

right care.
right time.
right place.



PERINATAL REGIONALIZATION



1 in 4 at-risk newborns are born at a facility that is not equipped to meet their needs.

On average, **1,100 infants are born at very low birth weight (VLBW)** each year in Missouri. Around **1,500 infants are born very preterm** each year in Missouri (Source: March of Dimes Peristats).

Up to **26% of these babies are NOT born at a facility with a NICU** specially equipped for their care (Source: MCHB, Title V Information System).



Very Preterm Babies more than 8 weeks premature are 55%* more likely to die **if Born in a Hospital WITHOUT a Neonatal Intensive Care Unit.**



Very Low Birth Weight Babies under 3.5 lbs. are 62%* more likely to die **if Born in a Hospital WITHOUT a Neonatal Intensive Care Unit.**



Extremely Low Birth Weight Babies under 2.2 lbs. are 80%* more likely to die **if Born in a Hospital WITHOUT a Neonatal Intensive Care Unit.**

Despite increased training and advancing technology, data shows moms still make the best transport vehicles.

*(Source: Lasswell et al. 2010)

Perinatal Regionalization defines hospitals at risk-appropriate levels, regarding both maternal and neonatal care, and creates a system for referral to ensure high-risk pregnancies and low birth weight, preterm, or otherwise at-risk newborns receive consultation and access to risk-appropriate care. This approach was one of seven recommendations to emerge from the Governor-appointed Missouri Task Force on Prematurity and Infant Mortality.

How did we get here?

The Birth Of Perinatal Regionalization In Missouri



2011

The Missouri Legislature established the Missouri Task Force on Prematurity and Infant Mortality (House Bill 555) in order to seek evidence-based and cost-effective approaches to reduce Missouri's preterm birth and infant mortality rates.

The Task Force was comprised of senators, representatives, medical professionals, members of various health organizations, representatives of Missouri departmental agencies and other citizens with a vested interest in improving Missouri's birth outcomes.

2011 – 2013

The Task Force met regularly during this period, examining current research and practices associated with the prevention and treatment of prematurity and infant mortality in its quest to develop strategies that could be implemented in Missouri.

December 2013

The Task Force submitted its findings and recommendations to the Governor and General Assembly, with Seven Key Recommendations, including Presenting Regionalized Perinatal Care, an evidence-based, time-tested system shown to reduce infant mortality. Supported by 40 years of data and endorsed by national and state-wide professional and health organizations, including the CDC, AAP, and ACOG, Perinatal Regionalization became the first recommendation to move forward.

February 2014

Rep. Kurt Bahr filed House Bill 1898, which would implement Perinatal Regionalization. The bill failed to make it out of the House during the 2014 session.

April 2014

In response to the Task Force's recommendation to establish a body to oversee implementation of the remaining recommendations, appointments were made to the newly formed Prematurity and Infant Mortality Subcommittee, residing under the Children's Services Commission.

April 2014 – December 2014

The Subcommittee continued to pursue Perinatal Regionalization as its first recommendation to move toward implementation, and subsequent work on drafts of legislation commenced.

Monthly meetings allowed for input from various stakeholders and true collaboration among physicians, nurses, hospital representatives, MO departmental agencies, and various professional organizations with an interest in maternal and child health.

January 2015

Rep. Marsha Haefner filed House Bill 735 and Sen. Dan Brown filed Senate Bill 342 to implement Perinatal Regionalization, with the full support of myriad Subcommittee members and stakeholders in Missouri.

In the Know

Perinatal Regionalization in Missouri



Perinatal Regionalization defines hospitals at risk-appropriate levels, regarding both maternal and neonatal care, and creates a system for referral to ensure high-risk pregnancies and low birth weight, preterm, or otherwise at-risk neonates receive consultation and access to risk-appropriate care.

