

Million Babies:

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



Prepared by



A FIGHTING CHANCE FOR EVERY BABY™

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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 10 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 babies. 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.

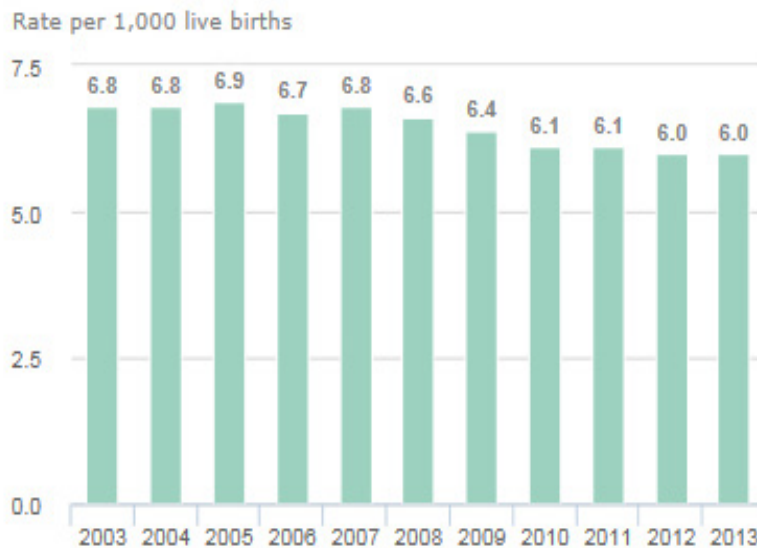
Million Babies will coordinate the work of federal agencies, health care providers, public health agencies, nonprofit organizations and the private sector to achieve the goal of reducing preterm birth, infant mortality and related adverse birth outcomes by one million instances in 10 years. Current efforts 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, 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 tools such as community outreach, patient engagement, quality improvement initiatives, improved data collection and facilitated information-sharing among researchers, public health officials, 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.

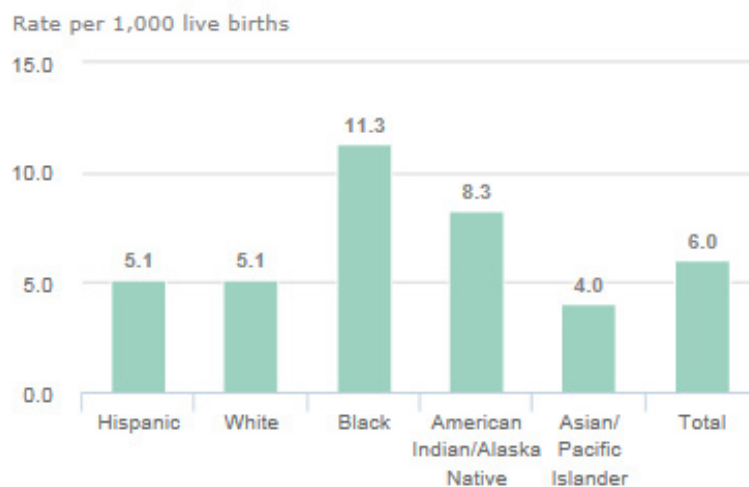
Preterm Birth, Infant Mortality and Related Adverse Birth Outcomes: Background

The United States has a significant burden of premature 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 our preterm birth rate of 9.6% ranks our nation on par with Turkey and Somalia.² Clearly, our nation should place a strong emphasis on improving the health of pregnant women and their babies.

