

Fiscal Year 2003

USAID Child Survival and
Health Programs Fund
Progress Report

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Executive Summary

USAID's global health programs during 2003 renewed the 40-year commitment of the Agency – and of the United States – to the control and prevention of infectious diseases, including HIV/AIDS; child and maternal health; and family planning and reproductive health. Through USAID, the United States remains the world leader in supporting programs that prevent and control infectious diseases such as HIV/AIDS, tuberculosis, and malaria; immunize children and treat childhood diseases; protect mothers and infants through pregnancy, childbirth, and early infancy; and enable couples to decide how many children to have. This year brought new strategic directions, including preparations for an unprecedented expansion of HIV/AIDS programs under the President's Emergency Plan for AIDS Relief; a reinvigorated emphasis on scaling up proven interventions; new partnerships, particularly with an increasing number of faith-based and private sector partners; strengthened efforts to reduce barriers to working with these and other such partners; and a focus on interventions that increase workforce health and reduce poverty.

This annual report documents the Agency's achievements for the year in the core areas of:

- HIV/AIDS;
- Infectious diseases;
- Child survival and maternal health (comprising childhood diseases such as pneumonia and diarrhea, immunizations, polio eradication, nutrition, and maternal and neonatal health);

- Vulnerable children;
- Family planning and reproductive health; and
- Research, technical innovation, and health systems strengthening.

In fiscal year 2003, USAID programs continued to achieve results for families in developing countries. Highlights included:

HIV/AIDS: USAID supported HIV/AIDS treatment, prevention, care, and support interventions in approximately 100 countries. These activities operated through a wide array of collaborations with international and U.S. partners, including faith- and community-based organizations; the private sector; and international initiatives like the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

The Agency initiated antiretroviral drug therapies, launching pilot projects in Ghana, Kenya, and Rwanda. These projects, and other expanded activities in such areas as the “ABC”^{*} approach to HIV prevention, prevention of mother-to-child HIV transmission, and care and support for children orphaned by AIDS, will provide important foundations for scaled-up programs under President Bush's Emergency Plan for AIDS Relief, the greatly expanded U.S. response to the global HIV/AIDS pandemic.

Infectious Diseases: USAID continued to play a proactive role in developing and expanding global initiatives such as the Stop TB partnership, the Stop TB Global Drug Facility, the Roll Back Malaria partnership, and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. At the national level, USAID support helped establish, strengthen, and expand programs to reduce illness and death from TB and malaria, strength-

^{*}“ABC” refers to abstinence, being faithful, and correct and consistent use of condoms as appropriate.

en disease surveillance systems, and address the growing problem of antimicrobial resistance to treatment drugs.

Support for TB control focused on expanding the “directly observed treatment, short course,” or DOTS, treatment strategy in more than 30 countries. Malaria control activities emphasized expanding implementation of the goals of the Roll Back Malaria partnership and programs in more than 20 countries in Africa (including access to insecticide-treated bednets, prompt and effective treatment, and reducing malaria in pregnancy); expanding the innovative NetMark program for insecticide-treated bednet sales in Africa (which topped 1 million in 2003); and strengthening surveillance of drug quality in African and Southeast Asian countries.

Childhood Diseases – Pneumonia and

Diarrhea: In recent years, USAID has supported a highly successful program for community-based management of pneumonia in Nepal. In 2003, USAID introduced this model in West Africa, where it has the potential to cut pneumonia-related child mortality in half.

Diarrhea is now the second most frequent killer of children. USAID re-emphasized proper home management of child diarrhea through expanded access to oral rehydration therapy and improved feeding, hygiene, and sanitation practices. “Keeping Children Healthy” media and marketing campaigns in Kazakhstan and Turkmenistan were effective at improving public knowledge of the danger signs of diarrhea and proper feeding practices for children with diarrhea.

Immunizations: USAID is a leading supporter of child immunization programs. In 1980, less than 10 percent of the world’s children under 1 year of age received their full series of immunizations. Today, coverage is estimated at 75 percent, although it varies widely and some countries failed to sustain increases in cover-

age in the 1990s.

Since 1999, USAID’s Boost Immunization Initiative has helped struggling immunization programs in USAID-assisted countries regain momentum. Data from 12 Boost countries suggest an estimated 25 percent increase in coverage, with immunization rates now approaching 60 percent in these countries. USAID continued to support the Global Alliance for Vaccines and Immunization (GAVI) and its Vaccine Fund, which support enhanced immunization programs in about 70 countries.

Polio Eradication Initiative: USAID provided more than \$28 million in support of global polio eradication in fiscal year 2003. The number of confirmed cases worldwide declined from 1,922 in 2002 to 758 in 2003 (confirmed as of February 2004). Almost half these cases were reported from Nigeria, and only seven countries remained endemic. USAID-supported activities in endemic countries included routine immunization services and surveillance in the Democratic Republic of the Congo, Ethiopia, Sudan, Afghanistan, Bangladesh, and Pakistan, and assistance to Pakistan in conducting eight large-scale supplemental immunization campaigns.

