

The Commonwealth of Massachusetts

Executive Office of Health and Human Services
Department of Public Health
250 Washington Street, Boston, MA 02108-4619

Maura T. Healey Governor

Kimberley Driscoll Lieutenant Governor Kiame Mahaniah, MD, MBA Secretary

Robert Goldstein, MD, PhD Commissioner

November 17, 2025

Timothy Carroll House Clerk State House Room 145 Boston, MA 02133

Michael D. Hurley Senate Clerk State House Room 335 Boston, MA 02133

Dear Mr. Clerk,

Pursuant to Chapter 127 of the Acts of 2022, Section 43, please find enclosed a report from the Department of Public Health entitled "Abortion Desert and Maternity Care Desert Report".

Sincerely,

Robert Goldstein, MD, PhD Commissioner Department of Public Health







KIAME MAHANIAH, MD, MBA SECRETARY

ROBERT GOLDSTEIN, MD, PhD
COMMISSIONER

Abortion Desert and Maternity Care Desert Legislative Report



Legislative Mandate

The following report is hereby issued pursuant to Chapter 127 of the Acts of 2022, Section 43 as follows:

Not later than April 1, 2023, the department of public health, in consultation with Reproductive Equity Now, Inc., shall issue a report to the senate and house committees on ways and means and the joint committee on public health identifying areas of the commonwealth in which pregnant people do not have access to abortion, as defined in section 12K of chapter 112 of the General Laws, or birth care within a radius of 50 miles and providing recommendations to facilitate access to abortion and birth care in the identified areas. The report shall be made publicly available on the department's website.

Executive Summary

Overview

This report, requested by the Massachusetts Legislature, summarizes geographic access to abortion and maternity care in Massachusetts. Massachusetts is a small state with many exceptional health care providers, and thus geographic access deserts are rare. While the legislature defined an access desert as greater than 50 miles from care, we have also added analyses of 25-mile distances to highlight possible geographic access concerns. However, geographic distance only tells part of the story. Depending on the circumstances of the pregnant individual seeking care, the closest facility may not be able to provide the type or level of care needed. Therefore, we extended our analysis to look at sub-categories of abortion and maternity care not found at all facilities.

Key Findings

When looking more closely at sub-categories of abortion and maternity care, several limitations to accessing care emerged. Cape Cod and the Islands were most often distant from certain types of care, but there are also many areas of North Central Massachusetts and Western Massachusetts that experience access challenges. We also analyzed distance to care by disaggregating the population into racial and ethnic groups, to ensure that these results are viewed through a racial equity lens. This analysis found that American Indian/Alaskan Native populations in Massachusetts were most likely to have to travel far distances for care.

Limitations

A key limitation is that the focus on distance in this report does not take into consideration the significant additional barriers faced by individuals, including those with disabilities, that use public transportation, especially in more rural parts of the state. Other limitations include lack of data on social determinants of health such as insurance coverage and access to transportation by community as well as provider and appointment availability, provider cultural and linguistic competency, availability of doulas, levels of maternal care, challenges to describing age-based barriers and access to prenatal/postnatal care, and the unknowns of future changes in access.

Recommendations

We recommend that Massachusetts increase and maintain access points for abortion and maternity care, raise awareness about the dangers of anti-abortion centers, improve data access to address the limitations of this report, improve reimbursement and provider training for all types of birth and abortion care, expand access to culturally competent care, especially on Cape Cod and the Islands, and support maternal health efforts to increase access to midwifery care and birth center care.

Introduction

The following report is required by <u>Chapter 127 of the Acts of 2022</u>, <u>An Act Expanding Protections for Reproductive and Gender Affirming Care</u> (Chapter 127):

Section 43. Not later than April 1, 2023, the department of public health, in consultation with Reproductive Equity Now, Inc., shall issue a report to the senate and house committees on ways and means and the joint committee on public health identifying areas of the commonwealth in which pregnant people do not have access to abortion, as defined in section 12K of chapter 112 of the General Laws, or birth care within a radius of 50 miles and providing recommendations to facilitate access to abortion and birth care in the identified areas. The report shall be made publicly available on the department's website.

Chapter 127 was enacted following the U.S. Supreme Court's decision in <u>Dobbs v. Jackson</u> <u>Women's Health Organization</u> which overruled both <u>Roe v. Wade</u> and <u>Planned Parenthood of</u> <u>Southeastern Pennsylvania v. Casey</u> and held that there is no federal constitutional right to an abortion. Chapter 127 includes provisions to protect and expand access to reproductive healthcare and gender affirming care throughout the state, including creating a first-in-thenation health care provider shield law to provide protections for providers of reproductive care and gender affirming care against out-of-state investigations and prosecutions, professional discipline, civil liability, and adverse consequences for professional liability insurance. This legislation affirms the Commonwealth's position as a leader in protecting reproductive freedom and access to reproductive health care services for all Massachusetts residents.

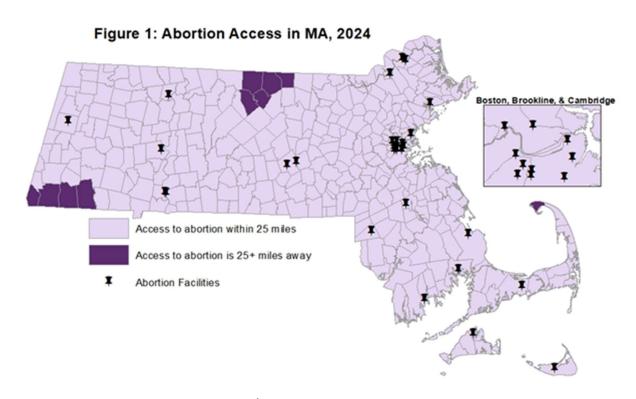
The Department delayed issuance of this report while the *Food & Drug Administration v*. *Alliance for Hippocratic Medicine* litigation challenging the FDA authorization of mifepristone, one of two drugs in the medication abortion protocol, made its way through the federal courts. The U.S. Supreme Court's June 13, 2024, decision in that case leaves the FDA approval of mifepristone unchanged, and this report reflects the current availability of abortion services in Massachusetts as of 2024.

While Massachusetts contains very few abortion and maternity care deserts as defined by a lack of services within a 50-mile radius, this report examines access using a broader lens and centers health equity. Drafted by the Massachusetts Department of Public Health (DPH), in consultation with the Reproductive Equity Now Foundation, this comprehensive report:

- identifies geographic areas in the state that do not have access to subtypes of abortion and maternity care within 50- and 25-mile radiuses (using a straight line/point-to-point distance).
- examines inequities in geographic access to abortion and maternity care among birthing people of reproductive age by race/ethnicity.
- contains recommendations for state leadership to facilitate access to reproductive care in the identified regions.
- serves to guide state policy in attempts to address racial and regional reproductive health inequities across the state.

Abortion Deserts

Abortion: geographic access to all abortion providers



Note: All map distances are straight line/point-to-point, not driving distance.

In general, Massachusetts has strong access to abortion care relative to many other states. Abortion care is most commonly provided by specialized clinical providers that offer abortion and other sexual and reproductive health care in outpatient clinics, with a smaller proportion of abortions provided by hospitals. With a small total area and large number of health care providers overall, there are no Massachusetts communities outside of a 50-mile radius from any facility providing abortion care, and no significant differences in access to an abortion facility by race and ethnicity. However, this does not mean that all communities have equal access to care. There are select municipalities, shown on the map above, that are located more than 25 miles from a Massachusetts abortion facility. These include municipalities in north Worcester County, south Berkshire County, and on Cape Cod (Barnstable County).

Given that these maps use a straight-line distance, in certain rural areas the actual driving distance to an abortion facility may be farther than 25 miles. Due to limited public transportation availability in these areas, this distance could present significant challenges to accessing care to a patient without access to reliable private transportation. Transportation challenges may be compounded depending on availability of appointments, gestational age, insurances accepted, planning for time off work, and obtaining childcare. An additional barrier to obtaining abortion care in Massachusetts is the large number of anti-abortion centers in the

Commonwealth. Also sometimes called crisis pregnancy centers, anti-abortion centers are facilities or mobile vans that look like medical clinics but do not offer comprehensive care, abortion care, or referrals. The Department encourages patients to research facilities at which they are seeking care and fully understand what types and level of services they provide.¹

Not all patients seeking abortion care have the same needs, and not all facilities providing abortion care are able to meet the needs of all patients. Below, this report explores some of the nuances of abortion access for specific patient circumstances.

