

Concerned Scientists @ IU / Advocates for Science @ IU
Open Letter to Indiana State Legislators on Proposed Abortion Restrictions

We are writing on behalf of *Concerned Scientists @ IU* and its student affiliate organization *Advocates for Science @ IU*. We are a grass-roots, non-partisan community organization consisting of over 1200 members—scientists, students, and supporters of science—from the south-central Indiana region. Our membership includes residents from virtually every district in the state. While many of our members are faculty, students or staff at Indiana University, our organization does not officially represent the University. Concerned Scientists @ IU is dedicated to strengthening the essential role of science in public policy and evidence-based decision-making.

On behalf of CSIU's 1200 members, we write to express our concerns about proposed legislation that would limit or ban access to abortion during the earliest months of pregnancy in Indiana and its potential impacts on maternal and child health care. **We strongly urge you to reject any legislation that further restricts abortion care in Indiana.** We support the public statements by virtually all of America's major medical organizations (including the American Medical Association,¹ American College of Obstetrics and Gynecology,² American College of Pediatrics,³ and the American Public Health Association,⁴ among many others) that have underscored the importance of abortion as an essential part of comprehensive and high-quality healthcare.

With this letter, we highlight the scientific basis for this concern. The statement from the American College of Obstetrics & Gynecology articulates the medical concerns about abortion restrictions like those currently proposed in Indiana: "*Abortion is a safe, essential part of comprehensive health care, and ... it must be available equitably to people, no matter their race, socioeconomic status, or where they reside. ... Restrictive abortion policies, including restrictions and outright bans on this essential component of medical care, results in an increase in the inequities that already plague the health care system and this country.*"

Following the lead of major medical and public health organizations, we conclude that

- (1) **abortion is a safe, effective, and essential component of healthcare,**
- (2) **the proposed ban will worsen health outcomes for women in Indiana,**
- (3) **the proposed ban will have negative consequences on the health and well-being of Hoosier families,**
- (4) **the proposed ban will have an inequitable impact on the poor, ethnic and racial minorities, and rural Hoosiers,**
- (5) **the proposed ban undermines the physician-patient relationship that is fundamental to quality healthcare, and**
- (6) **the proposed legislation will have severe consequences for our ability to attract top-quality scientists to work and study in our state.**

In the sections below, we briefly summarize scientific evidence in support of these concerns.

¹ <https://www.ama-assn.org/press-center/press-releases/ruling-egregious-allowance-government-intrusion-medicine>

² <https://www.acog.org/news/news-releases/2022/06/acog-statement-on-the-decision-in-dobbs-v-jackson>

³ <https://www.aap.org/en/news-room/news-releases/aap/2022/aap-statement-on-supreme-court-decision-in-dobbs-v-jackson-womens-health-organization/>

⁴ https://www.apha.org/News-and-Media/News-Releases/APHA-News-Releases/2022/Abortion_SC

I. Abortion is a safe, effective, and essential component of healthcare

Abortion has been a widely established, safe, and legal medical procedure across the United States for half a century. The available scientific evidence demonstrates conclusively that abortion is a safe medical procedure, with extremely low complication rates.⁵ The risk of death from an abortion is extremely rare, and less than one-tenth the risk of childbirth and systematically lower than common medical procedures such as colonoscopies or even wisdom tooth removal.⁶ It is an important component of women's healthcare, and efforts to reduce access will undoubtedly result in negative health outcomes. As underscored by their formal statements, the medical community is virtually unanimous in its recognition of abortion as a safe, effective, and essential component of women's health care.⁷

II. The proposed ban will worsen health outcomes for women in Indiana

The proposed abortion ban puts women's lives at risk by limiting their ability to obtain essential health care. Many Hoosier women will be forced to carry their unwanted pregnancy to term. Others will choose to travel outside Indiana to obtain an abortion; some will attempt self-induced abortion. Each of these outcomes increases the likelihood of negative medical consequences that could be avoided if care were available.⁸

Hoosier patients who cannot obtain an abortion may be forced to carry their pregnancy to term, which carries significantly greater risk to maternal health and mortality than abortion itself. A woman's risk of childbirth-related death is approximately 14 times higher than the risk of death from a legal abortion.⁹ The proposed abortion ban also increases the likelihood that women may attempt self-induced abortions through harmful or unsafe methods.¹⁰ The empirical evidence from states that enacted abortion restrictions is already becoming clear. States with new restrictions based on gestational age saw maternal mortality increase by 38%.¹¹ Another study¹² found that maternal mortality rates in states with the most restrictive abortion laws were nearly double those of states with more comprehensive abortion access.

