol consumption during pregnancy.78 FASDs are considered the most common non-hereditary cause of mental retardation.79 Included in FASD Fetal Alcohol Spectrum Disorders is its most severe form, Fetal Alcohol Syndrome (FAS).80 FAS is characterized by facial defects, growth deficiencies, and central nervous system dysfunction.81 Also included in FASDs are other types of alcohol-induced mental impairments such as Alcohol-Related Neurodevelopmental Disorder (ARND), which is characterized

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76. Another type of limitation on reproductive autonomy with respect to substance use or abuse is the case of illegal drugs. As in the case of alcohol use during pregnancy, the state does constrain pregnant women's behavior with respect to ingestion of illegal drugs. But, the crucial distinction between the two is that use of certain substances is illegal whether or not one is pregnant. Hence, exploring the boundaries of reproductive autonomy using illegal drug use as an example necessitates an entirely different type of analysis that factors in criminal behavior and the array of punishments flowing from engaging in it.
78. See id. at 283.
79. See id.
80. See id.
81. See id.
by behavioral or cognitive abnormalities or a combination of both, and Alcohol-Related Birth Defects (ARBD), which is characterized by physical abnormalities of the skeleton and certain organ systems.82 What is not known is how much alcohol results in these disorders or the extent to which the answer differs from woman to woman.83

82. See id.

Although alcohol use during pregnancy has been thought to harm fetuses for centuries, a medical link was not identified until 1899 by Dr. William Sullivan during his study of alcoholic prisoners. In 1968, Dr. Paul Lemoine published a study that associated distinctive facial features of children to prenatal alcohol exposure. It was not until 1973 that the “syndrome” was named. In a Lancet article published in June of that year, Drs. David W. Smith and Kenneth Lyons Jones coined the term “fetal alcohol syndrome.” More than two decades later, in 1996, the Institute of Medicine created additional terms to delineate gradations of the syndrome. FAS was “characterized by growth retardation, central nervous system abnormalities, and evidence of behavioral or cognitive disorders” in individuals exposed to alcohol in utero. See Janet Golden, Message in a Bottle: The Making of Fetal Alcohol Syndrome 163 (2005).

Alcohol-related birth defects are “. . . distinguished by a variety of anomalies associated with maternal alcohol consumption during pregnancy.” Id. at 163. Alcohol-related neurodevelopmental disorders are diagnosed with “evidence of central nervous system abnormalities and behavioral and cognitive disorders.” Id. Finally, the term “fetal alcohol spectrum disorders” was created as “an umbrella term describing the range of effects that can occur in an individual whose mother drank alcohol during pregnancy.” U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration Center for Substance Abuse Prevention, The Language of Fetal Alcohol Spectrum Disorders (2005), http://www.fascenter.samhsa.gov/pdf/WYNKLanguageFASD2.pdf.

Throughout the 1970s and parallel to the emergence of the second wave of the feminist movement, women’s use of alcohol entered the spotlight. In 1976, Congress passed legislation requiring states to include in a required survey, identification of the need for prevention and treatment of alcohol abuse and alcoholism by women, and to provide assurance that state prevention and treatment programs would be designed to meet such needs. See 151 Rev. No.PL 94-371, 90 Stat 1035 (1976). This act amended the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment, and Rehabilitation Act of 1970. By 1980, states began to address the issues of alcohol use and pregnancy. During this era, in 1981, an “Advisory on Alcohol and Pregnancy” was issued by the federal government that urged pregnant women not to drink alcoholic beverages. When the federal government mandated warning labels to be placed on alcohol in 1989, another flurry of legislation ensued across states. See Golden, supra note 84, at 74-86.

As the condition “fetal alcohol syndrome” gained rapid acceptance from the early 1970s onward, the focus of public attention and policy quickly moved from concern about harm that women experienced through alcohol use and abuse and to fetal harm. Maternal morality was the message in hearings, task force investigations, and media coverage. See id. Yet, as analyzed throughout this article, federal and state legislative efforts fell far short of providing for the screening, assessment,
Although there are no precise incidence rates for FASD in the U.S.,84 existing studies suggest that approximately 1,300 to 8,000 children are born each year with FAS alone.85 Other alcohol-related conditions such as ARND and ARBD occur approximately three times more often than FAS.86 Additionally, the number of children with FASD conditions is growing.87 The Centers for Disease Control have reported a six fold increase in the percentage of babies born with FAS over the last fifteen years (although a portion of this increase may be due to more accurate reporting and diagnosis).88

Growth in the numbers of FASD children is likely related to the increasing number of women of childbearing age who use alcohol.89 Drinking among women, including women of childbearing age, has increased over time,90 although pregnant women are more likely to abstain from drinking and less likely to engage in heavier drinking than women who are not pregnant.91 Still, more than half of all women of childbearing age in United States report that they drink alcohol, and approximately one in thirty pregnant women engage in risky drinking, which is defined as seven or more drinks per week or five or more drinks on any occasion.92 Because more than half of all pregnancies are unplanned, and because birth defects associated with prenatal exposure to alcohol can occur in the first three to eight weeks of pregnancy, damage can be done before a woman knows she is pregnant.93

and treatment pregnant women needed to ensure their own health and the health of their fetuses. See id.
84. See Warren & Foudin, supra note 83.
85. See id.
86. Use of Alcohol Linked to Rise in Fetal Illness, N.Y. TIMES, Apr. 7, 1995, at A27.
87. See id.
89. See id.
92. See id.
93. Although other legal substances, such as tobacco or, potentially, caffeine, have adverse affects on fetuses, according to our present levels of scientific knowl-
The severity of the effects of alcohol use during pregnancy, the fact that they are lifelong for children born with FASDs, and that the incidence is rising has resulted in substantial amounts of legislative attention to reversing the trend. Federal and state governments have enacted two predominant approaches. The first, consistent with preserving women's autonomy and providing healthy birth outcomes, seeks to provide information, early intervention and treatment to pregnant women who use or abuse alcohol. This approach is also supported by an array of feminist advocacy organizations and professional associations related to public health including the ACLU Women's Rights Project, the American Medical Association, and the American Public Health Association.

edge, neither are as severe or irreversible as the effects of alcohol. Hence, governmental action in these areas does not match the attention to alcohol use during pregnancy. See March of Dimes, Quick Reference and Fact Sheets: Caffeine in Pregnancies, http://www.marchofdimes.com/professionals/681_1148.asp (last visited Feb. 9, 2006); March of Dimes, Quick Reference and Fact Sheets: Smoking During Pregnancy, http://www.marchofdimes.com/professionals/14332_1171.asp (last visited Feb. 9, 2006).


95. For example, the American Medical Association (AMA) passed a resolution on this topic entitled "H-420.976. Alcohol and Other Substance Abuse During Pregnancy" that reads as follows: "Our AMA: (1) supports ongoing efforts to educate the public, especially adolescents, about the effects of alcohol abuse on prenatal and postnatal development; (2) favors expanding these efforts to target abuse of other substances; and (3) encourages intensified research into the physical and psychosocial aspects of maternal substance abuse as well as the development of efficacious prevention and treatment modalities. (Res. 244, A-89; Reaffirmation A-99.)" American Medical Association Policy # H-420.976, available at http://www.ama-assn.org/apps/pf_new/pf_online?f_n=browse&doc=policyfiles/HnE/H-420.976.HTM&s_t=&st_p=&nth=1&prev_pol=policyfiles/HnE/H-415.999.HTM&nxt_pol=policyfiles/HnE/H-420.959.HTM. Additionally, the American Society of Addiction Medicine, the American Nurses Association, the National Commission on Correctional Health Care, the Center for the Future of Children, the National Association of Maternal and Child Health Programs, the National Association of Public Child Welfare Administrators, the March of Dimes, and the American Academy of Pediatrics are all on record of support of the public health approach to alcohol use during pregnancy; See RACHEL ROTH, MAKING WOMEN PAY: THE HIDDEN COSTS OF FETAL RIGHT 155 (1999) [hereinafter "MAKING WOMEN PAY"].

Finally, the following was taken from the ACLU website: "The ACLU, drawing upon the expertise of both its Reproductive Freedom and Women's Rights Projects, defended many of the women who were subject to coercive or punitive state actions. We won case after case, and attempts to bully and punish pregnant women eventually diminished. Recently, however, we have seen this dangerous trend revive. A look at selected cases will highlight the important issues at stake.” See American Civil Liberties Union, Coercive and Punitive Governmental Responses to Women's Conduct During Pregnancy, Sept. 30, 1997, http://www.aclu.org/ReproductiveRights/ReproductiveRights.cfm?ID=9054&c=30.
Despite the fact that alcohol use is legal, the second approach to reducing the incidence of FASD is to place restraints on pregnant women's behavior. Punitive or coercive policies include civilly committing pregnant women who use or abuse alcohol, requirements to report women who use alcohol during pregnancy or are suspected of doing so to law enforcement and/or child welfare agencies, and initiating child welfare proceedings to temporarily remove children after their birth or terminate parental rights.  