Abortion: geographic access to hospital-based abortion providers

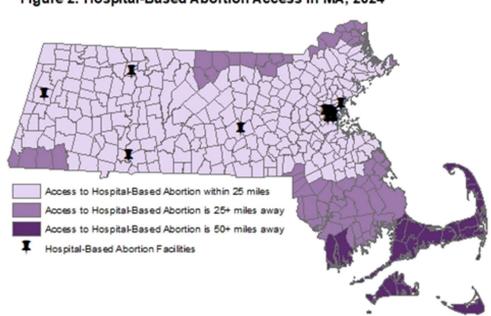


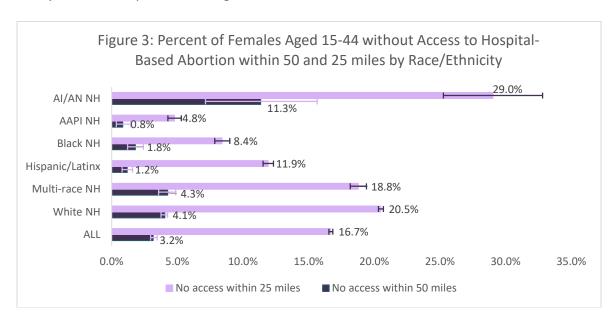
Figure 2: Hospital-Based Abortion Access in MA, 2024

Note: All map distances are straight line/point-to-point, not driving distance.

Patients with certain comorbid conditions and/or medical complexities may need to receive abortion care in a hospital setting rather than a freestanding or outpatient clinic. Typically, hospitals provide specialized care for patients with more complex medical needs. The map above shows access to hospital-based abortion providers in Massachusetts. Again, there is more difficult access to abortion care (a distance of more than 25 miles) for certain municipalities in north Worcester County and south Berkshire County, as well as northern Essex County and virtually all of Bristol and Plymouth Counties. In addition, all of Cape Cod and the Islands (Barnstable, Dukes, and Nantucket Counties) and some municipalities in southern Bristol County are more than 50 miles from the nearest hospital-based abortion provider.

¹ <u>https://www.mass.gov/avoid-anti-abortion-centers</u>

It is also important to note that while access to hospital-based abortion care must be maintained as a priority for those that need a higher level of care, the hyper-medicalization of abortion care has been used as a rationale for non-evidence-based restrictions on abortion care. Abortion is well documented as one of the safest medical procedures. Nationally, only 2% of people who receive abortion care experience complications, most of which are routine in nature and can be easily addressed. Complications are even less likely when abortions are performed during the first trimester of pregnancy, which is when most abortions take place. The risk of death associated with abortion is 14 times lower than that of childbirth and more akin to the risk of wisdom teeth removal or a colonoscopy. As a result, most abortion care can safely occur in outpatient settings like clinics.



AI/AN = American Indian/Alaskan Native. AAPI = Asian-American/Pacific Islander. NH = Non-Hispanic. Error bars represent 95% confidence intervals.

To determine if there were differences in access to different types of abortion care by race/ethnicity, we calculated the percent of Massachusetts residents aged 15-44 assigned female at birth who have access to abortion care within 50 miles and 25 miles of their communities (see methodology and Tables 1-2 for more information on methods used and full

² American College of Obstetricians and Gynecologists. (2024). *Abortion Access Fact Sheet*. https://www.acog.org/advocacy/abortion-is-essential/come-prepared/abortion-access-fact-sheet.

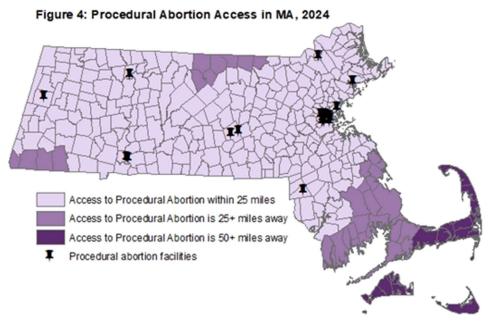
³ White K, Carroll E, Grossman D. Complications from first-trimester aspiration abortion: a systematic review of the literature. *Contraception*. 2015 Nov;92(5):422-38. doi: 10.1016/j.contraception.2015.07.013. Epub 2015 Aug 1. PMID: 26238336.

⁴ Raymond EG, Grimes DA. The comparative safety of legal induced abortion and childbirth in the United States. *Obstet Gynecol.* 2012 Feb;119(2 Pt 1):215-9. doi: 10.1097/AOG.0b013e31823fe923. PMID: 22270271.

results). There were no differences in access to abortion care overall by race/ethnicity with 100% of Massachusetts residents assigned female sex at birth having access to abortion care within 50 miles and over 99% having access within 25 miles. However, there were significant differences by race/ethnicity in certain types of abortion care, such as hospital-based care, procedural care, and care for those over 21 weeks gestation.

Nearly 17% of Massachusetts residents aged 15-44 assigned female sex at birth do not have access to hospital-based abortion care within 25 miles of their communities and 3.2% do not have access within 50 miles. Non-Hispanic American Indian/Alaska Native (AI/AN) individuals assigned female sex at birth are significantly less likely to have access to hospital-based abortion care within 25 and 50 miles of their communities compared to other racial/ethnic groups: 30% of non-Hispanic AI/AN females do not have access within 25 miles and 11.3% do not have access within 50 miles of their communities. White and multi-race non-Hispanic females are also more likely not to have access to hospital-based abortion care within 25 and 50 miles of their communities compared to Asian-American/Pacific Islander (AAPI), Black non-Hispanic, and Hispanic females. While these populations may have less access in terms of geographic proximity, there also may be differences in access to care among these groups due to issues related to transportation, getting time off work, childcare, financial means, insurance coverage, and other factors.

Abortion: geographic access to facilities providing procedural abortion care

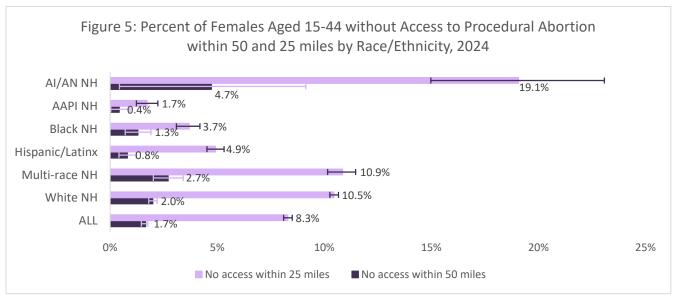


Note: All map distances are straight line/point-to-point, not driving distance.

There are two main types of abortion care: medication abortion and procedural abortion. There are many factors that may contribute to a patient choosing medication versus procedural abortion care. The most important factor is gestational age; medication abortion is

FDA-approved for use through 10 weeks of gestation, but it is commonly used for patients through 11 weeks gestational age in the United States. Patients presenting for abortion care who are beyond 11 weeks gestational age are typically ineligible for a medication abortion. However, patient choice also plays an important role. Some patients may choose procedural abortion even if they are eligible for medication abortion because of privacy (the abortion is completed in the facility rather than at home), other medical conditions (for example, patients with blood clotting disorders are not eligible for medication abortion), or legal reasons (patients traveling to Massachusetts from states where abortion care is illegal may prefer to complete the abortion in Massachusetts and not in their home state).

All abortion providers in Massachusetts offer medication abortion, but only some providers have the capacity to offer procedural abortion as well (conversely, while hospitals can provide medication abortion, most hospitals primarily offer procedural abortion). Figure 4 shows providers that offer procedural abortion. Again, there are geographic barriers to accessing procedural abortion care (a distance of more than 25 miles) for certain communities in north Worcester County and south Berkshire County. And while there are fewer locations in Bristol and Plymouth Counties more than 25 miles away from a procedural abortion provider compared to a hospital-based provider, most of Cape Cod (Barnstable County) and all of the Islands (Dukes and Nantucket Counties) remain more than 50 miles away from the nearest procedural abortion provider.



