CDC GLOBAL MATERNAL AND CHILD HEALTH STRATEGY









ACRONYMS

ANC Antenatal Care

CDC Centers for Disease Control and Prevention

CDC-HQ Centers for Disease Control and Prevention Headquarters

CIO Center Institute Office

DGHA Division of Global HIV and AIDS

FELTP Field Epidemiology and Laboratory Training Program

GDD Global Disease Detection

GHI Global Health Initiative

HBB Helping Babies Breathe

HHS Department of Health and Human Services

HIV/AIDS Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

IMCI Integrated Management of Childhood Illness

M&E Monitoring and Evaluation

MCH Maternal Child Health

MDG Millennium Developmental Goal

MDSR Maternal Death Surveillance and Response

MOH Ministry of Health

PEPFAR President's Emergency Plan for AIDS Relief

PMTCT Prevention of Maternal to Child Transmission of HIV

SMGL Saving Mothers Giving Life

STD Sexually Transmitted Diseases

TB Tuberculosis

UN United Nations

UNICEF United Nations International Children's Emergency Fund

US United States

USAID United States Agency for International Development

USG United States Government

VPD Vaccine-preventable diseases

VR Vital Registration

WHO World Health Organization

WHO-AFRO World Health Organization-Regional Office for Africa



EXECUTIVE SUMMARY

This CDC Global Maternal and Child Health (MCH) Strategy provides a comprehensive framework for global MCH efforts at CDC. It promotes an integrated approach to the implementation of interventions that support MOH programs in countries and advance achievement of global MCH goals. It emphasizes strengthening public health related components of the health system that are important to achieving MCH goals. The strategy aims to ensure that CDC's technical and programmatic expertise is leveraged for maximum impact to reduce maternal and child morbidity and mortality. It focuses on women's health from preconception through postpartum, and children's health from the perinatal period through the fourth year.

The strategy builds upon existing MCH activities implemented by Centers/Institutes/Offices and by CDC's country offices in collaboration with Ministries of Health and partners. CDC has a breadth and depth of expertise in MCH from both domestic and global MCH work that can contribute to the final "big push" to reach the Millennium Development Goals launched during the 2012 United Nationals General Assembly meeting.

CDC's Global MCH Strategy has two primary goals consistent with United States government and global MCH targets: the reduction of morbidity and mortality among children under five years (under-5) and the reduction of maternal and perinatal morbidity and mortality. To support achievement of these goals and ensure sustainability, a third goal is to strengthen health systems necessary for MCH. The fourth goal, strengthened partnerships, supports achievement of the first three goals. The objectives for each of these goals are shown in Table 1 below.

Table 1. CDC Global MCH Strategy Goals and Objectives

Goal	Objectives
1. Reduce Under-5 Morbidity and Mortality	 Strengthen activities during facility-based well-child visits to prevent morbidity and mortality among infants and children Improve care of sick infants and children Improve population and community-based disease prevention and control
2. Reduce Perinatal and Maternal Morbidity and Mortality	 Strengthen antenatal care to improve perinatal and maternal outcomes Improve emergency obstetric care coverage and quality to reduce maternal mortality and morbidity and improve perinatal outcomes Improve access to family planning and preconception health
3.Strengthen Public Health Systems for MCH	 Strengthen surveillance and other information systems for MCH and improve use for decision-making Strengthen MCH workforce capacity Strengthen MCH-related public health laboratory coverage and quality Improve the quality and utilization of routine health information systems for planning and monitoring and evaluation, with a focus on the district level Improve global MCH research at CDC Strengthen MCH capacity within National Public Health Institutes
4. Strengthen Partnerships	 Strengthen existing partnerships Identify new resources and partnership to leverage CDC's expertise



CDC GLOBAL MATERNAL AND CHILD HEALTH (MCH) STRATEGY

I. PURPOSE

The Global MCH Strategy will guide implementation of MCH activities by CDC country offices with support from CDC Centers/Institutes/Offices (CIOs). It will also serve as a framework for discussions with CDC's partners. The anticipated timeframe for implementation of this strategy is 2012-2016. It aligns with the CDC Global Health Vision and Mission below.

CDC Global Health Vision:

The CDC aspires to create a world where people live healthier, safer, and longer lives.

CDC Global Health Mission:

CDC's global health mission is to protect and improve health globally through science, policy, partnership, and evidence-based public health action.