From the perspective of advocates of reproductive freedom, prosecuting women who use or abuse alcohol during pregnancy, involuntarily civilly committing them, or requiring medical staff and other public officials to report suspicion or evidence of alcohol use during pregnancy are problematic on multiple levels. First, these policies are gender discriminatory in that the civil liberties of pregnant women are diminished or eliminated by these laws. Instead, the rights and welfare of the fetus are elevated above those of the pregnant woman. The effect of these policies is to discourage pregnant women from seeking important prenatal care. When women know that they may be subject to involuntary commitment or charges of child abuse or neglect, evidence suggests they avoid medical treatment altogether. Thus, fear of the adverse consequences of detection may have the unin-
tended outcome of erecting barriers to obtaining treatment thereby increasing the chances of problem pregnancies.\textsuperscript{99}

Governmental actions that constrain pregnant women's freedom not only inherently discriminate on the basis of sex, they also discriminate based on the intersection of race and class. Research designed to determine the extent to which policies are evenly or unevenly applied indicates that women of color and poor women are more likely than their counterparts to be subject to punitive alcohol and pregnancy policies.\textsuperscript{100} An example is available from a study of women receiving prenatal care at public health clinics and private doctors' offices in Pinellas County, Florida, where the use of alcohol and illicit drugs is common among pregnant women of all races and classes.\textsuperscript{101} Yet, "... Black women were nearly ten times more likely than whites to be reported to governmental authorities"\textsuperscript{102} and women of both races who were reported were more likely to be of low socioeconomic status.\textsuperscript{103}

Instead of punitive and coercive policies toward pregnant women who use or abuse alcohol, advocates of reproductive freedom point to alternate choices.\textsuperscript{104} While few fail to acknowledge the serious and long-lasting consequences of alcohol use or abuse

\begin{itemize}
\item \textsuperscript{99} The evidence that coercive laws result in less treatment for women who use or abuse alcohol during pregnancy may suggesting that punishing these women and/or furthering anti-choice reproductive agendas are more salient for proponents than public health concerns or concerns about women's reproductive autonomy. See \textit{Schroedel}, \textit{supra} note 94, at 138-64.
\item \textsuperscript{100} See \textit{Roberts}, \textit{supra} note 61, at 178.
\item \textsuperscript{101} \textit{Id.}
\item \textsuperscript{102} \textit{Id.}
\item \textsuperscript{103} Additionally, in 2002, the percentage of mothers beginning prenatal care in the first trimester was higher for white women than for women of color. Overall, 88.6\% of White women sought after-care, while only 75.2\% and 76.7\% of Black and Hispanic women, respectively, sought care. Joyce A. Martin et. al., Center for Disease Control, \textit{Births: Final Data for 2003}, 54 \textit{Nat'l Vital Stats. Rpt.} (2005) available at http://www.cdc.gov/nchs/data/nvss/nvss54/nvss54_02.pdf.
\item \textsuperscript{104} See \textit{Mary. R. Haack}, \textit{Drug-Dependent Mothers and Their Children: Issues in Public Policy and Public Health} (1997); \textit{Dailard & Nash}, \textit{supra} note 96, at 5-6. This position is coupled with advocacy to reverse the reality that, even with priority treatment laws or special programs law on the books, neither the federal nor state governments have provided anything close to adequate funding for drug and alcohol treatment programs that treat pregnant women. This is true despite the fact that substance abuse treatment is much more economical than the costs imposed on society by its absence. See \textit{Nelson}, \textit{supra} note 41, at 155; \textit{Roberts}, \textit{supra} note 61, at 189; \textit{Schroedel}, \textit{supra} note 94, at 110-111; Barry M. Lester et. al., \textit{Substance Use during Pregnancy: Time for Policy to Catch Up with Research}, 1 \textit{Harm Reduction J.} (2004), available at www.harmreductionjournal.com/content/1/1/5.
\end{itemize}
during pregnancy, advocates of reproductive freedom favor funding treatment programs, expressly prohibiting evidence of prenatal alcohol use or abuse in prosecutions, and either mandating priority treatment in existing substance abuse programs, or creating programs that meet the needs of pregnant women and their families while simultaneously preserving women's self-determination, and providing incentives to seek and complete necessary treatment. 105 These programs and policies are predicated on making the rights of women determinative. Rather than seeking to punish women, the highest priority is providing the care they need. 106

V. WHAT MESSAGES ARE BEING SENT BY LEGISLATURES TO PREGNANT WOMEN?

Federal responses to FASD began approximately twenty-five years ago. In 1981, the U.S. Surgeon General issued the first advisory warning that alcohol use by pregnant women was risky. 107 In 1989, the U. S. Department of Health and Human Services mandated warning labels on alcohol. 108

Since that time, a host of statutes designed to address alcohol use and abuse during pregnancy have been enacted in states across the nation. 109 In this section, we examine the trajectory of

105. See DAILARD & NASH, supra note 96, at 3.
106. Id.
109. In the case of legal drugs, such as alcohol, it is the legislatures in which most governmental action has resided. Nevertheless, based on the array of available alcohol and pregnancy statutes and many others not directly related to that policy topic, courts across the nation have prosecuted pregnant and post-partum women for drinking during pregnancy and its effects. The University of Washington School of Medicine Fetal Alcohol and Drug Unit and The University of Washington School of Law, whose researchers collect case law on FASD across a range of subjects, offer summaries of 18 cases across the nation from 1985-2003. Three of these cases concerned termination of parental rights based on conduct before the birth of the child. See the University of Washington's Fetal Alcohol and Drug Unit website at http://depts.washington.edu/fadu/ (last visited Mar. 26, 2005). These are summarized as follows (underlining was added for ease of identifying the portion of the case dealing with alcohol):

In Matter of Danielle Smith, 492 N.Y.S.2d 331 (N.Y. Family Ct. 1985), the county Department of Social Services brought an action to have Danielle Smith declared a "neglected child." This apparently was a first step toward removing the
child, at least temporarily, from the custody of her mother. The action was based solely upon the prenatal conduct of the mother. The Department urged, first, that Danielle was a neglected child because her mother's drinking had caused FAS. The court concluded that there was insufficient evidence that the child had FAS. The Department also argued that Danielle was a neglected child simply because her mother's drinking had created a risk of FAS. The court agreed. "Although the proof in the instant proceeding is insufficient to establish that the [mother's] abuse of alcohol, during pregnancy, caused fetal alcohol syndrome at the time of birth, the Court, nevertheless, holds that such proof was sufficient to establish 'imminent danger' of impairment of physical condition, including the possibility of fetal alcohol syndrome, to the unborn child." 492 N.Y.S.2d at 334. Under state law creating an imminent danger of impairment was sufficient to support a finding of child neglect. The court also held that the fetus was a "person" within the meaning of the state Family Court Act.

In Toni D. v. Superior Court, 2002 WL 1943651 (Cal. App. 5 Dist.2002), the county department of social services filed a dependency petition, alleging that the mother had been guilty of physical abuse of a child because she drank while she was pregnant. The child was born prematurely at 26 weeks, and required oxygen and a feeding tube. A neurologist present at the birth testified that the child had a small head, which was a "direct indicator" that the child had an underdeveloped brain. The neurologist in turn attributed this to FAS. Under the statute relied on by the county, it was required to show that physical injury was caused by a "single act of abuse." The court held that this standard could not be met, because it was "the cumulative effects" of alcohol use, not a single drink, that had interfered with the development of the child's brain. The court suggested the county might be able to proceed under a different state statute.

In In re Valerie D., 613 A.2d 748 (Conn. 1992), a state agency sought to terminate the parental rights of a mother because she had used cocaine shortly before giving birth. The state Supreme Court held that Connecticut law does not authorize termination of parental rights on that basis. The state's argument was that prenatal use of cocaine fell within the statute authorizing termination of parental rights for causing "serious physical injury" to the child. The state conceded that on its interpretation of state law termination of parental rights would be warranted if a mother drank alcohol.

Other topics on which data are available from this source include: Adoption; Children with FASD, Criminal Law, Diagnosis and Symptoms of FASD; Disability Benefits/Social Security; Education, Special Education; Juvenile Law; Liability of Manufacturers of Alcoholic Beverages; and Termination of Parental Rights when one or both parents has FASD. See also University of Washington's Fetal Alcohol and Drug Unit, http://depts.washington.edu/fadu/ (last visited Mar. 26, 2005).

