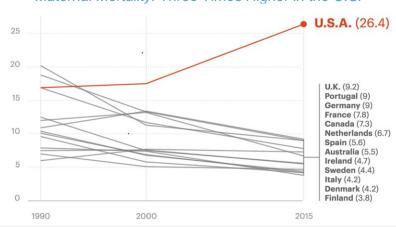




## **Maternal Mortality**

The rate of maternal mortality in the U.S. is three times greater than any other developed country, and it is rising. More moms are dying today than 20 years ago. In Pennsylvania, the rate has doubled since 1994. Maternal mortality rates are 2.6 times higher for black women than for white women in the U.S. and Pennsylvania. <sup>2</sup>



Maternal Mortality: Three Times Higher in the U.S.

As a result of investing in avoidable treatment and complications and not investing in the right services at the right time, the U.S. has high rates of mortality, morbidity, C-sections, complications, and preterm births. About one in three moms have a C-section to deliver the baby.<sup>3</sup> and one in 10 births are preterm.<sup>4</sup>

Over 60% of maternal deaths are preventable due to factors, such as lack of knowledge on warning signs and need to seek care, misdiagnosis and ineffective treatments, and lack of coordination between providers.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> The Lancet, Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)31470-2/fulltext?code=lancet-site

<sup>&</sup>lt;sup>2</sup> America's Health Rankings, Maternal Mortality in Pennsylvania in 2018,

https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/maternal\_mortality/state/PA

<sup>&</sup>lt;sup>3</sup> CDC, Cesarean Delivery Rate by State, https://www.cdc.gov/nchs/pressroom/sosmap/cesarean\_births/cesareans.htm

<sup>&</sup>lt;sup>4</sup> CDC, Percentage of Births Born Preterm by State, <a href="https://www.cdc.gov/nchs/pressroom/sosmap/preterm\_births/preterm.htm">https://www.cdc.gov/nchs/pressroom/sosmap/preterm\_births/preterm.htm</a>

<sup>&</sup>lt;sup>5</sup> Maternal Mortality Review Committees, *Report from Nine Maternal Mortality Review Committees*, https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf

Half of pregnancy-related causes of death include hemorrhage, cardiovascular and coronary conditions, cardiomyopathy, or infection.<sup>6</sup> Other factors include the opioid epidemic and social determinants of health.

More than half of maternal deaths occur in the postpartum period.<sup>7</sup> For example, one in seven women experience postpartum depression, and one in five of those will consider suicide.

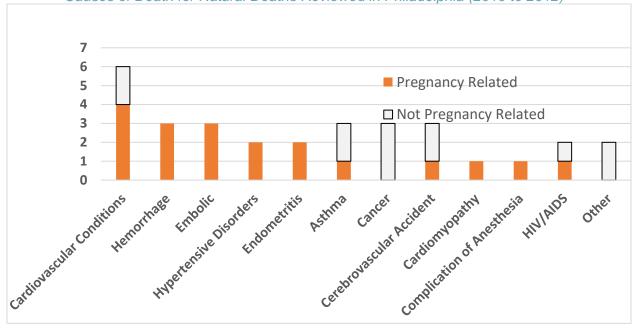
Pennsylvania can be the best place for a mom to have a healthy baby, but there are important improvement opportunities in the Commonwealth.<sup>8</sup>

Pennsylvania's Rank (out of 50) on Perinatal Care Measures in the U.S.

Maternal Mortality	Infant Mortality	Low Birth Weight	Cesarean Delivery	Prenatal Care Before 3 <sup>rd</sup> Trimester	Tobacco Use During Pregnancy
17	26	27	30	32	31

Pennsylvania became the 33<sup>rd</sup> state with a Maternal Mortality Review Committee (MMRC) in 2018. The MMRC will review maternal deaths and develop strategies for the prevention of maternal deaths.<sup>9</sup> Prior to this statewide MMRC, Philadelphia was the only city in Pennsylvania with an MMRC. The Philadelphia MMRC found cardiovascular issues to be the leading cause of natural pregnancy related deaths, and drugs to be the leading cause of accidental deaths.