II. BACKGROUND

CDC has a decades-long history of engaging in activities to improve MCH globally, building on its domestic expertise, and making important contributions to reducing child mortality and morbidity around the world. Most notably, CDC has been involved in a wide range of activities to prevent and control infectious diseases that affect young children. During the 1980s USAID partnered with CDC on the Combatting Childhood Communicable Diseases initiative, which addressed diarrheal diseases, VPDs, malaria, and later respiratory diseases. Following the successful eradication of smallpox in 1979, CDC has continued to make major contributions to global efforts to reduce the incidence of other VPDs by supporting the Global Polio Eradication Initiative and the Global Measles and Rubella Initiative; by strengthening routine vaccination services; and by introducing and evaluating new vaccines. CDC also has a long history of working on efforts to prevent and control malaria, including supporting the President's Malaria Initiative since 2005. Since 2002, CDC has played a central role, first in the implementation of the President's Preventing Mother to Child Transmission (PMTCT) initiative (2002-2003), followed by the President's Emergency Plan for AIDS Relief (PEPFAR, since 2003), which includes PMTCT and pediatric HIV treatment and care. Since 2007, CDC has partnered with WHO on the global elimination of congenital syphilis and with WHO regional offices on the dual elimination of MTCT of HIV and syphilis. CDC staff are detailed to WHO headquarters to support reducing VPDs, HIV/AIDS, and STDs, and to regional and country offices to support reducing Vaccine Preventable Diseases (VPDs).

CDC has also contributed to global activities related to family planning, and infant and maternal health. Since the 1980s CDC has provided support for nationally representative reproductive health surveys and until the late 1990s provided technical assistance on contraceptive logistics to USAID. CDC also supports multiple other global MCH efforts including early childhood and maternal nutrition, maternal and perinatal mortality and morbidity surveillance, prevention of birth defects through food fortification with folic acid, congenital syphilis elimination, promotion of cookstoves, and prevention of unintentional injuries and violence.

This is the first CDC-wide Global MCH Strategy. It aligns with the United States government (USG) global health goals, the Department of Health and Human Services' (HHS) Global Health Strategy (2011-2015), and the CDC Global Health Strategy (2012-2015), all of which support achievement of the MDGs (Table 2). The HHS Global Health Strategy has an objective to "Support the USG Global Health Initiative (GHI)" which emphasizes MCH. CDC's Global Health Strategy has a goal to "improve the health and well-being of people around the world," and objectives to "reduce maternal and perinatal mortality," and to "reduce child morbidity and mortality."

Table 2. Alignment of Global, USG, HHS, and CDC MCH-related Goals and Objectives

Global MDGs	USG Global Health Goals [GHI]	HHS Global Health Objectives	CDC Global Health Strategy
MDG 4: Reduce child mortality	Eliminate preventable under-five mortality Reduce undernutrition	Support the GHI to achieve major improvements in health outcomes through strengthened health systems, with emphasis on women, children,	Reduce child morbidity and mortality Control, eliminate, or eradicate vaccine- preventable diseases (VPDs)
MDG 5: Reduce maternal mortality	Reduce maternal mortality Increase contraceptive prevalence	and families, as confirmation of the US commitment to the health-related Millennium	Reduce maternal and perinatal mortality
MDG 6: Halt spread of HIV Begin to reverse incidence of malaria and TB	Prevent new HIV infections Reduce the burden of malaria Contribute to a reduction in TB deaths and disease burden	Development Goals.	Prevent new HIV infections and serve the needs of HIV-positive individuals globally Reduce malaria morbidity and mortality Reduce TB morbidity and mortality

CDC Global Health MCH Strategy Goals and Objectives

CDC's Global MCH Strategy is organized around achieving global MCH goals by applying the diverse, disease specific areas of expertise at CDC to an integrated approach at the country level and to a cross-cutting approach to strengthening health systems. The UN's Global Strategy for Women's and Children's Health has integrated delivery of health services as one of its five key messages. Most MOHs implement MCH interventions through programs that deliver integrated packages of services (e.g., antenatal care, well child care, integrated management of childhood illness (IMCI) and obstetric care) and through health systems strengthening. The strategy seeks to take advantage of CDC expertise to provide technical assistance with identifying and applying new interventions within integrated programs or to use older interventions in innovative ways. This will require a greater level of coordination between programs at CDC-HQ and with CDC country of-fices where technical assistance to the MOH on implementation takes place.