Forcing women to carry unwanted pregnancies to term also exacerbates other underlying medical conditions such as diabetes mellitus or pre-eclampsia.¹³ In addition, medications that are used for medical abortion are also widely used for unrelated conditions like rheumatoid arthritis. It is already documented that providers are wary of continuing to prescribe these essential medications to women for non-abortion related purposes.¹⁴ Medical evidence also indicates that negative psychological health

⁵ National Academies of Sciences, Engineering, Medicine, *The Safety and Quality of Abortion Care in the United States* 10 (2018); Upadhyay et al., *Incidence of Emergency Department Visits and Complications After Abortion*, 125 *Obstetrics & Gynecology* 175, 181 (2015)

⁶ ANSIRH, *Safety of Abortion in the United States*, Issue Brief No. 6, at 2 (Dec. 2014); American Soc'y for Gastrointestinal Endoscopy, *Complications of Colonoscopy*, 74 *Gastrointestinal Endoscopy* 745, 747 (2011)

⁷ Editors of the *New England Journal of Medicine*, the American Board of Obstetrics and Gynecology, et al., *The Dangerous Threat to Roe v. Wade*, 381 *New Eng. J. Med.* 979 (2019); ACOG, *Abortion Policy* (Nov. 2014, reaff'd Nov. 2020); Soc'y for Maternal-Fetal Med., *Access to Pregnancy Termination Services* (2017).

⁸ See, e.g., ACOG, *Committee Opinion No. 815, Increasing Access to Abortion* (Dec. 2020)

⁹ Raymond & Grimes, 119 *Obstetrics & Gynecology* at 216.

¹⁰ Jones et al., *Abortion Incidence and Service Availability in the United States, 2017*, at 3, 8 (2019)

¹¹ [https://www.ajpmonline.org/article/S0749-3797\(19\)30419-2/fulltext](https://www.ajpmonline.org/article/S0749-3797(19)30419-2/fulltext)

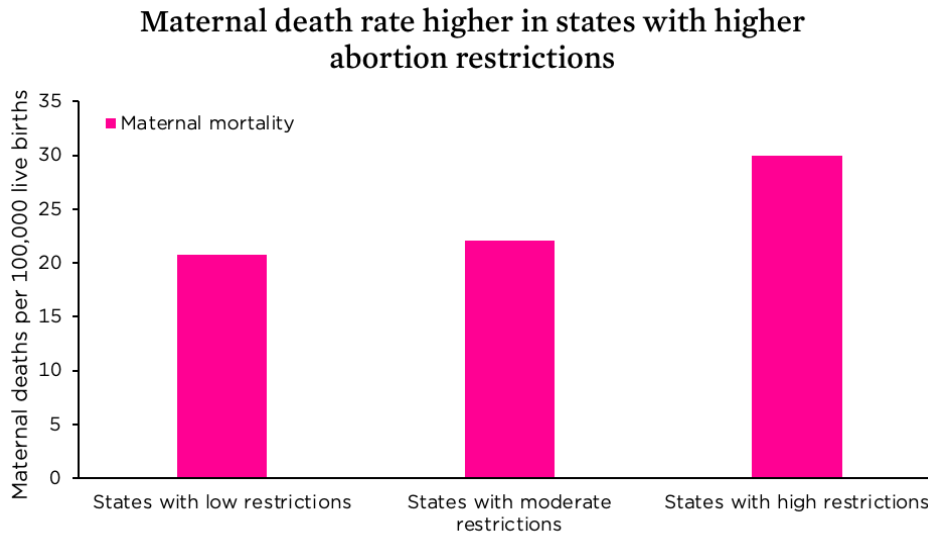
¹² [https://www.contraceptionjournal.org/article/S0010-7824\(21\)00090-1/fulltext](https://www.contraceptionjournal.org/article/S0010-7824(21)00090-1/fulltext)

¹³ ACOG Practice Bulletin No. 190, *Gestational Diabetes Mellitus* (Feb. 2018); ACOG Practice Bulletin No. 222, *Gestational Hypertension and Preeclampsia* (Dec. 2018).

