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# Global Health Programs

**PROGRESS REPORT TO CONGRESS**  
FY 2012



World Bank/Curt Carnemark

## Foreword

Looking across the last two decades, the progress that the global community has made in health is impressive. Compared to 1990, this year, more than 4 million more children will live past their fifth birthday, and average life expectancy has increased by 21 years. For many around the world, access to life-saving antiretroviral drugs means that HIV & AIDS is no longer a death sentence, and thousands more women survive the natural act of childbirth, thanks to the skilled attendants by their side. At the same time, the development landscape for health is changing. Many developing countries around the world are seeing unprecedented growth of their gross domestic product, and half of the low-income countries in 2000 will be middle income by 2020. A growing number of our partner countries will reach total health spending levels per capita that enable them to cover basic health services for the first time in history.

But despite these successes, we know there are places where progress remains far too slow. Every year, 6.9 million children around the world continue to die, many from causes we know how to prevent. Infectious, life-threatening diseases such as pneumonia, diarrhea and malaria are further exacerbated by endemic rates of malnutrition and poor access to health services. With less than 1,000 days until the Millennium Development goalpost in 2015, the challenges before us are substantial. International development assistance will increasingly focus and concentrate on the poorest people of the world, as we continue to seek greater value for money and careful documentation of our impact.

Last June, we joined our partners in hosting a Child Survival Call to Action to rally the world behind the goal of ending preventable child deaths. Through the Call to Action and its follow-on initiative, A Promise Renewed, more than 170 countries have signed a pledge to reduce child mortality, and 200 civil society organizations – along with 220 faith-based organizations – have echoed the call with commitments of their own. Most importantly, the Child Survival Call to Action is being led by developing countries themselves.



Maggie Hallinan Photography

The realization that our generation can end preventable child and maternal deaths has catalyzed a renewed focus on newborn, maternal and reproductive health through international commitments and evidence-based action from host country governments, other donors and the private sector. One example of such commitment and action is the London Summit on Family Planning, which secured \$2.6 billion in new commitments from donors and incited more than 20 developing countries to make bold commitments to address barriers to family planning. Another is the Declaration on Scaling Up Treatment of Diarrhea and Pneumonia, which galvanized support for national plans to scale up zinc and oral rehydration salts in prioritized high-burden countries. Still another is the continuation of the Saving Mothers, Giving Life public-private partnership aimed at rapidly reducing maternal mortality.

As a key partner in the U.S. President's Emergency Plan for AIDS Relief, we are building on nearly a decade of progress to create an AIDS-free generation while improving the perfor-

mance and sustainability of country health systems. Addressing the health workforce shortage and growing out-of-pocket expenditure is a critical part of this effort, which includes improving the number, distribution, skills and financing of health workers in facilities and in communities, as well as new efforts to reorganize domestic financing in more efficient and equitable ways. All of these efforts align under U.S. goals to end extreme poverty and promote peace and prosperity worldwide, which result in improved security at home and better markets for U.S. businesses abroad.

At the U.S. Agency for International Development, our approach to addressing today's challenges in an integrated, sustainable and cost-effective way is reflected in how we work. Our specialists in nutrition are working side-by-side with counterparts in agriculture to build integrated Feed the Future programs that address the supply of, and the demand for, nutritious food. The President's Malaria Initiative has expanded efforts to reduce the intolerable burden of malaria and help relieve poverty.

A new Office of Health Systems is spreading lessons learned from decades of work in building broad and sustainable health systems while breaking new ground in how countries align their finances, human resources and operations to support those who are most vulnerable. Our Center for Accelerating Innovation and Impact is working with the private sector to bring market-driven solutions to the world's most pressing health challenges. The Center of Excellence on Children in Adversity, under the framework of the new U.S. Government Action Plan on Children in Adversity, is coordinating efforts to nurture strong beginnings while protecting children from violence, exploitation, abuse and neglect.

I am pleased to present a summary of key accomplishments we have achieved in FY 2012 in partnership with host country governments, other U.S. agencies, faith-based and civil society organizations, corporate partners and, above all, the individuals around the world whose desire for a healthier and better life motivates us every day.

A handwritten signature in black ink, appearing to read 'Ariel'.

Ariel Pablos-Méndez, MD, MPH, Assistant Administrator for Global Health  
U.S. Agency for International Development



## Executive Summary

In FY 2012, the U.S. Agency for International Development (USAID), as part of the Global Health Initiative (GHI), continued to answer President Obama's call to end extreme poverty and its most devastating corollaries by ending preventable child and maternal deaths, creating an AIDS-free generation and building capacity to fight infectious diseases.

USAID, under GHI, is working to maximize its health impact through an approach that focuses on women, girls and gender equality; encourages country ownership; builds sustainability through health systems strengthening; strengthens and leverages key partners; increases impact through strategic coordination and integration; and promotes research and innovation.

USAID draws on investments made through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR), the President's Malaria Initiative (PMI) and programs in maternal and child health (MCH), family planning and reproductive health, tuberculosis (TB), neglected tropical diseases (NTDs) and other areas, and expands their reach by linking individual programs in an integrated system of care. The financial and technical contributions made by the U.S. Government through USAID are catalyzing the remarkable progress made in partnership with countries around the world.

**KEY PROGRESS IN GLOBAL HEALTH**  
USAID is contributing to progress in global health with efforts to end preventable maternal and child deaths, achieve an AIDS-free generation, protect communities from infectious diseases, strengthen health systems, invest in technological innovations and protect vulnerable children from health threats.

**ENDING PREVENTABLE CHILD AND MATERNAL DEATHS**  
In June 2012, the U.S. Government led the charge to renew the global effort to end preventable child death. Over 80 countries represented by governments and a multitude of partners from the private sector and civil society, including faith-based organizations, gathered at the Child Survival Call to Action – a high-level forum co-convened by the United States along with the Governments of Ethiopia and India and in collaboration with United Nations Children's Fund. The Call to Action challenged the world to reduce child mortality to 20 or fewer child deaths per 1,000 live births in every country by 2035. Reaching this historic target will save 45 million children's lives by 2035.

Ending preventable child and maternal deaths is not an outcome of U.S. Government assistance alone, nor is it solely the outcome of narrowly-defined programs in

MCH. Rather, improvements in mortality outcomes are the result of increasingly effective efforts to link diverse health programs – in MCH, in malaria, in family planning's contribution to the healthy timing and spacing of pregnancy, in nutrition, in HIV & AIDS and in sanitation and hygiene improvement. Each of these programs brings us closer to the desired outcome. But when they work together in health systems that are well implemented, well staffed, and well supplied, their value and effectiveness can be all the greater.

### *Maternal Health*

USAID programs have contributed to accelerated maternal mortality declines in 24 MCH priority countries at an average rate of 5 percent per year, which is faster than the global average. Attendance at birth by a skilled provider increased from 26.9 percent in 1990 to 50.0 percent in 2012, increasing women's access to life-saving interventions in some of the world's most challenging environments.

### *Newborn Health*

Babies born today in USAID's 24 MCH priority countries have a better chance of surviving their first 28 fragile days of life. In those countries, newborn mortality rates declined 33 percent from 1990 to 2011.

### *Child Health*

In USAID's MCH health priority countries, deaths of children under 5 were reduced from 7.7 million in 1990 to 4.8 million in 2011. Worldwide deaths of children under 5 dropped from 12 million to 6.9 million over the same period of time. Moreover, the rate of decline has accelerated in the last decade, particularly in sub-Saharan Africa, as momentum builds to address the leading causes of child death.

### *Immunization*

Coverage for the full three courses of diphtheria, pertussis and tetanus (DPT3) vaccination in USAID's 24 MCH priority countries increased from 41.6 percent in 1990 to 59.8 percent in 2012. Through FY 2012, USAID technical assistance has supported the successful launch of vaccines to prevent pneumonia and diarrhea in 12 countries in partnership with the GAVI Alliance.

### *Pneumonia, Diarrhea, Water, Sanitation and Hygiene*

USAID's long-term support for addressing the leading killers of children has contributed to an 18 percent decline in pneumonia and diarrhea deaths from 2000 to 2010 among 24 MCH priority countries.

### *Nutrition*

USAID reached more than 12 million children under 5 in FY 2012 through nutrition programs such as micronutrient supplementation and food fortification, anemia reduction and the treatment of acute malnutrition.

### *Malaria*

Since 2006, 12 of the original 15 PMI focus countries have had reductions in childhood mortality rates, ranging from 16 to 50 percent. In FY 2012, PMI protected over 50 million people with a prevention measure (insecticide-treated nets and/or indoor residual spraying) and distributed more than 43 million treatments of life-saving drugs to targeted populations.

### *Family Planning and Reproductive Health*

In the 27 countries that currently receive at least \$2 million in USAID family planning/reproductive health assistance, 1 in 10 married women of reproductive age used a modern method of contraception in 1990. Today, almost one-third of such women in these same countries are users of modern contraception.

## **ACHIEVING AN AIDS-FREE GENERATION**

PEPFAR, the largest effort by any nation to combat a single disease, continues to work toward achieving ambitious prevention, care and treatment goals while also strengthening health systems and emphasizing country ownership. USAID is a key implementing agency of PEPFAR and works with partners to build a long-term sustainable response to the epidemic and to create an AIDS-free generation.

### *HIV & AIDS*

PEPFAR directly supported life-saving antiretroviral treatment for 5.1 million men, women and children living with HIV worldwide in FY 2012.

## **PROTECTING COMMUNITIES FROM INFECTIOUS DISEASES**

In addition to USAID's commitment to saving lives of mothers and children and creating an AIDS-free generation, we also continue to combat other infectious diseases, such as TB, NTDs and pandemic influenza and other emerging threats, that cause death and suffering for millions around the world.

### *Tuberculosis*

Over 1.5 million people with TB were successfully treated in USAID priority countries in FY 2012. The number of patients with multidrug-resistant TB (MDR-TB) who initiated treatment in priority countries more than doubled from the previous year, with over 44,000 MDR-TB patients starting treatment.

### *Neglected Tropical Diseases*

USAID support for NTDs has expanded to include 23 countries. The Agency delivered 231 million treatments in FY 2012 and leveraged \$1 billion in drug donations. In the countries where we work, 24 million people are no longer at risk of acquiring blinding trachoma, and 34.4 million people are no longer at risk for lymphatic filariasis.

### *Pandemic Influenza and Other Emerging Threats*

From 2010 to 2012, USAID collaborated with international partners to provide technical, operational and commodity support in response to 18 infectious disease outbreaks around the world among animals and people, including yellow fever, Ebola and avian influenza.

## **STRENGTHENING HEALTH SYSTEMS**

Investment in health systems strengthening has allowed USAID to expand coverage of basic services to those who need them most and to document their impact on improved health outcomes in many countries. These investments have additionally strengthened the capacity of countries to plan strategically for future needs by using National Health Accounts, prioritizing for essential health services, developing health workforce management capacity, strengthening health information systems and ensuring the availability of quality-assured medicines.