AI/AN = American Indian/Alaskan Native. AAPI = Asian-American/Pacific Islander. NH = Non-Hispanic. Error bars represent 95% confidence intervals.

Eight percent (8.3%) of Massachusetts residents assigned female at birth aged 15-44 do not have access to procedural abortion within 25 of their communities and nearly 2% do not have access within 50 miles. Similar to hospital-based abortion care, non-Hispanic American Indian/Alaskan Native populations have significantly lower geographic access to procedural care compared to other populations: 19.1% do not have access within 25 miles and 4.7% do not

have access within 50 miles. White and multi-race populations also have lower geographic access compared AAPI, Hispanic, and Black non-Hispanic populations.

Abortion: geographic access to facilities providing abortion care at 21 weeks gestation or greater

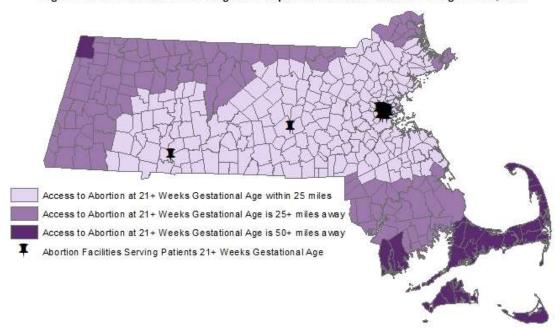


Figure 6: Abortion Access for Pregnant People 21+ Weeks of Gestational Age in MA, 2024

Note: All map distances are straight line/point-to-point, not driving distance.

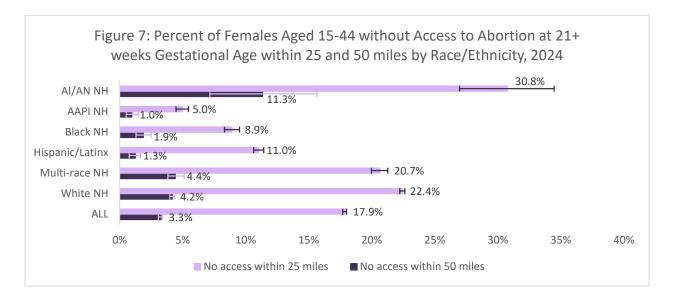
Most abortions in Massachusetts are conducted early in pregnancy. In 2022, 91% of Massachusetts abortions occurred prior to 13 weeks gestation and 97% occurred prior to 19 weeks gestation.⁵ However, access to abortion at greater gestational ages is an important part of the continuum of abortion care and must be accessible to ensure patient health, safety, and autonomy.

Figure 6 shows distances to abortion providers that offer abortion care at 21 weeks gestation or greater. The reasons why patients seek abortion care at this point in pregnancy are often complex. Patients seeking abortion care at this stage in pregnancy may have a recently diagnosed fetal anomaly or other pregnancy complication, may have experienced challenges accessing care earlier in pregnancy, lacked the social or financial support necessary to

⁵ Registry of Vital Records and Statistics, "Annual Massachusetts Induced Termination of Pregnancy Reports," Mass.gov, 2023, https://www.mass.gov/lists/annual-massachusetts-induced-termination-of-pregnancy-reports#itop-reports:-2021-2022-.

determine their desired pregnancy outcome earlier in pregnancy, or are experiencing other social, financial, or medical challenges not captured in these examples.^{6,7}

Facilities that can provide abortion care at 21 weeks gestation or more are exclusively located in Massachusetts' major urban centers. All of Cape Cod and the Islands, portions of Bristol County, and one community in Berkshire County are more than 50 miles from a facility that can provide abortion care at 21 weeks or more; with the remainder of Barnstable County, most of Franklin and Bristol Counties, and parts of Worcester, Essex, and Plymouth Counties more than 25 miles from a facility that can provide abortion care at 21 weeks or more.



AI/AN = American Indian/Alaskan Native. AAPI = Asian-American/Pacific Islander. NH = Non-Hispanic. Error bars represent 95% confidence intervals.

Overall, 17.9% and 3.3% of females aged 15-44 do not have access to abortion care for persons 21+ weeks gestation within 25 and 50 miles of their communities, respectively. These percentages are significantly higher among non-Hispanic AI/AN females compared to other groups, with over 30% not having access within 25 miles of their communities and 11.3% not having access within 50 miles. Higher percentages of white and multi-race non-Hispanic females also do not have access within these distances compared to AAPI, Hispanic, and Black NH females.

⁷ Finer LB, Frohwirth LF, Dauphinee LA, Singh S, Moore AM. Timing of steps and reasons for delays in obtaining abortions in the United States. *Contraception* (2006) 74:4, pp 334-344,

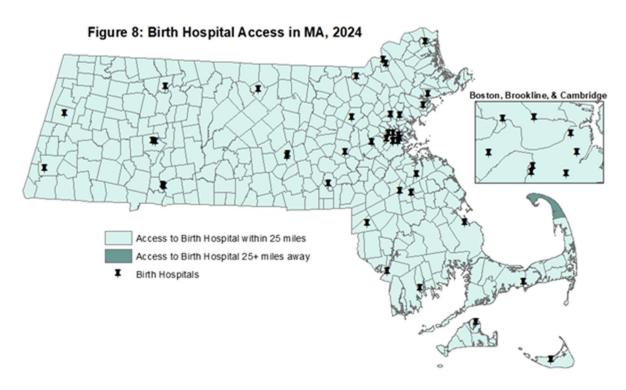
https://doi.org/10.1016/j.contraception.2006.04.010.

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⁶ Janiak E, Kawachi I, Goldberg A, Gottlieb B. Abortion barriers and perceptions of gestational age among women seeking abortion care in the latter half of the second trimester. *Contraception* (2014) 89:44, pp 322-327, https://doi.org/10.1016/j.contraception.2013.11.009.

Maternity Care Deserts

Maternity care: geographic access to all birth providers



Note: All map distances are straight line/point-to-point, not driving distance.

Similar to abortion access, in general Massachusetts has strong access to maternity care relative to many other states. There are no Massachusetts communities outside of a 50-mile radius from any facility providing maternity care. There are two municipalities on Cape Cod (Barnstable County) that are more than 25 miles from a facility offering maternity care. Again, actual driving distances, especially in rural areas, may exceed 25 miles in some cases, and public transportation may not be accessible in many rural communities.

It is important to note that while geographic access to maternity care remains relatively strong in Massachusetts, the recent trend has been towards *decreasing* access. Since 2014, 11 hospitals have closed or filed to close their maternity services in Massachusetts. The most recent closure of maternity care, at UMass Memorial Health HealthAlliance—Clinton Hospital—Leominster Campus, puts several communities in Central Massachusetts very close to 25 miles from the nearest maternity care. Additional closures could create new deserts where they do

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⁸ Department of Public Health, 2023. *Review of Maternal Health Services, 2023*. https://www.mass.gov/doc/maternal-health-report/download.

not exist today and could lead to more overcrowding and diversion in nearby maternity centers, which has the potential to impact quality of care.

Access to Birth Center within 25 miles Access to Birth Center 25+ miles away Access to Birth Center 50+ miles away Birth center

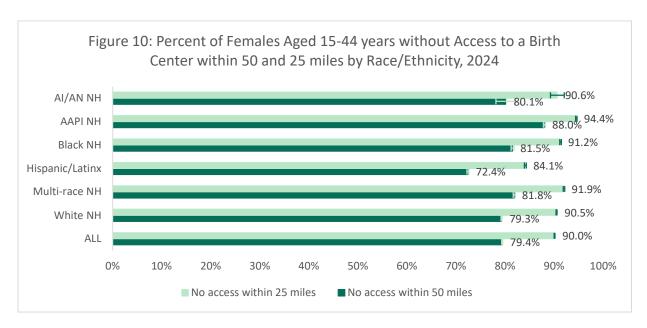
Maternity care: geographic access to birth centers

Note: All map distances are straight line/point-to-point, not driving distance.

