POST-DOBBS PERILS: LESSONS TO BE LEARNED
FROM REGRESSIVE POLISH POLICIES ON THE RISKS
POSED BY RESTRICTIVE ABORTION LAWS

ERIN MCANDREWS

I. INTRODUCTION .......................................................................................64

II. THE RIGHT TO ABORTION CARE IS SUPPORTED BY
INTERNATIONAL HUMAN RIGHTS LAWS ..............................................65
   A. Historical Status of Abortion in the International Human Rights
      Arena ........................................................................................................65
   B. International Human Rights Treaties Securing the Right to
      Abortion .....................................................................................................66

III. DE JURE AND DE FACTO ACCESS TO ABORTION CARE
    IN POLAND AND THE UNITED STATES ..............................................69
   A. Poland .....................................................................................................69
   B. United States ........................................................................................70

IV. IMPLICATIONS OF RESTRICTIVE ABORTION REGIMES IN
    POLAND AND THE UNITED STATES .....................................................70
   A. Substantial Risks to Parental Health ....................................................71
   B. Disproportionate Impact on Vulnerable Individuals ..............................73
   C. Chilling Effect on Legal Abortions ......................................................75

V. CONCLUSION ............................................................................................77

I. INTRODUCTION

In 1956, the Polish Legislature enacted the Act on the Conditions for the Termination of Pregnancy, which largely allowed abortions on demand.1 As it stands today, abortion is criminalized in Poland, with only narrow exceptions for instances of rape or incest and to protect a pregnant person’s life.2 Once a state seen as a safe haven for those seeking abortion care across Eastern Europe,3 Poland’s current

2. Id.
abortion scheme disregards various human rights and represents a reversion inconsistent with the global trend of expanded access to abortion care.4

In the monumental 1973 case of Roe v. Wade, the Supreme Court of the United States determined that pregnant people had a qualified right to terminate pregnancies, rooted in the right to privacy.5 Though state regimes across the United States varied substantially, for almost fifty years, federal law upheld the right to obtain an abortion. However, in the recent case of Dobbs v. Jackson Women’s Health Org., the Supreme Court upended this constitutional guarantee, finding that the Constitution did not explicitly or implicitly establish a right to obtain an abortion.6 Post-Dobbs, a pregnant person’s access to an abortion is largely contingent on their state of residence, meaning that the degree to which the reproductive rights, embraced by certain well established human rights,7 of those residing within the United States are protected is inconsistent.

Poland and the United States represent states that run counter to the global trend of increasingly liberal abortion schemes and expanded access to safe abortion care. Though laws and access across the United States are not standardized, the Supreme Court’s ruling in Dobbs presents substantial risks for parental health and represents a circumvention of international human rights obligations. Observing trends in access to safe abortions in Poland illustrates that pregnant people in the United States are already encountering barriers and indicates potential risks to come.

II. THE RIGHT TO ABORTION CARE IS SUPPORTED BY INTERNATIONAL HUMAN RIGHTS LAWS

A. Historical Status of Abortion in the International Human Rights Arena

In the 1968 Proclamation of Teheran, the United Nations formally recognized that parents have a human right to determine the number and spacing of their children.8 The Proclamation built upon

and reaffirmed the Universal Declaration of Human Rights, emphasizing the indivisibility of human rights, while also expanding the rights recognized. While there is no direct right to reproductive autonomy within international human rights law, various human rights instruments address issues inherent in reproductive justice.

In 1994, the international human rights community considered reproductive rights in the Programme of Action (Cairo Compromise) developed at the International Conference on Population and Development (ICPD) in Cairo. While taking care to avoid reference to any affirmative state obligations regarding the accessibility of abortion care, the Cairo compromise declared that reproductive rights “embrace certain human rights that are already recognized in . . . international human rights documents.” The document specified that when legal, abortion services should be safe, yet that abortion policies were to be established only at national and local levels. Following the ICPD Programme of Action, the Beijing Declaration and Platform for Action, adopted by the 1995 Fourth World Conference on Women, questioned the propriety of imposing criminal penalties upon pregnant people for obtaining illegal abortions, suggesting that such policies should be reviewed.