## **ADVANCING SCIENCE AND TECHNOLOGY**

Through investments in science, technology and innovation, USAID is supporting more effective interventions that save lives and improve health services around the world. In FY 2012, USAID harnessed new technologies that will accelerate efforts to achieve our goals.

USAID is investing in the introduction and scale-up of GeneXpert, a new diagnostic technology that facilitates diagnosis of drug-resistant TB and TB associated with HIV infection. USAID has supported the rollout and implementation of GeneXpert in 14 countries through procurement of over 80 machines and associated test kits.

USAID is supporting the completion of studies required for Food and Drug Administration approval of the 1-year contraceptive vaginal ring, the first woman-controlled, long-acting family planning method. Manufacturing refinements were also developed to reduce the ring's overall cost.

USAID is assisting the rollout of chlorhexidine – a new intervention proven to reduce neonatal infection and mortality when applied to the umbilical cord within hours of birth.

## **DISPLACED CHILDREN AND ORPHANS FUND**

The evidence base on reducing risks for vulnerable children that USAID has developed through program activities and rigorous research was influential in developing the United States Government Action Plan on Children in Adversity. Launched in 2012, the action plan guides the work of seven U.S. Government departments and agencies in more than 100 countries.

## Ending Preventable Child and Maternal Deaths

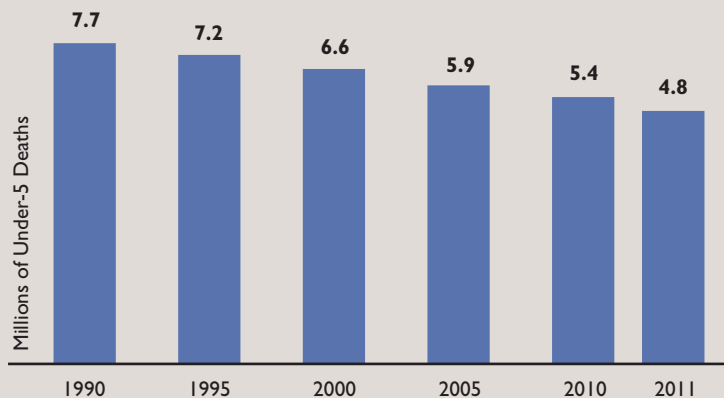
*“In our work to build resilience, fight poverty and improve child survival, we can bend the curve of development, realizing transformational leaps of progress that would have been unimaginable only a decade ago.”*

Dr. Rajiv Shah, USAID Administrator

The U.S. Agency for International Development (USAID), with its partners in the U.S. Government and the global community, is committed to the goal of ending preventable child and maternal deaths. While many challenges remain, today, more than ever, we are equipped with the tools and knowledge to reach this goal. Worldwide deaths of children under age 5 dropped in the past two decades from 12 million in 1990 to 6.9 million in 2011. This means that approximately 14,000 fewer children died each day in 2011 than in 1990. What is more, the annual rate of decline has accelerated in the last decade, particularly in sub-Saharan Africa. There has also been a nearly 50 percent reduction in maternal deaths from 543,000 in 1990 to 287,000 in 2010.

The June 2012 Child Survival Call to Action was a high-level forum, convened by

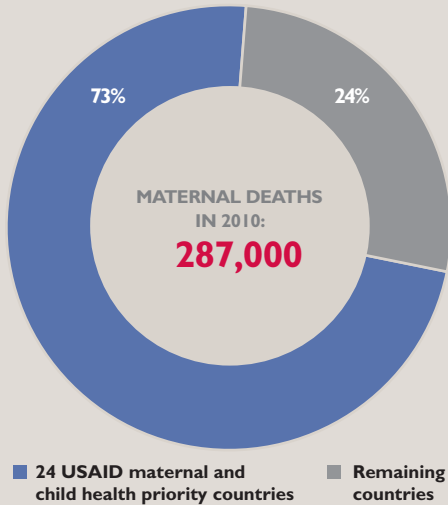
### Declines in Under-5 Deaths in USAID's 24 Maternal and Child Health Priority Countries



**From 1990 to 2011, on average 4% fewer children died each year in the countries where USAID focuses its maternal and child health programs.**

Source: IGME, 2012.

## USAID Focuses Where the Majority of Maternal Deaths Occur



Source: WHO, 2012.

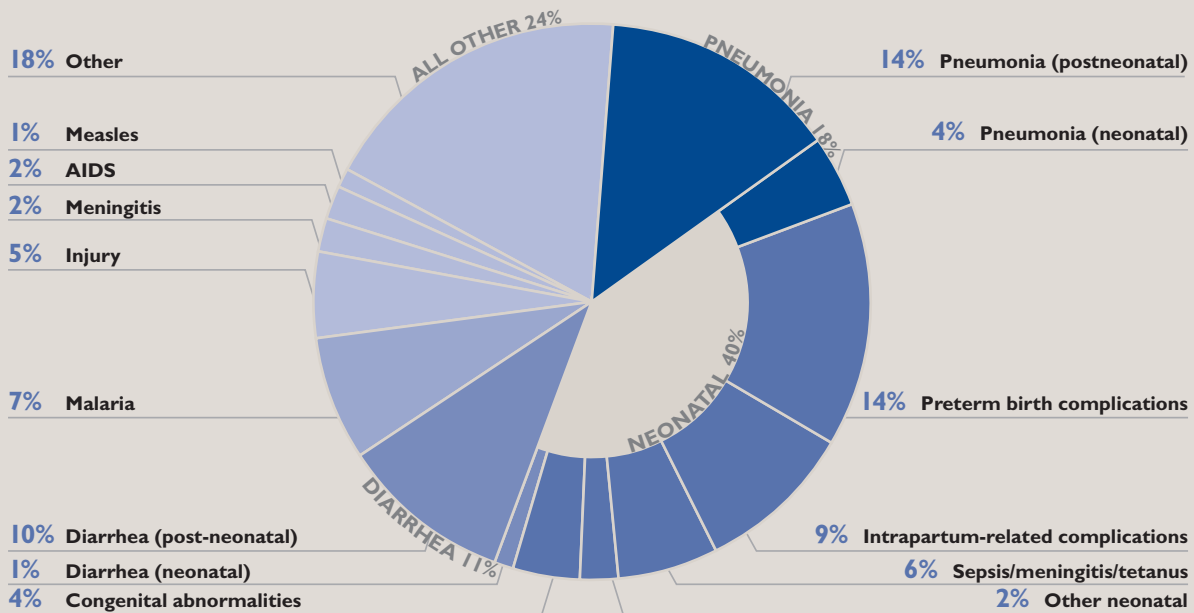
the Governments of Ethiopia, India and the United States in collaboration with the United Nations Children's Fund. It challenged the world to reduce child mortality to 20 or fewer child deaths per 1,000 live births in every country by 2035. Reaching this historic target will save 45 million children's lives by 2035.

USAID used the momentum of the Child Survival Call to Action and its follow-on initiative, A Promise Renewed, to increase its focus on five countries that collectively account for one-half of global child deaths: the Democratic Republic of the Congo, Ethiopia, India, Nigeria and Pakistan. The governments of these countries are already sharpening plans and accelerating efforts to reduce maternal and child mortality; for example, Nigeria has committed \$500 million over 4

years to support frontline health workers and improve rural health facilities, and Pakistan is developing a scorecard that will track progress at the federal and provincial levels.

Most of the interventions needed to reduce child deaths are inexpensive and straightforward – provide children with insecticide-treated nets, vaccines and oral rehydration solution and zinc; promote healthy nutrition during pregnancy; have mothers give birth with someone experienced by their side; support exclusive breastfeeding; use voluntary family planning to ensure healthy timing and spacing of pregnancies; and help a newborn baby breathe following birth. USAID's long-term investments in these and other key interventions have been paying dividends toward promoting child survival.

## Global Distribution of Deaths among Children under Age 5, by Cause, 2010



Source: CHERG 2012.

Undernutrition is an underlying cause of **1/3** of child deaths.

## Competition spurs life-saving innovation

USAID's \$10 million investment is leveraging \$40 million in funds from the Government of Norway, the Bill & Melinda Gates Foundation, Grand Challenges Canada and the U.K. Department for International Development in a development-focused competition called Saving Lives at Birth.

### A low-cost breathing device to reduce newborn deaths

Bubble continuous positive airway pressure (bCPAP) systems are commonly used in developed countries to treat infants whose respiratory systems are underdeveloped or compromised by infection. However, the \$6,000 price tag puts the life-saving device out of reach in low-income countries. Through Saving Lives at Birth, Rice University received a grant to scale up a low-cost bCPAP system in the hospitals of Malawi. An evaluation of the novel device's implementation has demonstrated its feasibility and effectiveness in Malawian hospitals. The survival rate in the bCPAP group was 62 percent, compared to 24 percent for a control group of infants receiving standard of care nasal oxygen.

### Scale-up of umbilical cord cleaning

In a pilot study supported by USAID in Nepal, the use of umbilical cord cleaning with chlorhexidine was proven to reduce the risk of overall neonatal mortality by 24 percent. Few interventions have shown such promise for rapidly reducing newborn mortality in developing country settings. Following the success of the pilots in Nepal, the Nepalese Government announced in 2011 that it will scale up the use of chlorhexidine nationwide with support from Saving Lives at Birth.

From more than 600 applications, Saving Lives at Birth brought together 65 innovators from around the world to identify potentially game-changing technologies and interventions. Testing of the 24 most promising solutions for saving mothers and babies is already under way in countries where USAID works.

# Newborn Health



**Babies born today in U.S. Agency for International Development's (USAID's) 24 maternal and child health priority countries have a better chance of surviving their first 28 fragile days of life. In those countries, newborn mortality rates declined 33 percent from 1990 to 2011.**

In 2011, 3 million newborns died within the first month of life, accounting for 43 percent of deaths among children under 5. Most newborn deaths are caused by pre-term births, infections and asphyxia, while low birth weight is the chief indirect cause of death. Though child mortality worldwide has been declining at 2.5 percent per year, newborn mortality has declined much more slowly, at 1.8 percent per year. As this comparison reveals, neonatal conditions must be tackled in order to make further headway in ending preventable child deaths.

### STRENGTHENING CAPACITY AND QUALITY OF FACILITY-BASED SERVICES

USAID's newborn health programs provide training, strengthen health systems and improve policies for delivering high-impact interventions, including immediate and exclusive breastfeeding, warmth, clean cord care, resuscitation and antibiotics. In countries such as Bangladesh, Malawi, Nepal and Rwanda, USAID supports robust community-based newborn health programs that are linked to strengthened health facilities. In these countries, this effort has resulted in an annual rate of reduction in newborn mortality of 3.5 percent or higher.