Freestanding birth centers are an important element in the continuum of maternity care that are appropriate for individuals with low-risk pregnancies. Some individuals prefer a birth center because of their midwifery model of care, home-like setting, fewer interventions, and access to labor support strategies that may not be present in hospitals, such as additional support people, frequent position changes, hydrotherapy, and more. As described below, birth centers improve birth outcomes among communities of color. Unfortunately, following the closure of the Cambridge Birth Center in 2020 and the North Shore Birth Center in 2022, Massachusetts currently has only one freestanding birth center – out of 400 across the nation⁹ – located in Northampton. Therefore, parts of Central and Western Massachusetts are more than 25 miles from birth center services and all of Eastern Massachusetts, including the Cape and Islands, is more than 50 miles from birth center services. Boston's first birth center, Neighborhood Birth Center, is expected to open in 2025 and will increase access to birth center services in the Eastern part of the state.

⁹ American Association of Birth Centers. (2024). *Birth Centers are Growing*. https://www.birthcenters.org/birthcenters-are-growing.

While each pregnant person has a right to determine their own preferred pregnancy journey, the benefit of birthing centers to Black, Indigenous, and other people of color (BIPOC) has been well documented. Amidst a growing maternal health crisis, research has shown that BIPOC-owned birth centers may be "protective against experiences of discrimination when compared to care in the dominant, hospital-based system." The culturally-centered care model provided in many BIPOC-owned birth centers seems to play a role in improving the experience of autonomy and respect among BIPOC birthing people. 13



AI/AN = American Indian/Alaskan Native. AAPI = Asian-American/Pacific Islander. NH = Non-Hispanic. Error bars represent 95% confidence intervals.

Due to the extremely limited availability of birth centers in Massachusetts, 90% of reproductive aged Massachusetts residents assigned female sex at birth do not live within 50 miles of a birth center and 79.4% do not live within 25 miles of a birth center. A higher percentage of Hispanic/Latinx females have access to a birth center within 25 and 50 miles of their

¹⁰ Sakala, C., Declercq, E., Turon, J., & Corry, M. (2018). Listening to Mothers in California: A Population-Based Survey of Women's Childbearing Experiences, Full Survey Report. National Partnership.

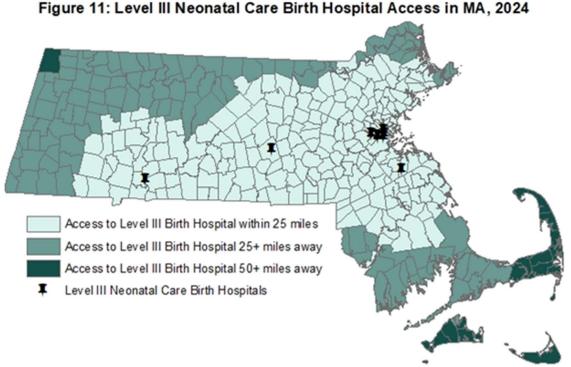
¹¹ Vedam, S., Stoll, K., Taiwo, T. K., Rubashkin, N., Cheyney, M., Strauss, N., McLemore, M., Cadena, M., Nethery, E., Rushton, E., Schummers, L., Declercq, E., & GVtM-US Steering Council. (2019). The Giving Voice to Mothers study: Inequity and mistreatment during pregnancy and childbirth in the United States. Reproductive Health, 16(1), 77. https://doi.org/10.1186/s12978-019-0729-2

¹² Karbeah J, Hardeman R, Katz N, Orionzi D, Kozhimannil KB. From a Place of Love: The Experiences of Birthing in a Black-Owned Culturally-Centered Community Birth Center. J Health Dispar Res Pract. 2022 Summer;15(2):47-60. PMID: 37275571; PMCID: PMC10237589.

¹³ Almanza JI, Karbeah J', Tessier KM, Neerland C, Stoll K, Hardeman RR, Vedam S. The Impact of Culturally-Centered Care on Peripartum Experiences of Autonomy and Respect in Community Birth Centers: A Comparative Study. Matern Child Health J. 2022 Apr;26(4):895-904. doi: 10.1007/s10995-021-03245-w. Epub 2021 Nov 24.

communities; however, the percent of those who do not have access are still over 80% and over 70% respectively. Over 90% of all other racial/ethnic groups do not have access within 50 miles and over 79% do not have access within 25 miles.

Maternity care: geographic access to hospitals with Level III neonatal care



Note: All map distances are straight line/point-to-point, not driving distance.

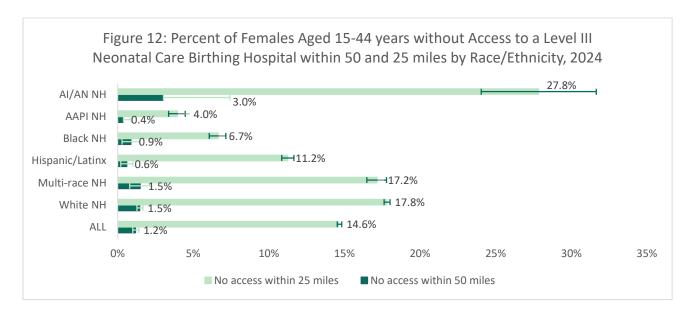
There are four levels of neonatal care: Level I (well newborn nurseries), Level II (special care nurseries), Level III (neonatal intensive care units), and Level IV (regional neonatal intensive care units). Infants who are born at less than 32 weeks' gestation, weigh less than 1500 grams at birth, or have medical or surgical conditions, regardless of gestational age, should be cared for at a Level III facility or above. Note that Boston Children's Hospital has the only Level IV neonatal intensive care unit in Massachusetts and is not a delivery hospital; therefore we have restricted this analysis to Level III hospitals.

Nearly all Level III hospitals in Massachusetts are located in major metro areas, significantly limiting access to care for individuals in other parts of the state. All of Berkshire, Barnstable,

¹⁴ Committee on Fetus and Newborn, Barfield WD, Papile L, Baley JE, Benitz W, Cummings J, Carlo WA, Kumar P, Polin RA, Tan RC, Wang KS, Watterberg KL; Levels of Neonatal Care. *Pediatrics* September 2012; 130 (3): 587–597. 10.1542/peds.2012-1999.

Dukes, and Nantucket Counties, most of Franklin County, and significant parts of Worcester, Essex, Plymouth, and Bristol Counties are more than 25 miles from a Level III hospital, with several municipalities more than 50 miles away.

Birthing people of color are more likely to have preterm births than their white counterparts, with rates of preterm births among Black people being the highest of any racial or ethnic group at 14.6%. Access to Level III hospitals is, therefore, especially important to address racial inequities in birth outcomes.



AI/AN = American Indian/Alaskan Native. AAPI = Asian-American/Pacific Islander. NH = Non-Hispanic. Error bars represent 95% confidence intervals.

While over 96% of all reproductive age female Massachusetts residents have access to Level III neonatal care birthing hospitals within 50 miles of their communities, 27.8% of non-Hispanic AI/AN female residents between ages 15-44 do not have access to Level III neonatal care centers within 25 miles of their communities; this is significantly higher than other racial/ethnic groups in the state. In addition, higher percentages of white (17.8%) and multi-race (17.2%) non-Hispanic populations do not have access to Level III neonatal care with 25 miles of their communities compared to AAPI (4.0%), Black NH (6.7%) and Hispanic (11.2%) populations.

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¹⁵ March of Dimes. (2024). *Preterm Birth*. https://www.marchofdimes.org/peristats/data?reg=99&top=3&stop=63&lev=1&slev=1&obj=1.

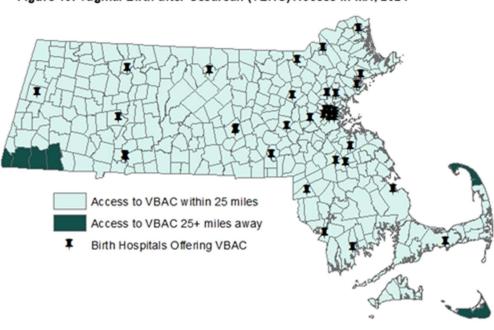


Figure 13: Vaginal Birth after Cesarean (VBAC) Access in MA, 2024

Note: All map distances are straight line/point-to-point, not driving distance.