B. International Human Rights Treaties Securing the Right to Abortion

Adopted by the General Assembly in 1966, the International Convention on Civil and Political Rights (ICCPR) implicates reproductive rights through various human rights, including the rights to privacy, equality and non-discrimination, and life. Ratified by

12. ICPD, supra note 7, at ¶ 7.3.
13. ICPD, supra note 7, at ¶ 8.25.
Poland in 1977 and the United States in 1992,\(^{16}\) the ICCPR represents a binding obligation for both party states.

The right to privacy as illustrated in Article Seventeen of the ICCPR states that no person “shall be subjected to arbitrary or unlawful interference with [their] privacy . . . .”\(^{17}\) In reviewing disputes surrounding abortion access, the U.N. Human Rights Commission, the “body charged under the ICCPR with monitoring its implementation,”\(^{18}\) has consistently held that state restrictions to abortion care violate pregnant persons’ right to privacy.\(^{19}\) In Article 26, the ICCPR secures the right to equality and nondiscrimination, establishing that all persons are equal before the law.\(^{20}\) As illustrated in *Mellet v. Ireland*, a case decided by the Human Rights Committee in 2016, restricted access to abortion care can subject pregnant people to gender discrimination in violation of Article 26, as such restrictions do not adversely affect people without the capacity for pregnancy in the same manner.\(^{21}\) Further, Article 6 of the ICCPR secures an “inherent right to life” free from arbitrary deprivation.\(^{22}\) In General Comment Thirty-Six, the Human Rights Committee expanded on the right to life secured by Article 6 of the ICCPR, stating that when regulating abortion, state parties must guarantee that such policies do not infringe upon pregnant people’s right to life, nor neglect “their duty to ensure that [pregnant people] do not have to resort to unsafe abortions.”\(^{23}\) Moreover, the Comment asserts that state parties should eliminate barriers to safe, legal abortions, while also refraining from introducing new limitations on access.\(^{24}\)


\(^{18}\) United States v. Duarte, 208 F.3d 1282, 1287 (11th Cir. 2000).


\(^{20}\) ICCPR, supra note 17, at art. 26; See also ICCPR, supra note 17, at art. 2 (stating that party states are obligated to ensure that the rights of all persons within their jurisdiction are secure regardless of sex, among other protected characteristics).


\(^{22}\) ICCPR, supra note 17, at art. 6.


\(^{24}\) Id.
The right to abortion is also supported by Article 16 of the Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), which obligates party states to prohibit and thwart “cruel, inhuman, or degrading treatment” within their territory. The human rights community has recognized that restricted access to abortion care can cause severe physical and mental suffering, thus constituting cruel or degrading treatment in violation of CAT. Article 24 of the Vienna Convention on the Law of Treaties (“VCLT”) establishes that a treaty enters into force for a given state party when the state consents to be bound after the treaty has already gone into force. While the United States has not ratified the VCLT, the treaty is considered customary international law. Thus, as both Poland and the United States have ratified CAT, both are bound by the commitments set out in the instrument.

Additionally, the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the International Covenant on Economic, Social and Cultural Rights (ICESCR) further support the right to abortion, rooted in various human rights such as the right to health. While Poland is fully bound by both CEDAW and ICESCR, as merely a signatory rather than a party, the United States is prohibited from defeating the object and purpose of both instruments, but is not bound by the instruments in full force.

29. Status of Ratification, supra note 16.
30. VCLT, supra note 27, at Art. 18(a); Flores v. S. Peru Copper Corp. 414 F.3d 233, 256 (2d Cir. 2003).
32. Status of Ratification, supra note 16.
33. VCLT, supra note 27, at Art. 18(a).
34. Status of Ratification, supra note 16.
III. DE JURE AND DE FACTO ACCESS TO ABORTION CARE IN POLAND AND THE UNITED STATES

