



The U.S. Government and Global Maternal, Newborn & Child Health

May 2010

Maternal Health: The health of mothers during pregnancy, childbirth, and in the postpartum period.

Child Health: The health of children from birth through adolescence, with a focus on the health of children under the age of five.

Newborn Health: The health of babies from birth through the first 28 days of life.

Overview

Each year, approximately 9 million children under age five die from largely preventable or treatable causes, including an estimated 3.6 million newborns.^{1,2} Recent estimates indicate that approximately 342,000 to half a million women die during pregnancy and childbirth each year, and millions more experience severe adverse consequences and illness.^{3,4} Almost all (99%) live in the developing world, with Africa being the hardest hit region, followed by South Asia (see Figure 1).

The U.S. government has been engaged in efforts to improve maternal, newborn, and child health (MNCH) in developing countries for several decades.^{5,6,7} While U.S. funding for disease-specific initiatives such as the President's Emergency Plan for AIDS Relief (PEPFAR) and the President's Malaria Initiative (PMI) has expanded significantly in recent years, funding for MNCH programs has increased more slowly.⁸ In addition, MNCH activities have not always been well integrated with other U.S. global health efforts, including disease-specific and family planning and reproductive health (FP/RH) programs, whose interventions have been shown to improve MNCH outcomes.⁹

The Obama Administration has highlighted MNCH as part of the Global Health Initiative (GHI), a new \$63 billion six-year (FY09-FY14) effort to develop a comprehensive global health strategy with a women- and girls-centered approach. The GHI includes specific MNCH targets: to save approximately 360,000 women's lives and 3 million children's lives, including 1.5 million newborns, by reducing maternal and child mortality.¹⁰ Secretary of State Clinton has elevated women's rights, including reproductive rights, and women's empowerment more broadly as part of U.S. foreign policy.

Figure 1: Maternal, Newborn & Child Health Indicators by Region¹

UNICEF Region	Maternal Mortality Ratio (deaths/100,000 live births)	Under Five Mortality Rate (deaths/1,000 live births)	Skilled Attendant at Birth (%)
	2005	2008	2003-2008 ¹¹
Global	400	65	64
Sub-Saharan Africa	900	144	46
Middle East and North Africa	210	43	76
South Asia	500	76	42
East Asia and Pacific	150	28	91
Latin America and Caribbean	130	23	91
CEE/CIS	46	23	97
Industrialized countries	8	6	NA
Developing countries	450	72	63

Current Global Snapshot

The health of mothers and children is interrelated and affected by multiple factors.¹² Increasingly seen as critical to fostering economic development, two of the eight Millennium Development Goals (MDGs)

are specific to MNCH: MDG 4 (reduce child mortality) and MDG 5 (improve maternal health). Of all 8 MDGs, countries have made the least progress toward MDG 5.¹³ Many effective interventions and programs exist to help achieve these goals, but lack of funding and limited access to programs and services have hampered progress, particularly on maternal health.

- **Maternal mortality:** A quarter of all maternal deaths are due to severe bleeding, primarily during the postpartum period (postpartum hemorrhage). Sepsis (15%), unsafe abortion (13%), eclampsia (12%), and obstructed labor (8%) are other major causes. Diseases that complicate pregnancy, including malaria, anemia, and HIV, account for 20% of maternal deaths.⁴ A lack of adequate care during pregnancy and high fertility rates, often due to a lack of access to contraception and other FP/RH services, increase the lifetime risk of maternal death.^{1,14}
- **Newborn mortality:** Premature births account for more than a quarter (29%) of newborn deaths, followed by asphyxia (22%), sepsis (15%), pneumonia (10%), congenital abnormalities (7%), diarrhea (2%), and tetanus (2%).² Low birth weight is a major risk factor and indirect cause of newborn death.⁴
- **Child mortality:** Newborn deaths account for most child deaths (41%), followed by diarrhea (14%), pneumonia (14%), malaria (8%), injuries (3%), HIV/AIDS (2%), and other infectious or non-communicable diseases (18%, including measles (1%)).² Undernutrition significantly increases children's vulnerability to these conditions, as does the lack of access to clean water and sanitation.^{1,15}
- **Effective interventions:** Key interventions that reduce the risk of maternal mortality include access to skilled care at birth and emergency obstetric care. Newborn deaths may be substantially reduced through increased use of simple, low-cost interventions, such as breastfeeding, keeping the newborn warm and dry, and treating severe newborn infection.⁵ When scaled-up, interventions such as immunizations, oral rehydration therapy (ORT), and insecticide-treated mosquito nets (ITNs) have contributed to significant reductions in child mortality over the last two decades.¹³ Strengthening health systems and increasing access to services, including through community-based clinics, are also important and interventions have been found to work best when integrated within a comprehensive continuum of care.^{1,16}