In comparison, Schroedel reports that, partially in response to the heavy media focus on the use of cocaine in the 1980s, prosecutors aggressively pursued women who were using illegal drugs during pregnancy. See SCHROEDEL, supra note 95, at 101-105. Schroedel and Fiber report that, since 1985 criminal prosecutions were initiated in at least 34 states. See generally Jean R. Schroedel and Pamela Fiber, Punitive Versus Public Health Oriented Responses to Drug Use by Pregnant Women, 1 YALE J. OF HEALTH POL'Y, LAW, AND ETHICS 215 (2001). The most frequent charge has been child abuse and poor women and women of color have been disproportionately targeted. In one situation in South Carolina, the local prosecutor in Charleston and the Medical University of South Carolina joined together to identify and then prosecute pregnant cocaine users. See id. In the five years of this effort, 280 women, almost all African American, were either threatened or prosecuted. See id. In 2001, in the Supreme Court decision in the case, Ferguson v. City of Charleston, 532 U.S. 67 (2001), the Court ruled that, in the absence of consent, the Medical Univer-
reproductive autonomy in issues of alcohol use during pregnancy by collecting and analyzing data on statutes to answer the following four questions:
1. How many states in the United States have enacted policy to address issues of alcohol use during pregnancy?
2. What type of policy predominates across jurisdictions? To what extent are policies in place that facilitate reproductive autonomy verses those that inhibit it?
3. Within the broad categories of facilitation versus restriction of reproductive autonomy, are certain types of statutes more likely than others? For example, in the facilitation category, are jurisdictions more likely to adopt laws that offer general public education on the effects of alcohol use during pregnancy than laws that offer access to substance abuse treatment for affected individuals?
4. Are jurisdictions sending mixed messages to pregnant women with respect to alcohol use during pregnancy policy by passing autonomy enhancing statutes as well as those that inhibit reproductive autonomy, or are they formulating a consistent approach to the issue?

To address the extent to which states across the nation have adopted statutes that facilitate or inhibit reproductive autonomy for women, we start our original data analysis by collecting all extant statutes on the books as of January 1, 2003 on alcohol use during pregnancy across the 50 states and the District of Columbia. These can be categorized into seven broad categories as follows:
1. Mandatory signs posted in establishments that sell or serve alcohol to warn patrons of the impact of alcohol use during pregnancy;
2. Priority treatment for pregnant women using or abusing alcohol;\textsuperscript{110}

\textsuperscript{94} University of South Carolina's policy of testing pregnant women for cocaine was unconstitutional under the Fourth Amendment. Not incidentally and consistent with feminist advocacy, the court noted that programs that punish pregnant women for drug use during pregnancy can cause more harm to them than good. \textit{Id.} Perhaps equally interestingly, unlike the case of alcohol use during pregnancy, scientific study has found that negative effects to a fetus as the result of crack use by pregnant women may not be as devastating or as permanent. \textit{See Schroedel, supra} note 94, at 57.

\textsuperscript{110} Our research identified federal statutes that provide formula grants to states for substance abuse prevention and treatment. The grants include specific directives mandating priority services to pregnant women including the minimum proportion of the grant allocation that must be used for these types of services. \textit{See} 42 U.S.C.
3. Special programs for pregnant women who use or abuse alcohol;
4. Prohibitions against criminal prosecution of women who have exposed a fetus to alcohol;
5. Mandatory or discretionary reporting by health care providers and others of evidence of fetal exposure to alcohol;\textsuperscript{111}
6. Use of indicators of alcohol use or abuse during pregnancy as evidence of child welfare or child neglect; and
7. Civil commitment of pregnant women who use or abuse alcohol.\textsuperscript{112}

\textsuperscript{111} Additionally, two federal statutes related to data and information gathering on fetal alcohol syndrome have been identified. Each of the statutes requires reports about rates of fetal alcohol syndrome and/or plans for reduction of incidents of FASD by the fifty states and the District of Columbia. The reports must be submitted either to Congress or the President of the United States. See 25 U.S.C. § 1680d (1992); 42 U.S.C. § 706 (1999).

\textsuperscript{112} MANDATORY WARNING SIGNS: These provisions require that notices be posted in settings such as licensed premises where alcoholic beverages are sold and health care facilities where pregnant women receive treatment. The warning language required across jurisdictions varies in detail, but in each case, warns of the risks associated with drinking during pregnancy. CIVIL COMMITMENT refers either to mandatory involuntary commitment of a pregnant woman to treatment or mandatory involuntary placement of a pregnant woman in protective custody of the state for the protection of a fetus from prenatal exposure to alcohol. LIMITATIONS ON CRIMINAL PROSECUTION: legal provisions that prohibit the use of the results of medical tests, such as prenatal screenings or toxicology tests, as evidence in the criminal prosecution of women who may have caused harm to a fetus or a child. Such prosecutions may be based on a law specific to harm to a fetus or child from alcohol consumption, or on more general criminal laws addressing child abuse and criminal endangerment. PRIORITY TREATMENT mandates priority access to substance abuse treatment for pregnant and postpartum women who abuse alcohol. REPORTING REQUIREMENTS: requirements to report suspicion or evidence of alcohol use or abuse by women during pregnancy. Evidence may consist of screening and/or toxicological testing of pregnant women or toxicological testing of babies after birth. Jurisdictions with reporting requirements differ with respect to whether reporting is mandatory or discretionary. They also vary based on who must report and the purpose of reporting. With respect to the latter, some jurisdictions require reporting for data-gathering purposes. Others use the information to refer women for assessment and treatment, or to child welfare agencies for determination of the best interests of children born to women who used or abused alcohol during pregnancy. CHILD ABUSE/CHILD NEGLECT: The legal significance of a woman's conduct prior to birth of a child and of damage caused in utero varies considerably across jurisdictions. Some states have adopted statutes and/or regulations that clarify the rules for evidence of prenatal alcohol exposure in child welfare proceedings (e.g., those alleging child abuse, child neglect, child deprivation, or child dependence, or concerning termination of parental rights). SPECIAL PROGRAMS: Some states have addressed the issue of alcohol use during pregnancy by offering special programs or services for pregnant and postpartum women and for children with fetal alcohol syndrome and related effects. These include education efforts (for the general public and for
We then sorted all statutes into two categories: those that facilitate autonomy versus those that restrict it.\textsuperscript{113} The following policies were analyzed as promoting reproductive autonomy: mandatory warning signs,\textsuperscript{114} priority treatment, reporting requirements (provisions that mandate reporting to gather epidemiological data or to refer women for assessment and treatment), special programs, and limitations on criminal prosecution.

Falling within the category of policies that are reproducively restrictive are: civil commitment, child abuse/child neglect charges, and reporting requirements (provisions that pertain to referral of women who use or abuse alcohol during pregnancy to child welfare agencies).

Table One below shows the number of states with provisions in each category of policies that facilitate autonomy. In part because of its multidimensional nature, the special programs policy category is represented among the largest number of states. In addition to direct services to women, such as monies appropriated for treatment of alcohol disorders, this category includes task forces and research councils to collect information, programs to certify teachers and public health workers about FASD,

\begin{itemize}
  \item health professional; screening, identification, and assessment protocols and tools; in-and out-patient care in treatment facilities; family counseling; child care; relapse prevention programs; transportation assistance; housing assistance; and transitional employment. This category also includes various provisions mandating standards for Special Programs as well as research, task forces, and councils investigating the best ways for jurisdictions to address FASD and related disorders.
  
These data are currently available (or, in some cases, scheduled to be available in the near future) from the Alcohol Policy Information System at http://apis.niaaa.nih.gov, an electronic resource of state and federal legal and legislative information on alcohol-related policies. “The Alcohol Policy Information System (APIS) was developed under contract for the National Institute on Alcohol Abuse and Alcoholism (NIAAA), which is part of the National Institutes of Health (NIH), a component of the U.S. Department of Health and Human Services” under Contract No. N01AA12009.

113. Our research includes all state and federal statutes extant as of January 1, 2003. All amendment activity between original enactment dates of each provision and January 1, 2003 has been reviewed for provisions that could affect coding. However, budgetary constraints precluded collection and analysis of statutes that were enacted but later repealed (if any).

114. No federal laws on these policy topics exist although there is one law related to Mandatory Warning Signs laws. As noted earlier, federal statutes mandate health-warning labels on all alcohol containers. \textit{See} 27 U.S.C. §216. These labels must include warnings regarding drinking during pregnancy. The federal legislation also prohibits states from mandating any additional or alternative warnings on alcohol containers thereby preempting any state action on this policy topic.
and general message dissemination to citizens about the dangers of alcohol use during pregnancy.\textsuperscript{115}

<table>
<thead>
<tr>
<th>Priority Treatment</th>
<th>Reporting Requirements (data gathering and assessment)</th>
<th>Special Programs</th>
<th>Mandatory Warning Signs</th>
<th>Limitations on Criminal Prosecution</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 Jurisdictions</td>
<td>17 Jurisdictions</td>
<td>47 Jurisdictions</td>
<td>20 Jurisdictions</td>
<td>5 Jurisdictions</td>
</tr>
</tbody>
</table>

Table Two shows the number of jurisdictions with statutes that inhibit reproductive autonomy. The policy represented in the highest number of jurisdictions, child abuse/child neglect, is also, arguably, the most stringent (restrictive) as it can result in termination of parental rights. Nevertheless, while the number of civil commitment statutes is small, it is an extraordinarily harsh penalty. In Oklahoma and South Dakota, pregnant alco-

\textsuperscript{115} A total count of how many of the seven types of alcohol and pregnancy provisions in each state in each category was completed. Next, then the provisions by state were grouped into those that promoted or restricted autonomy. A percentage was calculated for the proportion of provisions that promoted or restricted autonomy based on the number of provisions per state compared to the total possible number of provisions (5 for promoting and 3 for restricting). Percentages were compared for provisions in the promotion and restriction categories. A notation was made for each state based on whether it had more promotion provisions or more restriction provisions. The final step was to perform coding based on those states that only had provisions that promoted autonomy, those that only had provisions that restricted autonomy, and those that had both.