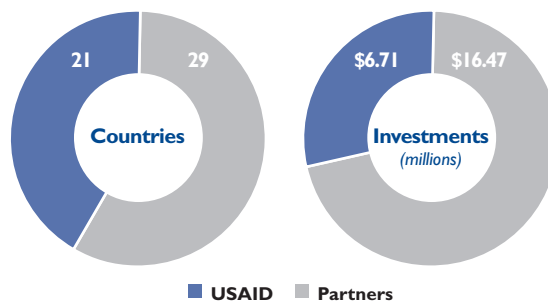
Investments in research and innovation are bringing promising new solutions to scale so that more babies can survive and thrive. For example, USAID is supporting a multicenter study to determine the efficacy and effectiveness of a simplified antibiotic regimen. The study will also evaluate the national rollout of chlorhexidine for preventing infections and the expansion of resuscitation in multiple countries.

### PARTNERSHIPS SCALE UP HIGH-IMPACT INTERVENTIONS AND BUILD LOCAL CAPACITY

USAID supported the scale-up of Helping Babies Breathe, a simplified newborn resuscitation program developed by the American Academy of Pediatrics (AAP). The public-private partnership with AAP, Laerdal Global Health and others offers evidence-based training, high-quality and affordable resuscitation equipment and technical assistance to support countries in their efforts to improve coverage and quality of newborn resuscitation services. In just 2 years, the partnership has trained and equipped about 100,000 health providers in 50 countries. The approach has dramatic effects on the lives of newborns; a study of Helping Babies Breathe in Tanzania showed a 47 percent decline in early newborn deaths.

## Scaling Up Helping Babies Breathe

In just 2 years, the partnership has trained and equipped about **100,000 HEALTH PROVIDERS IN 50 COUNTRIES.**



*"This program will change the way we resuscitate newborns. Sharing the occasion of new life with a mother is very joyful. You can't equate that feeling to anything."*

Jonathan Musonda, a pediatric anesthesiologist in Zambia who received USAID's help to spread low-cost, high-impact interventions through Helping Babies Breathe.



# Immunization



Coverage for the full three courses of diphtheria, pertussis and tetanus (DPT3) vaccination in U.S. Agency for International Development's (USAID's) 24 maternal and child health (MCH) priority countries increased from 41.6 percent in 1990 to 59.8 percent in 2012. Through FY 2012, USAID technical assistance has supported the successful launch of vaccines to prevent pneumonia and diarrhea in 12 countries in partnership with the GAVI Alliance.

Immunization is a proven, cost-effective intervention. It prevents an estimated 2.5 million childhood deaths each year and millions of cases of disease and disability. USAID works in partnership with a wide range of international and local partners to support a comprehensive approach that ensures life-saving vaccines are available to all children at the appropriate times. USAID emphasizes building routine immunizations systems that can reach every child. Through these efforts, more than 107 million children worldwide are reached each year with routine vaccinations. But there is more work to be done; 1.5 million children under 5 are still dying annually from diseases that can be prevented by vaccines.

## INTRODUCING NEW AND UNDERUTILIZED VACCINES

New vaccines against pneumonia and severe diarrhea are saving lives of children in countries where access to these vaccines was unheard of just a decade ago. USAID combines its contributions with those from other donors and recipient countries through the GAVI Alliance, as well as provides robust technical assistance to ensure vaccine supply is coordinated and to prepare countries for sustainable introductions. This assistance has supported the following vaccine introductions: Haemophilus influenzae type b (hib) containing pentavalent vaccine in 70 countries, pneumococcal con-

jugate vaccine in 24 countries since 2010 and rotavirus vaccine in 12 countries in just 2 years – 2011 and 2012. Many more countries are approved for the introduction of pneumococcal and rotavirus vaccines by 2015 and are working toward that goal.

## REACHING EVERY DISTRICT STRENGTHENS HEALTH SYSTEMS

Sufficient vaccine supply alone is not enough for an immunization program to reach every child. Ensuring that children receive needed vaccines as part of routine health care is also essential to sustaining high levels of vaccine coverage. USAID assistance supports the development of sound immunization policy, strategies and guidelines so that routine immunization programs are well planned and managed. This support includes the implementation of critical approaches such as Reaching Every District and decentralized, data-driven planning to improve immunization program performance at the district level. Strengthening routine immunization services also involves training health workers and community volunteers, mobilizing communities, improving data management and use, supporting cold chain and logistics management and elevating effective supervision and performance monitoring.

In the early 2000s in Kenya, routine immunization coverage was on the decline.

Through collaboration between USAID and the Kenyan Ministry of Health, Kenya was able to apply the Reaching Every District principles to several poorly performing districts. By tailoring attention to the needs of each district and focusing on improving routine systems issues, USAID support helped to increase DPT3 immunization coverage from 76 percent in 2005 to nearly 88 percent in the most recent national surveys.

## SUPPORTING GLOBAL POLIO ERADICATION

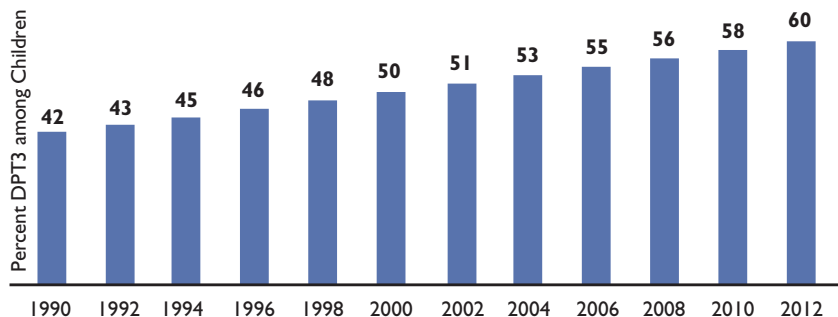
The Global Polio Eradication Initiative has made significant progress in reducing the number of polio cases from 650 in 2011 to 222 in 2012.

USAID has contributed to the global reduction of polio cases by providing technical and financial support to more than 25 countries to conduct facility- and community-based surveillance and laboratory accreditation; improving planning, mobilization and monitoring of polio immunization campaigns; investigating and responding to outbreaks; and targeting hard-to-reach populations.

## REGIONAL POLIO-FREE CERTIFICATION IN SOUTHEAST ASIA

Regional certification is under way to recognize Southeast Asia as polio free by 2014. In India, USAID supported a sophisticated program to increase vaccine uptake (refusals in Western Uttar Pradesh were reduced from 40 to 2 percent) as well as to strengthen surveillance networks and logistics. India has now been removed from the list of polio-endemic countries, and its overall immunization and health systems have benefited from polio eradication efforts. With USAID assistance, polio specialists from India are lending their expertise to the remaining polio-endemic countries, while USAID continues to support surveillance, labs and immunization campaigns in Bangladesh, Indonesia and Nepal.

DPT3 Vaccine Coverage in USAID's 24 MCH Priority Countries



Source: Country DHS and census data.

# Pneumonia, Diarrhea, Water, Sanitation and Hygiene



**U.S. Agency for International Development's (USAID's) long-term support for addressing the leading killers of children has contributed to an 18 percent decline in pneumonia and diarrhea deaths from 2000 to 2010 among 24 maternal and child health priority countries.**

While the June 2012 Child Survival Call to Action celebrated the incredible progress in reducing child deaths globally, it also highlighted remaining work to be done to accelerate reductions in preventable deaths from pneumonia and diarrhea, which together cause more than 2 million deaths a year and account for nearly 30 percent of all child deaths globally. Children who survive these illnesses can face long-term consequences that impair their growth and learning.

As part of efforts to scale up integrated care for children, USAID promotes low-cost, evidence-based interventions to reduce pneumonia and diarrhea mortality. By the end of 2012, through partnership with the GAVI Alliance, the pneumococcal conjugate vaccine has been introduced in 24 countries and rotavirus vaccine in 12. Many more countries are approved for the introduction of pneumococcal and rotavirus vaccines by 2015 and are now working toward that goal. Other interventions to protect against pneumonia and diarrhea include exclusive breastfeeding and vitamin A supplementation, practices such as proper handwashing with soap and improving the quality of drinking water and access to adequate sanitation.

## **MULTIPLYING THE EFFECT OF KEY INTERVENTIONS**

USAID continues to improve the treatment of pneumonia and diarrhea diseases by expanding the number and quality of frontline health workers who can treat pneumonia and diarrhea. With USAID support, health workers are integrating treatment and case management of these diseases into their daily work through appropriate use of antibiotics, oral rehydration salts (ORS) and zinc.

Integrated community case management (iCCM) of childhood illness is one strategy to reduce morbidity and mortality in the under-5 population. In iCCM, health workers who are appropriately trained, supervised

and supplied deliver high-quality services to underserved and hard-to-reach populations. Many countries are still in the early stages of their iCCM programs, while a few countries have begun to implement the approach on a national scale. In three countries where USAID supported iCCM for pneumonia, diarrhea and malaria in 2012, more than 45,000 children under 5 with pneumonia were treated by trained facility or community health workers.

## **PARTNERING WITH THE PRIVATE SECTOR TO INCREASE TREATMENT SUPPLY AND DEMAND**

Partnerships that engage the private sector are critical to saving children's lives. In many countries, when caretakers seek treatment for their sick children, they turn first to a private provider, so the Agency expands access to effective treatment in the private sector as well as the public sector. Also, USAID works to increase the availability of information about the warning signs of child illness and to build demand for appropriate care.

In Ghana, USAID supported the scale-up of a private sector program to improve diarrhea treatment through the use of ORS and zinc. The program has trained over 8,000 providers at the clinic and community levels. It also has partnered with local pharmaceutical companies to increase the availability of quality zinc products, and a complementary mass media campaign targeted caregivers to increase demand for them. As a result, zinc sales have increased from 0 prior to 2012 to a total of 16 million tablets by the end of that year.

## **LEVERAGING FUNDING AND EXPERTISE TO REDUCE DIARRHEA'S EFFECT**

In support of the Declaration on Scaling Up Treatment of Diarrhea and Pneumonia that USAID developed, the Zinc Alliance for Child Health, the Micronutrient Initiative and the Canadian International Development Agency pledged \$15 million to support national plans for scaling up use

of zinc and ORS in prioritized high-burden countries. In addition, USAID is partnering with McCann Health to remove a critical barrier to the use of ORS and zinc: lack of awareness of these products and their health benefits. McCann, one of the world's largest marketing and communication companies, has committed \$5 million of in-kind resources and technical assistance to support the design and implementation of marketing campaigns to increase usage of zinc and ORS.

## **PROMOTING SUSTAINABLE, SECURE AND EQUITABLE ACCESS TO WATER AND SANITATION**

More than 780 million people lack access to an improved water source, and 2.5 billion people lack access to basic sanitation. USAID helps to improve water security through both direct support for small- and large-scale infrastructure development and indirect support through capacity building, partnering with the private sector and establishing sustainable platforms for maintaining and financing water systems. Hallmarks of USAID's programs include effective social marketing campaigns and behavior change efforts combined with the cultivation of an enabling policy environment.

Cross-cutting interventions such as clean water and hygiene engage a variety of local stakeholders, from governments to faith-based organizations to schools. In Madagascar, USAID promotes a standard set of water, sanitation and hygiene standards by recognizing schools, churches and communities that have clean latrines with handwashing stations as well as safe drinking water sources. In Zambia, USAID is partnering with the Ministry of Education, parent-teacher associations and others in local communities to improve water points and latrines in primary schools. These activities also include an examination of the relationship between improved water and sanitation facilities and learning outcomes, with a particular focus on girls.

