Million Babies:

Preventing One Million Cases of Infant Mortality, Preterm Birth, and Other Adverse Birth Outcomes

Prepared by the March of Dimes

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Introduction: Million Babies

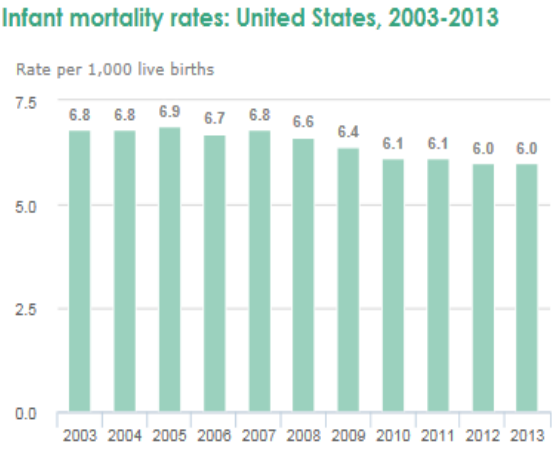
Million Babies is proposed as a collaborative initiative within the Department of Health and Human Services that would prevent one million cases of preterm births, infant mortality, and related adverse birth outcomes in ten years, with measurable outcomes reportable in the first four years of the program. To achieve this goal, Million Babies will act as a facilitator across new and existing Federal and partner efforts that share the common aim of ensuring healthy pregnancies and healthy infants. The program will work to achieve these improved outcomes by committing to specific interventions, with a special focus on reducing disparities in health and improving health equity for all women, children and families.

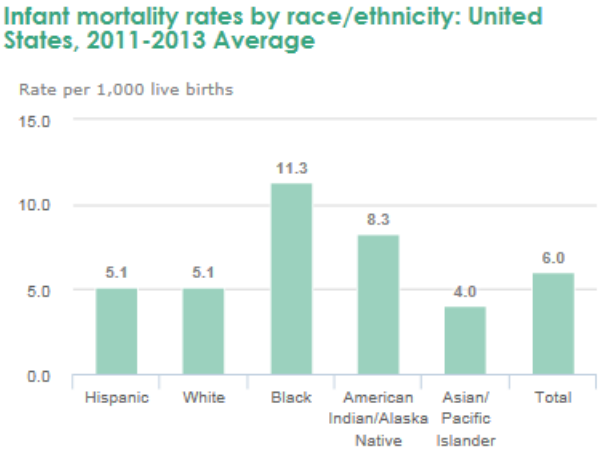
Million Babies will coordinate the work of federal agencies, health care providers, public health agencies, nonprofit organizations, and the private sector to achieve the goal of reducing preterm birth, infant mortality and related adverse birth outcomes by one million instances in ten years. Current efforts to promote general good health and prevent disease for all women are important and will serve as vital partners to the initiative. In addition to coordinating existing efforts such as these and many others, the initiative will bring added value by identifying and highlighting specific public health and health interventions that can be implemented via a multifaceted approach to improve outcomes. It will include utilizing tools such as community outreach, patient engagement, quality improvement initiatives, improved data collection, and facilitated information sharing among researchers, public health, health care providers and systems, and other stakeholders.

Some of the targeted interventions will involve the alignment and enhancement of well-established initiatives, while others will incentivize the development of new best practices and interventions. All efforts will share the common goal of reducing disparities and increasing equity in access to care and health outcomes for all women and infants.

Preterm Birth, Infant Mortality, and Related Adverse Birth Outcomes: Background

The United States has a significant burden of preterm birth, infant mortality, and related adverse birth outcomes. Our infant mortality rate of 6.0 deaths per 1,000 live births places us in the company of Serbia and Qatar,[1] while preterm birth rate of 9.6% ranks our nation on par with Turkey and Somalia.[2] Clearly, our nation should place a strong focus on improving the health of pregnant women and their infants.





The United States also experiences significant disparities in birth outcomes by race, ethnicity, geography, and other factors. For example, our infant mortality rate varies dramatically by geographic region and by race/ethnicity. Babies born to African-American women are one-and-a-half times more likely to be born preterm and more than twice as likely to die in the first year of life than those born to white women. In the United States, more than 381,000 babies (about 9.6%) were born prematurely in the year 2014. Premature infants are almost 20 times more likely than other infants to die in the first year of life, and complications of premature birth are the leading cause of infant mortality. Infants who are born preterm are also more likely to suffer lifelong consequences including developmental disabilities, blindness, chronic lung disease, and cerebral palsy. Factors associated with increased risk of preterm birth include advanced maternal age, multiple births, previous preterm birth, tobacco and illicit drug use, periodontal disease, extremes of maternal weight (obesity and underweight), diabetes, hypertensive disorders in pregnancy, and stress. However, the cause of half of all preterm births is unknown.