Many birthing people with a prior cesarean delivery decide that they would like to deliver subsequent children vaginally. First time cesarean deliveries carry important risks for both the birthing parent and the newborn, and repeat cesareans have significantly increased risks. ¹⁶ While a vaginal birth after cesarean (VBAC) does carry a higher risk for uterine rupture, there are also many benefits to a successful VBAC, such as no abdominal surgery, shorter recovery period, lower risk of infection, less blood loss, and lower risk of certain health problems linked to multiple cesarean deliveries. ¹⁷ While not all patients are eligible for a trial of labor/VBAC, for those who are eligible it is an important option that can only be realized through access to a facility that allows and enables VBAC and is equipped to provide the emergency care that may be needed for an unsuccessful VBAC. Certain municipalities in Massachusetts are more than 25 miles from hospitals that allow patients with a previous cesarean delivery to attempt a VBAC, otherwise known as a trial of labor. These include several municipalities in south Berkshire County and a small number of communities in Barnstable and Nantucket Counties. While all

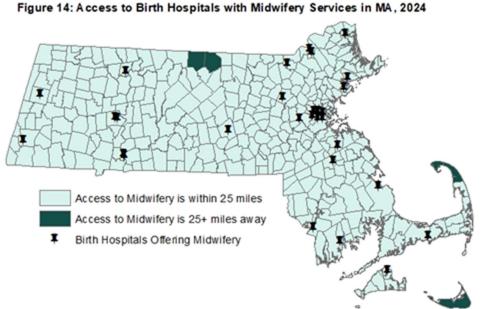
¹⁶ Backley S, Chen HY, Sibai BM, Chauhan SP, Fishel Bartal M. The association between number of repeat cesarean deliveries and adverse outcomes among low-risk pregnancies. *Int J Gynaecol Obstet*. 2022 Oct;159(1):246-253. doi: 10.1002/iigo.14092. Epub 2022 Feb 8. PMID: 34997574.

¹⁷ American College of Obstetricians and Gynecologists. (August 2022). *Vaginal Birth After Cesarean Delivery* (*VBAC*). https://www.acog.org/womens-health/faqs/vaginal-birth-after-cesarean-delivery.

the municipalities on Martha's Vineyard are within 25 miles of a hospital that offers VBAC, the hospital is only accessible by ferry or airplane.

Although 100% of Massachusetts female residents have access to hospitals that have the capacity to offer VBACs within 50 miles of their communities and over 99% have access within 25 miles, access to hospitals offering VBAC remains particularly important for communities of color. BIPOC individuals tend to have higher rates of primary cesarean therefore higher rates of repeat cesarean, putting them at higher risk of morbidity associated with repeat cesarean. 18 Access to maternity care facilities that support trial of labor and VBAC is an important element in reducing inequities in maternal morbidity and mortality.

Maternity care: geographic access to facilities providing midwife-attended births



Note: All map distances are straight line/point-to-point, not driving distance.

Much like birth centers, midwife-attended births are an important element in the continuum of maternity care that are appropriate for individuals with low- and moderate-risk pregnancies. Midwives can practice in a variety of settings, including birth centers, hospitals, and homes. Some pregnant people prefer midwifery care because they seek a more personalized experience, with fewer interventions and higher rates of autonomy in decision

¹⁸ Okwandu, I.C., Anderson, M., Postlethwaite, D. et al. Racial and Ethnic Disparities in Cesarean Delivery and Indications Among Nulliparous, Term, Singleton, Vertex Women. J. Racial and Ethnic Health Disparities 9, 1161-1171 (2022). https://doi.org/10.1007/s40615-021-01057-w

making.¹⁹ In 2021, 17.9% of births in Massachusetts were attended by midwives. While this rate of midwife-attended births was the 9th highest among all US states,²⁰ is it considerably lower than many other peer countries.

The low rate of midwife-attended births is connected to important limitations to midwifery care in Massachusetts. There are three education and certification pathways for midwives in the United States: certified nurse midwives (CNM), certified professional midwives (CPM), and certified midwives (CM). Until very recently, only CNMs were able to be licensed and practice in hospital settings in Massachusetts, and despite CNMs having full scope of practice in Massachusetts since 2012, individual hospital and insurance policies often restrict their practice. These restrictions limit the number of facilities that offer midwifery services. CPMs were recently authorized to practice in Massachusetts by *An Act Promoting Access to Midwifery Care and Out-Of-Hospital Birth Options*²¹ and a certification process is still being developed. Additionally, there is significant variation in the ratio of midwives to total providers at each hospital in Massachusetts, ranging from 0 to 70 percent.²² The mere availability of midwives at a hospital does not indicate that they are widely available, that they are able to practice frequently, that they are able to practice within their full scope of practice, or that pay and insurance reimbursement is adequate to cover the care that they provide.

All municipalities in Massachusetts are within 50 miles of a facility offering midwife-attended births, but 5 municipalities in Worcester, Barnstable, and Nantucket Counties are more than 25 miles from a birthing hospital that offers midwifery services. Continuing to improve upon this access is essential for birthing people and is particularly beneficial to BIPOC birthing people. Across all birthing people, midwifery care is associated with better maternal and neonatal health outcomes²³ as well as decreased spending.²⁴

Although geographic access to facilities with a midwifery service is good, with 100% of MA females of reproductive age of all races/ethnicities having access within 50 miles of their communities and over 99% having access within 25 miles, access to hospitals offering midwifery care supports racial equity in maternal outcomes. Midwifery access and integration has demonstrated to improve birth outcomes including reducing cesarean rates, prematurity, and

¹⁹ Combellick, JL et al. Midwifery care during labor and birth in the United States. *American Journal of Obstetrics & Gynecology* (2023) 228:5, pp S983 - S993

²⁰ Government Accountability Office (GAO). (April, 2023). *Midwives: Information on Births, Workforce, and Midwifery Education*. https://www.gao.gov/assets/gao-23-105861.pdf.

²¹ https://malegislature.gov/Laws/SessionLaws/Acts/2024/Chapter186

²² Massachusetts Health Policy Commission, "Certified Nurse Midwives and Maternity Care in Massachusetts" (Boston: Massachusetts Health Policy Commission, January 2022).

²³ ten Hoope-Bender P et al. Improvement of maternal and newborn health through midwifery. *The Lancet* (2014), 384:9949, pp 1226 – 1235.

²⁴ Altman MR, Murphy SM, Fitzgerald CE, Andersen HF, Daratha KB. The Cost of Nurse-Midwifery Care: Use of Interventions, Resources, and Associated Costs in the Hospital Setting. *Women's Health Issues* (2017), 27:4, pp 434-440, https://doi.org/10.1016/j.whi.2017.01.002.

neonatal mortality.²⁵ These poor outcomes are significantly higher among Black and other communities of color. Therefore, prioritizing midwifery access among BIPOC communities could improve outcomes.

Methodology

This report contains two analyses: a spatial analysis identifying communities outside of 25- and 50-mile radiuses of abortion and maternity care providers and a population-based analysis examining differences in access to abortion and maternity care providers by race/ethnicity. Both analyses looked at access to various types of providers, including providers offering any abortion care; hospital-based abortion care; procedural abortion care; abortion for patients greater than 21 weeks gestational age; any birthing/maternity care; birth centers; Level III neonatal birthing hospitals; birthing hospitals offering vaginal birth after cesarean (VBAC); and birthing hospitals offering midwifery services.

Data used in this report were compiled from multiple sources, including the Department of Public Health's Registry of Vital Records and Statistics' *Annual Massachusetts Induced Termination of Pregnancy Reports*²⁶ and *Annual Birth Reports*,²⁷ Reproductive Equity Now's *Massachusetts Abortion Care Guide*,²⁸ the Department of Public Health's Bureau of Health Care Safety and Quality's *Massachusetts Licensed or Certified Health Care Facility/Agency Listing*,²⁹ the Leapfrog Group's Hospital and Surgery Center Ratings,³⁰ and 2020 population estimates by age/sex/race/ethnicity and municipality from the University of Massachusetts Donahue Institute.³¹

Maps were created using ArcMap 10.7 to draw 50 mile and 25-mile radiuses in the shape of a circle from identified health care providers in Massachusetts. Municipalities (cities and towns) that fell outside of the 50-mile or 25-mile radiuses were identified as not having an abortion or maternity care facility within 50 or 25 miles, respectively. When a municipality was only partially within the 50 or 25 radiuses, it was excluded from the list of municipalities identified as

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²⁵ Vedam S., Stoll K., MacDorman M., Declercq E., Cramer R., Cheyney M., Fisher T., Butt E., Yang Y. T., Powell Kennedy H. (2018). Mapping integration of midwives across the United States: Impact on access, equity, and outcomes. *PLoS One*, 13(2), e0192523. 10.1371/journal.pone.0192523

²⁶ Registry of Vital Records and Statistics. (2023). *Annual Massachusetts Induced Termination of Pregnancy Reports*. Massachusetts Department of Public Health. https://www.mass.gov/lists/annual-massachusetts-induced-termination-of-pregnancy-reports.