Infant mortality rates: United States, 2003-2013



Infant mortality rates by race/ethnicity: United States, 2011-2013 average

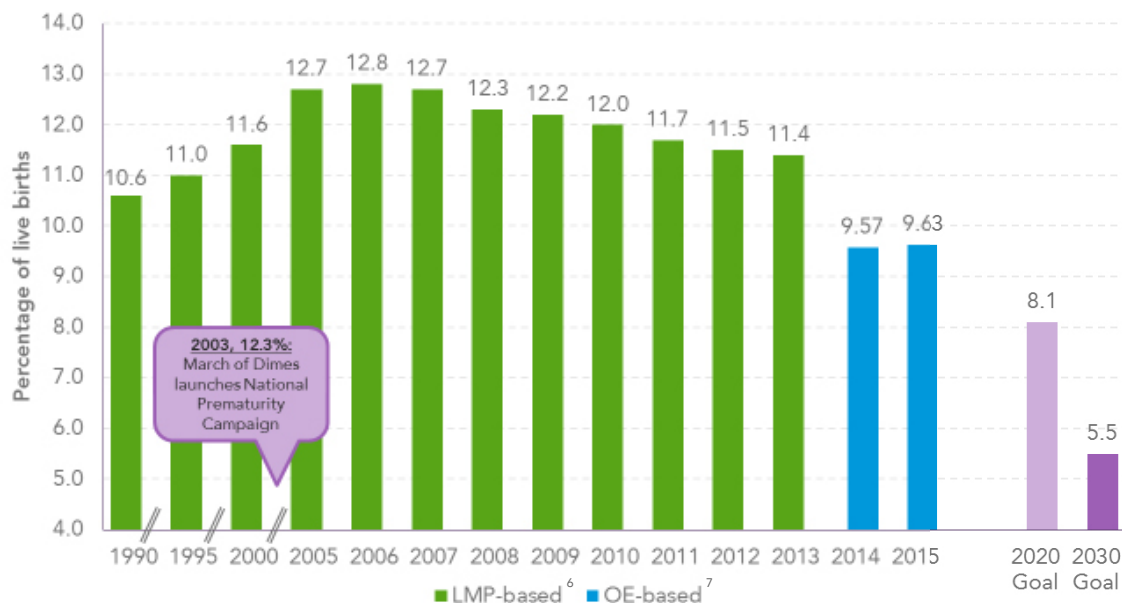


¹ Central Intelligence Agency World Factbook, 2016 estimates, <https://www.cia.gov/library/publications/the-world-factbook/rankorder/2091rank.html>.

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

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 babies 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 (34-36 weeks) markedly improved from 2003-2013⁴, but instances of very preterm birth (<32 weeks) have barely changed over the same period.⁵

Preterm birth rates: United States, 1990-2015



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

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

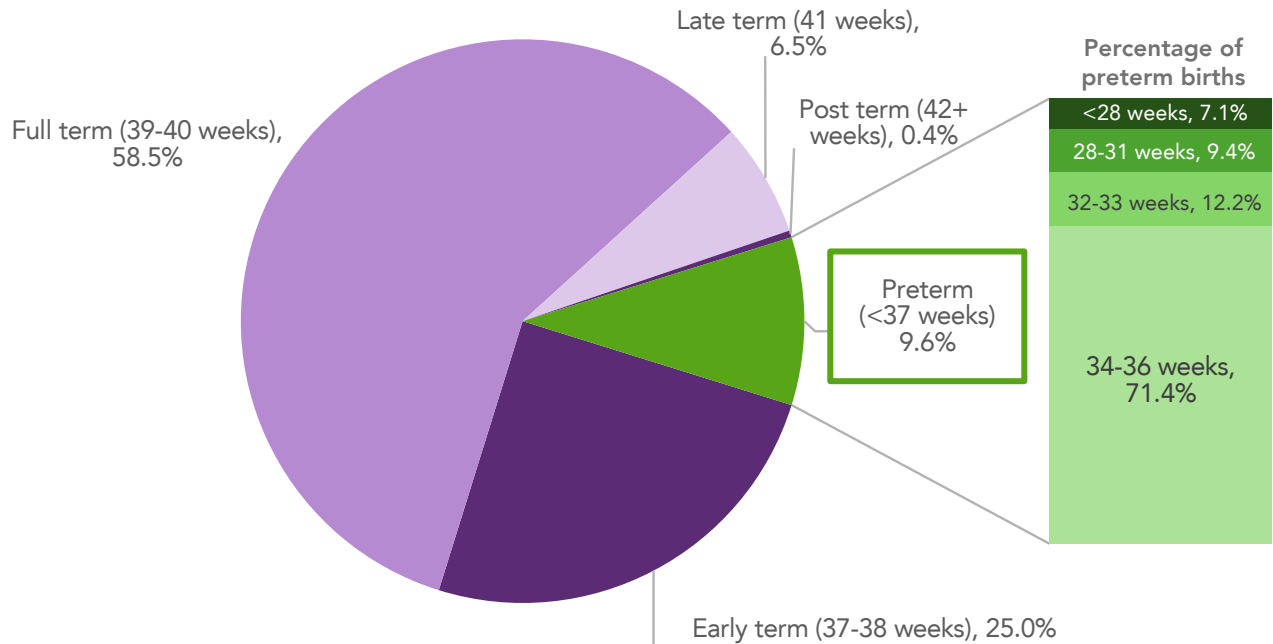
⁵ Ibid.

⁶ Last menstrual period used to determine gestational age.

⁷ Obstetric estimate used to determine gestational age.

Distribution of live births by gestational age: United States, 2015

Percentage of live births



Gestational age based on obstetric estimate.

Source: National Center for Health Statistics, 2015 final natality data.

Prepared by March of Dimes Perinatal Data Center, December 2016.

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

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 & 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 uses a two-pronged approach to reduce preterm birth via a public-private partnership education campaign and group prenatal care.

Health Resources & Services Administration

- Title V Maternal and Child Health Services Block Grant Program aims to improve the health and well-being of women (particularly mothers) and children by distributing grant funds to states and jurisdictions to provide access to quality care, reduce infant mortality, enhance access to comprehensive prenatal and postnatal care, increase health assessments and diagnostic services, improve access to preventive and child care services, and coordinate care for children with special health care needs.



Visiting (MIECHV) promotes and supports home visiting programs that serve pregnant women in at-risk communities.