Nutrition: USAID’s nutrition programs promote breastfeeding, improved feeding practices for children and women, micronutrient supplementation, and food fortification. Vitamin A supplements can achieve an average mortality reduction of 23 percent in children 6 to 59 months of age, and USAID supported vitamin A supplementation programs in 26 countries in 2003. National coverage rates achieved in these countries ranged from 66 percent in the Democratic Republic of the Congo to 90 percent in Ghana. A study in India found that zinc supplementation in full-term, small-for-gestational-age infants resulted in a 66 percent reduction in mortality.

In recent years, USAID strengthened the relationship between active nutrition programs and Food for Peace programs. Evaluations of health and nutrition programs conducted by USAID-supported private voluntary organizations under the Title II food aid program estimated that they save 48,000 children's lives annually.

Maternal and Neonatal Health: USAID's maternal and neonatal health programs emphasize the use of skilled birth attendants at delivery, the importance of recognizing complications of pregnancy and delivery, and the need for families and communities to be prepared for birth emergencies. In 2003, a skilled attendant was on hand for an estimated 52 percent of births in countries with USAID maternal health programs, compared with 42 percent in 1993. In addition, 72 percent of pregnant women in USAID-supported countries made at least one visit to an antenatal care provider in 2003.

Vulnerable Children: USAID's programs for vulnerable children strengthen the capacities of families and communities to meet the physical, social, educational, and emotional needs of displaced children and orphans, disabled children, and older children and adolescents in need of social integration and vocational or technical training. Assistance in 2003 included activities on behalf of orphans and other vulnerable children in Romania, war-affected youth in Afghanistan and Sierra Leone, street children in Indonesia and Peru, and disabled children in Cambodia, Indonesia, Nepal, and Vietnam.

Family Planning and Reproductive Health: USAID promotes voluntary family planning and reproductive health. Family planning saves the lives of women, infants, and siblings by enabling couples to space pregnancies for optimal health. Family planning is a critical intervention for preventing abortion and can

help women avoid sexually transmitted infections, including HIV/AIDS.

USAID achievements in 2003 included support for comprehensive family planning services in Senegal, which has increased contraceptive prevalence in project areas from about 8 to 14 percent in two years, and continued support for the five-year \$10 million Romania Family Health Initiative, which is expanding access to reproductive health and family planning services in primary health care settings. USAID is also integrating family planning and HIV/AIDS programs in selected settings where it can maximize the impacts of both.

Research, Technical Innovation, Health Systems Strengthening: In 2003, USAID supported research in a number of areas, including microbicides to protect against HIV transmission; malnutrition and micronutrient supplementation, especially zinc and vitamin A; the use of zinc in treating children with diarrhea; the social and economic impacts of HIV/AIDS, especially orphan- and workforce-related issues; and the effectiveness of a vaccine to prevent child pneumonia and meningitis. An improved formulation of oral rehydration solution that USAID helped develop became available for worldwide distribution. A program in Kyrgyzstan to adapt the health care system to a cost-effective primary care model showed substantial three-year increases in acceptance of the model by both users and providers. The program received support from other donors for expansion nationally.

Partnerships: Historically, USAID has forged successful partnerships with U.S. and local nongovernmental organizations, including community-based and faith-based organizations, at the country and global levels to achieve maximum program impact. In 2003, the Agency took a leading role in establishing the new Child Survival Partnership. Through this collaboration, USAID, the World Health Organization,

the United Nations Children's Fund, the World Bank, and others intend to refocus international efforts to reduce child mortality and scale up proven child survival interventions.

In fiscal year 2003, USAID health programs were funded principally from the Child Survival and Health (CSH) Programs Fund, but also received funding from the Economic Support Fund (ESF), the FREEDOM Support Act (FSA), the Assistance to Eastern Europe and the Baltic States (AEEB) account, and Food for Peace (Public Law 480). Total amounts shown below include funding from all these accounts.

Funds were allocated to the following categories:

HIV/AIDS: \$623.5 million supported treatment, prevention, and care programs and other activities to mitigate the impact of the HIV/AIDS pandemic. This included \$587.7 million from the CSH account.

Other Infectious Diseases: \$173.1 million (\$154.5 million from the CSH account) supported activities to reduce the threats of infectious diseases of major public health importance, particularly tuberculosis and malaria.

In addition to these HIV/AIDS and infectious diseases funds, the CSH account contributed \$248.4 million to the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

Child Survival and Maternal Health: \$389.7 million in support of immunizations (including \$28.5 million for polio eradication), nutrition, improved delivery care, and other core child and maternal health programs. CSH funds accounted for \$321.9 million of the total amount.

Vulnerable Children: \$34.3 million for programs that benefit displaced children and orphans, blind children, and other vulnerable children. CSH funds constituted \$26.8 million of the total for this category.

Family Planning and Reproductive Health:

\$443.6 million supported voluntary family planning and reproductive health to help families achieve their desired size while protecting the health of women and children. This included \$366.1 million from the CSH account.

This report provides examples of programs and achievements in which USAID, in collaboration with its partners, accomplished significant gains and progress in these key areas of public health concern in developing countries, including in complex emergency settings and in forging transitions from disaster assistance to sustainable development.

