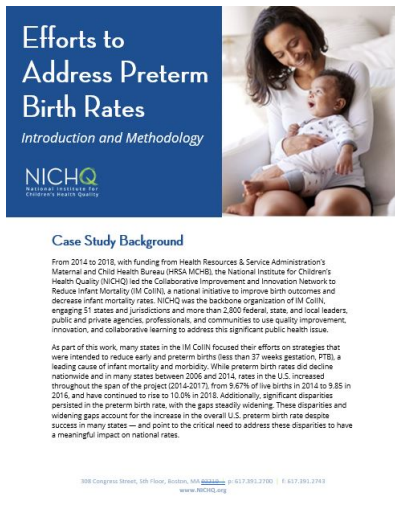


Case Studies

Efforts to Address Preterm Birth Rates



Click the image to view the full case study
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From 2014 to 2018, with funding from Health Resources & Service Administration's Maternal and Child Health Bureau (HRSA MCHB), the National Institute for Children's Health Quality (NICHQ) led the Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM CollIN), a national initiative to improve birth outcomes and decrease infant mortality rates. NICHQ was the backbone organization of IM CollIN, engaging 51 states and jurisdictions and more than 2,800 federal, state, and local leaders, public and private agencies, professionals, and communities to use quality improvement, innovation, and collaborative learning to address this significant public health issue.

As part of this work, many states in the IM CollIN focused their efforts on strategies that were intended to reduce early and preterm births (less than 37 weeks gestation, PTB), a leading cause of infant mortality and morbidity. While preterm birth rates did decline nationwide and in many states between 2006 and 2014, rates in the U.S. increased throughout the project (2014-2017), from 9.67% of live births in 2014 to 9.85 in 2016, and continued to rise to 10.0% in 2018. Since the project, rates have continued to rise, with the 2022 rate at 10.4%. Additionally, significant disparities persisted in the preterm birth rate, with the gaps steadily widening. These disparities and widening gaps account for the increase in the overall U.S. preterm birth rate despite success in many states — and point to the critical need to address these disparities to have a meaningful impact on national rates.



NICHQ Webinar: Reducing Preterm Birth: States Share Interventions, Policy Efforts, & Emerging Issues

This webinar dives into targeted interventions, policy efforts, and emerging issues that promoted or hindered improvements in preterm birth rates in each of the four states represented in these case studies: Kansas, Massachusetts, Mississippi, and Oklahoma.

[Access the Recording](#)

Building on the Results of the IM ColIN

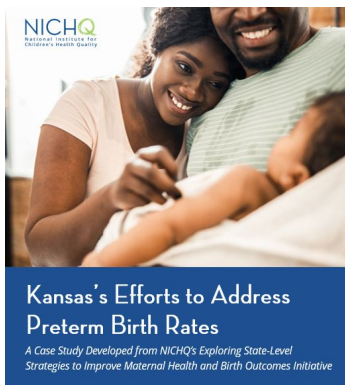
IM ColIN evaluation results indicated that 78% of the states improved at least one outcome measure, and 43% of states [reduced their infant mortality rate](#). The results of IM ColIN also suggested that certain systems and infrastructure components (e.g., health department workforce, data capacity, partnerships) facilitated reductions in PTB rates. Data collected as part of IM ColIN, coupled with contextual knowledge facilitated by strong relationships between NICHQ and state IM ColIN teams, has enabled NICHQ to explore and document systems and infrastructures that promoted or hindered improvements.

Because the science is still evolving on preterm birth prevention, the strategies used as part of IM CoIIN, and what we know about them, also have evolved.

- **Impact of COVID-19 on Expectant Mothers and Preterm Birth:** Emerging studies from the Centers for Disease Control and Prevention show that pregnant mothers who are infected with the coronavirus and hospitalized are at risk for developing serious complications — and they may face an elevated risk for delivering their babies prematurely, losing the pregnancy, or having a stillbirth. Medical professionals are calling for routine testing, consistent use of masking and social distancing, and more studies that include asymptomatic women.
- **Care Delivery and Programming:** New care delivery models have emerged, like group prenatal care, which has grown during the past 20 years, and telehealth — long an important option for rural and frontier regions and now in increasing use in the wake of the COVID-19 pandemic. Evidence is growing about both these and other models and programs to ensure the effective deployment of available interventions.
- **17P Efficacy:** Many states have begun to limit access to 17 alpha hydroxyprogesterone caproate after conflicting clinical trial results. While the Society of Maternal-Fetal Medicine released new guidelines suggesting that doctors assess the patient’s level of risk before recommending hydroxyprogesterone shots, the American College of Obstetricians and Gynecologists (ACOG) said it had reviewed the results and wasn’t changing its guidance. Until the FDA resolves the efficacy of 17P in reducing preterm deliveries, many states have put promoting 17P utilization on hold. More detail is provided in each case study that utilizes 17P.