The U.S. Government Response

History

- The first U.S. international efforts in the area of MNCH began in the 1960s focused on child survival research, including pioneering research on ORT conducted by the U.S. military, the U.S. Agency for International Development (USAID), and the National Institutes of Health (NIH). Early programs included fortifying international food aid with vitamin A and efforts to control malaria.^{7,17}
- In 1985, the U.S. augmented its child survival activities: Congress provided \$85 million for child survival activities during FY 1985, nearly doubling funding for this purpose.^{5,6,7}
- In 1989, USAID developed its first maternal health project, and in 2001, it introduced a newborn survival strategy.^{5,6,7}



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Structure and Approach

The GHI has placed a new emphasis on MNCH and FP/RH, and an expectation that these programs will be scaled up over the next several years. USAID serves as the lead U.S. agency for MNCH activities, and several other agencies and cross-cutting initiatives also carry out MNCH activities.

- USAID operates programs with MNCH components in 62 countries.¹⁸ Of these, 30 are designated as MNCH “priority countries,” which are primarily in Africa and receive the majority of funding. They are chosen based on need as reflected by maternal and child mortality burden, the presence of USAID Missions, and the capacity of those Missions and recipient countries to implement MNCH activities.⁵
- Outlined originally in 2008, USAID’s comprehensive MNCH strategy focuses on developing, introducing, and bringing “high impact interventions” to scale and health systems strengthening. Programs and interventions are supported through direct and indirect mechanisms (see Figure 2), including: USAID field staff’s work with governments and other on-the-ground partners; financial and technical support provided to countries, facilities, implementing partners, and others who, in turn, provide direct services and programs; health workforce training efforts; procurement of medications and other supplies; and operational research.^{5,6} Although FP/RH is part of the broader U.S. MNCH and global health strategy (and the internationally agreed upon definition of reproductive health includes both FP and MNCH),¹⁹ Congress directs funding to and USAID operates these programs separately as integration has been subject to political debate.
- The Centers for Disease Control and Prevention (CDC) operate immunization programs, provide scientific and technical assistance, and work to build capacity in a broad array of MNCH and RH areas. CDC also serves as a WHO Collaborating Center on reproductive, maternal, perinatal, and child health.²⁰ NIH addresses MNCH by carrying out basic science and implementation research, sometimes in cooperation with other countries.^{21,22} The Peace Corps carries out MNCH-related volunteer projects around the world.²³
- U.S. global health initiatives that address conditions that threaten the health of many pregnant women and children include PEPFAR, PMI, and the Neglected Tropical Diseases Initiative.

Figure 2: U.S. Government Funded MNCH Interventions^{5,6}

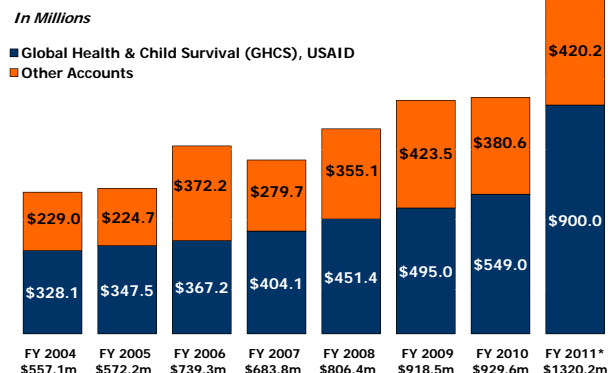
Newborns and Children	Women
Essential newborn care	Skilled care at birth, including attendants
Postnatal visits	Emergency obstetric care
Prevention and treatment of severe childhood diseases	Antenatal care, including aseptic techniques to prevent sepsis
Immunizations, including those for polio, measles, and tetanus	Improved access to FP/RH and birth spacing
Malaria prevention, including ITNs and, for mothers, intermittent preventive treatment during pregnancy (IPTp)	
HIV prevention/treatment/care, including prevention of mother-to-child-transmission (PMTCT) of HIV	
Improved nutrition/supplementation	
Clean water/sanitation efforts	
Health systems strengthening (health workforce, information systems, pharmaceutical management, infrastructure development)	
Implementation science and operational research	

U.S. Government Funding

- Most U.S. government funding for MNCH is specified by Congress in annual appropriations bills and is part of the “Global Health and Child Survival” (GHCS) account at USAID; all GHCS funding for MNCH is counted as part of the GHI. Additional funding is provided through other accounts (although it is not currently counted as part of the GHI).
- U.S. funding designated specifically for MNCH increased relatively slowly, until recent years (see Figure 3). Funding appropriated by Congress for MNCH, including nutrition, within the GHCS account increased from \$328 million in FY 2004 to \$549 million in FY 2010.⁸ The FY 2011 budget requests \$900 million for MNCH, and with additional funding through other accounts, the total requested amount would reach \$1.3 billion.^{8,18,24} Despite recent increases, designated

funding for MNCH has not kept pace with U.S. global health funding, declining from 10% in FY 2004 to 6% in FY 2010, although it represents 9% of the FY 2011 request (in part due to a significant increase in nutrition funding).²⁵