A. Poland

Enacted with the goal of protecting a pregnant person’s health, Poland’s 1956 Act on Conditions for the Termination of Pregnancy permitted abortions for medical reasons, for difficult living conditions of the pregnant person, and for pregnancies resulting from a crime.\textsuperscript{35} Under this statutory scheme, a pregnant person could essentially obtain an abortion on demand.\textsuperscript{36} This liberal abortion scheme not only supported pregnant people seeking abortions across Eastern Europe, but also made abortion safer.\textsuperscript{37} However, three decades later, the 1989 fall of the Polish Communist regime, coupled with potent pressure from the Catholic Church,\textsuperscript{38} led the Polish Parliament to pass The Family Planning, Human Embryo Protection and Conditions of Permissibility of Abortion Act (Family Planning Act) in 1993.\textsuperscript{39} The Family Planning Act repealed the 1956 Act and restricted abortions exclusively to instances of threat to the life or health of the pregnant person, a high probability of severe and irreversible fetal abnormalities, and pregnancies resulting from criminal acts.\textsuperscript{40} In 2020, the Constitutional Tribunal abolished the fetal abnormalities exception, finding the “legal[ized] eugenic practices” unconstitutional as the exception denied human dignity, constituted prohibited discrimination, and contravened the Constitutional guarantee of the protection of


\textsuperscript{36} Marta Bucholc, Abortion Law and Human Rights in Poland: The Closing of the Jurisprudential Horizon, 14 HAGUE J. ON RULE L. 73, 81 (2022).


\textsuperscript{38} Gordon F. Sanders, Lessons from Poland, The Other Developed Country Curtailing Abortion Rights, WASH. POST (June 12, 2022), https://www.washingtonpost.com/history/2022/06/12/poland-abortion-rights-history/.

\textsuperscript{39} Alexandra Sifferlin, It’s Almost Impossible to Get an Abortion in Poland. These Women Crossed the Border to Germany for Help, TIME (last visited Dec. 22, 2022), https://time.com/poland-abortion-laws-protest/.

\textsuperscript{40} Ustawa z dnia 7 stycznia 1993 r. o planowaniu rodziny, ochronie płodu ludzkiego i warunkach dopuszczalności przerywania ciąży [Act on Family Planning, Protection of the Human Fetus and Conditions for the Admissibility of Abortion] (1993 DZ. U. Nr. 17, poz. 78).
As over ninety percent of legal abortions in 2019 occurred under the fetal abnormalities exception, the Tribunal ruling amounts to virtually an absolute ban.\textsuperscript{42}

\textbf{B. United States}

In 1910, abortion was illegal in every state within the United States and designated a felony in most.\textsuperscript{43} However, following decades of work among activists concerned with the growing instances of adverse health effects and mortality from unsafe abortions, the United States Supreme Court held in the 1973 case of \textit{Roe v. Wade} that pregnant people had a qualified right to abortion, finding that the right to privacy was broad enough to cover reproductive autonomy.\textsuperscript{44} Yet in June of 2022, the Supreme Court overturned this longstanding precedent in \textit{Dobbs v. Jackson Women’s Health Org.}, finding that the Constitution does not establish a right to abortion.\textsuperscript{45} Declaring abortion to be a divisive moral issue, the Court determined that \textit{Roe} wrongly abrogated the public’s decision making authority.\textsuperscript{46} \textit{Post-Dobbs}, twenty-nine percent of reproductive aged people with the capacity for pregnancy now reside in states where abortion care is strictly limited or wholly inaccessible.\textsuperscript{47}

\section*{IV. Implications of Restrictive Abortion Regimes in}

\begin{itemize}
  \item \textsuperscript{41}Trybunał Konstytucyjny [Constitutional Tribunal] Biuletyn 01/2020 (Pol); see also Tekst Konstytucja Rzeczypospolitej Polskiej [Text of the Constitution of the Republic of Poland] ogłoszono w Dz.U.1997, Nr. 78 poz. 483, Art. 30, 31, Rozdział II (Pol).
  \item \textsuperscript{45}Dobbs, 142 S. Ct. 2228.
  \item \textsuperscript{46}Id. at 2284.
POLAND AND THE UNITED STATES

Poland’s restrictive laws surrounding abortion care have had severe implications for the health of pregnant people. Since the Supreme Court ruling in Dobbs, similar patterns are manifesting in the United States. Observing the risks to parental health, the disproportionate impact on vulnerable communities, and the chilling effect on legal abortion care, it is evident that these restrictive reproductive policies violate vital human rights obligations.