CDC's Global MCH Strategy has two primary goals consistent with USG and global targets: the reduction of under-5 morbidity and mortality and the reduction of maternal and perinatal morbidity and mortality. To support achievement of these primary goals and ensure sustainability, the third goal is to strengthen health systems necessary for MCH. The fourth goal, strengthened partnerships, is critical to the achievement of the first three goals. The objectives for each of these goals are shown in Table 3.

Table 3. CDC Global MCH Strategy Goals and Objectives

Goal	Objectives
1. Reduce Under-5 Morbidity and Mortality	 Strengthen activities during facility-based well-child visits to prevent morbidity and mortality among infants and children Improve care of sick infants and children Improve population and community-based disease and injury prevention and control
2. Reduce Perinatal and Maternal Morbidity and Mortality	 Strengthen antenatal care to improve perinatal and maternal outcomes Improve emergency obstetric care coverage and quality to reduce maternal mortality and morbidity and improve perinatal outcomes Improve access to family planning and preconception health services
3. Strengthen Public Health Systems for MCH	 Strengthen surveillance and other information systems for MCH and improve use for decision-making Strengthen MCH workforce capacity Strengthen MCH-related public health laboratory coverage and quality Improve the quality and utilization of routine health information systems for planning and M&E with a focus on the district level Improve global MCH research at CDC Strengthen MCH capacity within National Public Health Institutes
4. Strengthen Partnerships	 Strengthen existing partnerships with key development partners at global, regional, and country levels Identify new resources and partnerships to leverage CDC's expertise

III. BUILDING ON CDC STRENGTHS AND RESOURCES

CDC has core technical strengths that can be applied to addressing the global MCH challenge. As defined in CDC's Global Health Strategy these include:

- providing technical expertise
- implementing evidence-based public health programs
- · developing surveillance and strategic information systems
- translating research into public health policy and practice
- building public health workforce capacity
- strengthening laboratory systems
- improving emergency preparedness and response capabilities
- monitoring and evaluation activities

Over the last decade CDC increased its work all over the world and now maintains offices in over 50 countries supporting planning, implementation, and evaluation of public health programs. The CDC country offices are platforms for working effectively on public health programs in-country and responding to country requests and needs. They provide opportunities for improving collaborations between CDC programs. CDC country offices have strong relationships and ongoing dialogue with MOHs, and many support MCH programs. CDC country office activities are currently focused primarily on HIV/AIDS prevention and treatment, malaria prevention and control, influenza prevention and control, field epidemiology and laboratory training, TB prevention and control, VPDs, and emerging disease detection and response. Funding from these programs is used to strengthen core elements of the health system such as surveillance and health information, clinical and public health workforce development, program management, public health laboratories, which often also support MCH programs. Examples of key MCH activities currently being carried out by most countries with a CDC office include the elimination of mother-to-child-transmission of HIV; treatment and care for children with HIV; diagnosis, treatment and care of children with malaria; prevention of malaria during pregnancy; strengthened and expanded programs related to VPDs (done through partnerships with the WHO regional and country office); and strengthened diagnostics and surveillance for diarrheal and respiratory diseases in GDD focus countries. (See Annex 5 for a listing of CDC MCH activities in 49 countries). Many country offices are also supporting MCH-related health systems strengthening particularly related to health information and laboratory systems.

IV. WORKING WITH PARTNERS

CDC's strengths and expertise is leveraged through collaborations with partners. Achieving global MCH goals requires partnerships between countries, donors, and organizations with technical expertise to support the implementation of country led national plans. Key to success is an effective collaboration with MOHs that are committed to sustainably developing the necessary infrastructure and workforce. CDC partners in this effort include HHS, USAID, and other USG agencies; WHO, UNICEF, UNFPA, and other multilateral institutions; bilateral agencies; nongovernmental and philanthropic organizations; professional organizations; academic institutions; and the private sector. CDC staff collaborate with MCH partners on specific projects and through participation in donor coordination and advisory groups.



GOAL 1: REDUCE UNDER-5 MORBIDITY AND MORTALITY

The overarching strategy for Goal 1 is to support integrated packages of quality MCH services known to reduce under-5 mortality and morbidity and, when appropriate, to incorporate new evidence-based interventions focusing on areas of CDC strengths. These efforts will contribute to the achievement of MDG4, the GHI target of reducing child mortality by 35% between 2009 and 2014, the new USG "Call to Action" target of eliminating preventable child deaths and reducing under-5 mortality to 20/1000 live births by 2035, and the global targets of eliminating polio and measles.