Figure 3: U.S. Government Funding for Global MNCH/Nutrition, FY 2004–FY 2011^{*8}



*FY 2011 is the President’s Budget Request to Congress

Looking Ahead

The U.S. is one of the largest global donors to maternal, newborn, and child health efforts. The GHI and congressional interest in MNCH could boost efforts in this area. Global attention to MNCH and concern about reaching MDGs 4 and 5 have also contributed to growing momentum. Key issues going forward for the U.S. response include:

- The extent to which MNCH programs, goals, and activities are coordinated and integrated with other U.S. global health efforts under the GHI, including not only PEPFAR and PMI but family planning and reproductive health;
- The appropriate balance in funding between MNCH programs and disease-specific initiatives that may also benefit MNCH, as well as broader health systems strengthening;
- The linkage between MNCH programs and broader U.S. global development efforts, such as those addressing education, which have been shown to substantially improve MNCH; and
- The relative emphasis placed on U.S. bilateral programs compared to multilateral efforts, and U.S. coordination with other donors, particularly given the ongoing challenge of reaching women and children with critical MNCH services and recent global discussions about creating a new multilateral financing vehicle for MNCH.

¹ UNICEF. *The State of the World’s Children 2009*, December 2008, and *State of the World’s Children 2010*, November 2009.
² Robert E. Black, et al. “Global, regional, and national causes of child mortality in 2008: a systematic analysis,” *The Lancet*, Vol. 375; May 2010.
³ Margaret C. Hogan, et al. “Maternal mortality for 181 countries, 1980-2008: a systematic analysis of progress towards Millennium Development Goal 5,” *The Lancet*, Vol. 375, No. 9726; 2010.
⁴ WHO. *The World Health Report 2005 – make every mother and child count*, 2005.
⁵ USAID. *Working Toward the Goal of Reducing Maternal and Child Mortality: USAID Programming and Response to FY08 Appropriations* (Report to Congress), July 2008.
⁶ USAID. *Two Decades of Progress: USAID’s Child Survival and Maternal Health Program*, June 2009.
⁷ USAID Reports to Congress, 1985, 1987, 1990.
⁸ Kaiser Family Foundation analysis; May 2010.
⁹ Guttmacher Institute/UNFPA. *Adding It Up: The Costs and Benefits of Investing in Family Planning and Maternal and Newborn Health*, 2009.
¹⁰ GHI. *Implementation of the Global Health Initiative: Consultation Document*, February 2010.
¹¹ Percent of births attended by a skilled birth attendant, which is defined as an accredited health professional - such as a midwife, doctor, or nurse - who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth, and the immediate postnatal period, and in the identification, management, and referral of complications in women and newborns. Data are from the most recent year available.
¹² George Schmid, et al. “The Lancet’s neonatal survival series,” *The Lancet*, Vol. 365, Issue 9474, p. 1845, 28 May 2005.
¹³ UN. *The Millennium Development Goals Report 2009*, 2009.
¹⁴ WHO. *Maternal Mortality in 2005*, 2007.
¹⁵ CRS. *Child Survival and Maternal Health: U.S. Agency for International Development Programs, FY2001-FY2008*, July 2008.
¹⁶ Partnership for Maternal, Newborn & Child Health. *Strategy and Workplan 2009-2011*, April 2009.
¹⁷ USAID. *Child Health*: www.usaid.gov/our_work/global_health/mch/ch/index.html.
¹⁸ State Department. *Congressional Budget Justification, Foreign Operations, FY 2010 and FY 2011*.
¹⁹ International Conference on Population and Development (ICPD), Programme of Action, Cairo 1994, <http://www.un.org/ecosocdev/geninfo/population/icpd.htm#intro>.
²⁰ CDC. *Global Reproductive Health*: www.cdc.gov/reproductivehealth/Global/index.htm.
²¹ NIH. *NIH Newborn Screening Research Program Named in Memory of Hunter Kelly*, 19 October 2009.
²² NIH. Focus on NICHD International Health Activities: http://www.nichd.nih.gov/news/resources/spotlight/100606_international_activities_p2.cfm.
²³ Peace Corps: www.peacecorps.gov/index.cfm?shell=learn.whatvol.html.
²⁴ CDC also provides some funding for MNCH which is not included here.
²⁵ KFF calculation of funding designated for MNCH/Nutrition through the GHCS account, as part of the GHI, as share of overall funding the programs now counted as part of the GHI.