Causes of Death for Natural Deaths Reviewed in Philadelphia (2010 to 2012)<sup>10</sup>



<sup>&</sup>lt;sup>6</sup> Maternal Mortality Review Committees, *Report from Nine Maternal Mortality Review Committees*, <a href="https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf">https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf</a>

<sup>&</sup>lt;sup>7</sup> Maternal Mortality Review Committees, *Report from Nine Maternal Mortality Review Committees*, <a href="https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf">https://www.cdcfoundation.org/sites/default/files/files/ReportfromNineMMRCs.pdf</a>

<sup>&</sup>lt;sup>8</sup> America's Health Rankings, *Maternal Mortality in Pennsylvania in 2018*, <a href="https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/maternal\_mortality/state/PA">https://www.americashealthrankings.org/explore/health-of-women-and-children/measure/maternal\_mortality/state/PA</a>

<sup>&</sup>lt;sup>9</sup> Act No. 24, https://www.legis.state.pa.us/cfdocs/legis/li/uconsCheck.cfm?yr=2018&sessInd=0&act=24

<sup>&</sup>lt;sup>10</sup>Philadelphia Maternal Mortality Review Team, Maternal Mortality in Philadelphia, 2010-2012, https://www.phila.gov/health/pdfs/MMR%202010-12%20Report%20-%20final%20060115.pdf

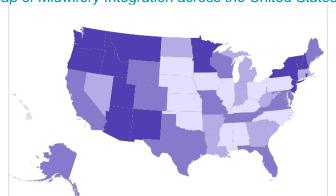
## **Certifying Midwives**

Countries with lower maternal mortality rates have integrated midwives into their healthcare systems to a much greater degree than the U.S. Midwives are trained professionals with special expertise in supporting women to maintain a healthy pregnancy and birth. They offer individualized care, education, counseling, and support to a woman and her newborn.

"I wanted the best prenatal care possible for my 2nd pregnancy. I knew that the midwife I chose would be available for questions throughout my pregnancy. And she helped me prepare both physically and psychologically for childbirth. Our midwife was with us every step of the way – from prenatal care to birth at home to multiple home visits in the weeks following the birth." ~ Mother

States that have done the most to integrate midwives into the healthcare workforce tend to have the best outcomes for mothers and babies. **Pennsylvania ranks 13**<sup>th</sup> in terms of the lowest degree of midwifery integration.<sup>11</sup> In Great Britain, midwives assist in around half of all births. In Pennsylvania, 11% of births are attended by a certified midwife.<sup>12</sup>

"Midwifery in the U.S. is extremely marginalized. It's completely undervalued, and it's a constant uphill battle to provide the high-quality care that we want to give. In other countries, midwives are the standard. Here, we're the outlier." ~ Midwife



Map of Midwifery Integration across the United States<sup>13</sup>

Deeper shades of purple represent higher integration and lighter shades represent lower integration of midwives

Integrating midwives into healthcare systems could prevent more than 80% of maternal and newborn deaths worldwide by filling gaps in obstetric services and reducing overuse of unnecessary, high-risk services. <sup>14</sup> Midwives reduce instrumental births, preterm births, and miscarriages for women without serious health complications. <sup>15</sup>

<sup>&</sup>lt;sup>11</sup> PLOS One, *Mapping integration of midwives across the United States: Impact on access, equity, and outcomes,* <a href="https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0192523">https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0192523</a>

<sup>&</sup>lt;sup>12</sup> American Collage of Nurse-Midwives, State Fact Sheets, http://www.midwife.org/State-Fact-Sheets

<sup>&</sup>lt;sup>13</sup> PLOS One, *Mapping integration of midwives across the United States: Impact on access, equity, and outcomes,* <a href="https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0192523">https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0192523</a>

<sup>&</sup>lt;sup>14</sup> The Lancet, The Power of Midwifery, https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)60855-2/fulltext

<sup>&</sup>lt;sup>15</sup> Cochrane, Midwife-led continuity models of care compared with other models of care for women during pregnancy, birth and early parenting, <a href="https://www.cochrane.org/CD004667/PREG\_midwife-led-continuity-models-care-compared-other-models-care-women-during-pregnancy-birth-and-early">https://www.cochrane.org/CD004667/PREG\_midwife-led-continuity-models-care-compared-other-models-care-women-during-pregnancy-birth-and-early</a>

**Australia** is one of the countries with the lowest rates of maternal and infant mortality. Women live longer, spend less on health care, and receive excellent care across the board, especially in maternity care. Midwives are essential to a successful birth and parenting experience in Australia. The midwives conduct a comprehensive prenatal assessment at 20 weeks to initiate wrap-around services for six weeks to up to one year postpartum, depending on the risk level. Some function in hospitals and delivery settings, while others go into the home to develop the appropriate attachment and care behaviors. Parenting training and mental health assessments are built into the childbirth classes and home visits.