Introduction

Support for global health remains a cornerstone of the international development and humanitarian aid programs of the United States government. Through the U. S. Agency for International Development (USAID), the United States has been a world leader in supporting programs that control infectious diseases such as HIV/AIDS, tuberculosis, and malaria; immunize children and treat childhood diseases; protect mothers and infants through pregnancy, childbirth, and early infancy; and enable couples to decide how many children to have. In short, USAID's programs in infectious diseases, child and maternal health, and reproductive health and family planning have improved the health, well-being, and lives of millions of people in developing countries for more than 40 years.

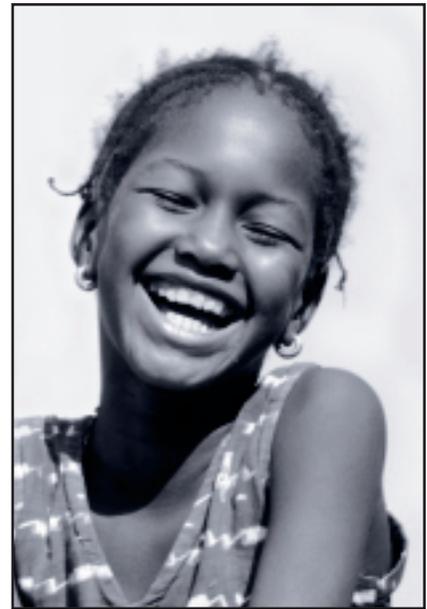


Photo by PLAN Watson

The progress that the United States has generously supported and achieved over the past four decades has been substantial, but many daunting challenges remain. In 2003 alone, 3 million people died from AIDS and 5 million acquired HIV infection, bringing the number infected worldwide to approximately 40 million. The HIV/AIDS pandemic in fact threatens to undo much of the progress in global health realized by USAID and its many partners. Almost 11 million young children in developing countries die each year, mostly from preventable causes, and over 500,000 women die in childbirth or from pregnancy-related causes. In addition, many countries are experiencing resurgent epidemics of tuberculosis and malaria. In some areas, these challenges are compounded by crises that impede immediate, comprehensive, and sustainable responses.

In fiscal year 2003, USAID continued its record of achievement in responding to such challenges through well-established programs, innovative responses to new and changing conditions such as conflict or complex emergencies, and preparations for President Bush's Emergency Plan for AIDS Relief, the greatly expanded U.S. response to the global pandemic authorized by legislation early in the year. This annual report on USAID's Child Survival and Health Programs Fund documents the Agency's achievements for the year in the core areas of:

- HIV/AIDS;
- Infectious diseases;
- Child survival and maternal health (comprising childhood diseases such as pneumonia and diarrhea, immunizations, polio eradication, nutrition, and maternal and neonatal health);
- Vulnerable children;
- Family planning and reproductive health; and
- Research, technical innovation, and health systems strengthening.

For each area, the report describes the strategic approach and interventions employed by USAID and details specific country or regional achievements during the year. In addition, some sections include and reflect on lessons learned from experience that have significance for future approaches and interventions.

I. HIV/AIDS



Photo by WFP/Othman, W.

I. HIV/AIDS

The HIV/AIDS pandemic constitutes an enormous public health challenge in the developing world in both health and development terms. As the disease spreads, its impact on individuals, families, communities, and whole societies may erase decades of development progress. About 95 percent of people living with HIV/AIDS live in developing countries where poverty, inadequate health care, and lack of basic infrastructure are contributing to the spread of the disease.

Since AIDS was first recognized in 1981, more than 60 million people have become infected and about 20 million have died. At the end of 2003, 40 million people were living with HIV/AIDS worldwide. In 2003, 5 million new HIV infections occurred, and 3 million adults and children died of AIDS. By the end of 2001, 13.4 million children under the age of 15 had lost one or both parents to AIDS. Without significant intervention, this number is expected to reach 25 million by 2010.

Taking bold and decisive action to combat the global pandemic, President Bush has raised the United States' commitment to and leadership in the fight against HIV/AIDS to an unprecedented level. In his State of the Union address in January 2003, the President announced his Emergency Plan for AIDS Relief, which will build upon previous successes (such as the 2002 International Mother and Child HIV Prevention Initiative) to significantly expand the U.S. response to the pandemic and the technical and financial resources for addressing its challenges.



Photo by WHO/TBP/Davenport, J.

The objectives of the President's Emergency Plan for AIDS Relief include the achievement of the following by 2008:

- Providing treatment to 2 million people;
- Preventing 7 million new infections; and
- Providing care and support to 10 million people living with and affected by HIV/AIDS, including orphans and vulnerable children.

Focus countries for the Emergency Plan are Botswana, Côte d'Ivoire, Ethiopia, Guyana, Haiti, Kenya, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Tanzania, Uganda, and Zambia.

To attain these ambitious goals, the United States must rapidly scale up interventions, engage new partners, and make sustainable improvements in health care infrastructure. As a world leader in responding to HIV/AIDS, USAID will be a key partner in helping to achieve the President's goals.