Objective 1.1: Strengthen activities during facility-based well-child visits to prevent morbidity and mortality among infants and children

- Improve the coverage and quality of routine well-child services.
- Increase the introduction and use of new and underused vaccines.
- Increase the adoption of home-centered preventive practices.

Objective 1.2: Improve care of sick infants and children

- Strengthen integrated management of childhood illness.
- Improve identification and management of HIV-infected and HIV-exposed infants and children.
- Improve screening and treatment for malaria.
- Improve identification and management of infants and children with sickle cell disease.

Objective 1.3: Improve population and community-based disease prevention and control

Improve implementation and integration of community-based child health interventions.



GOAL 2: REDUCE PERINATAL AND MATERNAL MORBIDITY AND MORTALITY

The current MDGs are falling short particularly in the area of maternal mortality. At the same time an increasing proportion of infant mortality occurs during the first month of life. The overarching strategy of Goal 2 is to support expansion of the content and improvement in the quality of evidence-based MCH interventions that reduce maternal and perinatal mortality, and integrate services where appropriate, focusing on areas of CDC strengths. These efforts will contribute to achievement of MDGs 4 and 5, the GHI target of reducing maternal and child mortality, the Commission on the Status of Women challenge of eliminating preventable maternal mortality, the global target of eliminating maternal to child transmission of HIV, and the elimination of congenital syphilis.

Objective 2.1: Strengthen antenatal care (ANC) to improve maternal and perinatal outcomes

- Improve the quality of ANC.
- Work with WHO and UNICEF to adapt, standardize and implement evidence-based ANC guidelines.
- Develop tools and trainings to support monitoring of ANC coverage and quality.

Objective 2.2: Improve emergency obstetric care coverage and quality to reduce maternal mortality and morbidity and improve perinatal outcomes

- Improve the quality of obstetric care.
- Identify barriers to accessing quality obstetric care.
- Strengthen district referral systems and 'readiness' of facilities to receive more patients.
- Improve access to safe blood.
- Increase exclusive breast-feeding postpartum.
- Introduce or improve coverage with monovalent hepatitis B vaccine birth dose.

Objective 2.3: Improve access to family planning and preconception health

- Collaborate with WHO to periodically update global and national contraceptive guidelines.
- Increase the use of long-acting reversible contraception.
- Incorporate family planning within services for HIV-infected women.
- Increase the number of countries with food fortification with folic acid initiatives.
- Increase rubella vaccine coverage among children and non-pregnant women of reproductive age.



GOAL 3: STRENGTHEN PUBLIC HEALTH SYSTEMS FOR MCH

Goal 3 supports the achievement of Goals 1 and 2 by strengthening key components of the health system. The focus is on areas of CDC strength including surveillance and information systems necessary to assess whether programs are effective and ensure accountability for results; strengthened public health workforce capacity; strengthened laboratory services; monitoring and evaluation and applied public health research.

Objective 3.1: Strengthen surveillance and other information systems for MCH and improve use for decision-making, with a focus on the following:

- Maternal death surveillance and response
- Vital registration
- Birth defects surveillance
- Vaccine-preventable disease surveillance
- Violence against children surveys
- Continuous MCH surveys
- Birth records and other MCH-related health facility outcomes

Objective 3.2: Strengthen MCH workforce capacity

- Develop and implement an MCH track for the Field Epidemiology and Laboratory Training Program (FELTP) and a post-FELTP MCH 'concentration'.
- Increase the number of countries with nursing and midwifery legislation and regulations.

Objective 3.3: Strengthen MCH-related public health laboratory coverage and quality

• Strengthen public health laboratories and networks to sustain high quality MCH-related diagnostics e.g. for VPDs, HIV, syphilis, blood typing etc.

Objective 3.4: Improve the quality and utilization of routine health information systems for planning and monitoring and evaluation, with a focus on the district level

- Strengthen capacity to evaluate the implementation and effectiveness of interventions.
- Support development of district-level feasibility and best practices for implementation of child survival intervention packages, building on packages such as SMGL and HBB.

Objective 3.5: Improve global MCH research at CDC

- Develop a research agenda for global MCH at CDC.
- Strengthen research capacity at country level to improve MCH outcomes.

Objective 3.6: Strengthen MCH capacity within National Public Health Institutes

• Ensure that public health infrastructure for MCH is included in the design and development of National Public Health Institutes.