UCLA Women's Law Journal

Alcohol abusers can be committed to treatment facilities. In Wisconsin, however, civil commitment can be to a treatment facility, a relative's home, or jail. Not only is jail an amazingly severe reaction to alcohol abuse during pregnancy, substance abuse treatment programs and pre-natal care are almost non-existent in these facilities. While few question the serious consequences of alcohol abuse on fetuses, feminist advocates, public health advocates and others assert that the best way of avoiding them is to provide appropriate, comprehensive, and available treatment for pregnant women rather than restricting their freedom. Indeed, they claim, that removal may not result in better birth outcomes than would otherwise be the case.

<table>
<thead>
<tr>
<th>Table 2: Policies That Restrict Reproductive Autonomy Across U.S. States and the District of Columbia As of January 1, 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Commitment</td>
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<tr>
<td>3 Jurisdictions</td>
</tr>
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</table>

The overall picture confirms what each of the above tables suggests—that as of January 1, 2003, jurisdictions across the United States have been more likely to adopt policies that facilitate reproductive autonomy than restrict them. This indicates

119. DAILARD & NASH, supra note 96, at 3.
120. Id.
122. States with Civil Commitment statutes are: Oklahoma, South Dakota, and Wisconsin. States with Reporting Requirements (referral to child welfare agencies) statutes are: Arizona, California, Indiana, Michigan, Minnesota, Oklahoma, Rhode Island, South Dakota, Texas, Utah, Virginia, and Wisconsin. States with Child Abuse/Child Neglect statutes are: Florida, Illinois, Indiana, Nevada, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, and Wisconsin.
123. Another way to view the patterns is that 40 states have a higher proportion of autonomy facilitation provisions than autonomy restrictive provisions (compared to 10 states with the reverse pattern). And, 33 states have autonomy facilitation provisions only compared to 2 (Indiana and Michigan) states that have autonomy
that the policy enactment patterns, more often than not, have been consistent with ideals of reproductive freedom that seek to ensure that women's welfare, autonomy, and access to effective treatment are enhanced.\textsuperscript{124}

However, delving deeper into the data suggests that there is more to the story than just raw numbers of overall policy enactments. First, to detect patterns within states as well as across them, we rated each state on two measures: whether each achieved a high, medium, or low score on a measure of its total number of facilitation provisions, and whether each achieved a high, medium or low score on a measure of its total number of restrictive provisions. The findings indicate that few states receive high marks for enlightened policy toward issues of alcohol use during pregnancy.\textsuperscript{125} Specifically, only two percent of states received a high score on the number of autonomy facilitation policies. Sixty-five percent of states received either a low score or zero, and about a third (thirty-three percent of the states) received a medium score. Put another way, only thirty-five percent have addressed the issue beyond minimal efforts. In contrast, only six percent of states exhibit a high restrictive score reflecting choices that restrict reproductive freedom, whereas eighty-four percent of states have either a low score or a zero score.\textsuperscript{126} It appears that while the majority of states have not enacted restrictive provisions with respect to alcohol use during pregnancy, neither have they sought to comprehensively enact approaches to the issue that facilitate reproductive freedom.

Related analysis examines the direct relationship of provisions in each state that facilitate or inhibit autonomy. Significantly, fifteen jurisdictions across the nation have both types of alcohol use during pregnancy policies.\textsuperscript{127} Thus, in these states, the good that might be done by creating priority treatment rules for pregnant women, for example, is clearly circumscribed by threatening women with criminal prosecution or loss of their children if alcohol use is detected or reported. As noted earlier,

\begin{footnotes}
\item[124] The states with the highest proportion of autonomy facilitation policies are: California, Illinois, Kansas, Kentucky, Missouri and Washington.
\item[125] On this scale, a high score= 5; average=3 or 4; low=1 or 2; and no score=0.
\item[126] On this scale, a high score= 3; average=2; low=1; and no score=0.
\item[127] These states include Arizona, California, Florida, Illinois, Minnesota, Nevada, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Texas, Utah, Virginia, and Wisconsin.
\end{footnotes}
evidence suggests that, under those circumstances, at-risk women will be unlikely to seek any treatment.\textsuperscript{128} Hence, in these mixed statute jurisdictions, efforts to be supportive of women may be undermined by punitive or coercive policies.\textsuperscript{129}

The specifics of facilitation policies also matter tremendously to the chances of improving positive birth outcomes for women who use or abuse alcohol during pregnancy. The special programs category of policies, which is the one with the greatest amount of state activity, is illustrative of this point (special programs includes direct services to women, such as monies appropriated for treatment of alcohol disorders, as well as task forces and research councils to collect information, programs to certify teachers and public health workers about FASD, and general message dissemination to citizens about the dangers of alcohol use during pregnancy). As shown in Table Three (see below) almost every state in the nation has enacted legislation classified within special programs, yet of the eighty-two types of enactments across for forty-seven states, fifty-five enactments are not related in any way to direct services.\textsuperscript{130} These non-service related provisions are directives to create task forces and research councils (fourteen statutes), programs to train and certify teachers and health care professionals about FASD (twelve statutes), and directives to disseminate general educational messages to the public (twenty-nine statutes). By combining the non-service special programs provisions with another facilitation category, mandatory warning signs, (these provisions are operative in twenty states at the time of this analysis) suggests that evaluating legislative reaction to alcohol use during pregnancy based on the ratio of facilitation to inhibition provisions provides only one part of the story. While information dissemination, research, and credentialing efforts are positive, important, and necessary to reduce alcohol use by pregnant women and, therefore, the incidence of FASD, they are fundamentally different from actions that provide the services that may ultimately do the most to serve pregnant women who use or abuse alcohol.

\textsuperscript{128} See Schroedel, \textit{supra} note 94, at 111.

\textsuperscript{129} It is important to note that there can be large differences between enactment of laws and implementation and enforcement of them. This analysis deals only with enactment of such laws.

\textsuperscript{130} These data are derived from authors' analysis of every statute in the Alcohol Policy Information System database under the category of special programs; data not yet publicly available.
Finally, some information about possible future directions is available for these policy topics. An additional civil commitment statute was adopted in North Dakota in 2004, bringing the total number of states with such provisions to four.\textsuperscript{131} Similarly, two more child abuse/child neglect statutes were adopted during 2004, resulting in fifteen states for which alcohol use or abuse during pregnancy is permissible evidence in child welfare proceedings that allege child abuse, child neglect, child deprivation, or child dependence, or concern termination of parental rights altogether.\textsuperscript{132}

The analysis offered here indicates that while jurisdictions across the nation have adopted a greater number of alcohol use during pregnancy provisions that facilitate reproductive autonomy than inhibit it, few of the positive efforts are directed toward the creation or adequate funding of programs of direct service to pregnant women.\textsuperscript{133} Moreover, much like the evolution of the right to prevent or terminate pregnancy, the over-time trend for state policy related to freedom to bear children has moved toward increasing restrictions on women. And, if the evidence in these data is suggestive, the future may be even more restrictive. In the next section, we explore steps to ameliorate this condition.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline
Number of States with Special Program Provisions & Total Number of Special Programs across States & Number of Special Program Provisions Related to Direct Services & Number of Special Program Provisions Related to Task Forces & Research Councils & Number of Special Program Provisions Related to Train and Certify Professionals & Number of Special Program Provisions to Mandate Dissemination of General Educational Messages & Number of Special Program Provisions Related to Non-Service & Mandatory Warning Signs Provisions \tabularnewline
\hline
47 & 82 & 27 & 14 & 12 & 29 & 55 & 20 \\
\hline
\end{tabular}
\caption{Special Programs - Provision Specifics}
\end{table}


\textsuperscript{132} No additional restrictive reporting requirements statutes were adopted in 2004. Two additional mandatory warning signs statutes were adopted in 2004 bringing the total to 22 statutes. Further, there were no changes in 2004 on limitations on criminal prosecution. No data gathering-oriented reporting requirement statutes were adopted in any state in 2004 nor were any priority treatment statutes. This is particularly suggestive of the fact that state legislatures are not as proactive and assertive in protecting women's reproductive autonomy with respect to issues of alcohol use during pregnancy as is ideal. Finally, no comprehensive information is available to analyze trends in special programs.

\textsuperscript{133} See Paltrow et. al, supra note 96, at 10; SCHROEDEL, supra note 94, at 111; \textit{and see Making Women Pay}, supra note 95, at 139.
VI. Increasing Reproductive Autonomy: The Effect of Women in Legislative Office

Decades-long advocacy efforts by feminist organizations and public health associations to influence legislative action toward increasing women's reproductive freedom appear to have been only partially successful. Indeed, the trends pertaining to the right to prevent and terminate pregnancy and the right to bear children both appear to be evolving in the opposite direction of freedom preservation, particularly for poor women and women of color. Pursuing another approach to securing these crucial rights is vital. In this section, we turn from the legal, public policy, interest group, and feminist theory literatures typically used to analyze and strategize about reproductive rights and turn toward the political science study of women in elite-level politics. The research findings in this area suggest a promising approach to reversing losses of reproductive autonomy.