USAID Strategy and Interventions

With a budget of \$623.5 million in fiscal year 2003, USAID supported programs in approximately 100 countries. Key components of USAID's HIV/AIDS program include:

- **Treatment:** USAID supports a range of programs to increase the availability of

treatment services. Activities include improving access to and clinical management of pharmaceuticals (including antiretroviral drugs); training health providers; increasing voluntary counseling and testing services; and establishing treatment programs for clinical care, including screening and treatment for opportunistic infections such as tuberculosis.

- **Prevention of new infections through behavior change:** USAID promotes a balanced “ABC” approach to prevention, including abstinence, being faithful (partner reduction), and correct and consistent use of condoms as appropriate.
- **Care and support:** USAID funds palliative care; psychosocial support and home-based care programs for people living with HIV/AIDS; and care for the needs of children affected by HIV/AIDS, including medical care, counseling, and material support such as food, shelter, clothing, school

fees, and other school-related expenses. USAID currently supports 99 activities in 21 countries to assist such children.

- **Prevention of mother-to-child HIV transmission:** Programs focus on increasing the availability of preventive care, including drug treatment, and building health care delivery systems to reach as many women as possible.
- **Voluntary counseling and testing:** Voluntary counseling and testing services help people learn their HIV status and link people living with HIV/AIDS to treatment, prevention, care, and support. USAID currently supports voluntary counseling and testing in more than 25 countries. Activities include establishing testing sites, training and supporting counselors, and promoting outreach programs to enhance community acceptance of HIV/AIDS activities.
- **Research:** One of the key components of USAID’s HIV/AIDS program has been biomedical and operational research to develop and evaluate new tools for providing antiretroviral therapy, preventing HIV transmission, and caring for people living with AIDS. The major focus of USAID’s research is to address needs for program implementation in resource-limited settings. USAID-funded research is comprehensive, covering identification of program-relevant research problems, efficacy verification, field testing, and full application in developing countries.



Programs in all countries seek to strengthen health systems as needed to respond to the HIV/AIDS challenge.

USAID operates through collaborative programs with international and U.S. partners, including faith- and community-based organizations and the private sector, and collaborates with international initiatives such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

Key Achievements

Treatment

Antiretroviral therapy. In order to develop models of care and treatment, USAID is expanding its efforts to introduce antiretroviral drug therapies in developing countries. In 2003, USAID launched pilot programs for delivering antiretroviral therapy in multiple health facilities in **Ghana, Kenya, and Rwanda**. The sites are linked to provide a continuum of HIV/AIDS care within a geographic area. At each site, treatment has been introduced as an integral component of comprehensive care and support for HIV-infected patients and their families. Comprehensive care encompasses counseling and testing, preventing mother-to-child HIV transmission, nutritional counseling, treatment and management of opportunistic infections, psychosocial support, and referral to home-based care. All three programs are expanding to reach more patients at their start-up sites and are scaling up to additional sites. Currently, 360 patients are being managed with antiretrovirals in the three countries, and approximately 2,400 HIV-positive patients are being seen for disease management, including prevention and treatment of opportunistic infections (especially TB), and comprehensive HIV care. Key progress included training for counselors, physicians, pharmacists,

and laboratory staff; procurement and installation of essential laboratory equipment; and laboratory and clinic renovations.

Prevention of New Infections Through Behavior Change

Promoting abstinence and delayed sexual activity for youth. With USAID support, partners in **Zambia** implemented a national behavior change program focusing on abstinence and delay of sexual activity by youth. Preliminary results from the 2003 Zambia Sexual Behavioral Survey showed delays of more than a year in median age at sexual debut for both girls (from 16.4 to 17.5 years) and boys (16.7 to 18 years) between 1996 and 2003. This is enough to result in significant changes in HIV transmission risk. Working with the Zambian government, USAID completed a national population-based survey that indicated HIV prevalence at 16 percent, with rates of infection in urban areas (23.1 percent) higher than in rural areas (10.8 percent). The qualitative analysis of this study suggests that faith-based and other community organizations played an important role in Uganda and Zambia promoting “A” (abstinence) and “B” (being faithful) behavior changes.

Behavior change in uniformed services.

Behavioral surveillance data from **Cambodia** show that while members of the uniformed services remain particularly vulnerable to HIV infection and transmission, significant



Photo by Haskell, T.

improvements have been achieved. USAID is funding a peer education program to support behavior change among military and police personnel. The HIV prevalence rate for urban police declined from 6 percent in 1998 to 3.9 percent in 2002. During the same period, fewer military and police reported having had recent commercial sex (33 percent of military, down from 72 percent, and 32 percent of police, down from 82 percent). At the end of 2002, the peer education approach was being implemented in 16 of 24 provinces and involved more than 70,000 men. In fiscal year 2003, the program expanded to 18 provinces to cover 99,000 men, a 41 percent increase in coverage that enabled it to reach about 80 percent of all military personnel and 25 percent of all police.