²⁷ Registry of Vital Records and Statistics (2024). *Annual Massachusetts Birth Reports*. Massachusetts Department of Public Health. https://www.mass.gov/lists/annual-massachusetts-birth-reports

²⁸ Reproductive Equity Now. (2023). *Massachusetts Abortion Care Guide*. https://reproequitynow.org/find-a-provider-massachusetts.

²⁹ Bureau of Health Care Safety and Quality (2023, November). *Massachusetts Licensed or Certified Health Care Facility/Agency Listing*. Massachusetts Department of Public Health. https://www.mass.gov/info-details/find-information-about-licensed-or-certified-health-care-facilities.

³⁰ The Leapfrog Group (2023). *Leapfrog's Hospital and Surgery Center Ratings*. https://ratings.leapfroggroup.org/

³¹ UMass Donahue Institute (2024). Massachusetts Population Estimates Program. https://donahue.umass.edu/business-groups/economic-public-policy-research/massachusetts-population-estimates-by-massachusetts-geography

having an abortion or maternity care facility within 50 or 25 miles. This was done because the distance measured was a straight line/point-to-point, meaning that the distance does not take into account that travel from a facility to a given point within a municipality is very rarely in a straight line and therefore the distance traveled from the outermost point of the circle drawn is likely greater than 25 or 50 miles. This analysis does not include health care providers located in other states. While some communities located more than 25 or 50 miles away from an abortion or birth hospital facility may have closer providers in other states, we excluded out of state providers because we did not have data on out-of-state providers and a large proportion (31.2%) of births in Massachusetts are covered by Medicaid, which is not portable to other states.

The percent of Massachusetts females of reproductive age (ages 15-44) without access to abortion and maternity care within 50- and 25-mile radiuses by race/ethnicity was calculated using 2020 interim population estimates stratified by municipality, sex, age, and race/ethnicity from the University of Massachusetts Donahue Institute (UMDI).³³ In census population files, female refers to sex assigned at birth and not gender identity.³⁴ Racial/ethnic groups are "bridged," meaning each individual is only assigned to one racial/ethnic group. The groups "Asian non-Hispanic" and "Native Hawaiian/Pacific Islander non-Hispanic" were added together for this analysis and labeled "Asian American Pacific Islander non-Hispanic." To create the charts displaying percent of females of reproductive age without access to different types of abortion and maternity care facilities by race/ethnicity, the results of the spatial analysis were first used to identify municipalities that fell within and outside of 50- and 25-mile radiuses of abortion and birth facilities. For each subtype of facility (all abortion facilities, birth center only facility, birthing hospital offering VBAC, etc.) municipalities were grouped according to if the municipality was within 25 miles of care, outside of 25 miles of care but within 50 miles of care, or outside of 50 miles of care. Then, the total population of females of reproductive age for the groups of municipalities outside of 25 miles of care but within 50 miles of care and outside of 50 miles of care were added together respectively to create the two groups "No access within 25 miles" and "No access within 50 miles." The total number of females of reproductive age within each of these two groups was divided by the total number of females of reproductive age in the state as a whole to determine the percent of females of reproductive age within each group. These percentages represent the "ALL" category in each bar chart. This process was repeated for each of the following racial/ethnic groups: American Indian/Alaska Native non-Hispanic (AI/AN), Asian American Pacific Islander non-Hispanic (AAPI), Black non-Hispanic, Hispanic/Latinx, Multi-race non-Hispanic, and White non-Hispanic. Because the population files used for this analysis are estimates, 95% confidence intervals were calculated for each percentage. (Table 1 and Table 2). To test if there were statistical differences between racial/ethnic groups, a chi-square test was performed. Results are displayed in Tables 1-2.

https://www.marchofdimes.org/peristats/data?reg=25&top=11&stop=154&lev=1&slev=4&obj=1&sreg=25.

³² March of Dimes. (2024). *Health Insurance/Income*.

³³ UMass Amherst Donahue Institute. (2022). *UMDI Interim 2020 Population Estimates by Age, Sex, Race, and Municipality: Statement of Methods, Assumptions, and Limitations.*

³⁴ United States Census Bureau. (2024). Glossary. https://www.census.gov/glossary/?term=Sex

Limitations

While this report aimed to evaluate the full scope of abortion care and maternity care access across Massachusetts, there are several limitations that must be considered. There were several access-related factors that would have been valuable to include in this report, but were unable to be included because no reliable data source existed to provide information for analysis. Factors that are not included in this report include:

- Social determinants of health, including economic stability, housing, education, racism, discrimination, social support, and community violence among others. Our analysis found that, geographically, American Indian/Alaska Native (AI/AN) populations have the lowest access to abortion/maternity facilities followed by White, non-Hispanics. While Black and Hispanic/Latinx populations live closer to many of these facilities, we know they still have worse maternal and child health outcomes compared to White, non-Hispanics. This report focuses on access to care based on geography, which while important, is not the only barrier to accessing care. Living close to abortion/maternity facilities is just one of many factors that can determine health outcomes. Other factors, such as experiences with racism or discrimination, access to resources to help navigate complex healthcare systems, ability to take time off of work for both appointments and to recover, transportation (explained in more detail below), childcare, and social/community support may be as or more important than geography in accessing quality abortion and maternity care.
- Insurances accepted. Not all insurance plans are accepted by all providers, including MassHealth, and whether an individual's insurance is accepted at a particular facility can drastically change their ability to access care. Given the information available for this report, we were unable to determine whether insurance availability was a factor in access to care.
- Provider and appointment availability. We were unable to determine which providers are accepting new patients and the average wait time for a new patient appointment. Many providers in Massachusetts are experiencing long wait times for new appointments or have closed their patient panels entirely; this may mean that the geographically closest facility may not be an option for patients seeking care.
- Provider cultural and linguistic competency. We have limited and inconsistent data on languages spoken by providers, and even less information about cultural competency to ensure that patients from varied backgrounds are able to receive respectful care. However, these are important factors in access which may result in patients choosing a provider that is not geographically closest, exacerbating distances traveled to receive care. Availability of these data would allow us to further contextualize access to abortion and maternity care in Massachusetts.
- Doulas. Doulas are non-clinical trained professionals who provide continuous physical, emotional, and informational support to pregnant people. Doulas are available for both abortion and childbirth. However, there is no reliable source of data on the doula workforce or the availability of doulas in certain facilities. In December 2023, MassHealth announced that it would begin covering doula services for its members, an

- important step toward racial and health equity. Further data is needed to analyze doula access in Massachusetts.
- Access to transportation. As described above, the distances used to identify deserts in
 this report are straight-line distances, which approximate but may underestimate
 driving distances. However, for individuals that do not have access to private vehicles,
 travel distances to care may be substantially longer. Public transportation can take
 inefficient routes, be subject to delays, or in some parts of the state simply not exist. We
 were unable to account for travel distances for individuals who must rely on friends and
 family, ride hailing services, and public transportation when traveling to receive care.
- Levels of maternal care. While this report describes distances to hospitals offering Level III neonatal care, access to an appropriate level of maternal care, especially for high-risk pregnancies, is also important to achieve positive health outcomes. Massachusetts has perinatal regulations that define levels of neonatal care, but there are no similar regulations that define the expectations for different levels of maternity care. Thus, there is no standardized way to assess the level of maternity care available at hospitals across the Commonwealth. Addressing this gap is an important step towards ensuring that pregnant people have accurate information to choose the right birthing facility for their circumstances.

