Target 4a: Reduce by two thirds, between 1990 and 2015, the under-five mortality rate

Under-five mortality rate per 1,000 live births in developing regions, 1990 and 2008

1990 100
2008 72
0 25 50 75 100

Child deaths are falling, but not quickly enough to reach the target. Four diseases—pneumonia, diarrhoea, malaria and AIDS—accounted for 43% of all deaths in children under five in developing countries world-wide during 2008. An estimated 9.2 million children under five world-wide died from largely preventable causes during 2007. Malnutrition, poor hygiene and lack of access to safe water and adequate sanitation contributed to more than half of these deaths.

Notes
1. UN (2010).

SOURCE: UN (2010).
Partnerships that support large-scale immunization campaigns can produce quick gains in children’s health. The number of children world-wide who die before their fifth birthday declined from 12.5 million in 1990 to 9 million in 2008. Health-sector partnerships ensured vaccination against measles for 700 million children globally between 2000 and 2008, averting 7.5 million deaths and reducing death by 68% over the same period. These achievements were supported by international co-operation that raised $5 billion and mobilized 20 million volunteers for targeted campaigns and interventions. For example, Vietnam has benefited from the Global Alliance for Vaccines and Immunization (GAVI) Vaccine Fund, which made it possible to raise total government expenditures on immunization by 20%. Key supporters include Novartis, GlaxoSmithKline and Merck.93

The private sector is also contributing towards the reduction of child mortality by providing products and services designed to tackle some of its main causes. For example, Manila Water Company has connected more than 140,000 low-income households to the piped-water system and provided access to clean water for more than 860,000 poor people in the Philippines.94 And each year A to Z Textiles manufactures 20 million long-lasting anti-malaria bed nets for poor children in Tanzania.95

What are the challenges?

- A lack of awareness in low-income communities about the causes of child mortality can make it difficult for businesses to provide solutions. For example, people may not be used to making their children sleep under bed nets. Raising popular awareness requires collaboration from public-sector actors and development organizations.

- For vaccinations, distribution and provision is a main challenge. Many places lack the cold chains needed to transport vaccines safely.

- Many health systems are weak—especially in rural areas—with few doctors and nurses and a lack of nearby health facilities.

- Private water provision and sanitation can help make water more accessible and affordable—but only where regulation and enforcement provide the right incentives. Designing systems that draw on the capacities of the private sector while maintaining and improving equitability has proven challenging in some places.
MNCs can, for example:

- As pharmaceutical companies, partner with governments and international organizations to sharply reduce prices for essential pneumonia, diarrhoea, malaria and AIDS drugs.96
- Develop products to tackle major causes of child mortality—water purifiers, mosquito repellent and nets, fortified food—and market them at affordable prices.

Large domestic companies can, for example:

- As pharmaceutical companies, produce generic medicines at low cost.
- As water and sanitation utilities, improve access to clean water and hygiene by expanding networks to low-income communities and upgrading quality standards.
- Raise awareness about child health issues in the workforce and in local communities.
- Combine corporate marketing expertise and products with major public-health campaigns.

SMEs can, for example:

- Put in place distribution methods that will ensure delivery of the required products to people in need; sell such products (clean water, bed nets, medicines) to low-income households through pharmacies, retail shops and other outlets.
- As local food manufacturers, help fight malnutrition by producing products with high nutritional value.

NPOs can, for example:

- Design and implement innovative business models to provide clean water, basic hygiene, sanitation, nutrition and access to basic medicines in a sustainable and scalable manner while creating entrepreneurship opportunities.
- Provide medical services and education on child health to local communities.
**Grameen Danone ▪ MNC, Bangladesh**

Microfinance institution Grameen and French dairy company Groupe Danone established a joint venture whereby a self-sustainable social business was set up with the objective to create a yogurt fortified with micro-nutrients to decrease malnutrition for the children of Bangladesh. The yogurt is produced with solar and bio gas energy and is served in environmentally friendly packaging. Around 25% of low-income children living around the factory are regular customers, 700 village ladies are getting an additional income by selling these yogurts door-to-door, and 370 micro-farmers around the plant sell daily to Grameen Danone, thus improving their income by approximately 40%. The first plant started production in late 2006 and the 10-year plan is to establish 50+ plants, create several hundred distribution jobs and develop self-degradable packaging. In 2007 Danone launched a mutual fund, danone.comunities, designed to finance the expansion of Danone's social business in Bangladesh as well as encourage the development of new social businesses that fight malnutrition and poverty in developing countries.