A. Substantial Risks to Parental Health

Within a year after the Polish Constitutional Tribunal’s decision overruling the fetal abnormalities exception to the abortion ban, an estimated 18,000 pregnant people contacted a single organization seeking abortion-inducing medications.48 Similarly, web search queries for abortion medications skyrocketed to an all-time national high within three days after the U.S. Supreme Court Dobbs draft opinion was leaked, the highest relative search volumes of which occurred in states with restrictive abortion policies.49 The legal status of abortion within a state is unlikely to affect the number of actual abortions that actually occur.50 States with liberal abortion policies and those with restrictive ones have roughly the same abortion rates.51 However, these similar rates disappear when observing safety, as there is a substantial correlation between restrictive abortion laws and unsafe abortions.52 A mere forty percent of abortions occurring within states that ban or severely restrict abortion care are rendered safely.53 Such states also tend to have more abortion related deaths, as policies restricting abortion access often work as a barrier to safe abortion care, rather than a deterrent from abortions.54 When faced with restricted access to


49. Adam Poliak et al., Internet Searches for Abortion Medications Following the Leaked Supreme Court of the United States Draft Ruling, 182 JAMA INTERN. MED. 1002, 1003–04 (2022).


51. Id.


54. Id.
the abortion care they seek, many pregnant people do not simply forgo abortions, but instead seek out less safe and reliable methods of termination.

Self-managed medical abortions, in which pregnant people self-administer abortion-inducing drugs such as mifepristone and misoprostol, is a safe and effective means of inducing abortion.55 Access to the requisite medications limits the likelihood that pregnant people will resort to more dangerous methods to induce termination.56 However, for pregnant individuals in both Poland and various U.S. states, gaining access to these medications is complex, if not unfeasible. In Poland, while performing a self-managed abortion is not criminalized, any person who assists a pregnant person in carrying out an unpermitted abortion faces criminal penalties.57 In the United States, though legal approaches vary, some nineteen states require abortion medications to be administered in-person by a health care professional.58 Further, the Food and Drug Administration designated mifepristone as presenting significant health and safety concerns, meaning that it must be prescribed by a health care professional.59 Thus, pregnant people residing in states with restrictive abortion policies may not be able to procure the requisite drugs legally, if at all.

Accordingly, activists and grassroots organizations in both states have established elaborate, covert networks to distribute mifepristone

55. See generally Abigail R. A. Aiken et al., Self Reported Outcomes and Adverse Events After Medical Abortion Through Online Telemedicine: Population Based Study in the Republic of Ireland and Northern Ireland, 357 BMJ 2011 (2017) (finding that 94.7% of the 1636 pregnant people involved in the study successfully terminated their pregnancies, utilizing mifepristone and misoprostol obtained through telehealth services, without any surgical interventions); See also Elizabeth G. Raymond et al., First-Trimester Medical Abortion with Mifepristone 200 mg and Misoprostol: A Systematic Review, 87 CONTRACEPTION 26 (2013) (finding a 0.3% rate of hospitalizations and 0.1% rate of blood transfusions in a 50,000 person study of abortions using mifepristone and misoprostol).


and misoprostol to individuals seeking to induce abortion. These underground networks are vital for pregnant people in both Poland and a growing number of U.S. states. Yet, such networks face constant threats of legal consequences and simply cannot secure the human rights inherently jeopardized by restrictive abortion schemes. Pregnant individuals that cannot gain access to safe medications often resort to more dangerous at-home abortifacients. In Poland, pregnant individuals utilize less regulated medications not intended to induce abortions, such as ulcer drugs, that can be dangerous and do not reliably induce abortions. Similarly, after the Dobbs decision was released, at-home herbal abortifacients, many of which are potentially lethal, became a trending topic online.

B. Disproportionate Impact on Vulnerable Individuals

Restricted access to abortion care places particularly undue hardships on pregnant people in vulnerable communities. Vulnerable communities, including low-income communities, minorities and people of color, and residents of rural areas, face increased barriers to accessing safer alternatives. Moreover, rates of unintended pregnancies tend to be highest among such groups, meaning that those with the fewest resources to secure safe reproductive health care become the most vulnerable. As summed up succinctly in the 2016 Report by the Working Group on the Issue of Discrimination against Women in Law and in Practice to the U.N. Human Rights Council, “safe termination of pregnancy is a privilege of the rich,” as pregnant people residing in a jurisdiction with restrictive abortion laws “with limited resources have little choice but to resort to unsafe providers and practices.”