# Nutrition

**The U.S. Agency for International Development (USAID) reached more than 12 million children under 5 in FY 2012 through nutrition programs such as micronutrient supplementation and food fortification, anemia reduction and the treatment of acute malnutrition.**

Undernutrition is an underlying cause for 1 in 3 child deaths and 1 in 5 maternal deaths. For those who survive, it leaves lasting effects on cognitive and physical development, costing developing countries 2 to 3 percent of their gross domestic product annually.

Through the Global Health Initiative (GHI) and Feed the Future (FTF), USAID is supporting country-owned programs to address the root causes of undernutrition and to improve the future potential of millions of people. Nutrition is the defining link between the two initiatives, which aim to reduce undernutrition through integrated investments in health, agriculture and social protection. These investments lead to healthier women and children, more resilient communities and more productive countries.

USAID supports country-led efforts to ensure the availability of affordable, quality foods, the promotion of breastfeeding and improved feeding practices, micronutrient supplementation and community-based management of acute malnutrition. Nutrition programs work across sectors to maximize the effectiveness of efforts in agriculture, health, education and humanitarian assistance.

## TARGETING THE 1,000 DAYS WINDOW OF OPPORTUNITY

USAID supports 18 focus countries for GHI and FTF to provide comprehensive nutrition programs, aimed particularly on the

child's first 1,000 days, from pregnancy to age 2. In 2012, USAID reached more than 12 million children and trained more than 800,000 people in child health and nutrition. This includes the Child Survival and Health Grants Program, where USAID reached beneficiaries in 25 countries with high-impact maternal, newborn and child health interventions delivered through innovative community-oriented approaches by U.S. nongovernmental organizations and their local partners.

Examples of our work include the support of early childhood development interventions in Rwanda that benefit more than 50,000 children under 5 and their mothers. As of 2012, 153 home-based Early Childhood Development centers were established, and 152 volunteer mother leaders were trained in early childhood development and basic health and nutrition. In Uganda, USAID has supported local production of ready-to-use therapeutic food by private corporations. In FY 2012, more than 50 health units providing care and treatment of children and adults with severe acute malnutrition were using locally produced therapeutic food.

## INCREASING IMPACT THROUGH STRATEGIC PARTNERSHIPS

USAID is an active supporter of the Scaling-Up Nutrition (SUN) Movement, a country-led global movement endorsed by hundreds of organizations and governments working to increase the effectiveness of programs by

## A noninvasive test for maternal anemia

Anemia affects 2 billion people worldwide, and in the countries where USAID focuses nutrition programs, it affects over 40 percent of women of reproductive age. Anemia places women and their newborns at risk for poor pregnancy outcomes, including increased risk of mortality and morbidity, preterm births and low birth weight. Effective screening programs for pregnant women have been hampered by the lack of a hemoglobin (Hb) testing tool that is safe, accurate and reasonably priced. To improve screening in low-resource settings, USAID is testing the use of a noninvasive device to reliably and accurately measure Hb levels of pregnant women at antenatal care clinics in Ghana.

supporting national priorities, aligning resources and fostering broad ownership and commitment to nutrition. As a SUN donor convener in seven countries, USAID helps catalyze, prioritize and harmonize investments to address critical gaps. The United States was also an active participant in a series of SUN events during the 2012 United Nations General Assembly, where a new strategy and road map were released to guide action on achieving SUN objectives.

USAID has continued to support the Global Alliance for Improved Nutrition to work in Bangladesh, Kenya and Mozambique to assess the links between agriculture and nutrition and identify opportunities for private sector engagement. USAID's technical expertise has helped local food producers develop business plans, research the feasibility of nutritious agriculture cultivation and increase partnerships with global actors.

**Undernutrition is an underlying cause for 1 IN 3 CHILD DEATHS and 1 IN 5 MATERNAL DEATHS**



Source: CHERG and IGME, 2012.

# Malaria

Since 2006, 12 of the original 15 President's Malaria Initiative (PMI) focus countries have had reductions in childhood mortality rates, ranging from 16 to 50 percent. In FY 2012, PMI protected over 50 million people with a prevention measure (insecticide-treated nets and/or indoor residual spraying) and distributed more than 43 million treatments of life-saving drugs to targeted populations.

Over the past decade, dramatic progress has been made in reducing the burden of malaria in sub-Saharan Africa. According to the World Health Organization, the estimated number of malaria deaths worldwide has fallen by more than one-third from 985,000 in 2000 to 660,000 in 2010. In spite of this progress, malaria remains one of the major public health problems in Africa, with about 80 percent of malaria deaths occurring in African children under 5 years of age.

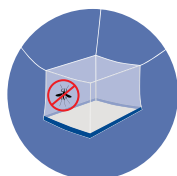
PMI was launched in June 2005. It is led by the U.S. Agency for International Development (USAID), in partnership with the U.S. Centers for Disease Control and Prevention (CDC), to reduce the intolerable burden of malaria and help relieve poverty on the African continent. PMI now includes 19 focus countries in Africa and 1 regional program in the Greater Mekong Subregion, and is aiming to halve the burden of malaria among 450 million at-risk people in sub-Saharan Africa.

## SCALING UP PROVEN INTERVENTIONS

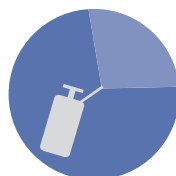
In FY 2012, PMI continued to support the scale-up of four proven malaria prevention and treatment interventions: insecticide-treated mosquito nets (ITNs); indoor residual spraying with insecticide; intermittent preventive treatment for pregnant women (IPTp); and improved laboratory diagnosis and appropriate treatment with artemisinin-based combination therapies. PMI also provided continued support for health systems. This support included building health worker capacity through training on appropriate malaria case management and supporting robust supply chain management practices.

Country highlights include PMI support in Senegal for an expansion of services provided by home-based malaria workers to include management of acute respiratory infections and diarrheal disease. In Malawi,

## In FY 2012, PMI:



Procured **+21M** long-lasting insecticide-treated nets



Sprayed **+7M** houses with insecticides



Procured **+4M** preventative treatments in pregnant women and trained **27,000** health workers in their use



Procured **+72M** combination therapy treatments and **+28M** rapid diagnostic tests

PMI supported implementation of the national malaria quality assurance and quality control plan. The focus of this support was on improving microscopy through training and supportive supervision for laboratory and clinical health workers. Malaria diagnostic supervision is being integrated with U.S. President's Emergency Plan for AIDS Relief HIV & AIDS and tuberculosis supervision and laboratory strengthening efforts.

## SAVING THE LIVES OF CHILDREN UNDER 5

In 12 of the 15 original PMI focus countries (Angola, Ethiopia, Ghana, Kenya, Madagascar, Malawi, Mozambique, Rwanda, Senegal, Tanzania, Uganda and Zambia), declines in all-cause mortality rates among children under 5 have been observed. These declines have ranged from 16 percent in Malawi to 50 percent in Rwanda.

At the same time, national household surveys are documenting dramatic improvements in the coverage of malaria control measures. Since the launch of PMI, in countries where data are available, household ownership of one or more ITNs increased from an average of 36 to 60 percent; usage of an ITN the night before the survey increased from an average of 22 to 43 percent for children under 5 years; and the average proportion of pregnant women who received two or more doses of IPTp increased from an average of 15 to 29 per-

cent. This progress represents the results of the combined efforts and the partnership of the U.S. Government; national governments; the Global Fund to Fight AIDS, Tuberculosis and Malaria; the World Bank; and other donors. Strong and growing evidence shows that malaria prevention and treatment are playing a major role in reducing child mortality. For example, an impact evaluation in Tanzania completed in FY 2012 showed that under-5 mortality fell by 45 percent during a decade of major improvements to malaria prevention and treatment. Impact evaluations also were completed in Malawi and Angola, and six additional evaluations began. By 2015, evaluations will have been carried out in all 15 original PMI focus countries.

## INVESTING IN NEW MALARIA CONTROL TOOLS

USAID plays a vital role in supporting innovative malaria research and development to advance new malaria control tools. USAID supports a portfolio of over 50 potential antimalarial drugs, and in FY 2012, three new treatments were approved for use. USAID is also fostering the development of promising vaccines, with seven malaria vaccine candidates in development with USAID support. To complement these investments in new tools, USAID is also researching the best ways to roll out and scale up malaria interventions, such as studies on mosquito net durability and approaches to mitigating insecticide resistance.

# Maternal Health

U.S. Agency for International Development (USAID) programs have contributed to accelerated maternal mortality declines in 24 maternal and child health (MCH) priority countries at an average rate of 5 percent per year, which is faster than the global average. Attendance at birth by a skilled provider increased from 26.9 percent in 1990 to 50.0 percent in 2012, increasing women's access to life-saving interventions in some of the world's most challenging environments.

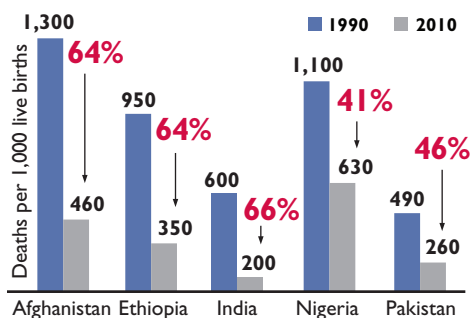
Close to 300,000 women die each year as a result of pregnancy and child-birth. USAID MCH programs are focused in the 24 countries where 73 percent of worldwide maternal deaths occur; USAID's strategy to accelerate reduction in preventable maternal deaths includes the promotion of respectful care and high-impact interventions for the major causes of death, especially postpartum hemorrhage and pre-eclampsia/eclampsia, strengthening health systems and changing family and community behaviors to access maternity care. USAID programs are improving the measurement of pregnancy outcomes as well as incorporating new approaches and technologies, including mobile phones, to speed progress.

## TACKLING THE BIGGEST MATERNAL KILLER

Postpartum hemorrhage is the most frequent cause of maternal death. USAID's leadership in promoting active management of the third stage of labor (AMTSL) to prevent postpartum hemorrhage has resulted in widespread acceptance. Thirty-six countries have approved AMTSL as national policy, and 21 have begun introduction and expansion of the life-saving practice.

The results of such efforts can be seen in places like Cambodia, where maternal mortality was reduced by 56 percent between 2005 and 2010. This was achieved following a national commitment to oxytocin to prevent postpartum hemorrhage and USAID-supported interventions for voluntary family planning, maternal care financing and health service quality. With U.S. support, in FY 2012, over 2,500 Cambodian midwives and community volunteers were trained on maternal and newborn care. Skilled providers also attended 825,000 antenatal care visits and 122,000 deliveries, incorporating life-saving techniques such as the AMTSL to prevent postpartum bleeding.

## Declines in Maternal Mortality Ratio 1990–2010



Source: WHO, 2012.