¹⁴ <https://www.forbes.com/sites/victoriaforster/2022/07/18/arthritis-patients-are-being-denied-methotrexate-post-roe-are-people-with-cancer-next/?sh=2034025c450c>

outcomes—such as anxiety, lower self-esteem, and lower life satisfaction—are experienced by women who are denied abortions at a far higher rate than those women who obtained a needed abortion.¹⁵

Strict abortion bans have been adopted in other countries, with detrimental outcomes for women and mothers. Ireland passed an amendment banning all abortions in 1983, and it was ultimately repealed in 2018, because of a publicized case in which a miscarrying mother was allowed to die from sepsis under hospital care, rather than saving her life by an abortion while there was still a fetal heartbeat. El Salvador, which has a complete abortion ban, has high rates of suicide among teenage girls who are impregnated during rape and have no access to abortion.¹⁶



*Rates of maternal mortality are higher in states with more restrictive abortion policies.
Data source: Vilda et al., 2021.*

III. The proposed ban will produce negative consequences on the health and well-being of Hoosier families

In addition to direct impacts on women subject to an abortion ban, public health research indicates that abortion bans will likely harm the wellbeing of Hoosier families. The public health literature provides evidence for the following observations:

- Women denied abortion access are more likely to experience physical or psychological violence and more likely to live in poverty years after the denial of medical services.¹⁷
- Unintended or unwanted pregnancies are far more likely to result in low birth weight and preterm birth than planned pregnancies, both of which can have lifelong health consequences to the child.¹⁸
- Empirical evidence suggests that unwanted pregnancy also increases the likelihood that a child will experience neglect and psychological or physical aggression.¹⁹

¹⁵ Biggs et al., 74 JAMA Psychiatry at 172.

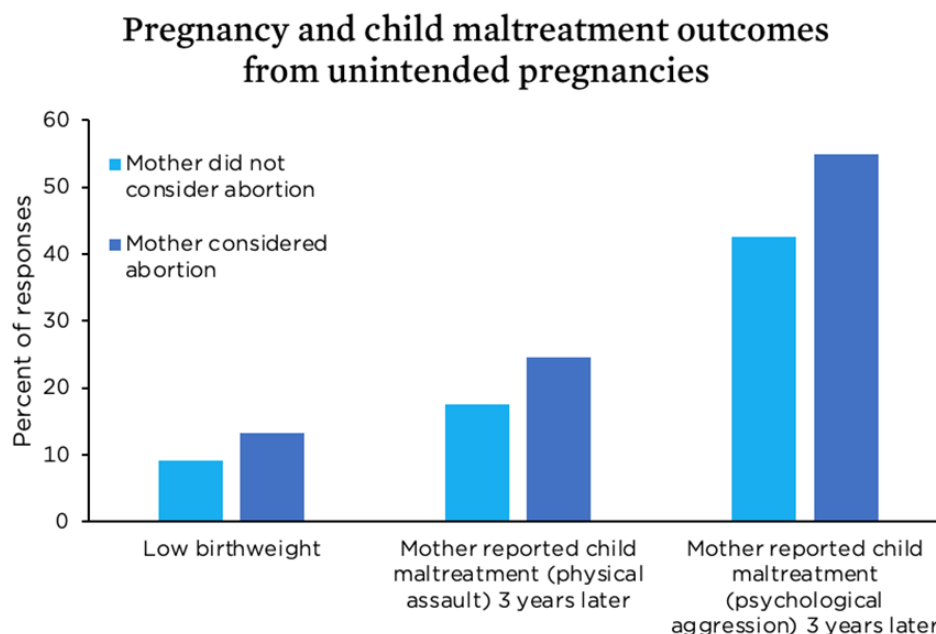
¹⁶ <https://www.reuters.com/article/us-el-salvador-suicide-teens/rape-abortion-ban-drives-pregnant-teens-to-suicide-in-el-salvador-idUSKCN0IW1YI20141112>

¹⁷ <https://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-014-0144-z>;
<https://ajph.aphapublications.org/doi/10.2105/AJPH.2017.304247>

¹⁸ <https://pubmed.ncbi.nlm.nih.gov/20012348/>

¹⁹ <https://pubmed.ncbi.nlm.nih.gov/26070372/>

- Indiana already has one of the highest rates of foster home placements in the region, trending nearly double the national per capita rate.²⁰ Additional restrictions on abortion will likely result in increased strain on an already overtaxed foster care system. An increased number of Hoosier children who enter foster care carries long-term risks— both on the course of the children’s lives and on the long term costs to Hoosier taxpayers.



Women who considered abortion during their unintended pregnancies had babies with lower birth weights and reported that their children experienced elevated rates of physical and psychological maltreatment years later. Data source: Guterman 2015.