60. See Stephania Taladrid, The Post-Roe Abortion Underground, NEW YORKER (Oct. 10, 2022), https://www.newyorker.com/magazine/2022/10/17/the-post-roes-abortion-underground (detailing how Texas-based activists have established an underground network to distribute abortion-inducing medications, modeled after a similar network in Mexico established by activist, Verónica Cruz).

61. Sipherlin, supra note 39.


While purchasing abortion medications online to circumvent restrictions is a viable option for people seeking to terminate pregnancies, many pregnant people lack such an option. One study on the viability of inducing abortion through medications purchased online without a prescription found, through chemical testing, that all of the tested medications contained mifepristone or misoprostol as advertised, with most having only minor deviations from the advertised amount of active ingredients contained. Despite such deviations, the majority of the medications purchased in the study contained the milligram and microgram amounts of active ingredients recommended by the World Health Organization as sufficient to induce abortion. While this is a promising avenue of care for some, it may be impossible for the most vulnerable communities. In Poland, one gynecologist offering covert abortion services stated that the lowest price for abortion medications she came across was 800 zloty, amounting to roughly $170 U.S. dollars. In the United States, prices range from $110 to $360.

Alternatively, many pregnant people in Poland travel to neighboring states with less restrictive laws. This is especially important for people in the second trimester of pregnancy, as medications inducing abortion are typically not recommended past twelve weeks. As states with liberal abortion laws tend to have more safe abortions than states with restrictive laws, abortion tourism is a safe and reliable means of terminating an unwanted pregnancy. Among Polish residents, roughly fifteen percent of the estimated 200,000 annual abortions occur in neighboring states. Similarly, following the Dobbs decision, Planned Parenthood saw an 800% increase in the number of

67. Id.
69. Muragh, supra note 66, at 287.
pregnant people seeking abortions at clinics in states neighboring Texas, where a trigger ban outlawed the procedure thirty days after the Supreme Court’s ruling.\footnote{Lydia Wheeler & Patricia Hurtado, \textit{Abortion-Travel Bans Are 'Next Frontier' With Roe Set to Topple}, \textit{Bloomberg Law} (May 4, 2022), https://news.bloomberglaw.com/health-law-and-business/abortion-travel-bans-emerge-as-next-frontier-after-roes-end.}

Despite the importance of abortion tourism to sustained access to safe abortion care, this solution also has important limitations. Pregnant people in both Poland and U.S. states with restrictive abortion laws must pay out-of-pocket costs to obtain abortions elsewhere. The procedure alone can cost upwards of $600 for residents of both states seeking outside abortion care.\footnote{Attia @ Planned Parenthood, \textit{How Much Does an Abortion Cost?}, Planned Parenthood (Apr. 29, 2022), https://www.plannedparenthood.org/ask-experts/how-much-does-an-abortion-cost; Abortion in Germany, \textit{Ctr. for Feminist Foreign Pol’y} (2021), https://centreforfeministforeignpolicy.org/abortion-in-germany.} Further, the additional costs and time required to travel are particularly debilitating for vulnerable pregnant people, such as those with limited economic resources, childcare or work responsibilities, or family members hostile to abortion care.\footnote{Hiroaki Matsuura, \textit{Abortion Tourism in a Post-Roe v. Wade Era}, \textit{67 Biodemography and Social Biology} 99, 99–100 (2022).} In the United States, a quarter of people with the capacity for pregnancy live over two-hundred miles from the closest abortion clinic.\footnote{Emily Bazelon, \textit{Risking Everything to Offer Abortions Across State Lines}, \textit{N.Y. Times} (Oct. 4, 2022), https://www.nytimes.com/2022/10/04/magazine/abortion-interstate-travel-post-roes-end.html.} Many people who obtain abortions already have children, meaning that obtaining an abortion requires travel, lodging, and child care expenses that can cost thousands of dollars.\footnote{Id.} Accordingly, obtaining an abortion in a neighboring state is simply not feasible for many women.

\textbf{C. Chilling Effect on Legal Abortions}

The restrictive abortion policies in Poland also work to reduce access to legal abortion care, creating severe implications for parental health. Alicja Tysiąca, a pregnant woman in Poland with a severe eye condition, sought an abortion after three separate specialists determined that continuing the pregnancy was a substantial risk to her eyesight.\footnote{Hirvonen, \textit{supra} note 72.} Despite this, none of the physicians signed off on a legal
termination under the maternal health exception. As a result, Ms. Tysiąc carried the pregnancy to term and lost nearly all of her sight. Polish resident and expectant mother Izabela Sajbor ultimately died after doctors failed to intervene when her water broke prematurely, leaving her in critical condition. Her doctors refused to remove the fetus, which was believed to have a low survival rate due to severe abnormalities, because they could still detect a fetal heartbeat.