## MIDWIVES SAVING LIVES

Ensuring that women give birth with the assistance of a skilled birth attendant is essential for reducing maternal mortality. In the 24 MCH priority countries, attendance at birth by a skilled provider increased from 26.9 percent in 1990 to 50.0 percent in 2012. USAID's program improves the capacity of midwives through improving pre-service curricula, strengthening professional associations and supporting improved regulation.

For example, in Afghanistan, despite years of conflict and insecurity, 60 percent of women now receive antenatal care compared to 16 percent in 2003, and one-third of women deliver with a skilled birth attendant. This has followed USAID support for training midwives and a results-based financing scheme.

## CHANGING LIVES OF WOMEN WITH OBSTETRIC FISTULA

Obstetric fistula is a devastating disability that can occur as a result of prolonged labor. Left untreated, it can cause lifelong urine and fecal leakage. In 2012, the USAID fistula program completed 5,746 surgical repairs – a 22 percent increase over the previous year. It is now building capacity

in 39 repair sites in 11 countries, including hard-to-reach, sometimes conflict-ridden areas. Women who had been previously disabled, stigmatized and cast out of their homes are able to reintegrate into their communities as a result of these surgical repairs and related supportive services.

## SAVING MOTHERS, GIVING LIFE

USAID is leading the U.S. Government Saving Mothers, Giving Life partnership to rapidly reduce maternal mortality by bringing together the Government of Norway, Merck for Mothers, U.S. Centers for Disease Control and Prevention (CDC), the American College of Obstetricians and Gynecologists, Every Mother Counts and Project C.U.R.E. The partnership is mobilizing volunteers to better link communities and health facilities, improving communication and transportation, training health care providers and improving the availability of medicine and equipment. Pilot projects have begun in Zambia and Uganda, and lessons learned from these efforts will be applied as the partnership scales up.

## Technology improves access to oxytocin in remote, rural areas

Many women at risk of postpartum hemorrhage do not have viable access to oxytocin, the gold standard for prevention, due to a lack of refrigerated storage and trained health workers. To increase access to life-saving treatment in remote and rural areas, USAID is supporting Monash to scale up a novel aerosol spray that does not require refrigeration or specially trained oxytocin administrators. It also has the added benefit of reducing needle-stick injuries.

# Family Planning and Reproductive Health



**In the 27 countries that currently receive at least \$2 million in U.S. Agency for International Development (USAID) family planning/reproductive health assistance, 1 in 10 married women of reproductive age used a modern method of contraception in 1990. Today, almost one-third of such women in these same countries are users of modern contraception.**

## Bringing new and improved methods to the market

In FY 2012, USAID supported the completion of studies required for U.S. Food and Drug Administration approval of the 1-year contraceptive vaginal ring, the first woman-controlled, long-acting family planning method. Manufacturing refinements were also developed to reduce the ring's overall cost.

Recent estimates indicate that 222 million women in developing countries want to space or limit child bearing but are not using a modern method of family planning. Enabling couples to determine whether and when to have children has profound health, economic and social benefits for families and communities. Closing the gap to access and use of family planning could prevent up to 40 percent of maternal deaths and save the lives of 1.6 million children under the age of 5 each year.

USAID advances and supports voluntary family planning programs that enable countries to meet the family planning needs of their people. Across the countries where USAID works, the rates of married women of reproductive age who use modern methods of family planning have steadily increased. Some are seeing remarkable improvements. For example, since 2005, use of modern contraception has increased from 14 to 29 percent in Ethiopia, from 28 to 42 percent in Malawi and from 10 to 45 percent in Rwanda.

## IMPROVING POLICIES AND SYSTEMS

Supportive policies are critical for strong country-led family planning programs. As a result of USAID's work, the Governments of Tanzania and Nigeria created line items

for family planning in their budgets and increased spending for family planning. In Liberia and Kenya, USAID worked with the Ministries of Health and advocacy groups to revise national service delivery guidelines to permit community health workers to administer injectable contraceptives. These and seven other African countries now permit this practice, which increases women's access to a broader range of contraceptive options.

USAID continues to support the largest and most effective global supply chain system for family planning commodities. USAID has helped countries develop national contraceptive security strategies and build local capacity for demand forecasting and supply chain management. Since 2003, contraceptive security has improved in 36 out of the 47 USAID-supported countries following Agency investments in health systems and other interventions. In Ethiopia, USAID's support to the Ministry of Health has improved procurement and supply of essential drugs, contraceptives and other health commodities. As a result, stock-out rates in Ethiopia for key contraceptive commodities average 4 to 5 percent – well below the target of 10 percent.

## INTEGRATED APPROACHES MEET CRITICAL NEEDS FOR POSTPARTUM WOMEN

Globally, nearly 65 percent of women in their first postpartum year have an unmet need for family planning, and postpartum pregnancies represent serious health risks for both mother and baby. Recognizing the needs of these women, USAID, in cooperation with the World Health Organization, released in 2012 the Statement for Collective Action for Postpartum Family Planning, which has been endorsed by more than 80 organizations. Research funded by USAID in Liberia, Mali and Rwanda has demonstrated an effective way to reach postpartum women: by integrating family planning

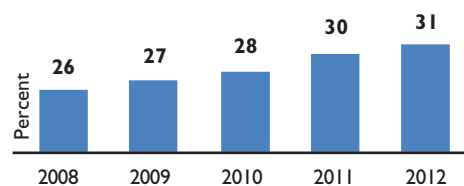
into postnatal care and routine immunization services. In Kenya, USAID supports more than 5,000 maternal and child health clinics, all of which now offer family planning programs, as well.

## PARTNERSHIPS CATALYZE FUNDING FROM DONORS AND COUNTRIES

Through the Alliance for Reproductive, Maternal and Newborn Health, USAID is coordinating with donors from the United Kingdom and Australia as well as the Bill & Melinda Gates Foundation to accelerate progress toward meeting Millennium Development Goals 4 and 5. To date, other donors have transferred nearly \$50 million to USAID programs rather than create duplicate systems.

The 2012 London Summit on Family Planning secured \$2.6 billion in new donor commitments. They included bold commitments from more than 20 developing countries to address barriers to family planning. Building on the momentum from the summit, USAID played a key role in launching Family Planning 2020, an initiative to enable 120 million more women in the developing world to access and use modern contraception by 2020.

## Modern Contraceptive Prevalence Rates among 27 Countries Receiving USAID Family Planning Funding



In FY 2012, USAID helped families access their contraceptive method of choice by shipping:

**751 M** male condoms      **1.6 M** intrauterine devices  
**64.5 M** oral contraceptives      **1.0 M** implants  
**36.2 M** injectables



AFP

## AIDS-Free Generation

*“We can reach a point where virtually no children are born with the virus, and as these children become teenagers and adults, they are at a far lower risk of becoming infected than they are today. And if they do acquire HIV, they have access to treatment that helps prevent them not only from developing AIDS but from passing the virus on to others.”*

Former Secretary of State Hillary Rodham Clinton

In 2012, the International AIDS Conference returned to the United States for the first time in over 20 years. At this event, then Secretary of State Hillary Rodham Clinton laid out the vision of an AIDS-free generation and catalyzed the development of a blueprint to achieve this goal through the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR).

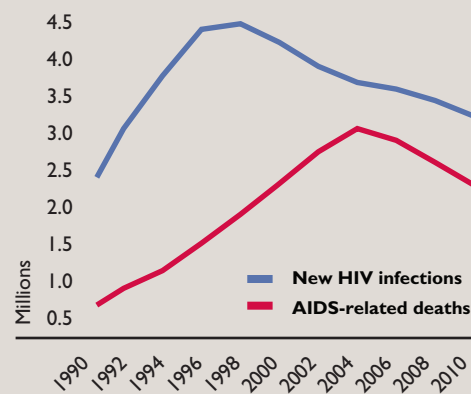
The PEPFAR Blueprint: Creating an AIDS-free Generation reflects lessons learned from almost 10 years of experience in supporting countries to rapidly scale up HIV prevention, treatment and care services. It demonstrates the opportunity for the world to help move more countries toward and beyond the tipping point in their epidemics and put them on a path to achieving an AIDS-free generation. The blueprint makes clear that the United States’ commitment to this goal will remain strong, comprehensive and driven by science. It

clearly outlines what PEPFAR is doing, and will continue to do, to help make it a reality. The blueprint also emphasizes that shared responsibility is needed to create an AIDS-free generation.

The need to expand access to treatment remains. According to the 2012 Joint United Nations Programme on HIV/AIDS global report, more than 8 million people living with HIV had access to antiretroviral treatment in 2011. However, 7 million people eligible for HIV treatment did not have access to it.

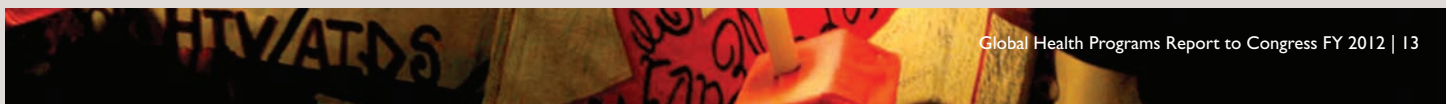
Creating an AIDS-free generation is an ambitious but reachable goal – and it is now a policy imperative of the United States. While there are still more than 34 million people living with HIV globally, the numbers of AIDS-related deaths and new HIV infections continue to decrease each year. The goals and blueprint for achieving an AIDS-free generation highlight the

**Declines in HIV Infections and AIDS-Related Deaths**



Source: WHO, 2012.

key interventions that the U.S. Agency for International Development has been supporting through PEPFAR.



# HIV & AIDS

**The U.S. President's Emergency Plan for AIDS Relief (PEPFAR) directly supported life-saving antiretroviral treatment for 5.1 million men, women and children living with HIV worldwide in FY 2012.**

The U.S. Agency for International Development (USAID) is a key implementing agency of PEPFAR, accounting for 53 percent of U.S. Government HIV & AIDS programs worldwide in FY 2012. With nearly 1,000 staff working on HIV & AIDS issues at the Agency – 80 percent of whom are in the field – USAID has been at the forefront of the global AIDS response for the past 25 years, managing \$3.3 billion in HIV & AIDS resources in FY 2012 and making remarkable strides in combating the epidemic by focusing on several key priority areas.

## PREVENTION

*HIV counseling and testing* helps individuals know their status so that they can protect themselves and prevent disease spread. In FY 2012, PEPFAR directly supported HIV counseling and testing for more than 49 million people, including more than 11 million pregnant women.

*Prevention of mother-to-child transmission of HIV* services are a critical intervention on the path to achieving an AIDS-free generation so that no child will be born with HIV. PEPFAR directly supported antiretroviral drug prophylaxis for 750,000 HIV-positive pregnant women in FY 2012 in order to prevent mother-to-child transmission of the virus. As a result, 230,000 babies were born free of HIV.

*Voluntary medical male circumcision* is another key intervention that is highly cost-effective. It can dramatically reduce female-to-male transmission of HIV – by as much as 60 percent. PEPFAR has directly supported about 2 million male circumcision procedures worldwide through the end of FY 2012.