The basics:



- Perinatal Regionalization is a formal system of assessing a facility's ability to deliver specialized care to both pregnant moms and newborns. It establishes a clear network for appropriate referrals based on hospital assessments, with the goal of ensuring moms and babies receive the right care at the right place. This approach was one of seven recommendations to emerge from the Governor-appointed Prematurity and Infant Mortality Task Force.
- A regionalized system does **NOT** mandate how referrals are made, **NOR** does it outline penalties for doctors or patients who decline to transfer between facilities.
- Among all providers, maternal and neonatal centers, the common goal of Perinatal Regionalization is to reduce infant and maternal morbidity and mortality and improve birth outcomes.
- Cost savings associated with perinatal regionalization are related to avoiding long-term complications for very low birth weight and very preterm infants by providing necessary risk-appropriate care immediately or as soon as possible after birth.

The data:



- Forty years of data supports the claim that risk-appropriate care reduces the risk of mortality for very low birth weight and very preterm infants.
- A meta-analysis published in The Journal of the American Medical Association in 2010 evaluated 41 publications spanning more than 30 years. Researchers found that, for very low birth weight babies (≤ 3.5 lbs), there was a **62% increase** in the odds of neonatal or pre-discharge mortality for infants born in hospitals without a Neonatal Intensive Care Unit compared to those born in Level III facilities; these odds **increased 80%** when considering extremely low birth weight (≤ 2.2 lbs) babies. For very preterm infants, the odds of neonatal or pre-discharge mortality **increased 55%** when born in lower level facilities. (Lasswell et al. 2010)
- At least **21 states** have already implemented a formal system of perinatal regionalization, with the oldest systems in Georgia, Tennessee, South Carolina, North Carolina, New Mexico, and California. An additional 15 have some component of regionalization in place.

In Missouri:



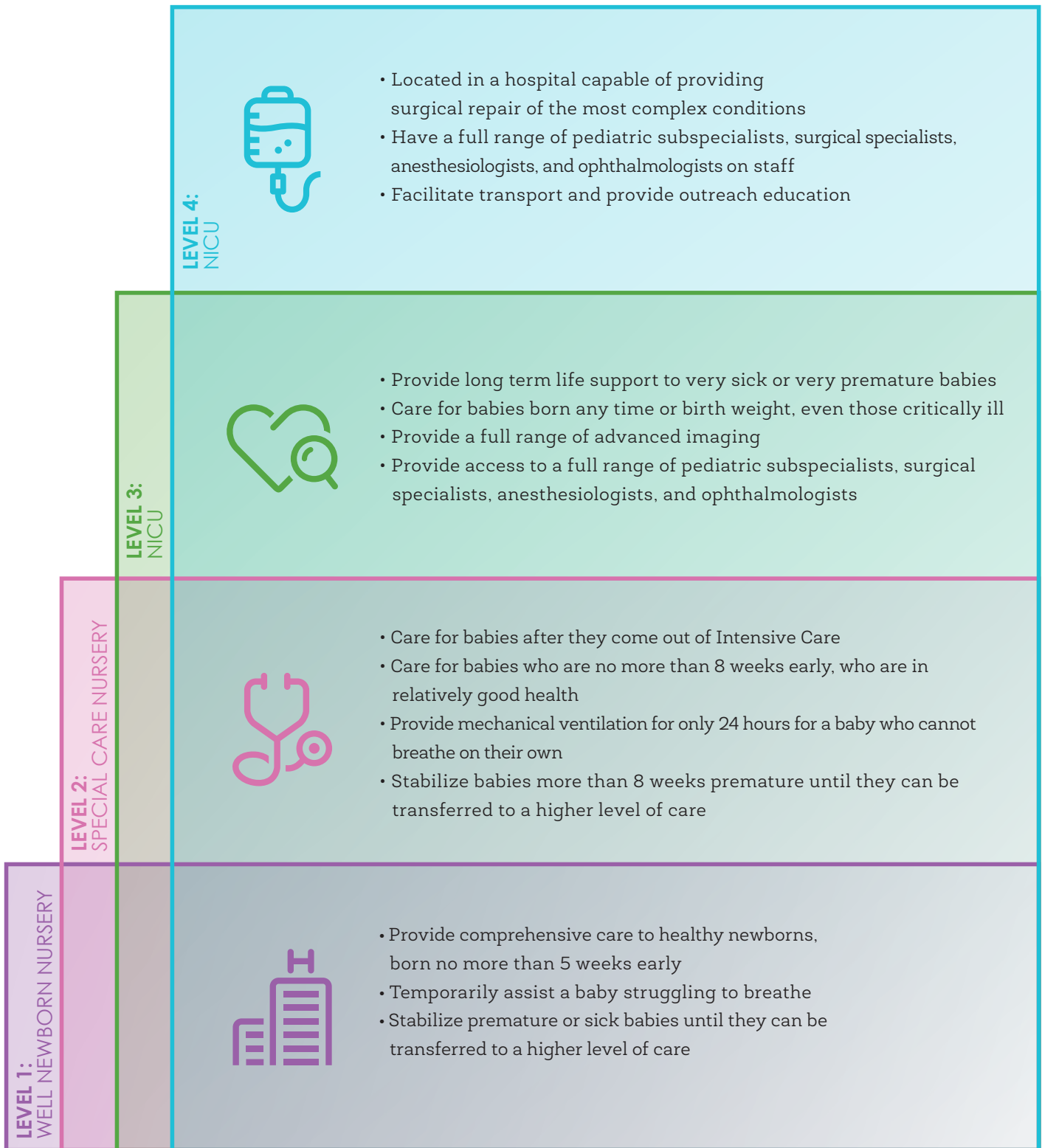
- Around **1,100 infants** are born at very low birth weight (VLBW) each year in Missouri (MODHSS MICA).
- Up to **26%** of these VLBW babies are not born at a Level III facility specially equipped for their care (MCHB, Title V Information System).
- Healthy People 2020 goal is for **90%** of all VLBW babies to be born at Level III facilities.
- Around **1,500 infants** are born very preterm in each year in Missouri (March of Dimes Peristats).
- Missouri's infant mortality rate has been between **6.5-7.5 per 1,000 births** for the last 5 years, while the Healthy People 2020 goal is to reduce that number to **6.0** (MODHSS).
- Between 1998-2008, the pregnancy-related mortality ratio in Missouri was 21.7 deaths per 100,000 live births while the Healthy People 2020 goal for pregnancy-related mortality is 11.4 per 100,000 live births (MO PAMR Case Review).

The bill and its collaborators:

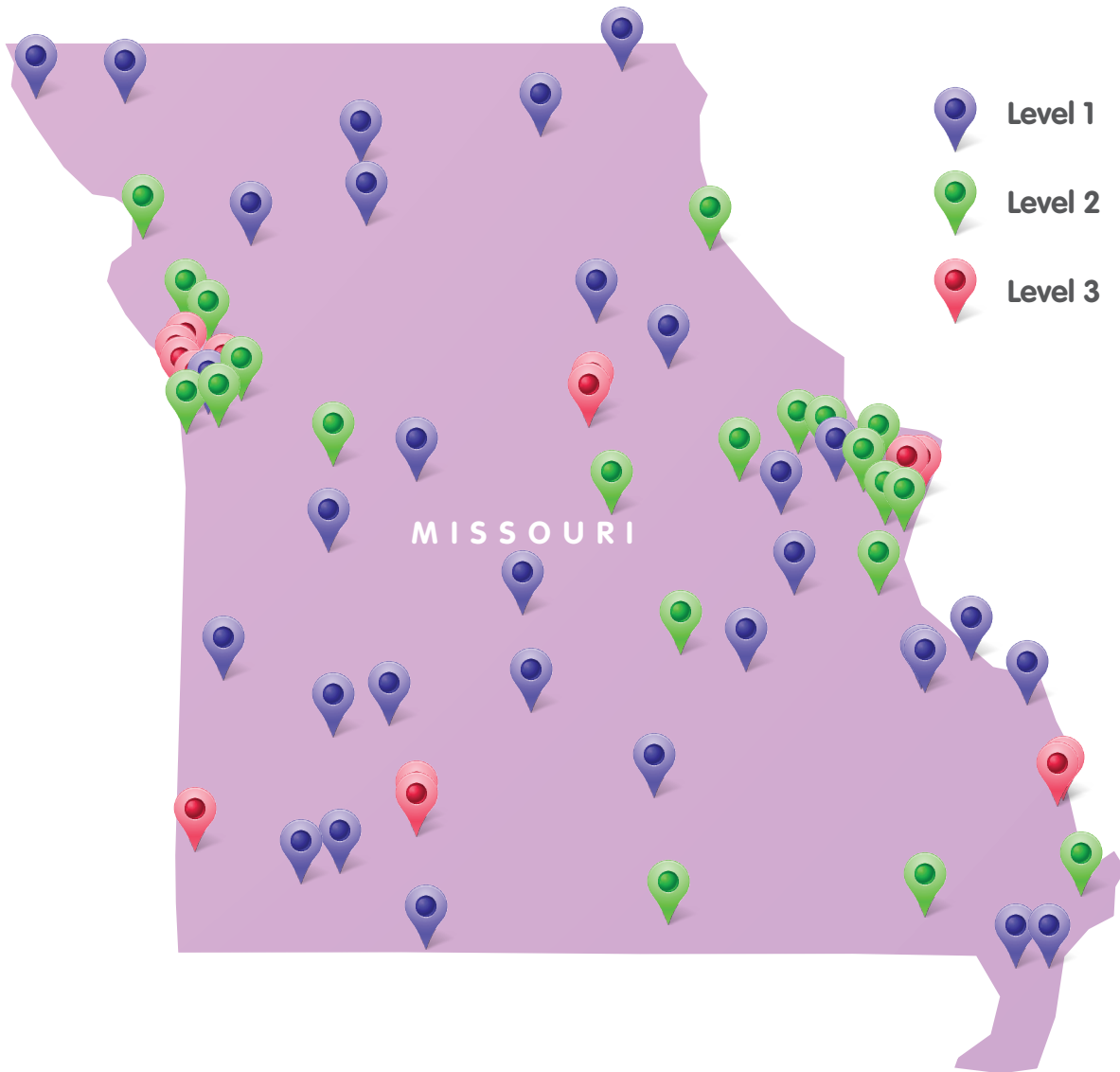


- The bill is a framework for implementation; the details of the levels of neonatal and maternal care will be established by the Perinatal Advisory Council from evidence-based practices and professional recommendations while allowing flexibility to adapt to the needs of the State.
- A Children's Services Commission subcommittee has reviewed the evidence and understands the benefits of a regionalized system of perinatal care; members of the subcommittee have been collaborating together to develop this bill for MO.
- Collaborators included:
 - American Academy of Pediatrics, Missouri Chapter
 - American College of Nurse-Midwives, Missouri Affiliate
 - American College of Obstetricians and Gynecologists, Missouri Section
 - Association of Women's Health, Obstetric and Neonatal Nurses, Missouri Section
 - March of Dimes
 - Missouri Academy of Family Physicians
 - Missouri Association of Health Plans
 - Missouri Department of Health and Senior Services, Division of Community & Public Health
 - Missouri Department of Social Services, Missouri HealthNet Division
 - Missouri Hospital Association
 - Missouri Primary Care Association
 - Missouri Association of Local Public Health Agencies
 - National Association of Nurse Practitioners in Women's Health
 - Society for Maternal-Fetal Medicine