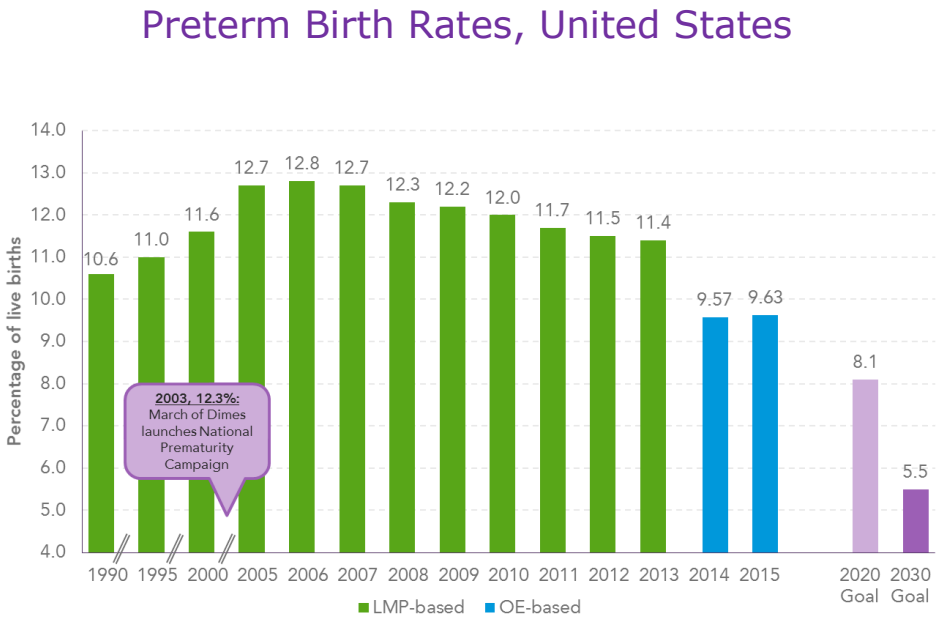
The Institute of Medicine estimates that, in 2005, the annual societal economic cost associated with preterm birth was at least $26.2 billion in direct and indirect costs. Rates of preterm births in the United States have dropped in recent years, but have recently plateaued.[3] Instances of late preterm births (34

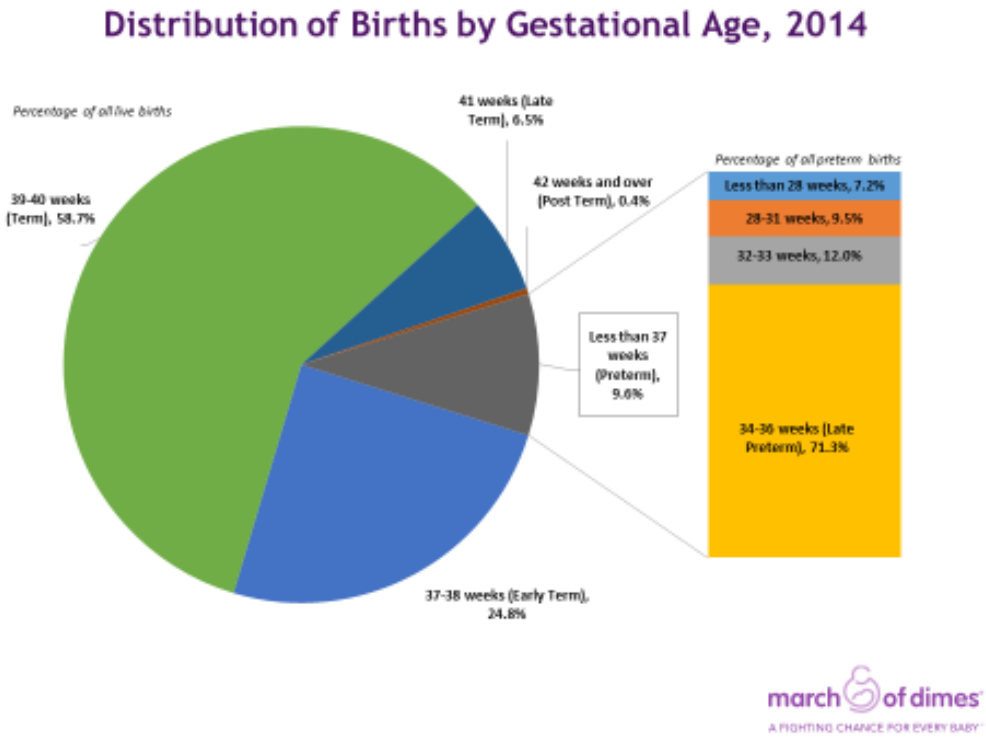
[1] Central Intelligence Agency World Factbook, 2016 estimates, https://www.cia.gov/library/publications/the-world-factbook/rankorder/2091rank.html.