There is not full concordance between hospitals that report abortion procedures to the Department of Public Health and hospitals that are included in this analysis. Hospitals providing fewer than 20 abortions per year in the last two years were not included on the maps in Figures 1-6. While these hospitals may have provided a limited number of abortions for existing patients, they often do not have a mechanism for new patients specifically seeking abortion care to make an appointment and access care.

Abortion care in the United States is increasingly being delivered via telemedicine, where an individual seeking an abortion does not have to travel to a physical clinic location.³⁵ However, this report focuses only on geographic distance to physical clinic locations, and thus does not capture the facilitators and barriers to telemedicine abortion.

Access to abortion services is also limited by age in a way that other services are not. While it is true that over 99% of all people assigned female at birth of reproductive age in Massachusetts are within 25 miles of an abortion care facility, young people face additional barriers in accessing abortion care. After the passage of the ROE Act, age-based restrictions were lifted for those ages 16 or older. However, individuals below 16 years of age seeking an abortion must still obtain either parental consent or judicial bypass. These additional steps may delay care or stop it from happening altogether.

³⁵ Society of Family Planning. (February 2024). #WeCount Public Report, April 2022 to September 2023. https://doi.org/10.46621/675707thmfmv.

³⁶ St. 2020, c. 227, § 40.

³⁷ G.L. c. 112, § 12R.

Maternity care services are not limited to labor and delivery. Pregnant people also need access to prenatal and postpartum care, including perinatal mental health services. This analysis does not include these services, but geographic (and other) access to these services is an important part of ensuring positive health outcomes for pregnant people and their infants. It is also important to note that the patient's choice of prenatal care provider generally dictates where they will deliver, based on the provider's employer or admitting privileges. This can create barriers to access to care that are not described in this report.

Finally, this report captures abortion and maternity care access as of the summer of 2024, and changes to access in both services are not only possible but likely in the near future. While the Supreme Court's June 13, 2024 decision in *Food & Drug Administration v. Alliance for Hippocratic Medicine* left access to medication abortion unchanged, there are likely to be ongoing political and legal challenges to abortion access. The bankruptcy filing of Steward Hospitals in 2024 resulted in the closure of two hospitals (Carney Hospital and Nashoba Valley Medical Center) and the transfer of other hospitals to new operators. While the two hospitals that closed did not offer maternity care, it is unknown at this time whether the new hospital operators may make changes that could affect access to maternity care.

Conclusion

Major Findings

Overall, Massachusetts residents have good geographic access to abortion and maternity care, usually within 25 miles. We further evaluated access by looking specifically at resident distance to various elements of abortion and maternity care, including hospital-based abortion care, procedural abortion care, abortion care after 21 weeks gestational age, birth centers, hospitals offering Level III newborn care, VBAC services, and midwifery services. These analyses show important limitations to access for certain populations that should be addressed to support health equity and positive health outcomes.

As defined by the need to travel more than 50 miles to access abortion care, there are no longer any overall abortion deserts in Massachusetts. However, there are significant areas of decreased access when we look at hospital-based abortion care, procedural abortion care, and abortion care after 21 weeks gestational age. For each of these categories, most of Cape Cod and the Islands and parts of Western and Northern Massachusetts remain 25-50+ miles away from care.

Similar to abortion care, there are no overall maternity care deserts in Massachusetts in which residents would need to travel greater than 50 miles to access care. There are two municipalities on Cape Cod in which residents would need to travel more than 25 miles. However, access to other elements of maternity care is less promising. There is only one birth center in the state, and it is located in Northampton, meaning that much of Central/Western Massachusetts is greater than 25 miles away and all of Eastern Massachusetts, including Cape Cod and the Islands, is greater than 50 miles away. Access to birth centers is important for all pregnancy-capable people, but the location of Massachusetts' only birth center in a majority white and suburban setting means limited access to birth centers for BIPOC birthing people and no Massachusetts birth centers that are BIPOC-owned and integrate cultural safety and care models that are designed by and for communities of color. Additionally, access to hospitals offering Level III neonatal care is limited to major metro areas with approximately half of the state 25-50+ miles away from this type of care. Finally, access to the midwifery model of care is also limited in Massachusetts by licensure, professional autonomy, and integration restrictions.

Finally, the findings of this report are limited by a lack of data to measure access barriers caused by insurance coverage, provider availability, and use of public rather than private transportation. Thus, there may be additional barriers experienced by individuals in Massachusetts that are not captured here.

Recommendations

Encourage more hospitals to publicly offer abortion care.

Given the barriers to accessing abortion care, it is important to maximize the availability of access points for abortion care. While several hospitals in Massachusetts provide abortion care,

in many cases this care is only practically accessible for patients who are already receiving care from a provider affiliated with that hospital or patients at later gestational ages or greater medical complexity. While we are not suggesting that everyone begin receiving abortion care at hospitals (especially given the often-greater costs of accessing hospital-based abortion care), ensuring that hospitals with the capacity to offer abortion care are open to the public and able to schedule appointments for patients not already being seen at that hospital may increase accessibility and also serves to destigmatize abortion. This is especially important for rural and critical access hospitals in areas that are otherwise underserved and could include medication abortion provided at hospital-licensed outpatient clinics.

Where possible, integrate abortion care into primary care.

Abortion care, particularly medication abortion and early procedural abortion, is a common medical practice that can and should be integrated into primary care. However, abortion care is often siloed away from primary care services, stigmatizing abortion and decreasing its availability. Some of the barriers faced by primary care providers who would like to integrate abortion care into their practice include increased insurance and security costs and prohibitions on providing abortion care in certain settings based on receipt of federal funding. However, there are resources available to primary care providers that are interested in integrating abortion care into general primary care³⁸ that can help address these and other barriers. We also encourage community health centers to explore offering abortion care as one of their primary care services.³⁹ The Massachusetts Department of Public Health's Sexual and Reproductive Health Program can work with healthcare systems that want to make this integration.

Identify data sources for insurance, provider availability, linguistic and cultural competency, doulas, transportation, and levels of maternal care.

As stated in the limitations section, we were not able to fully evaluate barriers to abortion and maternal health access in Massachusetts because we lack reliable data elements measuring insurance accepted by existing providers, appointment and provider availability, provider linguistic and cultural competency, availability of doula services, transportation access to providers, and levels of maternal care. Identifying these data sources and adding to a future iteration of this report will be helpful in garnering a comprehensive understanding of abortion care and maternal care in our state.

Maintain access to abortion care via telemedicine

As this report was focused on geographic proximity to in-person care, it does not reflect access to abortion care by telemedicine. Made possible as a result of the COVID-19 pandemic during

³⁸ https://www.ansirh.org/research/ongoing/primary-care-initiative

³⁹ https://www.reproductiveaccess.org/resource/fags-integrating-abortion-community-health-centers/

which the FDA lifted in-person dispensing requirements for mifepristone, telemedicine abortion care is essential. It offers access where there may have previously been none, such as for those who are not able to travel for care due to disability, lack of transportation, distance to care, childcare responsibilities, or safety concerns from an abusive partner or family member. Access to telemedicine care should be preserved by maintaining and expanding the legal structures that allow this care and ensuring that insurance payors continue to reimburse for this service at parity with in-person care.

Continue to support maternal health policies that increase access to midwifery services.

In August 2024, the Massachusetts legislature passed *An Act Promoting Access to Midwifery Care and Out-Of-Hospital Birth Options*. This bill ensures that CPMs can be licensed in the state of Massachusetts, updates statewide birth center regulations, supports the training of new midwives, and creates equitable reimbursement strategies for both CNMs and CPMs. These strategies, and others address in the new law, will help expand access to midwifery care and will be key to supporting maternal health in Massachusetts.

Ensure adequate reimbursement for all birth and abortion care.

In addition to third-party payor parity for telemedicine services and equitable reimbursement for midwifery care, increasing reimbursement for all birth and abortion services is vital to provider sustainability. Many providers report that MassHealth rates, in particular, are not adequate to cover their costs and create a disincentive to providing care for low-income patients. Increasing reimbursement rates from both public and private insurers will help ensure that all patients can access the care that they need.