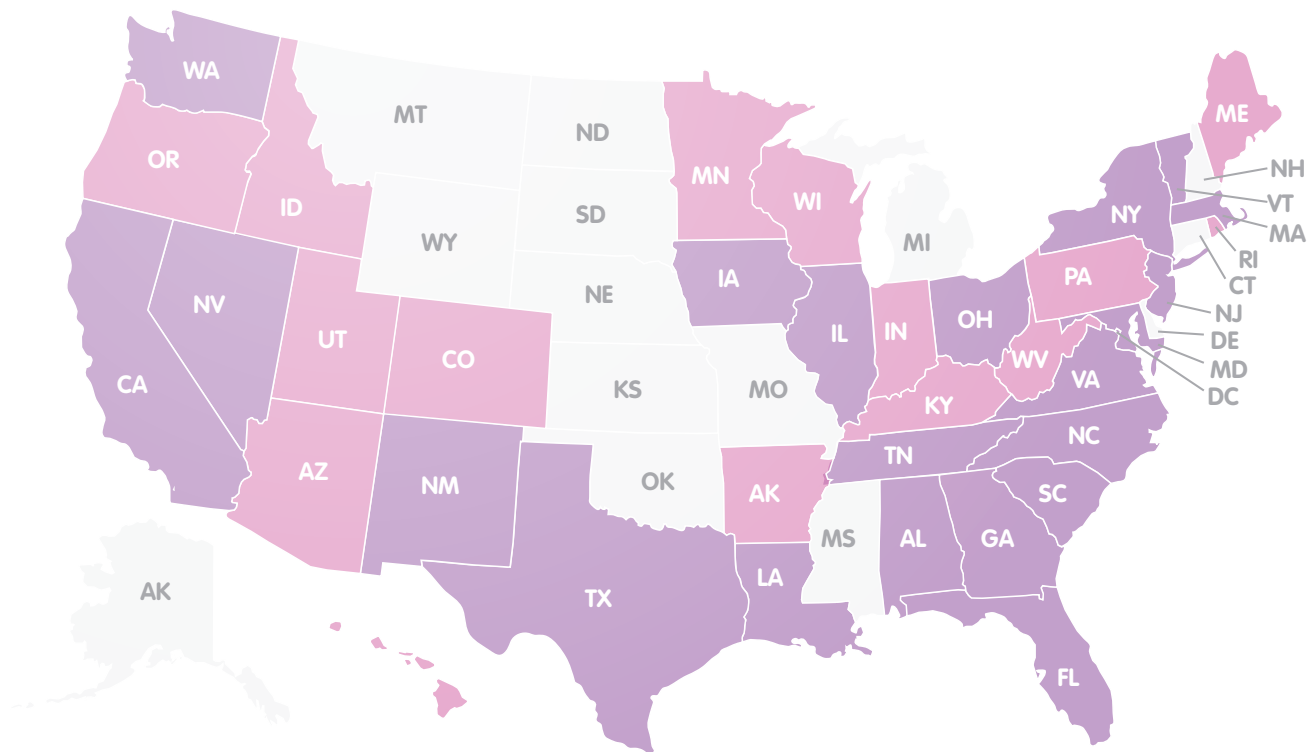
Defined Levels of Newborn Care



Missouri Map: Birthing Hospitals by Level



Perinatal Regionalization in the United States



States with Perinatal Regionalization in Statute:

Alabama, California, Florida, Georgia, Illinois, Iowa, Louisiana, Maryland, Massachusetts, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, South Carolina, Tennessee, Texas, Vermont, Virginia and Washington

States with Informal Perinatal Regionalization:

Arizona, Arkansas, Colorado, Hawaii, Idaho, Indiana, Kentucky, Maine, Minnesota, Oregon, Pennsylvania, Rhode Island, Utah, West Virginia, and Wisconsin

Answering the Call

Perinatal Regionalization in Missouri



Perinatal Regionalization defines hospitals at risk-appropriate levels, regarding both maternal and neonatal care, and creates a system for referral to ensure high-risk pregnancies and low birth weight, preterm, or otherwise at-risk neonates receive consultation and access to risk-appropriate care.



Frequently Asked Questions

Why do we need this?

Perinatal Regionalization has been recognized by a number of key organizations (Centers for Disease Control and Prevention, American College of Obstetricians and Gynecologists, etc) as an extremely effective way to reduce infant mortality. States that have regionalized systems of care see better outcomes for mom and for baby.