[2] World Health Organization. *Born Too Soon: The Global Action Report on Preterm Birth.* 2012. http://www.who.int/pmnch/media/news/2012/201204_borntoosoon_countryranking.pdf

[3] National Center for Health Statistics. 1981-2015 final natality data. Data prepared by the March of Dimes Perinatal Data Center, 2014.

36 weeks) markedly improved from 2003-2013[4], but instances of very preterm birth (<32 weeks) have barely changed over the same period.[5]





Clearly, major opportunities exist to improve infant mortality, preterm birth rates, and related birth outcomes in the United States.

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[4] National Center for Health Statistics. 1990-2015 final natality data. Data prepared by the March of Dimes Perinatal Data Center, 2016.

[5] Ibid.

Ongoing Federal Investment in Healthy Pregnancies and Infants

Current federal initiatives focused on promoting healthy pregnancies and reducing rates of infant mortality and preterm birth often feature interagency collaboration, but are not centrally coordinated. While this list is not exhaustive, such programs include:

Administration for Children and Families

- *Early Head Start* provides early, continuous, intensive, and comprehensive child development and family support services to low-income infants and toddlers and their families, and pregnant women and their families.

Centers for Disease Control and Prevention

- *Division of Reproductive Health* conducts research and data collection on preterm birth, infant mortality, and birth outcomes to improve women's reproductive health, pregnancy care, and fetal, newborn, and infant health.
- *National Center for Birth Defects and Developmental Disabilities* conducts birth defects surveillance and public health research to identify causes of birth defects, find opportunities to prevent them, and improve the health of those living with birth defects.
  National Center for Chronic Disease Prevention and Health Promotion conducts research, surveillance, and supports perinatal quality collaboratives through the Division of Reproductive Health's Safe Motherhood and Infant Health Initiative.
- *Perinatal Quality Collaboratives* work to improve quality of care and pregnancy outcomes via networks of perinatal care providers and public health professionals on state and regional levels.
- *Smokefree Women Initiative* provides tools and support to help pregnant women quit smoking.

Centers for Medicare and Medicaid Services

- *Maternal and Infant Health Care Quality Initiative* aims to improve care, improve birth outcomes, and reduce the costs of care for mothers and infants in Medicaid and CHIP through improved birth spacing and interpartum care.
- *Strong Start for Mothers and Newborns* utilizes a two-pronged approach to reduce preterm birth via a public-private partnership education campaign and group prenatal care.

Health Services and Resources Administration

- *Alliance for Innovation in Maternal Health (AIM)* works to prevent 100,000 maternal deaths and severe morbidities over the next five years by helping states and communities implement maternal safety bundles in U.S. hospitals.
- *Healthy Start* aims to reduce the rate of infant mortality and improve perinatal health by providing comprehensive services to families in communities with high infant mortality rates.
- *Infant Mortality Collaborative Improvement & Innovation Network (COIIN)* facilitates a collaborative state-based partnership to reduce infant mortality and improve birth outcomes.
- *Maternal, Infant, and Early Childhood Home Visiting (MIECHV)* promotes and supports home visiting programs that serve pregnant women in at-risk communities.
- *Perinatal and Infant Oral Health Quality Improvement (PIOHQI) Initiative* facilitates a learning collaborative with states to reduce oral disease in pregnant women and infants through improved access to high-quality oral health care.

National Institutes of Health

Maternal and child health research is conducted at the National Institute of Child Health and Development, the National Institute on Minority Health and Disparities, and the National Institute of Environmental Health Sciences, among others.

Office of Population Affairs

Title X: The National Family Planning Program provides high quality and cost-effective family planning and related preventive services with priority for services to low-income women and men.

U.S. Department of Agriculture

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutritious foods to pregnant and breastfeeding women and their infants.

Million Babies: Program Logistics

Million Babies, similar to the Million Hearts model, would be established as an interagency partnership. The initiative would be led by a small number of senior staff shared between the agencies and would serve as a facilitator across diverse Administration programs, partners and stakeholders.