Mobilizing nongovernmental organizations. The HIV/AIDS epidemic in **Central Asia** is concentrated among high-risk groups. USAID is supporting the crucial role of nongovernmental organizations in providing outreach, peer education, and referrals that link margin-

alized populations with needed information and services. The Agency has awarded 32 grants to strengthen local organizations and expand their ability to reach high-risk groups. Each project offers basic medical care, free condoms, referrals to social workers and legal services, and access to HIV testing sites and clinics that treat sexually transmitted infections. USAID support has helped develop a network of mobilized organizations that increasingly collaborate and link with health services to provide an effective response to the region's growing epidemic.

Care and Support

Comprehensive services. Early and vigorous action by indigenous civil society organizations was a linchpin of **Uganda's** success in its fight against HIV/AIDS. The AIDS Support Organization (TASO) was one of these groups. Having organized one of the largest responses to HIV/AIDS in Uganda, TASO now trains international and local organizations in comprehensive HIV/AIDS care and support. In fiscal year 2003, more than 11,000 clients received counseling and approximately 16,000 received medical services, bringing the cumulative number of people served since 1987 to 90,000. TASO and other partners in USAID's food aid program also provided food to more than 51,000 orphans, families, and HIV-positive individuals. To address Uganda's growing orphan crisis, TASO spearheaded a model orphan support program in 1999. Since then, with USAID support, more than 200,000 vulnerable children and orphans have received assistance for formal education and vocational training. In 2003, 832 children graduated from vocational skills training equipped for work in the community.

Home-based care and support. In **Kenya**, the Community-Based Program on HIV/AIDS Care, Support, and Prevention was initiated in 1999 with a focus on home-based care and



Photo by Gilbert, L.

support for people with HIV/AIDS and their families. The project has trained 400 community health workers who in turn trained more than 2,200 caregivers in 2002. More than 15,000 family members and friends are now able to provide simple nursing care and referrals for care, treatment, and services such as prevention of mother-to-child HIV transmission and voluntary counseling and testing. The project has also trained religious leaders in psychosocial counseling; facilitated the formation of support groups for widows, orphans, and people living with HIV/AIDS; and expanded access to credit through links with a regional USAID-funded microfinance activity.

Children affected by HIV/AIDS. USAID has continued to strengthen its multifaceted activities in support of AIDS-affected orphans and vulnerable children. In **Zambia**, the SCOPE project has strengthened organizations and communities that promote HIV/AIDS awareness and provide household economic support, education, and psychosocial and other assistance to more than 137,000 orphans and vulnerable children. The Schooled for Success Project in **Namibia** provided 7,600 orphans and vulnerable children with psychosocial support and nearly 3,400 with school uniforms. Another 129 children who were out of school are now back in school with the Project's help. In **Cambodia**, nearly 2,500 vulnerable children received direct support services. Program services also reached more than 11,100 young people, and 12 new community-based partner organizations mobilized to provide services.

Prevention of Mother-to-Child HIV Transmission

Building a national network. In July 2003, USAID and the Department of Health and Human Services launched an initiative for preventing mother-to-child HIV transmission in **Haiti**. A key component of the initiative is the establishment of a national network of centers



Photo by WHO/TBP/Hampton, G.

providing prevention, counseling, and testing services in all referral hospitals and in designated nongovernmental sites in each health district. The initiative will bring new services to 70 clinics and hospitals throughout Haiti and ensure new levels of care and treatment for rural regions as well as most cities and towns. National targets include testing 850,000 pregnant women over the next five years and providing antiretroviral treatment for approximately 25,000 of these women who are found to be HIV-positive. Thousands of children will be born virus-free as a result of these interventions.

Voluntary Counseling and Testing

Increasing awareness of HIV status. In the **Dominican Republic**, only 5 percent of adults who have HIV infection are aware of their status. In coordination with the AIDS Presidential Council and the National AIDS Program of the Dominican Republic, USAID helped establish 90 voluntary counseling and testing sites throughout the country in public, private, and nongovernmental organization facilities. More than 290 health personnel were trained in HIV/AIDS pre- and post-test counseling. Preliminary figures for 2003 show that 8,300 individuals have received pre-test counseling and more than 7,000 post-test counseling. This capability will take on greater importance as the country prepares to deliver drug therapy to people infected with HIV.

Promoting counseling and testing to men. The USAID mission in **Zimbabwe** saw the potential to reach large numbers of men – traditionally a difficult group to reach with HIV/AIDS messages – through the World Cup soccer tournament. In partnership with the regional telecommunications giant Econet and the Zimbabwe Broadcasting Corporation, USAID supported the airing of HIV/AIDS messages during game broadcasts, including a message encouraging men to get an HIV test. In addition, commentators for the broadcasts wore “New Start” T-shirts promoting the name of the USAID-supported voluntary HIV counseling and testing service. Health communications research after the games showed that the number of men seeking an HIV test increased by 34 percent from the number who sought a test 12 months earlier.

Research

Biomedical research. USAID is actively developing microbicides (female-controlled chemical barriers to the AIDS virus). USAID is also supporting the International AIDS Vaccine Initiative and its efforts to accelerate the development and introduction of new vaccine candidates. In the past year, both microbicide and vaccine candidates have advanced to clinical trials, the next step in developing a licensed product for use in the future.