One way to increase attention to preserving and enhancing women's reproductive freedom may be to actively promote the election of women officeholders at both the state and national levels. Over thirty years of political science research on gendered aspects of policymaking point to the greater likelihood of women representatives crafting, supporting and enacting policies that enhance the status of women, children, and families.134

Women in state legislatures and the federal government, regardless of party, seniority, ideology, region and other factors, support the type of agendas that enhance women's freedom on an array of health issues including reproductive ones.\textsuperscript{135} Moreover, there is some preliminary evidence that issues of proportionality matter—as women move from token status to more substantial representation within legislatures, they may be more likely to assert their priorities and experience policy success.\textsuperscript{136} These research findings suggest that an important determinant of legislative policy choice on alcohol use during pregnancy policies may be the sex ratios of legislatures. Thus, the remainder of this article addresses the following previously articulated question: "Is the proportion of women in state legislatures related to adop-


135. Theories about why we find political differences between women and men on both the mass and elite levels fall into two broad categories. Essentialists posit a unique female nature. Biologically-based differences between the sexes result in distinctive world views, including political perspectives. See Mary Daly, Gyn/Ecology: The Metaethics of Radical Feminism (1978); Susan Griffin, Woman and Nature: The Roaring Inside Her (1980). In contrast, scholars of social construction argue that asymmetric socialization based on deeply embedded cultural assumptions about women and men's proper roles in society lead to distinctive life experiences. See Alison M. Jaggar, Feminist Politics and Human Nature (1988); Imelda Whelehan, Modern Feminist Thought: From the Second Wave to 'Post-Feminism' (1995). It is imperative to note, however, that creating broad theoretical categories such as essentialists and social constructionists, while necessary in some instances, risks over-simplification. There is much variation in each of these categories.

tion of statutory provisions that facilitate reproductive autonomy with respect to alcohol use during pregnancy?" We test this query first by presenting results of frequency analysis and second, by offering multivariate analysis that takes into account other influences on decision choices of state legislatures.

A. Analysis of Frequency Data

To determine the extent to which the proportion of women in state legislatures meaningfully affects the type of alcohol use during pregnancy provision adopted, we offer two analyses based on frequency data. First, in contrast to our previous analysis, which examined the type of provisions extant as of January 1, 2003, we now explore the number of provisions adopted in each year in each state that facilitate reproductive autonomy and the number of provisions in each year in each state that inhibit it. This analysis allows us to discover the extent to which the proportion of women in legislatures at the time of statutory adoption is correlated with the type of policy promulgated. Additionally, because a single state may adopt multiple provisions in one year, we examine the number of jurisdictions that adopted each category of provision (facilitation or inhibition) in each year.

For ease of interpretation, Table Four (see below) depicts results in five-year intervals. It shows that across the fifty states and the D.C. City Council, in each time period, (except for 1980-1984) more facilitation than inhibition provisions were

137. Data coding proceeded in the following way: a jurisdiction was coded positively if it had any statutes in each of the seven alcohol use during pregnancy categories and negatively if it did not. The number of statutes (or session laws) within a specific category (such as special programs or civil commitment) is not reflected in the coding. This is because in one state, for example, one session law can generate many statutes (including purely definitional statutes) whereas in another state, one session law can generate one statute. Also, one state may accomplish a program or prohibition by one statute and another state may do the same thing with six statutes. Therefore, equivalency across states could be compromised if the number of statutes or session laws were compared rather than the fact that a specific state has provisions dealing with an alcohol and pregnancy category (again, such as special programs or civil commitment). One ramification of these differences is that if one state (State A) permits civil commitment and does so with eight statutes and another state (State B) permits civil commitment and does so with one statute, comparisons would be meaningless. State A would be counted as having 8 times "more" civil commitment than State B.

138. We have included provisions adopted by the District of Columbia City Council because that is the body that makes laws for that jurisdiction. In this particular way, the City Council is equivalent to the state government function. Without the inclusion of D.C., several alcohol use during pregnancy provisions would have been missing from analysis. Additionally, we ran analyses with and without the Dis-
adopted. If we look more deeply into the period from 1980-1984 (data not shown), there are two years in which more inhibition provisions were adopted than facilitation provisions. In 1980, with 8.1 percent female across states legislators,\textsuperscript{139} one inhibition provision and zero facilitation provisions were adopted. In 1984, with 13.9 percent of women legislators, the same pattern exists. More consequentially, the only individual years or five year time periods in which facilitation provisions did not exceed inhibition provisions were between 1980-1984, when the average proportion of women in legislatures was under fifteen percent. Leading theorists of organizational and institutional dynamics, such as Rosabeth Moss Kanter, indicate that when newcomers and minorities are fifteen percent or less of an organization, their actions and predilections are often constrained by the desire to avoid being set apart from the mainstream.\textsuperscript{140} If women legislators in governing bodies with less than fifteen percent female representation feel constrained on this issue, they will be less likely to introduce and solicit support for autonomy facilitation provisions, and less likely to actively organize against autonomy inhibition provisions. Indeed, that is precisely the pattern found in these data. Finally, the average percentage of women in legislatures for the entire period between January 1, 1980 and January 1, 2003 for adoption of facilitation provisions was twenty percent compared to seventeen percent for adoption of inhibition provisions. In sum, this first-level analysis investigating the question of whether the proportion of women in legislatures affects the broad type of provisions adopted on alcohol use during preg-

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\textsuperscript{139} Center for American Women and Politics at Rutgers University, \textit{Facts and Findings}, http://www.cawp.rutgers.edu (last visited Apr. 10, 2006).

\textsuperscript{140} Rosabeth Moss Kanter posits that minority status subjects those in the minority to "disproportionate visibility and performance pressures" that affect and constrain their behavior. See Rosabeth M. Kanter, \textit{Some Effects of Proportions on Group Life: Skewed Sex Ratios and Response to Token Women}, 82 Am. J. Soc. 965 (1977). In the case of a skewed group (fifteen percent or less of the total), minority members (in this case, women) are perceived as tokens, and that status alters their performance. In particular, they often respond by avoiding actions that set them apart from the mainstream. As organizations develop tilted groupings (minority members constituting fifteen to forty percent of the total) or approach balance (a sixty-forty split), minority members are less often perceived as aberrant, and are more able to respond to the environment in an unrestrained fashion \textit{Id}. at 966.
nancy suggests that women do indeed make a difference. Over this twenty-two year time period, their impact is detectable in policy outcomes once their numbers rise above a minimum threshold of representation.141

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141. Separately, we analyzed data from Substance Abuse and Mental Health Services Administration's Fetal Alcohol Center for Excellence (U.S. Department of Health and Human Services) on bills introduced in state legislatures across the U.S. during 2003 and 2004. SAMHSA's data are a secondary source and we have not independently assessed whether or not they are one hundred percent accurate in reflecting all bills introduced in legislatures on the subject. Nevertheless, our analysis of these data shows the following: similar to the pattern uncovered in this article, there were more facilitation than inhibition bills introduced during this time period. Twenty-eight bills were cited by SAMHSA, three of which we did not further analyze as they were tangential to the subject matter. Of the remaining bills, twenty fell into the facilitation category and five were in the inhibition category. Of these, nine facilitation bills were enacted (only three of which dealt with direct services to women) and four inhibition bills were enacted. Additionally, only eight of the facilitation bills dealt in some way with the core of FASD—assessment and treatment; the others offered public information and requirements for professional certification. Among the remaining facilitation bills, only four dealt with appropriating money for services. Most central to the analysis in this section of our article is a gender comparison of the bills introduced and enacted. Since there are more men than women in all legislatures across the nation, it is unsurprising that men sponsored or cosponsored (hereinafter referred to as introduced) more bills than women in each category. They also passed a greater proportion of bills in each category. Beyond those general trends, there is a stark difference in the number of inhibition bills introduced and adopted: men introduced four of the five inhibition bills across the nation. Three of men's inhibition bills were enacted and the one bill introduced by a woman sponsor was enacted. Within the facilitation category, men and women legislators introduced about the same number of bills and were about equally likely to see these bills enacted. Differences did exist in the types of facilitation policies to which they gravitated. Men were more likely to introduce bills relating to public information and education; women were more likely to introduce bills related to professional certification. The sexes were equal in introduction of appropriation bills (the foundation of support for reproductive autonomy), but women were the only successful appropriators. Hence, the types of patterns found in our article are generally supported by these data. Two caveats are relevant to this general conclusion. First, we do not link bills introduction and success directly to the proportion of women in each of the relevant legislatures as the numbers of bills in total is too small to further break the data down in this way. Separately, it is also important to note that meaningful conclusions about over-time trends in bill introductions of even the general types offered here are likely to be stronger with more years and more data points. Substance Abuse and Mental Health Services Administration, FASD Center for Excellence, Fetal Alcohol Spectrum Disorder Legislation by State as of October 2004 (on file with the author).
Table 4: Relationship of Autonomy Facilitation and Inhibition Provisions, As of January 1, 2003 - By Five Year Intervals