**Unilab/RiteMed ▪ Large domestic company, Philippines**

Philippine pharmaceutical company Unilab set up RiteMed in 2002 as a subsidiary with the mission of marketing and distributing quality generic medicines to the poor. RiteMed reduced prices by selling smaller batches and by marketing more efficiently (saving costs by marketing the whole line of 65 products together). Quality medicines, offered at prices 20%–75% below those of leading brands, were distributed by public government hospitals, making them affordable and accessible for millions of Filipinos. RiteMed also organizes marketing campaigns and community outreach programmes on disease prevention.

**Amanz Abantu ▪ SME, South Africa**

Diarrhoea remains the second leading cause of death among children—it kills more young children than AIDS, malaria and measles combined. About half of these deaths occur in South Asia and Africa. Amanz Abantu provides water supply and sanitation to peri-urban and rural communities in the Eastern Cape, where a quarter of the population lacked potable water. The company was set up in 1997 and won a contract for the Eastern Cape through a government tender (itself a result of South Africa’s unique constitutional guarantee of sufficient water access as a basic right). The company pipes water meeting international quality standards to standpipes where individuals can buy it using pre-paid smartcards; 25 litres are provided free to each household by the state. Through Amanz Abantu 2.5 million people have gained access to clean water at low cost.

**Pesinet ▪ NPO, Mali**

Pesinet, a French NPO, provides preventive medical diagnostics to children under five in rural areas of Mali. For a monthly fee of CFA 500 (about $1) each family receives weekly health check-ups for children, free medical examinations for any identified abnormalities, discounts on medicines and free follow-up examinations when needed. The weekly check-ups are provided by local agents, each trained by Pesinet and provided with a mobile phone containing a special application to transmit information on patients’ weights and symptoms (such as fever). Doctors who perceive irregularities can communicate through the agent by phone and suggest remedies. In Mali more than 5,000 children had benefited through 2008.

According to Pesinet child mortality in its subscriber base is now very low, at 5 per 1,000 (compared with an average of 150 per 1,000 in the capital city covered). The NPO estimates that it can prevent 80% of child mortality from benign diseases, reducing total child mortality in the covered populations by more than half.
THE SUPPORTING ROLES OF INSTITUTIONS

Policy

National assessments can identify bottlenecks that hamper efforts to reduce child mortality, thus guiding private resource allocation.

- Ethiopia’s Emergency Obstetric and Neonatal Care initiative starts with a needs assessment ranging from human resources to service capacity.  

- Botswana’s Accelerated Child Survival and Development Strategic Plan uses ‘bottleneck analysis’ to develop strategies for addressing the causes of high infant and child mortality.

Regulation can create the right market conditions for affordable medicines and other services to help tackle child mortality.

- South Africa passed the Medicines and Related Substances Act. Somebody who receives a prescription for a brand-name medicine now has the right to ask the pharmacist to substitute a generic equivalent.

Public-private partnerships in health are sometimes limited by a lack of public-sector capacity. Increasing that capacity can make private-sector contributions more effective.

- Argentina’s initiative titled Strengthening the Health Management System of the La Matanza Municipality worked on regulation, administrative and bureaucratic constraints and human-resource gaps to increase the efficiency of health-input procurement, delivery and service management.
Research and advocacy

Research provides knowledge on how to address causes of child mortality such as malnutrition and diarrhoea.

- The Micronutrient Initiative (MI) works to eliminate vitamin and mineral deficiencies in the world's most vulnerable populations. MI offers its knowledge and technology to the food industry to cost-effectively add nutrients, such as iron and folic acid, to food without affecting its quality or taste—helping to raise the quality of life for women and their families.107

- The International Centre for Diarrhoeal Disease Research in Bangladesh develops and promotes realistic, cost-effective solutions to the major health, population and nutrition problems facing poor people in Bangladesh and elsewhere.108

- Helen Keller International, which aims to prevent blindness and reduce malnutrition, is a rich source of research. It also helps to fund programmes by identifying partners in healthcare, schools, informal social systems and local and national food supplies.109

Initiatives exist to provide basic information on populations requiring specific services, such as their location—often a prerequisite for allocating scarce resources.