The three types of certified midwives in the U.S. are listed below. In, Pennsylvania, only Certified Nurse-Midwives are licensed.

- Certified Midwives (CM) and Certified Nurse-Midwives (CNM) are midwives who are certified by the American Midwifery Certification Board. They are licensed, educated in midwifery at the graduate level, and certified based on the requirements of the American College of Nurse-Midwives. CNMs and CMs work in all settings, including hospitals, homes, and birth centers.
- Certified Professional Midwives (CPMs) are midwives who are certified by the North American Registry of Midwives. They have knowledge of and experience in out-ofhospital settings. They are educated in midwifery through self-study, apprenticeship, or educational programs, and primarily work outside of the hospital setting.

The Scope of Practice for Certified Nurse-Midwives in Pennsylvania is based on laws and regulations from 1929, the 1980s, and 2009 that require a collaborative agreement with a physician. <sup>16</sup> Pennsylvania was the last state in the country to allow CNMs to prescribe and administer drugs. Medicaid in Pennsylvania, as well as all of the other states, reimburses CNMs. <sup>17</sup>

However, Certified Midwives (CM) and Certified Professional Midwives (CPN) are not licensed or regulated in Pennsylvania though they are in neighboring states.

- CMs can be licensed in New York, Maine, Rhode Island, New Jersey, and Delaware. In New York, where CMs have been licensed since 1997, at least 28 hospitals employ CMs and CMs are reimbursed by Medicaid and private insurers at the same rate as CNMs for midwifery professional services.<sup>18</sup>
- CPMs are licensed or certified in 33 states and 14 states reimburse for their services.

As a result, access to maternity care in all settings is an issue, particularly in rural areas, and most home births are not being attended by licensed providers in Pennsylvania. Pennsylvania is also losing Pennsylvania-trained midwives to other states with licensure and reimbursement policies. The US-Midwifery Education, Regulation, and Association task force has established principles for state regulation of midwifery.<sup>20</sup>

"A lot of people don't realize the different things that midwives do — you don't just catch babies. There's the counseling you do at all stages of the pregnancy, and after."

~ Rural midwife

https://www.pacode.com/secure/data/049/chapter18/subchapatoc.html

<sup>&</sup>lt;sup>16</sup> PA Code, Subchapter A Section 18.6 – Practice of Midwifery,

<sup>17</sup> Chapter 1142 Midwives' Services, https://www.pacode.com/secure/data/055/chapter1142/chap1142toc.html

http://nysalm.org/

http://narm.org/pdffiles/Statechart.pdf

<sup>&</sup>lt;sup>20</sup> http://www.usmera.org/index.php/2015/11/20/principles-for-model-u-s-midwifery-legislation-regulation/

Pennsylvania is also the only state in the Northeast that has CNMs under the Board of Medicine. Al of the other states have it under the Board of Nursing or as a separate board (e.g., New York and New Jersey).<sup>21</sup>

Pennsylvania could create an infrastructure for midwives to become an integral part of the maternity care workforce. CMs can be integrated into existing statute and regulation with amendments and can be jointly regulated with shared title as Board Certified Midwives. Subsequently, CPMs can be engaged in a process leading to CPM licensure. This two-step process of integrating midwifery licensure could improve access to care through workforce development and help tailor services.

<sup>&</sup>lt;sup>21</sup> PA Department of State, Bureau of Professional and Occupational Affairs. Review of State Professional and Occupational Licensure Board Requirements and Process. https://www.dos.pa.gov/ProfessionalLicensing/Documents/EO2017-03-Executive-Report-Occupational-Licensing.pdf