As the law currently stands, any physician practicing in Poland that performs an abortion outside of the narrow exceptions faces up to two years in prison. Fear of criminal prosecution or public disfavor means many doctors refuse to perform abortions, even in instances where termination would fall under a legally permissible exception. Similarly, U.S. states such as Texas and Oklahoma, among others, have laws that criminalize physicians who perform extra-legal abortions. Even in instances where providing an abortion would be legally permissible, some physicians in the United States, unclear of how the law will apply to a particular patient’s circumstances and fearing revocation of their medical license or other legal consequences, are deterred from providing what in their judgment is the most medically appropriate care. As such, restrictive abortion laws place pregnant people at severe risk of unsafe abortions and pregnancy complications.

---

79. Id.
80. Id.
81. Bennhold, supra note 3.
82. Bennhold, supra note 3.
86. See e.g., Lauren Coleman-Lochner et al., Doctors Fearing Legal Blowback Are Denying Life-Saving Abortions, BLOOMBERG LAW (July 12, 2022), https://news.bloomberglaw.com/health-law-and-business/doctors-fearing-legal-blowback-are-denying-life-saving-abortions (detailing an instance in which a Georgia-based pharmacy erroneously told a patient they did not carry misoprostol, and refused to fill their prescription until the physician clarified that the drug was prescribed to address health concerns from a miscarriage, not to induce termination).
V. CONCLUSION

Since 1994, there has been an extensive global trend of increasingly liberal abortion policies. In contrast, Poland and the United States represent some of the only states actively reducing the available legal grounds for obtaining an abortion, in contravention of their international human rights obligations. This regressive movement has led to growing rates of public disapproval and questions regarding the institutional legitimacy of both the Polish Constitutional Tribunal and the Supreme Court of the United States.

In both Poland and the United States, there is substantial public disapproval of the respective courts’ recent decisions on abortion. Following the Polish Constitutional Tribunal’s ruling on fetal abnormalities, the Public Opinion Research Center found that seventy-five percent of survey respondents believed abortion should be legal in instances of incurable, life-threatening disease, and sixty-four percent of respondents approved of legalized abortion for fetal disabilities. Moreover, regarding the large-scale protests following the Constitutional Tribunal’s decision, sixty-three percent of respondents said they supported the protests of the fetal abnormality ruling. Similarly, roughly sixty-one percent of adults in the United States believe abortion should be legal in at least most cases. Moreover, an estimated forty-eight percent of adults in the United States view the Supreme Court unfavorably. This represents a substantial shift compared to the Court’s nationwide approval rating in 2020, which was estimated at seventy percent.

More significantly, the Polish and U.S. abortion policies present severe risks to parental health, reinforce inequalities, and have a chilling effect on legal abortions. While purporting to protect fetal life and

---

89. Id.
92. Id.
dignity, Polish abortion policy is compromising pregnant people’s inherent rights, with a growing number of U.S. state law policies following suit. The abortion policies existing in both states conflict with pregnant people’s right to privacy, equality, life, and freedom from cruel and degrading treatment, which all implicate abortion care. Instead of respecting a pregnant person’s choice to receive abortion care or not to remain a private determination made in consultation with a healthcare provider, restrictive policies limit autonomy and place such decisions in the hands of the state. Moreover, such restrictive policies can and do have severe effects on the health and life of pregnant persons, disproportionately affecting vulnerable communities.

If the United States wishes to avoid the grim realities of disparate health impacts and reduced access to legal abortions as plainly evident in Poland, many states need to change course. As seen in Poland, abortions are and will continue to occur at similar rates, regardless of varying U.S. state restrictions. Just as is the case in Poland, restrictive laws in the United States will not deter pregnant people from receiving abortions, but rather will lead to greater health implications at disproportionate rates. In order adhere to international human rights obligations and protect pregnant people’s health, the United States and Poland need to drastically change course.