Case Study Results Overview

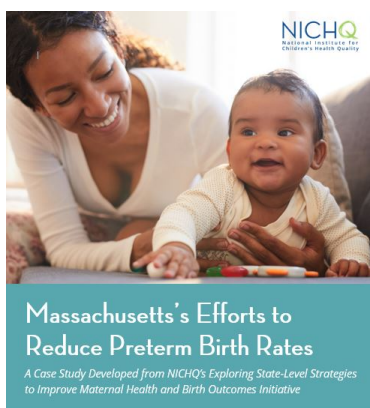
NICHQ worked with Kansas, Massachusetts, Mississippi, and Oklahoma to identify policies, structures, and other contextual factors that may have impacted preterm birth rates in each state. Each of the four selected states participated in the 2013-2017 phase of the Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM CoIIN) and elected to address preterm births as one of their priority areas.



Click the image to access the full Kansas case study

Kansas

- **Targeted interventions** included increasing the availability of progesterone statewide; increasing participation in smoking cessation programs; supporting prenatal education engagement; and fostering use of data collection and tracking systems.
- **Policy Efforts** included presumptive eligibility for Medicaid; a “hard stop” policy on Early Elective Deliveries; increasing access to long-acting reversible contraception; and smoking-related policy initiatives.
- **Emerging Issues** include comprehensive screening during well-woman visits; citizenship and immigration; guns and violence against women; and opioids and other substance abuse.



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Massachusetts

- **Targeted Interventions** included broadening provider involvement in the Perinatal-Neonatal Quality Improvement Network of Massachusetts (PNQIN); expanding group prenatal care using the *CenteringPregnancy*® program; and increasing statewide perinatal data collection for mothers and infants.
- **Policy Efforts** included funding the Health Equity Initiative (Massachusetts Department of Public Health); establishing priority housing status for women and children; increasing the state Earned Income Tax Credit rate (EITC); passing the Massachusetts Paid Family Medical Leave (PFML); and prioritizing equity for the Title V Block Grant Program For Maternal and Child Health (2019).
- **Emerging issues** include partnering with immigrants' rights organizations to better serve immigrants and undocumented mothers.

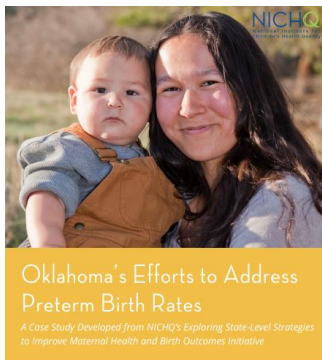
Mississippi



Click the image to access the full Mississippi case study

- **Targeted Interventions** included increasing the availability of progesterone statewide; increasing participation in smoking cessation programs; increasing access to community-based prenatal and maternal education; and increasing the use of data-driven, evidence-based perinatal care.
- **Policy Efforts** included creating collaborations to reduce infant mortality and maternal mortality; streamlining access to coverage and expanding pregnancy services for Medicaid recipients; providing financial incentives to reduce Early Elective C-Section Delivery (Medicaid and private insurance); changing requirements for Title V maternal health funding; and shifting tobacco control from the state level to local control.
- **Emerging Issues** included providing Spanish and other language translation services to a changing population; lack of Medicaid expansion; closing of rural hospitals and lack of mental health and substance misuse programs; and the increased use of opioids among expectant mothers.

Oklahoma



Click the image to access the full Oklahoma case study

- **Targeted Interventions** included the Oklahoma Perinatal Quality Improvement Collaborative; focusing on Native American women and infants; establishing the Preparing for a Lifetime statewide initiative; addressing Early Elective Deliveries; and increasing the availability of progesterone statewide.
- **Policy Efforts** have seen a shift away from infant mortality and prematurity reduction activities to initiatives focused on substance/opioid use and maternal mortality reduction. While addressing these issues could positively impact infant mortality and prematurity, there is currently no focused effort to address prematurity.
- **Emerging Issues** included passage of reimbursement for postpartum depression and anxiety screening in a pediatric setting; instituting a certified nurse midwife program to address the lack of a strong midwifery program in Oklahoma; and reimbursement for doula care, which is linked to improved maternal health outcomes, particularly in addressing issues of equity and access to quality care.

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