<table>
<thead>
<tr>
<th>Adoption Year</th>
<th>Relationship</th>
<th>Facilitation Provisions</th>
<th>Inhibition Provisions</th>
<th>Average % of Women in the Legislature by Year and State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-1984</td>
<td>=</td>
<td>3</td>
<td>3</td>
<td>10.9</td>
</tr>
<tr>
<td>1985-1989</td>
<td>+</td>
<td>29</td>
<td>7</td>
<td>18.0</td>
</tr>
<tr>
<td>1990-1994</td>
<td>+</td>
<td>60</td>
<td>4</td>
<td>19.0</td>
</tr>
<tr>
<td>1995-1999</td>
<td>+</td>
<td>35</td>
<td>13</td>
<td>21.2</td>
</tr>
<tr>
<td>2000-2002</td>
<td>+</td>
<td>15</td>
<td>2</td>
<td>23.1</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>142</td>
<td>29</td>
<td>19.5</td>
</tr>
</tbody>
</table>

+ More facilitation than inhibition provisions
= Same number of facilitation and inhibition provisions

Table Five (see below) depicts the adoption of facilitation and inhibition provisions in relationship to the percentage of women in legislatures by year and by jurisdiction (again, presented in five-year intervals). The number of jurisdictions with mixed provisions (both facilitation and inhibition provisions) per time period is also displayed. The average number of jurisdictions with facilitation provisions over this entire period is 5.9 percent compared to 1.2 percent for jurisdictions with inhibition provisions. Additionally, the 1980-1984 period (in which women made up less than fifteen percent of the legislators), is the only period in which the relationship between facilitation and inhibition jurisdictions is not weighted toward facilitation. In the years 1980 and 1984, the relationship between facilitation and inhibition is negative. Hence, Tables Four and Five indicate that whether the focus is on the overall number of facilitation and inhibition provisions enacted or the number of jurisdictions with each of these types of provisions, the data show the same patterns with respect to the influence of women.
TABLE 5: THE RELATIONSHIP OF FACILITATION, INHIBITION, AND MIXED PROVISIONS ON ALCOHOL AND PREGNANCY RELATIVE TO THE PERCENTAGE OF WOMEN IN STATE LEGISLATURES – BY JURISDICTION IN FIVE YEAR INTERVALS (Numbers of Jurisdictions NOT Mutually Exclusive)\(^\text{142}\)

<table>
<thead>
<tr>
<th>Adoption Year</th>
<th>Relationship</th>
<th># of Jurisdictions with Facilitation Provisions</th>
<th># of Jurisdictions with Inhibition Provisions</th>
<th># of Jurisdictions with Mixed Provisions</th>
<th>Average % of Women in the Legislature by Year and State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-1984</td>
<td>=</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>10.9</td>
</tr>
<tr>
<td>1985-1989</td>
<td>+</td>
<td>26</td>
<td>6</td>
<td>2</td>
<td>18.0</td>
</tr>
<tr>
<td>1990-1994</td>
<td>+</td>
<td>47</td>
<td>3</td>
<td>2</td>
<td>19.0</td>
</tr>
<tr>
<td>1995-1999</td>
<td>+</td>
<td>28</td>
<td>10</td>
<td>3</td>
<td>21.2</td>
</tr>
<tr>
<td>2000-2002</td>
<td>+</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>23.1</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>118</td>
<td>24</td>
<td>8</td>
<td>19.5</td>
</tr>
</tbody>
</table>

+ More facilitation than inhibition provisions
= Same number of facilitation and inhibition provisions

The final set of analyses of basic relationships appears in Table Six (see below). This table focuses on jurisdictions with facilitation or inhibition provisions only. These data depict the number of jurisdictions per year that have adopted only one type of provision or the other or jurisdictions that have mixed provisions only. Consistent with findings derived from Tables Four and Five, the 1980-1984 period (when women represented less than fifteen percent of the legislatures) is the only time period in which the relationship between facilitation and inhibition-only jurisdictions is not weighted toward facilitation. Additionally, the average proportion of women in legislatures over this entire time period with respect to jurisdictions with facilitation-only provisions was twenty percent while the figure for inhibition-only provisions was 15.3 percent. Further analysis of the year-by-year data (not shown) reveals that, in the years in which women comprised less than fifteen percent of legislators, there are two years in which no facilitative provisions were enacted (1980 and 1984). These were years in which only one jurisdiction adopted any type of alcohol use during pregnancy policy, but this phenomenon did not repeat in the over fifteen percent group. Finally, among the years in which more than fifteen percent of legislature was female, there were four years in which only facilitation provisions were enacted (1991, 1992, 1994, 2001), a phenomenon that did not occur in the under fifteen percent group.

142. Rather than counting provisions themselves we counted the number of jurisdictions with provisions falling into the facilitation category and the number of jurisdictions falling into the inhibition category. Hence, a single jurisdiction could be counted more than once.
In sum, each of the three lenses used to investigate the extent to which the proportion of women in legislatures is correlated with the type of alcohol use during pregnancy policy enacted show the same patterns. It appears that women's presence in legislative life makes a difference in furthering women's reproductive autonomy.

**Table 6: Comparison of Facilitation, Inhibition, and Mixed Provisions on Alcohol and Pregnancy to Percentage of Women in the State Legislatures – By Jurisdiction in Five Year Intervals (Numbers of Jurisdictions Are Mutually Exclusive)**

<table>
<thead>
<tr>
<th>Adoption Year</th>
<th>Relationship</th>
<th># of Jurisdictions with Facilitation Provisions</th>
<th># of Jurisdictions with Inhibition Provisions</th>
<th># of Jurisdictions with Mixed Provisions</th>
<th>Average % of Women in the Legislature by Year and State</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-1984</td>
<td>=</td>
<td>3</td>
<td>3</td>
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<td>+</td>
<td>47</td>
<td>3</td>
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<td>28</td>
<td>10</td>
<td>3</td>
<td>21.2</td>
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<tr>
<td>2000-2002</td>
<td>+</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>23.1</td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>118</td>
<td>24</td>
<td>8</td>
<td>19.5</td>
</tr>
</tbody>
</table>

+ More jurisdictions with facilitation only provisions than numbers of jurisdictions with inhibition or mixed only provisions.
= Same numbers of jurisdictions with inhibition only and facilitation only provisions.

**B. Multivariate Analysis**

The frequency data suggest that, above a certain threshold, the presence of women in legislatures is associated with the adoption of alcohol use during pregnancy policy that supports reproductive freedom. But, do these relationships remain after control variables are used in analysis? That is, once other factors that might explain the relationships are introduced into the analysis, is there evidence that the proportion of women state legislators is related to the presence of statutes that contribute to reproductive autonomy? The answer appears to be yes.

To test the persistence of the positive effects of the proportion of women in state legislatures on the presence of reproductive autonomy enhancing provisions, we created models with nine control variables. These include standard political science variables that may help, in whole or in part, account for state legislative policy choices, such as region of the country, level of legislative professionalization (legislatures that tend toward full-time professional status rather than part-time citizen status), state ideology, state education levels, religiosity of state residents, the percentage of the membership of each legislature
that was Democratic for each relevant year, the presence or absence of an election year during the years in which each statute was adopted, and the number of doctors per 10,000 people in each state. To test what effect, if any, alcohol industry influence accounts for policy outcome in this area, we also added annual per capita consumption of ethanol to our list of control variables.143

143. Measures of the Independent Variables: Region: Divided into four sections as follows: 1=North East; 2=Midwest; 3=South; 4=West. Professionalization Index: This variable represents the classic political science concept of legislative professionalism. For the figures used here, indexes were constructed for each state and Congress averaged for the biennium with respect to compensation (including salary and living expenses in constant dollars); days in session; and expenditures for service and operations (minus legislator compensation) per legislator in constant dollars. Professionalism was measured for 1983-84 and 1993-94. The index ranges from zero to one with one being the most professionalized legislature (the U.S. Congress). These data come from Dr. James D. King of the University of Wyoming. Dr. King can be reached at: 136 Arts and Sciences Building, Phone: (307) 766-6484, FAX: (307) 766-6771.