Operational research. USAID addressed a number of operational research issues. The Agency convened a meeting on youth and HIV/AIDS to discuss what research is available on preventing risk-taking among youth and to review specific country case studies to see what programs could be scaled up. Other research found that getting men involved in HIV testing and infant feeding led to higher use of services to prevent mother-to-child transmission of HIV.



Photo by Ndwiga, S.

Behavior change studies. USAID has carried out pioneering studies in the area of behavior change for successful HIV prevention. USAID funded a six-country study on the ABC behaviors that found that in countries with prevalence declines, ABC behaviors increased.

Male circumcision clinical trials. Clinical trials are currently underway to review whether male circumcision has a strongly protective effect on HIV transmission. USAID is supporting research in Haiti, Zambia, Kenya, and South Africa to learn more about issues of safety and complications, acceptability and feasibility, and the logistical issues involved in developing pilot demonstration services for safe and affordable male circumcision and male reproductive health.

Lessons Learned

USAID supports the ABC approach because it can target and balance A, B, and C interventions according to the needs of different at-risk populations and the specific circumstances of particular countries. In Uganda, substantial declines in HIV prevalence during the 1990s appear to have been associated with increases in all three ABC behaviors. The most significant of these appeared to be increased

Faith-Based Partnerships

USAID is reaching out to community- and faith-based organizations as critical partners in the fight against HIV/AIDS. USAID works with more than 700 community- and faith-based organizations in confronting the pandemic.

Religious leaders have an important role to play in reducing stigma and supporting a compassionate response to people living with HIV/AIDS. As a trusted information source, they can promote behavior change and provide accurate information about the disease. Faith-based organizations are also critical providers of health care services in developing countries and will be key partners in expanding antiretroviral treatment and other HIV/AIDS care and treatment services.

USAID programs have engaged religious communities through partnerships that reach millions of people:

- In Nigeria, knowledge of the causes and modes of transmission of HIV/AIDS is distressingly low. This lack of knowledge has fueled high levels of stigma and discrimination against HIV-infected individuals and their families. USAID has enlisted the support of indigenous faith-based organizations to combat this problem. Nigeria's Catholic Church, with 18 million members, has developed an HIV/AIDS policy that provides guidelines for prevention, treatment, and care and support for people living with HIV/AIDS and their families. Six other major Christian denominations with an estimated 2.5 million people in their congregations have integrated HIV/AIDS education into ongoing programs. Muslim clerics are supporting the USAID-funded film "The Awakening," which promotes responsible sexual behavior. The film has reached an estimated 65 million viewers across the country, fostering public dialogue on HIV/AIDS that has greatly reduced the misconceptions that fuel stigma and discrimination.
- In Kenya, a USAID-funded project sponsored a conference for 32 members of the Mombasa Imam's Council to educate them about voluntary counseling and testing and encourage them to promote it during prayer time, at religious meetings, and in religious schools. The leaders were taken to a counseling and testing center to see the facility and talk with counselors. The Council chairman briefed the imams on their role, based on the Koran, in preventing the spread of HIV infection. The imams made a commitment to promote voluntary counseling and testing, to receive counseling and testing themselves, and to involve other imams in discussing HIV and informing people how to obtain counseling and testing. The number of clients receiving counseling and testing services in the project area increased from 6,300 to 30,700 between January-March 2002 and January-March 2003.

USAID is continuing to increase its partnerships with faith-based organizations and is determined to overcome barriers to working with them. In November 2003, USAID sponsored a workshop to introduce U.S.-based community- and faith-based organizations to potential partners in developing countries and possible partnerships with USAID. Workshop participants learned how to register their organization with USAID and were introduced to Agency funding sources, application processes, guidelines for developing and evaluating proposals, and monitoring and evaluation requirements.

faithfulness or partner reduction behaviors by Ugandan men and women, whose reported casual sex encounters declined by well over 50 percent between 1989 and 1995.

USAID has supported studies of the relationship between changes in HIV prevalence and ABC behaviors, including an analysis in six countries, three showing declines in HIV prevalence (Uganda, Thailand, and Zambia) and three without declines (Cameroon, Kenya, and Zimbabwe). In the countries with prevalence declines, ABC behaviors increased. In the countries without documented declines in HIV prevalence, condom use often increased but there was little reported change in abstinence or partner reduction behaviors, supporting the conclusion that A and B behaviors are critical public health interventions with the potential to reverse the AIDS epidemic.



Photo by May, M.

II. Infectious Diseases



Photo by WFP/Roest, M.

II. Infectious Diseases

Infectious diseases continue to pose a serious global threat. Over the past decade the world has witnessed the re-emergence of infectious diseases thought to be under control, such as malaria and tuberculosis. During the same period, drug-resistant strains of widespread diseases and newly identified diseases such as severe acute respiratory syndrome (SARS) have also emerged. In the United States, immigration and global travel and commerce have resulted in the importation of West Nile encephalitis, multidrug-resistant tuberculosis, malaria, and SARS. The realization of just how quickly these diseases can spread has generated a heightened appreciation of the dangers of infectious diseases. The root causes of these threats to public health include environmental changes related to urbanization and deforestation, rapid population growth, migration, and the adaptation of microbes themselves in response to the modern antibiotics used to combat them. These problems are amplified in many countries by malnutrition, lack of clean water, inadequate sanitation, and overcrowding.