Expand access to training for birth and abortion care.

To maintain and expand the availability of birth and abortion care described in this report, we must ensure that the next generation of providers have the skills needed to continue to provide this essential care. This includes primary care and women's health specialty providers that have the capacity to offer care for complex pregnancies, abortion care at a range of gestational ages, VBAC care, and midwifery care. Expanding medical training programs both inside and outside Massachusetts and attracting and retaining a skilled workforce to all parts of the Commonwealth is key to ensuring access to these services for the long term.

Increase funding for birth centers.

Like midwifery services, birth centers are an integral component of maternal health care and provide a path toward decreasing maternal health disparities. Access to birth center care remains difficult for many Massachusetts residents – there is only one birth center in the state, and it is located in Northampton. As we look ahead to the opening of Neighborhood Birth Center in 2025, it is important to prioritize intentional investments that allow all pregnant people to make the birthing choice that is right for them.

Openly identify anti-abortion centers throughout the state.

Anti-abortion centers, also known as crisis pregnancy centers, falsely market themselves as sexual and reproductive health clinics that can offer a pregnant person access to the full suite of options: abortion, parenting, or adoption. In reality, these centers do not provide comprehensive, medically accurate services and can harm pregnant people by providing inaccurate information about abortion, misrepresenting the gestational age of a pregnancy, and causing other delays to care. In June of 2024, the Department of Public Health launched a public information campaign to ensure that consumers are fully informed about the risks of anti-abortion centers when making decisions about accessing reproductive health care. 40

Expand culturally competent access to abortion and maternity care on Cape Cod and the Islands

Many of the figures above demonstrate a particular lack of access to abortion and maternity care on Cape Cod and the Islands. This not only results in long distances to care for all individuals living in these areas, but also has a particular impact on Massachusetts' American Indian/Alaskan Native population, which is concentrated in this part of the state. Efforts to expand access on Cape Cod and the Islands should pay particular attention to providing culturally competent care for American Indian/Alaskan Native populations, and these efforts should include both in-person and telemedicine options.

⁴⁰ https://www.mass.gov/avoid-anti-abortion-centers

Table 1: Percent of MA Females Aged 15-44 wi	thout Access to Specific T	ypes of Abortion Care	
Access to Hospital-Based Abortion Care			
Race/Ethnicity	No access within 25	No access within 50	
	miles (95% CI)	miles (95% CI)	
American Indian/Alaska Native NH	29.0% (25.2%, 32.8%)	11.3% (7.1%, 15.6%)	
Asian/Native Hawaiian/Pacific Islander NH	4.8% (4.3%, 5.3%)	0.8% (0.3%, 1.4%)	
Black NH	8.4% (7.8%, 9.0%)	1.8% (1.2%, 2.4%)	
Hispanic /Latinx	11.9% (11.5%, 12.3%)	1.2% (0.8%, 1.6%)	
Multiracial NH	18.8% (18.2%, 19.4%)	4.3% (3.6%, 4.9%)	
White NH	20.5% (20.3%, 20.7%)	4.1% (3.8%, 4.3%)	
All races/ethnicities	16.7% (16.5%, 16.8%)	3.2% (3.0%, 3.3%)	
Access to Procedural Abortion Care			
Race/Ethnicity	No access within 25	No access within 50	
	miles (95% CI)	miles (95% CI)	
American Indian/Alaska Native NH	19.1% (15.0%, 23.1%)	4.7% (0.4%, 9.1%)	
Asian/Native Hawaiian/Pacific Islander NH	1.7% (1.2%, 2.2%)	0.4% (0.0%, 0.9%)	
Black NH	3.7% (3.1%, 4.3%)	1.3% (0.7%, 1.9%)	
Hispanic /Latinx	4.9% (4.5%, 5.3%)	0.8% (0.4%, 1.2%)	
Multiracial NH	10.9% (10.2%, 11.5%)	2.7% (2.0%, 3.4%)	
White NH	10.5% (10.3%, 10.7%)	2.0% (1.8%, 2.2%)	
All races/ethnicities	8.3% (8.1%, 8.5%)	1.7% (1.5%, 1.8%)	
Access to Abortion Care after 21 Weeks Gestation			
Race/Ethnicity	No access within 25	No access within 50	
	miles (95% CI)	miles (95% CI)	
American Indian/Alaska Native NH	30.8% (27.0%, 34.5%)	11.3% (7.1%, 15.6%)	
Asian/Native Hawaiian/Pacific Islander NH	5.0% (4.5%, 5.5%)	1.0% (0.5%, 1.5%)	
Black NH	8.9% (8.3%, 9.5%)	1.9% (1.3%, 2.5%)	
Hispanic /Latinx	11.0% (10.6%, 11.4%)	1.3% (0.8%, 1.7%)	
Multiracial NH	20.7% (20.0%, 21.3%)	4.4% (3.8%, 5.1%)	
White NH	22.4% (22.2%, 22.6%)	4.2% (4.0%, 4.4%)	
All races/ethnicities	17.9% (17.7%, 18.0%)	3.3% (3.1%, 3.4%)	

Note: All differences in access to abortion care by race/ethnicity displayed are statistically significant:

- Access to hospital-based care within 25 miles is significant at χ^2 =32,527, df=5, p<.0001.
- Access to hospital-based care within 50 miles is significant at χ^2 =8,784, df=5, p<.0001.
- Access to procedural care within 25 miles is significant at χ^2 =20,441, df=5, p<.0001.
- Access to procedural care within 50 miles is significant at χ^2 =3,620, df=5, p<.0001.
- Access to care for those 21+ weeks gestational age within 25 miles is significant at χ^2 =72,479, df=5, p<.0001.
- Access to care for those 21+ weeks gestational age within 50 miles is significant at χ^2 =8,703, df=5, p<.0001.

Table 2: Percent of MA Females Aged 15-44 without Access to Specific Types of Maternity Care			
Access to Level III Neonatal Care Birth Hospitals			
Race/Ethnicity	No access within 25 miles (95% CI)	No access within 50 miles (95% CI)	
American Indian/Alaska Native NH	27.8% (24.0%, 31.6%)	3.0% (0.0%, 7.4%)	
Asian/Native Hawaiian/Pacific Islander NH	4.0% (3.4%, 4.5%)	0.4% (0.0%, 0.9%)	
Black NH	6.7% (6.1%, 7.2%)	0.9% (0.3%, 1.5%)	
Hispanic /Latinx	11.2% (10.8%, 11.6%)	0.6% (0.2%, 1.0%)	
Multiracial NH	17.2% (16.5%, 17.8%)	1.5% (0.8%, 2.2%)	
White NH	17.8% (17.6%, 18.0%)	1.5% (1.3%, 1.7%)	
All races/ethnicities	14.6% (14.5%, 14.8%)	1.2% (1.0%, 1.4%)	
Access to Birth Centers			
Race/Ethnicity	No access within 25 miles (95% CI)	No access within 50 miles (95% CI)	
American Indian/Alaska Native NH	90.6% (89.2%, 92.0%)	80.1% (78.1%, 82.1%)	
Asian/Native Hawaiian/Pacific Islander NH	94.4% (94.3%, 94.6%)	88.0% (87.8%, 88.2%)	
Black NH	91.2% (91.1%, 91.4%)	81.5% (81.2%, 81.8%)	
Hispanic /Latinx	84.1% (83.9%, 84.3%)	72.4% (72.2%, 72.6%)	
Multiracial NH	91.9% (91.8%, 92.1%)	81.8% (81.6%, 82.1%)	
White NH	90.5% (90.4%, 90.5%)	79.3% (79.2%, 79.3%)	
All races/ethnicities	90.0% (90.0%, 90.1%)	79.4% (79.3%, 79.5%)	

Note: All differences in access to maternity care by race/ethnicity displayed are statistically significant:

- Access to Level III neonatal care within 25 miles is significant at χ^2 =27,852, df=5, p<.0001.
- Access to Level III neonatal care within 50 miles is significant at χ^2 =2,169, df=5, p<.0001.
- Access to birth centers within 25 miles is significant at χ^2 =12,084, df=5, p<.0001.
- Access to birth centers within 50 miles is significant at χ^2 =13,228, df=5, p<.0001.