*Correct and consistent condom use* can aid in the prevention of HIV & AIDS. In FY 2012, PEPFAR directly supported the shipping of over 595 million condoms for use in HIV prevention programs.

Moreover, USAID recognizes the importance of antiretroviral drugs not only to treat infected individuals but also to prevent new infections.

## CARE AND SUPPORT

USAID is committed to providing HIV & AIDS care and support to those in need, including orphans and vulnerable children. In addition to helping people obtain care through counseling and testing, USAID supports services such as pain and symptom management and a broad array of psychological and social services. Another important area of assistance is the assessment of nutritional deficiencies, which is followed by appropriate counseling and treatment. In FY 2012, PEPFAR funded care and support services for 15 million people, including 4.5 million orphans and vulnerable children.

## TREATMENT

USAID is committed to improving access to treatment and supports a range of programs in this area, including the Supply Chain Management System (SCMS) project, which assists in the delivery of safe and reliable HIV & AIDS medicines and supplies to programs around the world. SCMS was the only public sector organization to be nominated for the Supply Chain Innovation Award presented by the Council of Supply Chain Management Professionals in 2012. In addition, USAID is working to train health care providers and to establish programs for clinical services, including screening and

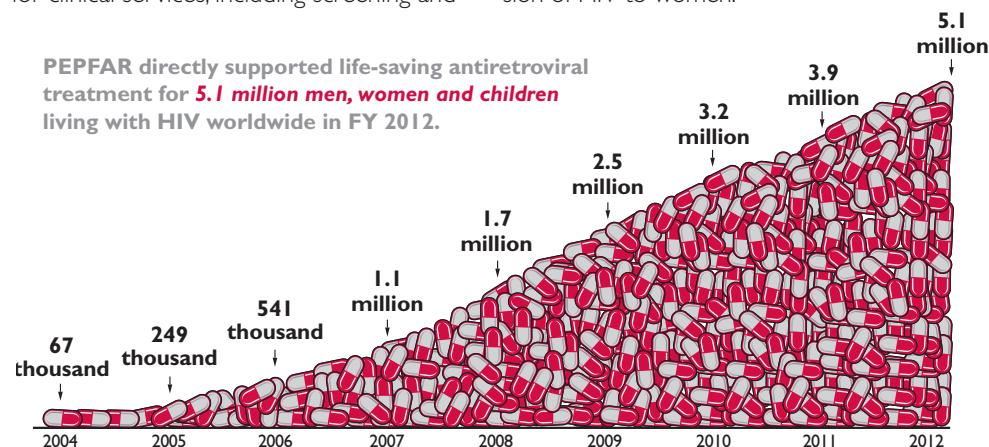
treatment for opportunistic infections such as tuberculosis (TB).

PEPFAR has provided life-saving antiretroviral treatment to 5.1 million men, women and children living with HIV worldwide in FY 2012. In South Africa alone, where the largest number of people living with HIV in the world resides, 1,651,800 people are on PEPFAR-supported treatment.

Taking a health systems approach improves outcomes for HIV & AIDS as well as other diseases. For example, in Tanzania, USAID demonstrated how investments in health systems led to an increase in HIV-exposed children receiving the recommended cotrimoxazole therapy from 13 to 94 percent and TB screening from 35 to 99 percent after just 18 months.

## INNOVATION

Over the past 15 years, USAID has supported innovative research on products to prevent the spread of HIV. The Agency also supports efforts to translate that research into highly effective practice. USAID has supported the International AIDS Vaccine Initiative since 2001, and in October 2012, USAID joined a consortium of research partners in announcing an AIDS study that offered new clues for an AIDS vaccine. USAID-funded research has also led to the development of a new type of female condom and a promising microbicide for preventing sexual transmission of HIV to women.







Robin Hammond/Paros Institute for WEI/Banwang

## Protecting Communities from Infectious Diseases

*“Fortunately, programs like those supported by USAID and the DoD have begun to create robust systems for identifying viruses ... and curbing epidemics at their earliest stages. Such systems are vitally needed in an interconnected world like ours, where a virus can circumnavigate the globe in less than 24 hours.”*

David Braun, National Geographic

For decades, the U.S. Agency for International Development (USAID) has been a leader in the control and prevention of infectious diseases as part of long-standing efforts in child survival, maternal health and HIV & AIDS. Today, USAID-funded programs are pivotal in the fight against tuberculosis (TB), neglected tropical diseases (NTDs) and pandemic influenza and other emerging threats.

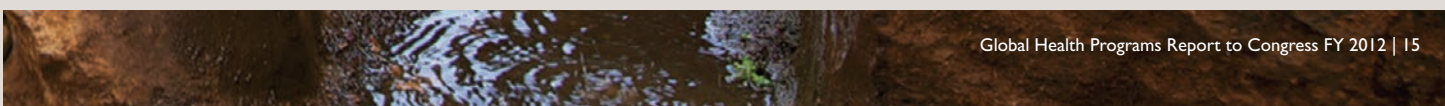
Strengthening health systems' ability to identify and respond to these diseases is critical particularly in light of the emergence of multidrug-resistant and extensively drug-resistant TB as well as the increased

threat of pandemic diseases such as avian influenza. Moreover, NTDs continue to plague the world's most vulnerable populations, causing severe disfigurement and disabilities that hinder economic productivity.

Through targeted interventions for affected populations, as well as through support of public-private partnerships and the development of new technologies, USAID has made great strides in alleviating the burden of these diseases.

For instance, in Afghanistan, the community-based directly observed treatment, short-course (DOTS) program to address

TB has expanded throughout the country, increasing access to TB diagnosis and treatment for those who need it most. For NTDs, USAID has leveraged donations from private sector partners to extend the reach of critical mass drug administrations and to accelerate progress toward eliminating and controlling these diseases by 2020 thus helping millions of people avoid significant debilitation and disability. New cutting-edge research funded by USAID has helped characterize existing and potential pandemic threats like H5N1 avian influenza and contributed to preventing and responding to new diseases.



# Tuberculosis



**In FY 2012, more than 1.5 million people were successfully treated for tuberculosis (TB) and more than 44,000 people with multidrug-resistant TB (MDR-TB) began treatment in U.S. Agency for International Development (USAID) priority countries.**

Nearly 9 million people were diagnosed with TB and 1.4 million died of the disease in 2011, according to the most recent global data. TB-HIV co-infection and drug resistance continue to be serious challenges to reducing TB morbidity and mortality throughout the world, with about 430,000 deaths among people with HIV co-infection and 630,000 cases of MDR-TB in 2011.

However, sustained and well-focused investments in fighting TB have begun to make their mark on the global burden, and the global community is on track to achieve its Millennium Development Goal targets. USAID supports four key TB intervention areas that are described in the U.S. Government TB strategy.

*Accelerated detection and treatment of TB.* In FY 2012, 1.5 million people with TB were successfully treated in USAID-supported countries. In half of USAID's 28 TB priority countries, treatment success rates reached the World Health Organization target of 85 percent or more.

*Scaled-up prevention, diagnosis and treatment of drug-resistant TB.* USAID worked to address the global challenge of MDR-TB by improving drug resistance surveillance, data collection at the global and country levels and community-based support programs to

help patients complete treatment. During FY 2012, the number of MDR-TB patients who initiated treatment in priority countries more than doubled from the previous year, with over 44,000 MDR-TB patients starting treatment.

*Expanded coverage for TB-HIV interventions.* In countries such as Namibia and Zambia, USAID has launched efforts to improve TB screening, diagnosis and treatment for people living with HIV & AIDS in collaboration with the U.S. Centers for Disease Control and Prevention (CDC) and the Office of the Global AIDS Coordinator. Worldwide, USAID with its partners has promoted the rollout of new technologies such as the GeneXpert system, described in more detail below.

*Overall health systems strengthening.* Investments in TB also strengthen health systems by improving laboratories that serve as critical tools in the fight against other diseases. For example, in Mozambique, USAID has strengthened laboratory capacity to diagnose TB and malaria through joint training and supervision activities.

## **ADDRESSING UNIQUE CHALLENGES OF PEDIATRIC TB**

TB is particularly difficult to diagnose and treat in children. USAID has actively sup-

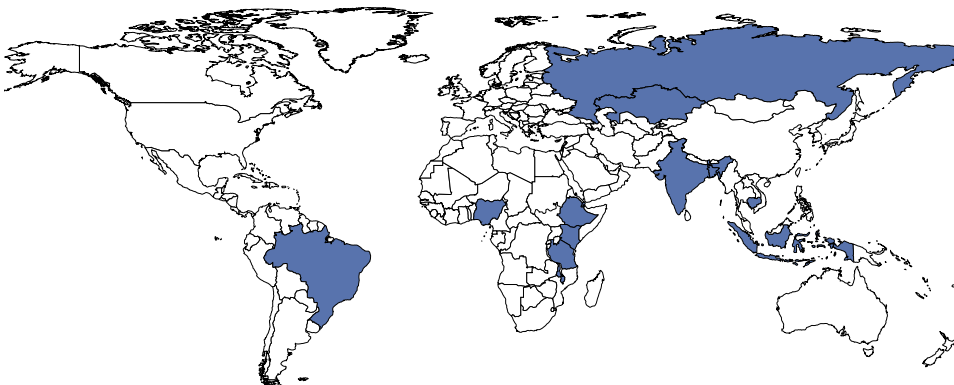
ported a strong advocacy focus on childhood TB, including global efforts to develop a road map for the revision of pediatric TB guidelines. USAID also has worked with national TB programs to tailor guidelines for pediatric TB. This effort has included piloting referral systems to ensure that TB screening is available in maternal and child health settings and throughout the primary health care system. In 13 countries, USAID is expanding the cadre of providers with the ability to diagnose and treat pediatric TB through development of training curricula and simple screening algorithms.

## **TOOLS AND APPROACHES FOR BETTER DETECTION AND OUTCOMES**

USAID continues to support the development of new methods for improving disease detection and treatment outcomes. In FY 2012, USAID invested in the introduction and scale-up of a new diagnostic technology that facilitates diagnosis of drug-resistant TB and TB associated with HIV infection called GeneXpert. USAID has supported the rollout and implementation of GeneXpert in 14 countries through procurement of over 80 machines and associated test kits. Along with the CDC and U.S. President's Emergency Plan for AIDS Relief (PEPFAR), USAID has developed and introduced a strong technical approach to help countries successfully utilize GeneXpert. Initial data from USAID-supported projects show that use of GeneXpert can significantly decrease the time for diagnosis and treatment initiation of TB and MDR-TB. To accelerate adoption and scale-up in low-resource settings, USAID joined UNITAID, PEPFAR and the Bill & Melinda Gates Foundation to support an agreement with the manufacturer of GeneXpert that decreases the price of test kits by 40 percent.

USAID is supporting research for shorter MDR-TB treatment regimens, piloting mobile phone applications to improve case detection, and developing web-based training tools and new technologies to support dual screening for TB and diabetes.