GOAL 4: STRENGTHEN PARTNERSHIPS

The scope and intensity of global MCH challenges mean that no single country or agency can work alone to meet them. Goal 4 supports the achievement of Goals 1, 2, and 3 by emphasizing the importance of strong partnerships for reaching shared global health objectives such as the MDGs. CDC works in close partnership with a wide array of international and domestic agencies, institutions, and organizations. These partnerships are essential for leveraging CDC's expertise as well as capitalizing on the expertise of our partners to help achieve the objectives of this strategy.

Objective 4.1: Strengthen partnerships with key development partners

- Develop annual work plans including deliverables with key development partners.
- Strengthen MCH-related inter-agency activities with USAID both in-country and at HQ.
- Strengthen collaborations with HHS and HHS agencies.
- Strengthen collaborations with multilateral partners.

Objective 4.2: Identify new resources and partnerships to better leverage CDC's expertise

• Develop an action plan for identifying additional resources needed to implement this strategy.

Annex 1. Global Maternal and Child Health Work at CDC by Center

• Newborn screening and follow-up, health education, and data collection systems

Health System Strengthening	Interventions		
Center for Global Health			
 Field epidemiology and laboratory training program MCH epidemiology Routine immunization services Global laboratory testing capabilities and accreditation Health information systems Global blood safety Nursing and midwifery regulatory systems Refugee assistance in emergency settings Improve MCH outcomes in Haiti 	 Global Polio Eradication Initiative, Global Measles and Rubella Initiative, and VPD elimination and control initiatives for hepatitis B and neonatal tetanus Introduction of new vaccines Maternal and pediatric prevention, diagnosis and treatment of malaria, and neglected tropical diseases Prevention of sexual violence and unintentional injuries Maternal and child HIV prevention, diagnosis, treatment, and care 		
National Center for Immunization and Respiratory D	iseases		
 Surveillance and laboratory capacity for VPDs Effectiveness and impact of new vaccines 	 Global Polio Eradication Initiative Measles and Rubella Initiative Rotavirus, pneumococcal, Hemophilus influenza type B (Hib) and meningitis A vaccination Neonatal and childhood sepsis/pneumonia prevention 		
National Center for Emerging Zoonotic Infectious Dis	seases		
 Prevention of health care associated infections Antimicrobial resistance reduction through promotion of more appropriate antibiotic use Vaccine safety surveillance systems Integration of diarrhea prevention strategies with MCH programs 	 Reduce mortality due to dengue hemorrhagic fever, Japanese encephalitis, and plague Cholera vaccination and Japanese encephalitis vaccination Safe drinking water and hygiene promotion programs 		
National Center for HIV/AIDS, Viral Hepatitis, STD a	and TB Prevention		
 Clinical ARV trials to prevent mother to child transmission of HIV during breastfeeding Laboratory STD surveillance and rapid diagnosis Clinical research on alternative latent TB treatment Global School-based Student Health Survey 	 Global elimination of congenital syphilis Maternal and pediatric TB and TB/HIV prevention, diagnosis, treatment, and care Hepatitis B vaccination, including administration of hepatitis B vaccine birth dose; HPV vaccination 		
National Center for Birth Defects & Developmental D	isabilities		
 Surveillance of birth defects Coordinate with the International Clearinghouse for Birth Defects Surveillance and Research 	 Neural tube defect prevention Screening and management of sickle cell disease Work with WHO and others to expand folic acid 		

Central American Micronutrient Initiative

fortification of staple foods

Health System Strengthening	Interventions		
National Center for Chronic Disease Prevention and H	Health Promotion		
 Maternal death surveillance and response M&E for MCH programs Continuous MCH-N surveys Work with WHO on contraceptive guidance 	 IMMPaCt program addressing vitamin and mineral deficiencies in women and children Smoking cessation programs for pregnant women SMGL - improve access to and quality of EOC 		
National Center for Environmental Health			
 Global Alliance for Clean Cookstoves Global newborn screening reference labs to provide quality assurance for 50 tests for congenital disorders 	Lead poisoning prevention		
National Center for Injury Prevention and Control			
 Surveillance of the magnitude and impact of sexual violence Violence Against Children surveys Surveillance systems for unintentional injuries (e.g., burns, drowning, poisonings) 	 Partner with "Together for Girls" to prevent violence against children, particularly girls Global Helmet Vaccine Initiative - reduce motorcycle injuries 		
National Center for Health Statistics			
Strengthen vital registration systems			



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