For the years 1983 and 1993, King provided an index of scores for each state. These data were then coded according to the decade in which the alcohol and pregnancy provision was adopted by each state with the 93 data used up through 1/1/03. Proportion of Women in Legislature by Year of Adoption Year by State: the percent of women in the states legislatures in each state in each year in which an alcohol and pregnancy provision was adopted. CENTER FOR AMERICAN WOMEN AND POLITICS, FACTS AND FINDINGS, available at http://www.cawp.rutgers.edu (last visited Apr. 10, 2006). For information on the District of Columbia, which is not covered in CAWP data, we obtained data from communications with representatives of the D.C. government. Number of Doctors per 100,000 people*. U.S. Census Bureau, Health and Nutrition Section of the Statistical Abstract of the United States, http://www.census.gov/statatab/www. State Ideology: This measure is based on measure of liberalism first developed by Erickson, Wright, and McIver. See ROBERT S. ERIKSON ET. AL., STATEHOUSE DEMOCRACY: PUBLIC OPINION AND POLICY IN THE AMERICAN STATES (1993). The authors used aggregated CBS/New York Times polls over several years in conjunction with other variables to develop a test of opinion-policy congruence. They found that state policies were highly correlated with opinion ideology and that the impact of traditional demographic factors was small in comparison. The figures represented here update the Erickson, Wright, and McIver data in time and with a variation. They comprise an index of opinion liberalism measured first by a standard ideology question from 122 CBS/New York Times polls taken between 1976 and 1988 (with Alaska, Hawaii, and Nevada omitted due to data limitations). Legislative strength, density of state interest communities, and the portion of for-profit organizations comprising them are additional variables in the index. Legislative strength was measured by the average of the Democratic strength in each chamber in each state legislature between 1994 and 1999. Data for the density of state interest communities and the proportion of for-profit organizations were gathered from the rolls organized interests registered to lobby state legislatures in 1997. Density is the number of organizations registered to lobby the state legislature. Positive scores represent liberal states, negative scores conservative states and zero scores represent moderate states. The State Ideology data were provided to us by David Lowery and Matthew Fellowes. These data can be obtained by Dr. Fel-
The region variable was included because policy diffusion literature in political science indicates a relationship between state policy choice and the choices of neighboring states. Data maps (not shown) suggest that west coast states have generally adopted the highest levels of statutes representing reproductive autonomy. Therefore, we expect that, all else being equal, western states will have the highest proportion of these laws.

With respect to legislative professionalization, the policy diffusion and policy outcome literatures in political science indicate a relationship between the level professionalization of legislatures and policymaking. Professional legislatures are typically more active and have more staff support than others, therefore, we expect that, all else being equal, they will be more likely to produce either a mixed set of statutes (as an outgrowth of a greater amount of legislative activity than less professionalized legislatures) or coercive statutes. The reasoning is that the co-

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Education: Our coding reflects the percentage of each state's population with a Bachelor's degree or higher for the years 1980, 1990, and 2000. The 1980 and 1990 data were supplied by Dr. James D. King of the University of Wyoming. The data for 2000 come from the U.S. Census Bureau, "Census 2000 Summary File 3; 1990 Census Population." The relevant table is "Table 1: Educational Attainment of the Population 25 Years and Over for the United States, Regions, and States, and for Puerto Rico: 1990 and 2000." Election Year: This variable reflects the presence or absence of an election in the year in which a provision was adopted. The data come from The Book of the States, vol. 35, (2003). 0 = No; 1 = Yes; 2 = Unicameral. Religiosity: This variable reflects the proportion of the population of each jurisdiction who belong to a fundamentalist religious denomination. The religious denomination data come from the American Religion Data Archive. Total number of adherents for each Protestant Fundamentalist group was gathered for each state for 1980, 1990, and 2000. Population estimates for each state were then obtained from the U.S. Census Bureau and then used to measure the percentage of Protestant fundamentalists in each state during the relevant decade. All alcohol and pregnancy provisions dated from 1980-1989 had 1980 decadal data percentages. Provisions from 1990-1999 had 1990 decadal data percentages. All other provisions dating from 2000 + were coded with 2000 data percentages. Per Capita Consumption of Ethanol: This variable reflects the apparent per capita ethanol consumption within each state in each analysis year. The data come from the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and were based on alcoholic beverage sales data, either collected directly by the Alcohol Epidemiologic Data System (AEDS) from the States or provided by beverage industry sources. Data are included for the years 1980 through 2002. Percent Democrat: the proportion of each legislature that was Democratic in each relevant year. Carl Klarner, The Measurement of the Partisan Balance of State Government, 3 STATE POL. & POL'Y Q. 309, 309-319 (2003).

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cive FASD measures are usually more controversial and take more legislative time than those that facilitate reproductive autonomy.

A large body of state politics literature suggests a meaningful relationship between the general political ideology of the state and policy choices of state representatives. We expect to find that the more liberal to state, the more likely it will be to produce statutes that facilitate reproductive autonomy. Similar expectations exist with respect to educational levels of each state’s population. The higher the level, the more likely it is that citizens will support policies that facilitate autonomy.

The religiosity variable reflects membership in fundamentalist Protestant religious denominations. Debates about pregnancy and substance abuse generally are often grounded in the concerns about reproductive rights on one hand and fetal rights on the other. At bottom, women’s roles, status in society, and autonomy are pitted against the primacy of the fetus. A direct measure of this influence on the policy process would be the amount of lobbying activity by pro-life groups such as the National Right to Life Committee in each state in each year. Absent such data (as they are unavailable), we rely upon this widely used substitute. The expectation is that the larger the fundamentalist Protestant religious population, the higher the level of restrictive policies in the state.

The percentage of the legislature that was Democratic in each relevant year is included in the analysis as a control variable because the expectation is that the Democratic Party is more likely to support measures that facilitate autonomy than the Republican Party. Party positions on the issue of abortion have been consistent with that expectation. The election year varia-

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147. A measure of interest group activity on behalf of women’s reproductive rights would also be useful in this analysis, but these data are unavailable.

148. For many years, the Republican Platform has supported a constitutional amendment to ban abortion. An example comes from the Republican Platform adopted at GOP National Convention Aug 12, 2000: “We say the unborn child has a fundamental right to life. We support a human life amendment to the Constitution and we endorse legislation that the 14th Amendment’s protections apply to unborn children. Our purpose is to have legislative and judicial protection of that right against those who perform abortions. We oppose using public revenues for abortion
ble reflects the expectation that restrictive policies are more likely to be adopted prior to elections than after them. The ability to claim credit and campaign on hot-button issues such as fetal protection is at a premium at that stage of the political cycle.

In addition, the American Medical Association, the American Public Health Association and other related national associations have long held official positions against coercive laws targeting substance abusing pregnant women.\textsuperscript{149} Therefore, we measured the influence of the medical establishment on legislative activity on alcohol use during pregnancy policy by using the number of doctors per 10,000 people in each state (data on legislative activity by state medical associations over time are unavailable). All else being equal, we expect that the more doctors per state, the fewer laws inhibiting reproductive autonomy and the larger amount of laws facilitating it.

Finally, to measure, to the greatest extent possible, the influence of the alcohol industry on legislative activity concerning alcohol use during pregnancy, we included a measure of annual per capita ethanol consumption in states across the nation. As the alcohol industry has focused its legislative influence on laws affecting behavior of individuals rather than curbs on the industry itself,\textsuperscript{150} we expect that, all else being equal, it will oppose laws that highlight the dangers of alcohol rather than the responsibility of alcohol users. Hence, the greater the consumption within a state, the less likely that mandatory warning signs statutes will exist regardless of the proportion of women in legislatures (thereby depressing the number of facilitation provisions adopted).

Readers may wonder why two variables that are almost certainly highly determinative of policy choice in this domain (FASD incidence and public opinion) are not included among our independent variables. At present, there are no reliable over-time, state-level data on either of these influences. The most comprehensive information on FASD currently available comes from the Centers for Disease Control, which only has fetal

\textsuperscript{149} See ROBERTS, supra note 61, at 191; American Medical Association (AMA), supra note 95.

\textsuperscript{150} See the “About Us” section of the Distilled Spirits Council of the United States, at http://www.discus.org/about/background.htm for more commentary on this subject.
alcohol data for children born from 1995 to 1997 collected from four states.\textsuperscript{151} Similarly, no 51-jurisdiction public opinion poll contains questions relevant to this analysis at any point in time. Some research on related topics use abortion opinion as a proxy measure for substance abuse, but the results of such analyses do not suggest that replication is appropriate here.\textsuperscript{152}

Two models correlating the proportion of women in state legislatures from 1980-2002 with the full array of control variables are presented below in Table 7. They depict time series regression results using reproductive autonomy and reproductive restrictive provisions in each state in each year as the dependent variables.\textsuperscript{153} The results of each model confirm the central hypothesis of this aspect of our article – that the proportion of women in state legislatures is related to the presence of statutes that support reproductive autonomy for women who use or abuse alcohol during pregnancy.

More specifically, looking first at the model for autonomy provisions, not only is the hypothesis about levels of female participation confirmed; the only statistically significant variable is the proportion of women in the legislature. As the number of women in a state’s legislature increases, there is a statistically significant increase (p<.05) in the number of facilitation provisions the state adopts for a particular year. The multivariate analysis assures that the effects of the proportion of women in legislatures are not the result of other plausible rival explanations.\textsuperscript{154}

Turning to the model for restrictive provisions, two explanatory variables are statistically significant predictors of the dependent variable. Specifically, as the degree of professionalization

\textsuperscript{151} See "Tracking FAS" from the Centers on Disease Control's National Center on Birth Defects and Development Disabilities, at http://www.cdc.gov/ncbddd/fas/fassurv.htm, for more data.