What other states use defined levels of hospital neonatal care?

Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Minnesota, Nevada, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin.

Where did the concept of Perinatal Regionalization come from?

The model for regionalization of perinatal services originally came out of Towards Improving the Outcome of Pregnancy, a 1976 report from the Committee on Perinatal Health and the March of Dimes. The report recommended that hospitals be broken out into levels based on the scope of perinatal services provided and that the system be implemented throughout the US.

What qualifies as a “birthing hospital”?

A birthing hospital is any hospital that has more than one obstetric bed or a Neonatal Intensive Care Unit.

What is a “perinatal regional center”?

A perinatal regional center is a hospital that provides comprehensive maternal and newborn services for women who have been assessed as high-risk patients or who are bearing high-risk babies, as determined by a standardized risk assessment tool, and who will provide the highest level of specialized care.

How will regional centers be selected?

Regional centers will be selected according to the criteria established by the Perinatal Advisory Council, based on recommendations for risk-appropriate levels of care from ACOG and AAP.

What do neonatal levels mean?

Levels increase as their capacity to provide care to a newborn increases, with a Level 1 nursery providing basic care for a healthy, full term newborn, and Level 4 providing the highest level of life sustaining care and a staff of pediatric surgeons and subspecialists.

Do we have to refer to a hospital outside of our system?

No provider or hospital will ever be forced to refer a patient to a certain facility; this system simply establishes clear guidelines for the levels of care a facility can provide. As regional systems are developed, hospital systems and current referral partnerships will be considered, and it will always be up to the provider or facility to refer the patient to a preferred facility where risk-appropriate care can be rendered. A referral does not need to be made only within a region if there is a pre-existing agreement with another facility or system outside of the region. Additionally, there may be regions where there is no Level IV facility, capable of providing complex surgeries and equipped with a full range of pediatric subspecialists on site, and a referral outside of the region may be necessary for certain specialized services.

Who will monitor and enforce regionalization?

Monitoring and assessment will either be conducted by the Department of Health and Senior Services or by a nationally-recognized nonprofit or professional organization commissioned by the Department.

How will the standards be created and by whom?

The Perinatal Advisory Council, as established by the bill, is tasked with establishing the standards for neonatal and maternal care centers. The levels will be based on ACOG and AAP guidelines and will be adapted for Missouri, for geography and varied needs, where seen as appropriate by members of the Council.

How will this affect the scope of practice for a provider?

The bill has no intention of limiting, modifying, or expanding the scope of practice for providers. The bill does not directly refer to providers but to hospitals acquiring a designation of care. Physicians may be limited by where they choose to practice, based on the designation level of their hospital.

Who will make up the Perinatal Advisory Council?

One representative from the following organizations:

- American College of Obstetricians and Gynecologists, *Missouri Section*
- American Academy of Pediatrics, *Missouri Chapter*
- March of Dimes
- National Association for Nurse Practitioners in Women's Health
- American College of Nurse-Midwives, *Missouri Affiliate*
- Association of Women's Health, Obstetric and Neonatal Nurses, *Missouri Section*
- National Association of Neonatal Nurses
- Missouri Academy of Family Physicians
- Society for Maternal-Fetal Medicine
- A Federally Qualified Health Center providing prenatal care

Also including:

- 1 public health agency and 1 coalition involved in infant mortality prevention
- 4 representatives from Missouri hospitals (one from each level of designation)
- 1 private practice physician specializing in obstetrics or gynecology



No family should lose its mother while bringing a new life into the world.

Between 1999-2008, the pregnancy-related mortality ratio in Missouri was 21.7 deaths per 100,000 births while the Healthy People 2020 goal for pregnancy-related mortality is 11.4 per 100,000 births (Source: MO PAMR Case Review).

Perinatal Regionalization will ensure that risk-appropriate care is available to moms, improving their outcomes as well as their child's.