## **USAID Has Supported the Rollout and Implementation of GeneXpert in 14 Countries**



# Neglected Tropical Diseases

**U.S. Agency for International Development (USAID) support for neglected tropical diseases (NTDs) has expanded to include 23 countries. The Agency delivered 231 million treatments in FY 2012 and leveraged \$1 billion in drug donations. In the countries where we work, 24 million people are no longer at risk of acquiring blinding trachoma, and 34.4 million people are no longer at risk for lymphatic filariasis.**

More than 1 billion people worldwide suffer from painful, debilitating tropical diseases that disproportionately impact poor, rural populations. Commonly referred to as NTDs, these diseases not only cause severe sickness and disability, but also compromise mental and physical development, contribute to childhood malnutrition, reduce school enrollment and hinder economic productivity.

Seven NTDs can be treated through targeted mass drug administration, which eventually leads to control and/or elimination. These diseases – lymphatic filariasis, schistosomiasis, onchocerciasis, blinding trachoma and three soil-transmitted helminthiasis – all have safe and effective drug therapies that can be delivered to all eligible individuals in an affected community once or twice a year.

USAID provides funding to supplement governments' budgets to distribute drugs safely and effectively, scale up treatment to reach national coverage and work toward control and/or elimination of NTDs. The program has expanded to include 23 countries. It has delivered 231 million treatments in FY 2012 and a total of 825 million treatments since 2007. In 2012, USAID laid the groundwork to begin implementing programs in two of the most populated and most NTD-affected countries in Africa: Democratic Republic of the Congo and Nigeria. In these countries, more than 155 million people are at risk for lymphatic filariasis alone.

## MOVING TOWARD ELIMINATION

Many of the USAID NTD Program-supported countries have started to document the control and elimination of NTDs in their populations. In the countries where we work, 24 million people are no longer at risk of acquiring blinding trachoma, and 34.4 million people are no longer at risk for lymphatic filariasis. In addition, USAID is supporting the Onchocerciasis Elimination Program of the Americas, managed by the Carter Center. This program is aimed at eliminating river blindness in the Western Hemisphere in the next 4 years.

In Sierra Leone, USAID has designed specific strategies for reaching remote and sparsely populated areas of the country. Practices such as including boats for river access and motorcycles to traverse difficult terrain have helped close the gap between the hard-to-reach and general populations. The NTD Program in Sierra Leone covers the entire country, and over 10 million NTD treatments were delivered in Sierra Leone during FY 2012.

A geographic evidence base is critical for targeting specific areas with the exact right quantity and type of drugs to eliminate and control NTDs. To address this need, USAID launched a global disease mapping initiative, "map the gap," to help global and local planners better meet community needs. In 2012, USAID supported mapping in 223 districts in seven countries.

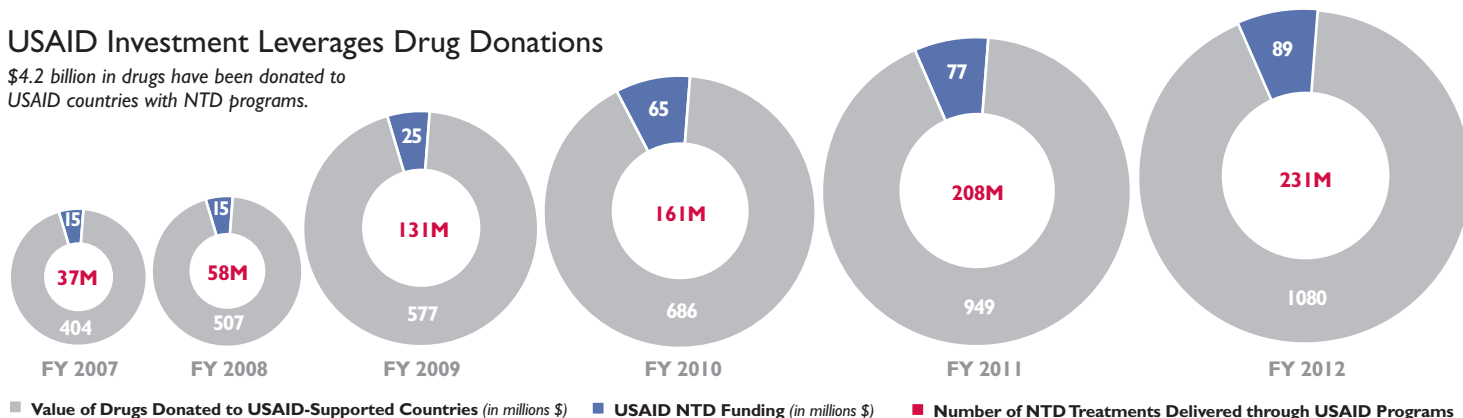
## PUBLIC-PRIVATE PARTNERSHIPS ACCELERATE DISEASE CONTROL

Since 2006, four companies – GlaxoSmithKline, Johnson & Johnson, Merck and Pfizer – have donated more than \$4 billion worth of drugs to 19 countries supported by the USAID NTD Program, and additional commitments are in place for coming years. Through close coordination, USAID leveraged its donations to extend the reach of mass drug administrations. Additionally, a new 2012 in-kind commitment from Merck Serono will allow USAID to scale back the purchasing of praziquantel – a drug used to treat schistosomiasis – and free up money for country-level interventions.

In early 2012, USAID joined a historic partner-driven effort to accelerate progress toward eliminating and controlling NTDs: the London Declaration on NTDs. Leaders from the Governments of the United States, United Kingdom and United Arab Emirates; 13 pharmaceutical companies; the Bill & Melinda Gates Foundation; the World Bank; and other global health organizations announced their support for eliminating certain NTDs by 2020. USAID is leveraging increased funding committed from the United Kingdom in order to expand programs into the Democratic Republic of the Congo, Ethiopia and Nigeria.

## USAID Investment Leverages Drug Donations

\$4.2 billion in drugs have been donated to USAID countries with NTD programs.



# Pandemic Influenza and Other Emerging Threats



**From 2010 to 2012, the U.S. Agency for International Development (USAID) collaborated with international partners to provide technical, operational and commodity support in response to 18 infectious disease outbreaks around the world among animals and people, including yellow fever, Ebola and avian influenza (AI). In addition, enhanced surveillance identified over 200 new microbes, and this information is being used to identify possible animal reservoirs of a novel coronavirus.**

Nearly 75 percent of new or re-emerging diseases that affect humans originate in animals. The persistence of H5N1 AI and emergence of H1N1 pandemic influenza in 2009 exemplify the potential for a new zoonotic pathogen to emerge and quickly spread across the globe. In addition, sporadic human infections with deadly Ebola and Marburg viruses in Africa, H5N1 AI in Asia and a novel coronavirus in the Middle East serve as reminders that old and new threats need to be continuously monitored.

USAID, in collaboration with the U.S. Centers for Disease Control and Prevention (CDC), Department of Defense, World Health Organization and Food and Agriculture Organization, is addressing these threats by strengthening the capacities of developing countries to prepare for pandemics as well as to monitor and quickly respond to infectious diseases in animals and people, particularly diseases with pandemic potential.

## PREVENTION AND RESPONSE FOR AVIAN INFLUENZA

A primary focus of USAID's pandemic prevention efforts has been the threat posed by H5N1 AI. With USAID support, particularly in Bangladesh, China, Egypt, Indonesia and Vietnam – the countries where most poultry and human infections are concentrated – there has been an effort to enhance the viral monitoring and outbreak containment in poultry. This effort includes vaccination and has resulted in a decrease in the number of affected countries from 53 in 2006 to 11 in 2012.

As part of an intensified effort to address this threat, USAID undertook a novel partnership with scientists and local vaccine manufacturers to develop and mass-produce poultry vaccines so that commercial poultry producers could more effectively use their own resources to protect their flocks from AI. Between 2011 and 2012, USAID's investments have resulted in a dramatic decrease

of more than 50 percent in the number of reported poultry outbreaks and birds testing positive at markets. Moreover, a similar decrease occurred in the number of reported human cases.

This success was possible because of a 38 percent decrease between 2006 and 2012 in the median number of days from the start of a poultry outbreak to its lab confirmation. Also, USAID-funded research in Egypt and Indonesia has helped to determine which poultry vaccines are most effective.

## PREVENTION OF OTHER EMERGING THREATS

USAID is strengthening capacities of local animal and human health staff and laboratories to detect, prevent and respond to diseases in 20 countries in Africa, Asia and Latin America where new pandemic threats are most likely to emerge. Surveillance efforts have detected over 200 new microbes, and this work has helped identify possible animal reservoirs of the novel coronavirus recently detected in Jordan, Qatar and Saudi Arabia.

From 2010 to 2012, USAID assisted seven countries in Asia and Africa in their response to 18 infectious disease outbreaks in animals and people. USAID is developing regional networks in Africa and Asia involving more than 25 veterinary medicine and public health schools to train future graduates to address emerging disease threats. USAID also supported key studies in four countries to identify specific practices and behaviors that expose people to zoonotic diseases and developed a risk-mitigation tool for extractive-industry workers.

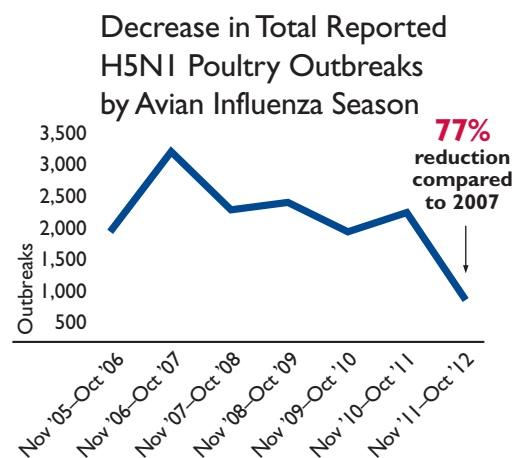
## UNIVERSITY PARTNERSHIPS BUILD LOCAL CAPACITY

To help develop country-level capacity to address zoonotic diseases, USAID provided support to 28 schools of public health, allied health, medicine and veterinary medicine

in Africa and Southeast Asia for the formation of two regional "One Health" networks. These schools are partnered with the University of Minnesota and Tufts University for the purposes of strengthening faculty and curricula and jointly developing creative approaches to teaching and learning. The objective is to provide graduates with competencies and tools that will prepare them to work with a broader range of disciplines and stakeholders to address prevention, detection and response to zoonotic disease.

## SUPPORTING RESEARCH TO IMPROVE DISEASE TESTING

USAID's technical and financial support have been essential for conducting new and cutting-edge research to characterize existing and potential pandemic threats and better understand ecological factors and human practices that contribute to the spillover of animal diseases into human populations. USAID support has led to the development of a better evidence base for preventing and responding to new diseases, for example, by helping to develop new methods for estimating viral diversity and for screening samples for 20 viral families. Together, these advances have made laboratory testing faster and less expensive than when using conventional methods.



Source: World Organization for Animal Health, 2012.