- Malawi’s RapidSMS initiative developed a mobile-phone-based platform to transmit nutrition data from growth-monitoring clinics to the government’s nutritional-surveillance and early-warning system. This helped to combat child mortality by reducing the time between identifying nutritional emergencies and scaling up treatment in affected areas.110

- The Gambia’s initiative titled Integration of Birth Registration into Maternal and Child Health Clinics has worked to decentralize birth-registration services for children under five nation-wide by integrating them into reproductive and child-health services.111
Financing

Because developing countries have limited resources to strengthen government health systems, funds and initiatives that support business in the pharmaceutical, food, sanitation and water sectors can help reduce child mortality.

- The Acumen Fund, a non-profit global venture fund, uses entrepreneurial approaches to solve problems of global poverty. Its health and water portfolios include support for initiatives that contribute towards reducing child mortality. One example is Insta Products Limited, a Kenya-based private company manufacturing a protein-rich, vitamin-rich pre-cooked porridge product that supplies the body with all nine essential amino acids. Another is LifeSpring, a network of maternity and child health-care hospitals in South India that provides vital reproductive and pediatric health care to people with low and lower-middle income.112

- The International Finance Corporation (IFC) offers financial, technical and strategic assistance to health-related projects. One example, the Child and Maternal Health Initiative, exemplifies the larger development role that the private sector needs to play in emerging economies. A partnership between the IFC and Cairn, a large oil company based in the United Kingdom, the initiative has two areas of focus in Rajasthan (where Cairn operates): building health-seeking behaviour and awareness in local women and children, and building the capacity of local government health workers.

- The Bill and Melinda Gates Foundation, which maintains a global health program, has announced a new $1.5 billion commitment to women and children’s health—for example, to develop and introduce simplified antibiotics for newborn infections, a post-partum hemorrhage treatment that will be more cost-effective and other interventions that could have major health impacts.113
A complex problem, child mortality is related to many factors (water, sanitation, HIV/AIDS). To tackle it, collaborations can bring together diverse capabilities from the private sector, the public sector and civil society.

- UNICEF works with governments, the World Health Organization (WHO), the United Nations Population Fund (UNFPA) and others to reduce child mortality. With Unilever and Synergos (an NPO) it has formed the Partnership for Child Nutrition, which is now working to bring safe drinking water to schools and day-care centres in low-income communities in South India. And with Pampers, UNICEF has striven to eradicate maternal and neo-natal tetanus through its 1 Pack = 1 Life-Saving Vaccine campaign, generating enough funds to provide more than 260 million vaccines for mothers and their babies.  

- Nutriset is the French manufacturer of Plumpy’nut—a ready-to-use therapeutic food that, in 2009 alone, was used to treat malnutrition in 258,000 children. Using a technology-sharing approach, Nutriset works through a network of 10 independent manufacturers in developing countries. Of a total of 14,000 tonnes of Plumpy’nut produced world-wide in 2009, around 4,000 tonnes were made in developing countries.

- Project Healthy Children (PHC) works with governments and private industry on programmes to improve the health of children and their families around the world with fortified food and supplements. Recently PHC began work with the Entrepreneurial Design for Extreme Affordability class at Stanford University, asking students to re-design the technology of current small-scale fortification projects to make them less expensive and more convenient for rural settings. The result was a device that is mounted to existing mills and adds micro-nutrients to a mixture of cereal and legumes, producing Nourimil (sold by Zanmi Lasante, a sister organization to Partners in Health).

- Project Laser Beam (PLB) is a five-year, $50 million public-private partnership seeking to eradicate child malnutrition. Bringing together the expertise of UN agencies, Fortune 500 companies and others in the private sector to work with local governments and companies, it will focus on areas including the fortification of food with micro-nutrients; the production of child-nutrition supplements and ready-to-use foods (requiring no water or cooking); sanitation and hand-washing; access to clean water; de-worming; immunization; therapeutic feeding for the severely malnourished; education on the benefits of breast-feeding; and nutrition education.