IV. The proposed ban will have an inequitable impact on the poor, ethnic and racial minorities, and rural Hoosiers

Available public health research suggests that the proposed abortion ban will likely disproportionately impact ethnic and racial minorities, rural residents, and those of limited economic means. 75% of women seeking abortion in the United States are living at or below 200% of the federal poverty level, and the majority of patients seeking abortions identify as members of minority groups.²¹ Similarly, economic and geographic conditions constitute a significant barrier for medical care. Legislation that forces patients to continue pregnancy to term increases their risk of complications associated with later pregnancy and childbirth. Nationwide, the rate of pregnancy-related deaths in the U.S. has nearly tripled over the past 30 years,²² with Black women experiencing nearly three times the mortality rate for pregnancy- and childbirth-related complications than white patients.²³ Studies on the inequities associated with our healthcare system suggest that abortion bans will disproportionately harm Black women and other marginalized groups.²⁴ Conversely, economic studies on the impact of abortion legislation indicate that legalization of abortion has helped women’s education, labor force

²⁰ Indiana Youth Institute (2022), *Data Spotlight: Policies Influencing the Foster Care System*.

²¹ Jerman et al., Guttmacher Inst., Characteristics of U.S. abortion patients in 2014 and changes since 2008 (2016).

²² <https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm>

²³ CDC, Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths (Sept. 5, 2019); <https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2020/maternal-mortality-rates-2020.htm>

²⁴ <https://birthequity.org/news/black-maternal-health-amicus-brief-filed/>

participation, and earnings, with the strongest impact for Black women.²⁵ The proposed ban on abortion in Indiana thus carries significant potential to exacerbate inequities in women's health care, negatively affecting the most vulnerable Hoosier citizens.

V. The ban undermines the physician-patient relationship that is fundamental to quality healthcare.

Indiana's proposed abortion ban violates long-established principles of medical ethics and intrudes upon the foundational principles of the physician-patient relationship. Indiana's proposed ban would require medical professionals to violate the central medical principles—of *beneficence*, *non-maleficence*, and *respect for patient autonomy*—in order to avoid negative legal consequences. Any legislation that substitutes lawmakers' views for physicians' expert medical judgment interferes with the patient-physician relationship and poses significant dangers to patient well-being. For example, the American College of Obstetrics and Gynecology's Code of Professional Ethics requires that "the welfare of the patient must form the basis of all medical judgments" and that physicians should "exercise all reasonable means to ensure that the most appropriate care is provided to the patient."²⁶ Beneficence, the obligation to promote the well-being of others, and non-maleficence, the obligation to do no harm and cause no injury, have been central to the medical profession since the Hippocratic traditions nearly 2500 years ago.²⁷ Legal intrusions into this relationship are likely to cause long-term damage to patient care in Indiana. Strict abortion bans, even with exceptions, can cause a strain on physician-patient relationships. Ambiguities in legal language regarding medical interventions to protect the mother's health have led in other countries to unnecessary deaths of women suffering miscarriages or ectopic pregnancies, when doctors are unsure of the legality of the required abortions. For example, abortions in Poland are allowed in cases of rape, incest, and life-threatening pregnancies, but doctors there have been reluctant to perform legal abortions for fear of criminal liability or prison.²⁸

VI. The proposed legislation will have severe consequences for our ability to attract top-quality scientists to work and study in our state

Although data are preliminary and mostly anecdotal, there are clear indications that abortion restrictions such as those proposed for Indiana are having a chilling effect on recruitment and retention of female and minority faculty, graduate students, and research scholars and their spouses, partners, and families.²⁹ In many of the scholarly fields on which Indiana's educational and economic future depend female scientists are underrepresented. Some of the fields most critical to Indiana's economic development—engineering, agriculture, physical sciences—are those facing major inequities in female representation, as well as those facing the greatest challenges in attracting talent to Indiana. Many scientists predict a gradual "brain drain" from states that ban abortion.³⁰

On the basis of this medical and public health evidence, we conclude that **abortion is, and should remain, a fundamental part of women's health care in Indiana**. We ask you to reject Senate Bill 1 and any related legislation that would reject or further restrict Hoosier women's access to this essential part of health care.

²⁵ <https://reproductiverights.org/economists-amicus-brief-in-dobbs-v-jackson-womens-health/>

²⁶ ACOG, Code of Professional Ethics 2 (Dec. 2018).

²⁷ AMA Principles of Medical Ethics (rev. June 2001); ACOG, Committee Opinion No. 390, Ethical Decision Making in Obstetrics and Gynecology 1, 3 (Dec. 2007, reaff'd 2016).

²⁸ <https://www.cfr.org/article/abortion-law-global-comparisons>

²⁹ <https://www.science.org/content/article/scientists-roe-s-end-raises-concerns-about-personal-safety-and-professional-choices>

³⁰ <https://www.the-scientist.com/news-opinion/scientists-predict-brain-drain-from-states-that-ban-abortion-70184>