- 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

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 would work to translate information and data across the partner spectrum and produce informational materials for use both within the 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 would 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 10-year project running 2017-2027, but would expect to begin reporting measurable, concrete progress in its fourth year (2020). The 10-year time frame 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 would 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 Million 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 — Most & Moderately Effective Methods, Postpartum Women Ages 15-44 (CCP) — Used by CMCS Maternal and Infant Health Initiative. (NQF #2902)
- Contraceptive Care — Most & Moderately Effective Methods, All Women Ages 15-44 (CCW) — Used by CMCS Maternal and Infant Health Initiative. (NQF #2903)

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.



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 College of Nurse-Midwives
- American College of Obstetricians and Gynecologists
- American Dental Hygienists' Association
- American Public Health Association
- Association of Maternal and Child Health Programs
- Association of State and Territorial Health Officials (ASTHO)
- Association of Women's Health, Obstetric and Neonatal Nurses
- CityMatCH
- Council of International Neonatal Nurses, Inc. (COINN)
- National Association of County and City Health Officials
- National Association of Nurse Practitioners in Women's Health
- National Association of Pediatric Nurse Practitioners
- National Healthy Start Association
- National Indian Health Board
- National Institute for Children's Health Quality (NICHQ)
- National WIC Association
- RESOLVE: The National Infertility Association
- Society for Public Health Education

Million Babies Logic Model

Situation	Goal	Inputs	Promoted interventions/benchmarks
National preterm birth rates hover at approximately 9.6%	Prevent 1 million preterm births in five years by providing a “home base” at HHS to coordinate efforts and facilitate connections between existing and potential partners.	Public partners OASH ACF CDC CMCS CMMI NIH OMH HRSA State and local government entities	1. Reduce non-medically indicated deliveries 2. Increase use of 17P for women with history of preterm birth 3. Reduce tobacco use among pregnant women 4. Encourage 18-month spacing between births 5. Low-dose aspirin to prevent pre-eclampsia 6. Expand group prenatal care
Many public and private efforts exist to address preterm birth in the U.S., but there is no single place where they are all brought together in order to expedite current projects, foster partnerships and reduce redundancy.		Private partners Advocacy organizations Healthcare systems Payers Providers Public health community Quality measure developers/stewards	Existing Quality Measures that Correspond to Interventions NQF 0469: PC-01, Elective Delivery Maternity Care — Behavioral Health Risk Assessment NQF 0028: Preventive Care and Screening: Tobacco Use: Screening and cessation intervention NQF 1517: Prenatal and Postpartum Care, Postpartum Care Rate NQF 2902: Contraceptive Care — Most & Moderately Effective Methods, Postpartum Women Ages 15-44 NQF 2903: Contraceptive Care — Most & Moderately Effective Methods, All Women Ages 15-44
		Resources Prevention and Public Health Fund (PPHF) Activities of public and private partners	Existing Data Sources that Correspond to Interventions Medicaid Child and Adult Core Sets measures data Medicare Inpatient Quality Reporting Program Joint Commission Core Set measures data National Center for Health Statistics (including Healthy People 2020) National Quality Forum Pregnancy Risk Assessment Monitoring System

Outcomes

Short term (1-4 years)

Creation of applicable quality measures and cultivation of data sources that correspond to interventions that lack them
Increased reporting on existing quality measures, including those in the Adult and Child Core Sets
Increased community-aimed efforts to reduce tobacco use among pregnant women
Increased public and stakeholder awareness of the risk factors for preterm birth and methods to prevent it

Strategies		Outputs
	Facilitate information sharing and communication between partners via regular interactions and updates organized by Million Babies Director.	Greater understanding across maternal and child health spectrum of existing partner/project goals and opportunities.
	Foster partnerships among stakeholders.	Establishment of formal partnerships between private and public partners, including state/local governments, to create and promote new initiatives.
	Translate diverse types of partner materials into user-friendly information.	Creates a better understanding of partner initiatives, and therefore opportunities for collaboration, across the Million Babies spectrum.
	Create and disseminate branded PR materials for partner outreach initiatives.	Engage and educate the patient population in their homes and the places where they receive medical care.
	Measure and report progress via quality measures that correspond to interventions.	Improved alignment with existing and new measures in the Adult and Child Core Sets. Improved reporting of measures.
	Fund and conduct research.	Better understanding of preterm birth and opportunities for prevention and improvement.

Medium term (4 years)		Long term (10 years)
	<p>Decreased rates of tobacco use among pregnant women.</p> <p>Decreased rates of non-medically indicated deliveries.</p> <p>Increased use of 17P.</p> <p>Increased use of low-dose aspirin.</p> <p>Increased rates of pregnancies spaced at least 18-months apart.</p> <p>Reduced rates of multiple birth conceived via assisted reproductive technology.</p> <p>Universal screenings of pregnant women for short cervix.</p>	Prevented 1 million instances of preterm birth, infant mortality and related adverse birth outcomes in 10 years.