\textsuperscript{152} See SCHROEDEL, supra note 94, at 142-43.

\textsuperscript{153} The coefficients in Table 6 are interpreted in the same manner as regular Ordinary Least Squares estimates. Our dependent variable has one case for each state/year and includes the variables: Autonomy Provisions and Restrictive Provisions, in which the total number of each is listed for each case. Autonomy is coded as 1 and Restrictive is coded as 2. These variables are based on the number of Autonomy or Restrictive statutes adopted in each year in each state in the United States. The relevant years are 1980-2003. The data represent adoptions from January 1, 1980 to January 1, 2003. If the proportion of women in legislatures is to serve as a convincing explanation of policy choice, the year of adoption of each statute must be matched to the percentage of women in the relevant legislature in the relevant year.

\textsuperscript{154} The set of predictors for both models provides a significant fit for the dependent variables.
of the state legislature increases, as expected, there is a significant (p<.05) and positive increase in the number of restrictive provisions adopted by the state. By contrast, as the number of doctors in a state increases, there is a significant decrease (p<.01) in the number of restrictive provisions adopted by the state. Finally, while not statistically significant, the variable for the proportion of women in the legislature has switched directions. This fits with our original hypothesis that the higher the number of women state legislators, the more likely that provisions facilitating reproductive autonomy would emerge from state legislatures.

The results are particularly meaningful in that the number of observations militates against statistically significant findings. That such evident effects of the proportion of women legislatures on the presence of state policy supporting reproductive autonomy are achieved suggests that the influence of women in legislative office is meaningful.

In sum, not only do women legislate differently than men, as has been amply demonstrated by three decades of research on women's influence in legislative life, but these findings provide compelling evidence that, as their numbers grow, women's policy influence increases. Coupled with the results of the frequency analysis, offered above, it also appears that, once a minimum threshold is reached (hypothesized to be fifteen percent), women have a positive effect on the adoption of legislative provisions related to alcohol use during pregnancy. Their presence is correlated with the enhancement of women's reproductive autonomy.

155. That women's presence is correlated with the adoption of provisions that facilitate reproductive autonomy is not meant to suggest that women legislators will be more likely to push for certain types of facilitation provisions more than others. As we demonstrated earlier, numbers alone are not the complete picture with respect to increasing reproductive autonomy for women.
### Table 7: The Effects of the Political Environment on the Adoption of Alcohol Use During Pregnancy Policies That Facilitate or Inhibit Reproductive Autonomy, 1980-2003

<table>
<thead>
<tr>
<th></th>
<th>Autonomy*</th>
<th></th>
<th>Restrictive*</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Coeff.(std. err.)</td>
<td></td>
<td>Coeff.(std. err.)</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.717</td>
<td>1.174*</td>
<td>(.603)</td>
<td>(.614)</td>
</tr>
<tr>
<td>West</td>
<td>.180</td>
<td>-.171</td>
<td>(.167)</td>
<td>(.329)</td>
</tr>
<tr>
<td>Professionalization</td>
<td>-.398</td>
<td>.743*</td>
<td>(.433)</td>
<td>(.329)</td>
</tr>
<tr>
<td>Women Legislators</td>
<td>.021**</td>
<td>-.001</td>
<td>(.009)</td>
<td>(.006)</td>
</tr>
<tr>
<td>Doctors</td>
<td>.003</td>
<td>-.005**</td>
<td>(.002)</td>
<td>(.002)</td>
</tr>
<tr>
<td>State Ideology</td>
<td>.015</td>
<td>-.011</td>
<td>(.021)</td>
<td>(.19)</td>
</tr>
<tr>
<td>Education</td>
<td>-.035</td>
<td>.013</td>
<td>(.024)</td>
<td>(.018)</td>
</tr>
<tr>
<td>Election Year</td>
<td>.113</td>
<td>-.090</td>
<td>(.112)</td>
<td>(.079)</td>
</tr>
<tr>
<td>Religiosity</td>
<td>.006</td>
<td>.001</td>
<td>(.007)</td>
<td>(.009)</td>
</tr>
<tr>
<td>Per Capita Consumption of Ethanol</td>
<td>-.114</td>
<td>-.034</td>
<td>(.112)</td>
<td>(.095)</td>
</tr>
<tr>
<td>% Democrat</td>
<td>.003</td>
<td>-.005</td>
<td>(.004)</td>
<td>(.005)</td>
</tr>
<tr>
<td>R-Square</td>
<td>.131</td>
<td>.151</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald.2(d.f.)</td>
<td>18.33(10)**</td>
<td>23.31 (10)*****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob.&gt;2</td>
<td>.0496**</td>
<td>.0097**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>124</td>
<td>124</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

***p<.01; **p<.05; *p<.10

*OLS estimates with panel corrected standard errors, heteroskedastic (unbalanced panels), panel-specific autocorrelation AR (1)

**OLS estimates with panel corrected standard errors, heteroskedastic (unbalanced panels), panel-specific autocorrelation AR (1)

156. Methods: For this analysis we have two dependent variables: 1) the number of policies that facilitate reproductive autonomy adopted by the state for each year, and 2) the number of policies that inhibit reproductive autonomy adopted by the state for each year. Because the data are repeated observations of states over time we use time-series cross-sectional estimation techniques, or pooled time series analysis. Despite the methodological power of this technique, there is concern regarding the violation of assumptions of ordinary least squares (OLS) regression,
VII. Conclusion

Reproductive freedom in all its forms has been inadequately supported by governmental bodies in the United States in the modern era. Whether it is the erosion, since the 1970s, of the right to prevent or terminate a pregnancy, ongoing inequalities surrounding sterilization decisions, or state intervention into the lives of pregnant women who use or abuse legal substances women's bodily integrity has not achieved the status envisioned by second wave feminists — especially not with respect to women of color and poor women. In this article, we have sought to expand our understanding of this subject in two ways. First, we investigated the extent to which state legislatures have pursued paths leading toward either reproductive autonomy or reproductive restraint with respect to alcohol use during pregnancy and what the trend suggests for the future. Our results indicate that while states have enacted a greater number of facilitation than inhibition provisions, the numbers tell only part of the story. The types of facilitation enactments generally do not provide intervention specifically, unit effects and auto-correlations. Indeed, diagnostics tests of our data reveal significant unit effects and auto-correlation. While a number of techniques have been proposed to control for these potential problems, we use OLS estimates with panel corrected standard errors. Lois W. Sayrs, Poled Time Series Analysis (1989).

Panel corrected standard errors (PCSEs) correct for the abovementioned problems by accounting for the nonspherical error terms present in our data. See generally Nathaniel Beck & Jonathan N. Katz, "What to do (and not do) with Time-Series Cross-Section Data," 89 Am. Pol. Sci. Rev. 643 (1995). Further, PCSEs provide the most efficient estimates when the number of panels exceeds the time periods. See id.

In our case, we have fifty-one panels (N) over twenty-four time periods (T), with each state, including the District of Columbia, representing a panel. Our data are unbalanced, with the number of observations for each panel ranging from one to eight. Thus, the method for computing panel-specific autocorrelation in the models in Table 1 are weighted according to the number of panels (T_i) as opposed to a lag for each panel (T_i-1) which is the default when using PCSEs in the statistical package, STATA. Further, because some states are represented by only a single cross-section, the method for computing autocorrelation is based on the autocorrelation of the residuals rather than a single lag OLS of residuals which is the default method for OLS estimates with PCSEs when using STATA. Because states with a single observation would be dropped from the analysis, the unbalanced nature of the data also prevents us from including a lag variable for the two dependent variables. Finally, we also ran the two models using panel corrected standard errors with common autocorrelation AR (1), as well as different specifications of a generalized least squares (GLS) and random effects versions of the two models. Results presented in Table 7 are consistent with those found using these other estimation techniques. We use the panel corrected standard errors because it provides a conservative test of our hypotheses.
and treatment for women in need. Moreover, the severity of the inhibition enactments, however small in number, deeply compromise women's reproductive freedom.

Second, using the political science literature on women officeholders as a foundation, we asked whether the proportion of women in legislatures across the nation is positively correlated with adoption of provisions supporting reproductive autonomy. The answer to that question is an unqualified yes. Thus, one strategy to reverse losses of reproductive freedom is for supporters of these goals to work not only to bring more women into politics, but to work strategically to increase proportions of women in legislature—especially in key legislatures. By no means do we suppose that women are monolithic, that all women, regardless of ideology, party, region, or other influences, are pro-choice or feminist, or that if gender parity (or the reverse imbalance) were achieved in legislatures, women legislators would necessarily act and react as they have done in the past. Nonetheless, evidence from this research and the wider women and politics literature suggests that not only does women's presence matter, the greater their presence across legislatures and in each individual legislature, the greater chance that reproductive autonomy will be preserved and extended. Hence, an additional, practical strategy that those who work toward the election of more women to public office may use is targeted efforts to elect more women, especially in legislatures where they are poorly represented.