With existing health knowledge and technology, it is possible to reduce the overall threat of infectious diseases and prevent the great majority of the premature deaths they cause. Since 1998, USAID has been working with U.S. and international partners to implement a truly global response to the major infectious diseases, particularly tuberculosis and malaria, which together claim an estimated 3 million lives annually.

The goal of USAID's Infectious Disease Initiative is to reduce the threat of infectious



Photo by WFP/Hockstein, E.

diseases of major public health importance, with a particular focus on:

- Testing, improving, and implementing options for tuberculosis control;
- Implementing new disease prevention and treatment efforts focused on malaria and other infectious diseases of major public health importance;
- Slowing the emergence and spread of antimicrobial resistance, targeted at the principal microbial threats to all countries (pneumonia, diarrhea, sexually transmitted diseases, tuberculosis, and malaria); and
- Strengthening surveillance systems by enhancing detection capability, information systems, and data-based decision-making and response capacity.

USAID's progress in implementing an impact-oriented infectious disease strategy has been impressive. At the global level, USAID's Bureau for Global Health has been proactive in developing and expanding key global initiatives such as the Stop TB partnership and its Global Drug Facility, the Roll Back Malaria partnership, and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. At the national level, technical support from USAID has been instrumental in establishing, strengthening, and expanding programs in 67 countries to reduce morbidity and mortality from TB and malaria;



Photo by WFP/Hockstein, E.

strengthening disease surveillance systems; and addressing the growing problem of antimicrobial resistance.

Tuberculosis

Tuberculosis remains one of the world's deadliest infectious diseases. Of the estimated 2 billion people infected with tuberculosis, 8 million develop active TB each year and 2 million die. TB persists mostly in the developing world, where 95 percent of the world's TB cases and 98 percent of TB deaths occur. The persistence of TB on a global scale is due chiefly to poverty, lack of resources and trained staff, emerging resistance to treatment drugs, the continuing spread of HIV/AIDS, and decreasing investments in public health systems.

In 1998, the Global Partnership to Stop TB was launched. USAID is committed to this partnership and provides global leadership on the Stop TB board. The cornerstone of Stop TB is the "directly observed treatment, short course," or DOTS, strategy. Under DOTS, health workers or trained volunteers observe patients taking their medication during the first months of a six- to eight-month anti-TB drug regimen. DOTS is a comprehensive approach that has significantly increased cure rates and slows the emergence of drug-resistant TB through its emphasis on case identification and prompt,

effective treatment. DOTS is an effective, affordable strategy for controlling TB and is especially valuable in resource-poor settings.

USAID Strategy and Interventions

USAID's objective is to enhance the capacity of developing and transitional countries to achieve global targets of 70 percent case detection and 85 percent treatment success (or cure) rates among pulmonary TB patients by preventing and curing active TB. USAID's programs in support of the Stop TB partnership provide financial and technical support to:

- Expand and strengthen DOTS programs;
- Increase and strengthen human resource capacity to implement DOTS;
- Develop and disseminate new tools and approaches; and
- Adapt DOTS to address the special challenges of multidrug-resistant TB and TB-HIV/AIDS co-infection.

Key Achievements

Improving and expanding DOTS. Since 2001, USAID has supported TB activities in **Haiti** and the **Dominican Republic**, both of which have high TB burdens. When USAID began its support for Haiti's TB program, only 92 institutions – about 15 percent of the country's health care facilities – provided DOTS, and cure rates as low as 40 percent were common. Technical assistance, training, logistics, and supervisory support provided by USAID expanded DOTS to 168 clinics, and increased the cure rate to 70 percent. In the Dominican Republic, USAID is helping regions that bear 67 percent of the national TB burden to expand and strengthen DOTS through decentralization and better integration of DOTS in primary health care services. Norms and training modules have been updated and printed, and nearly 800 health personnel have been

trained in DOTS. More than 500 health posts are currently implementing DOTS and coverage has increased from 10 to 40 percent as a result of USAID assistance. Advances have also been achieved in diagnosis and treatment, with the number of smear microscopy tests increasing from 10,000 to nearly 28,000 and cure rates in DOTS areas increasing from 45 to 55 percent.

Increasing DOTS coverage. **India** has more tuberculosis cases than any other country in the world. With technical input from WHO and in partnership with the Tamil Nadu State

TB Program and the Tuberculosis Research Center, USAID financial support has helped increase training capacity at the Model Center of Tuberculosis Control, Training, and Research. USAID provides direct support for DOTS implementation in Haryana state, where treatment success and case detection rates of 83 percent and 64 percent, respectively, were achieved in 2002. Full coverage of Haryana's 22 million people will be achieved by the end of 2004. With USAID support, DOTS coverage nationwide increased from 50 percent in 2002 to 65 percent in 2003. The goal is to achieve full national coverage by 2005.