# Strengthening Health Systems



**Investment in health systems strengthening has allowed the U.S. Agency for International Development (USAID) to expand coverage of basic services to those who need them most and to document their impact on improved health outcomes in many countries. These investments have additionally strengthened the capacity of countries to plan strategically for future needs by using National Health Accounts (NHAs), prioritizing for essential health services, developing health workforce management capacity, strengthening health information systems and ensuring the availability of quality-assured medicines.**

USAID's historic investments in saving lives and improving health around the world have contributed to impressive outcomes: fewer children are dying from preventable causes, more people are accessing care and treatment for HIV & AIDS, and entire communities are facing a future free from debilitating diseases such as blinding trachoma. For these trends to be sustained and accelerated, countries need stronger, more robust health systems that are able to address current and future challenges.

Health system performance is challenged by health worker shortages, inadequate financing, poor or disjointed information systems and inexperienced leadership. USAID's work has shown that health systems strengthening in these areas can improve short-term results and leave a lasting effect. This year, USAID formed a new Office of Health Systems in the Bureau for Global Health to lead these efforts and to work to promote sustainable health systems.

## **IMPROVING HEALTH GOVERNANCE, LEADERSHIP, AND DECISION-MAKING**

USAID works with countries to improve health system oversight and accountability while engaging civil society and the private sector. USAID also focuses on strengthening the leadership and management skills of health staff at the national, regional and local levels. USAID supported improved curricula for management education in six countries and launched a web portal for south-south exchange on building health management and leadership skills.

To encourage evidence-based policy and management, USAID facilitates access to timely and accurate information through NHAs and Demographic and Health Surveys. As a result of USAID's leadership and support for NHAs, health policymakers in 65 countries have more information needed to advocate

for more appropriate levels of public funding. For example, in Kenya, public spending on health doubled as a result of the increased awareness of high out-of-pocket spending by the poor. While supporting robust data collection worldwide through Demographic and Health Surveys, USAID is advancing an annual survey in Senegal that provides more frequent updates to health information.

## **SYSTEMS APPROACH TO ESSENTIAL HEALTH SERVICES AND FINANCING**

With support from USAID, 24 countries have defined essential health service packages. Three of these countries (Nigeria, Yemen and Zambia) can now finance essential health services with domestic resources alone. USAID helps countries mobilize resources to pay for health needs from reliable, sustainable sources; pool these resources; and allocate them in ways to optimize impact, promote efficiency and enhance equity. This includes expanded health insurance and community-based insurance performance-based financing, credit and targeted subsidies.

USAID has helped countries such as Ghana, the Kyrgyz Republic, the Philippines and Vietnam the expand financial protection and coverage of essential services even when their incomes per capita were less than \$1,000. USAID has also contributed to gains in Afghanistan, where expanding coverage with a basic package of maternal and child health interventions led to a 64 percent reduction in the maternal mortality ratio. In Rwanda, expanded coverage with health insurance contributed to a 42 percent decline in infant mortality and a 47 percent decline in under-5 mortality in 4 years.

## **INCREASING CAPACITY FOR HUMAN RESOURCE PLANNING**


Human resource planning is critical to ensuring the right number, mix and distribution of quality health care providers and volunteers.



USAID continues to help countries assess and manage their capacity to meet the health needs of their populations. This effort is expanding programs on human resources for health data to 16 countries and has included the rollout of an open-source software suite. In FY 2012, USAID brought together nearly 100 representatives from 26 countries to develop a comprehensive approach to improving health worker training. The Agency also led an evidence summit on best practices for supporting the performance of community health workers.

## **PROVIDING ACCESS TO ESSENTIAL QUALITY-ASSURED MEDICINES AND COMMODITIES**

USAID helps countries to ensure equitable, timely and consistent access to essential quality-assured, safe, efficacious and cost-effective contraceptives, vaccines and medicines. For example, in Bangladesh, USAID support in supply chain management capacity building has reduced stock-outs, halved procurement lead time and promoted transparency through an online tracker. USAID also improved quality management systems of national quality control laboratories in 12 countries, with three labs achieving international standard accreditation and two labs achieving World Health Organization prequalification. In addition, in FY 2012, USAID supported research to demonstrate the feasibility of a portable device to assess medicine quality more accurately and less expensively than current approaches.



# Displaced Children and Orphans Fund



The evidence base on reducing risks for vulnerable children that the U.S. Agency for International Development (USAID) has developed through program activities and rigorous research was influential in developing the United States Government Action Plan on Children in Adversity. Launched in 2012, the action plan guides the work of seven U.S. Government departments and agencies in more than 100 countries.

## USAID Child Blindness Program

Since 1991, USAID has supported programs in 58 countries to reduce childhood blindness. The primary interventions include surgery, eye health education, vision screening and provision of eyeglasses, education and rehabilitation services and training. Through the Child Blindness Program, over 2.5 million children have had their vision and eyes screened using innovative approaches such as engaging small entrepreneurs in outreach efforts and establishing mobile screening camps for children in remote communities.

The United States' sustained commitment to meet vulnerable children's needs has increased the impact of foreign assistance in many key areas, including impressive gains in child survival. Research shows that children at risk of violence, abuse and exploitation face threats not only to their immediate survival and well-being but also to their physical, cognitive and social development over time.

Through the Displaced Children and Orphans Fund (DCOF), USAID supports programs in more than 20 countries to prevent family separation, promote family-based alternatives to institutional care for children and strengthen the capacity of families, communities and governments to care for children. As a result of our assistance, more than 2,000 child protective service providers were trained in FY 2012 to provide comprehensive, sensitive care. In turn, these providers have directly reached

more than 70,000 children and their family members, improving protection and well-being for vulnerable children.

### STRENGTHENING NATIONAL SYSTEMS TO PROTECT CHILDREN

USAID has strengthened national child protection systems in Eastern Europe (including Armenia, Belarus, Georgia, Moldova and Russia), Asia (including Cambodia, the Kyrgyz Republic, Sri Lanka and Thailand) and Africa (including the Democratic Republic of the Congo, Ethiopia and Liberia). These activities include helping governments and other partners to develop and apply relevant national child protection legislation and policies; strengthening coordination among key governmental and civil society actors at the national, regional and community levels; developing information systems to track children; and increasing the capacity of and access to social and community services.

USAID is also supporting programs to strengthen children's life skills by improving mental health and psychosocial competencies. These interventions range from promoting life skills through peer discussion groups, to sports and civic activities, to trauma-focused behavioral therapy. For example, in Moldova, USAID has been supporting efforts to prevent unnecessary separation of children from families and improve alternative care environments.

### IMPROVING HOUSEHOLD INCOMES FOR VULNERABLE FAMILIES

USAID supports sustainable methods to increase families' capacities to better care for children through household economic strengthening programs in Africa and Asia that use approaches such as savings-led microfinance. These programs are designed to demonstrate effective and replicable

approaches for improving the economic functioning of vulnerable families, with the aim of measurably improving their children's well-being.

By using a robust monitoring and evaluation framework and learning strategy, USAID is tracking and documenting the impacts of diverse interventions – such as those in health, education, nutritional intake, and protection – on household economic circumstances and children's well-being. A midterm evaluation from Burundi showed that village savings and loans associations led to a 14 percent reduction in families living below the poverty line and that parenting-skills education could be effectively incorporated into these programs to decrease harsh discipline practices by up to 64 percent.

### ADVANCING EVIDENCE-BASED POLICY AND PRACTICE FOR CHILD RISK REDUCTION

USAID supports the innovative work of three interagency networks composed of nongovernmental organization, university, donor and United Nations partners. Their aim is to promote research, learning and exchange of best practices related to child protection.

The experience and evidence from USAID's work through DCOF were integral to the development of the United States Government Action Plan on Children in Adversity, which was officially launched in December 2012 to guide the work of seven U.S. Government departments and agencies in more than 100 countries. The action plan has already been endorsed by more than 100 civil society and faith-based organizations.

# Financial Annex

## FY 2012 Total USAID Health Budget (\$ Thousands)

PROGRAM CATEGORY	Africa	Asia	Democracy, Conflict and Humanitarian Assistance	Europe and Eurasia	Global Health Bureau	Global Health International Partners	Latin America and Caribbean	Middle East	Total
Maternal Health & Child Health	251,817	237,755	-	5,413	74,744	130,000	40,700	19,588	760,017
Malaria	579,500	14,000	-	-	52,500	-	4,000	-	650,000
Family Planning & Reproductive Health	299,650	150,100	-	5,532	104,800	3,000	28,700	16,500	608,282
Nutrition	58,200	14,800	-	-	15,000	2,000	7,000	-	97,000
Vulnerable Children	-	-	15,000	4,050	-	2,500	-	-	21,550
HIV & AIDS	1,116,628	82,338	-	9,983	159,336	1,374,045	67,920	-	2,810,249
Tuberculosis	95,000	86,240	-	18,057	34,500	20,000	2,500	-	256,297
Antimicrobial, Surveillance, & Other Infectious Diseases	-	10,171	-	-	-	89,000	-	7,700	106,871
Pandemic Influenza	-	-	-	-	-	58,000	-	-	58,000
<b>Total</b>	<b>2,400,795</b>	<b>595,404</b>	<b>15,000</b>	<b>43,035</b>	<b>440,880</b>	<b>1,678,545</b>	<b>150,820</b>	<b>43,788</b>	<b>5,368,266</b>

Accounts include Global Health Programs/USAID; Global Health Programs/State; Assistance for Europe, Eurasia and Central Asia and Economic Support Funds. For additional information, please visit the Foreign Assistance Dashboard website at <http://www.foreignassistance.gov/DataView.aspx>.

## FY 2012 Global Health Programs Account/USAID (\$ Thousands)

PROGRAM CATEGORY	Africa	Asia	Democracy, Conflict and Humanitarian Assistance	Europe and Eurasia	Global Health Bureau	Global Health International Partners	Latin America and Caribbean	Middle East	Total
Maternal Health & Child Health	251,817	102,800	-	-	74,744	130,000	40,700	5,489	605,550
Malaria	579,500	14,000	-	-	52,500	-	4,000	-	650,000
Family Planning & Reproductive Health	299,650	90,100	-	-	104,800	3,000	28,700	2,500	528,750
Nutrition	58,200	12,800	-	-	15,000	2,000	7,000	-	95,000
Vulnerable Children	-	-	15,000	-	-	2,500	-	-	17,500
HIV & AIDS	91,410	47,400	-	5,450	90,086	94,045	21,609	-	350,000
Tuberculosis	95,000	74,300	-	9,700	34,500	20,000	2,500	-	236,000
Antimicrobial, Surveillance, & Other Infectious Diseases	-	-	-	-	-	89,000	-	-	89,000
Pandemic Influenza	-	-	-	-	-	58,000	-	-	58,000
<b>Total</b>	<b>1,375,577</b>	<b>341,400</b>	<b>15,000</b>	<b>15,150</b>	<b>371,630</b>	<b>398,545</b>	<b>104,509</b>	<b>7,989</b>	<b>2,629,800</b>

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