Million Babies leaders would conduct regular calls and meetings to ensure that partners are kept up-to-date on progress across programs in order to align goals, encourage partnerships and reduce redundancy. Staff will work to translate information and data across the partner spectrum and produce informational materials for use both within the MB partnership and for public engagement and education. A special focus would be outreach to diverse partner organizations and entities in order to improve health equity. Staff will also produce a yearly progress report for dissemination to Congress, partners and the public.

Million Babies leadership would be encouraged to establish a recognition program to challenge and reward public health and health care-delivery partners who meet specific goals tied to the interventions prioritized by the program, including health equity goals.

Million Babies is envisioned as a ten-year project running 2017-2027, but would expect to begin reporting measurable, concrete progress in its fourth year (2020). Because programs require time to be improved or implemented and show results, the ten-year timeframe represents an ambitious but achievable period within which to make significant progress on a range of birth outcomes.

Like Million Hearts, Million Babies activities and staff could be funded via a range of sources, such as the Prevention and Public Health Fund, and would serve as a coordinator of research and programs, not as a funder of them. The Million Babies executive director have primary responsibility for promoting the work and goals of the Million Babies project. Other support staff could maintain other interagency responsibilities while working on activities under the Millions Babies umbrella.

Million Babies: Interventions and Benchmarks for Success

The March of Dimes has identified the following interventions as integral to reducing rates of preterm birth in the United States:

1. Reducing non-medically indicated (elective) deliveries before 39 weeks gestation.
2. Increasing use of progesterone for women with history of preterm birth.
3. Reducing tobacco use among pregnant women.
4. Encouraging women to space pregnancies at least 18 months apart.
5. Increasing use of low-dose aspirin to prevent pre-eclampsia.
6. Expanding group prenatal care.

Promoting these interventions initially in states with the highest rates of preterm birth via new and existing prevention methods (including successful group prenatal care and home visiting program models), quality improvement projects, public engagement, provider partnerships, and other methods will lead to lower rates of preterm birth and provide a basis for replication in other states.

Benchmarks for success on progress made on the interventions will be measured through a variety of tools, most of which are already in place. Short term goals, such as the creation of new quality improvement measures and the cultivation of data sources related to interventions that lack them, will be used to measure the initial progress of the program. Longer term goals, like the collection, translation, and dissemination of the associated data, will stimulate progress on the interventions and lead to improved care and health outcomes.

A range of existing quality measures are available to track progress on specific interventions, including the below measures used in various settings:

- PC01, Elective Delivery—Used in Joint Commission Perinatal Core Set and Medicaid Adult Core Set. (NQF #0469)
- Behavioral Health Risk Assessment (for Pregnant Women)—Used in Medicaid and CHIP Child Core Sets.
- Tobacco Cessation—Used in Medicaid Adult Core Set. (NQF #0027)
- Timeliness of Prenatal and Postpartum Care—Used in Medicaid Adult Core Set and Medicaid and CHIP Child Core Set. (NQF #1391, #1571)
- Contraceptive Care- All Women Ages 15-44 (CCW) – Used by CMCS Maternal and Infant Health Initiative.
- Contraceptive Care- Postpartum Women Ages 15-44 (CCP)—Used by CMCS Maternal and Infant Health Initiative.

The Healthy People 2020 initiative also sets a number of goals among its Maternal, Infant and Child Health objectives that aim to improve pregnancy outcomes, such as:

- MICH 9.1—Reducing total preterm births.
- MICH 11.3—Increasing abstinence from cigarette smoking among pregnant women.
- MICH 16.6—Increasing the proportion of women delivering a live birth who used contraception postpartum to plan their next delivery.

Various entities have recommended overarching structures for improving the health of pregnant women and infants. For example, the Secretary's Advisory Committee on Infant Mortality advised that the government frame its efforts through principles such as improving interconception health, ensuring access to a continuum of safe and high-quality care, and increasing health equity by reducing disparities. This guidance could serve as an important framework for executing and assessing the Million Babies initiative.

Million Babies Logic Model

See attachment.

Committed Partners

The following organizations have committed to partner with federal agencies in the Million Babies initiative:

- March of Dimes
- *American Academy of Pediatrics*
- *American Congress/College of Obstetricians and Gynecologists*
- *Association of Maternal and Child Health Programs*
- *Association of State and Territorial Health Officials.*
- *Association of Women's Health, Obstetric and Neonatal Nurses*
- *National Association of County and City Health Officials*
- *Other Prematurity Partners*