Advances in TB Control in Europe and Eurasia

USAID TB investments in the Europe and Eurasia region supported activities in 14 countries in 2003. These programs helped host countries control TB effectively and efficiently through implementing the DOTS strategy.

In 2002, an evaluation of USAID investments in seven countries in the region indicated that USAID support for TB control contributed to a number of significant achievements in the preceding five years. DOTS has expanded with improved results; political support for DOTS-based TB control has increased in all countries; and there has been progress in managing multidrug-resistant (MDR) TB. Significant achievements have included the following:

- USAID programs have contributed to substantial progress across the region with respect to standardization of TB treatment regimens and increased use of sputum-smear microscopy in diagnosing TB.
- In Russia, a high-level TB working group was established and helped decrease opposition to the DOTS approach.
- DOTS coverage in Kosovo has reached 100 percent.
- In demonstration sites in Russia, Uzbekistan, and Kosovo, treatment success rates are approaching or have surpassed the WHO target of 85 percent.
- In Kazakhstan, where USAID has supported the nationwide DOTS program since 1998, TB-related mortality has declined by 37 percent. USAID and the U.S. Centers for Disease Control and Prevention estimate that more than 20,000 TB deaths were prevented between 1998 and 2003.
- In Latvia, an international electronic surveillance system for MDR TB and clinical capacity for managing MDR TB have been developed with USAID support. MDR TB decreased from 54 to 28 percent of all TB cases.

Building DOTS capacity in the public and private sectors. Since 1999, USAID TB support in the **Philippines** has included DOTS expansion and training in three isolated regions of the country covering 48 municipalities and three cities. In 2002, USAID launched a new initiative to strengthen diagnosis and treatment of TB by private sector providers in 25 selected sites nationwide. Activities included DOTS training for 3,900 health personnel and the establishment of TB microscopy quality assurance centers in three provinces. As a result, 7 million people (9 percent of the population) are covered by DOTS. USAID support to the Department of Health has helped increase DOTS coverage in the public sector by approximately 10 percent. Case detection rates increased from about 50 to 70 percent between 2000 and 2001.

The Global TB Drug Facility. The financial and technical support of USAID's Bureau for Global Health has been a major contributor to the success of the Global Drug Facility (GDF), which is committed to providing inexpensive TB drugs to countries in need. USAID and other donor contributions have helped to bring about a 30 percent decline in the average price of a full course of TB treatment drugs to about \$10 and to provide drugs for more than 1.6 million patients in 30 countries. USAID technical assistance has also ensured that pharmaceutical management receives appropriate attention. USAID provides TB drug management expertise to Stop TB and the GDF for country audits and monitoring visits. In-country monitoring ensures that GDF drugs are distributed in accordance with requirements (which include free availability) and that progress towards global TB goals is demonstrated. In fiscal year 2003, in-country assessments were performed in **Azerbaijan, Bosnia-Herzegovina, Egypt, Haiti, Kosovo, and Macedonia.**

Malaria

More than 300 million cases of malaria occur every year, directly and indirectly causing at least 1 million deaths. Ninety percent of these deaths occur in Africa, and most of the victims are young children. Recent studies confirm that malaria is responsible for at least 20 percent of all deaths among children under age 5 in Africa. Malaria places a huge burden on already fragile health systems, representing 30 to 50 percent of outpatient visits and hospital admissions. It continues to drain the resources of poor households throughout the tropics and is a major underlying barrier to economic development in Africa, inhibiting regional gross domestic product by as much as \$12 billion annually.

USAID Strategy and Interventions

The international community has remobilized in the past few years to develop and implement sustainable actions against malaria. USAID is a committed partner in the global Roll Back Malaria (RBM) initiative, and its malaria strategy is consistent with RBM's technical and intervention priorities. The goal of USAID's malaria strategy is to reduce malaria-related morbidity and mortality by:

- Preventing malaria infection and illness;
- Promoting effective treatment of malaria illness;
- Protecting pregnant women from malaria;
- Responding to the emergence and spread of drug-resistant malaria;
- Developing new tools and approaches for malaria prevention and control; and
- Addressing the needs of populations in complex humanitarian emergencies.

Implementation of this strategy has involved building malaria control networks among U.S. government agencies, multilateral and other bilateral donors, and nongovernmental organi-



Photo by World Bank/Goto, M.

zations; working with the private sector to provide malaria control commodities and services to communities at affordable prices; and establishing malaria programs in more than 20 African countries as part of local RBM partnerships. USAID also supports operational research to improve access to interventions and to develop new prevention technologies such as vaccines. USAID works closely with UNICEF, the World Bank, and WHO on the global RBM initiative to develop links with maternal and child health programs and foster innovative strategies for preventing malaria transmission.

Key Achievements

Vaccine development. A promising candidate vaccine for malaria developed by the Bureau for Global Health's malaria vaccine program is undergoing safety evaluation in **Kenya**. The U.S. National Institutes of Health plan to test it for

safety at a second site. With support from the Malaria Vaccine Initiative, funded by the Gates Foundation, this candidate vaccine is scheduled for an efficacy trial in fiscal year 2004.

Coordinated technical assistance. USAID technical partners in the Malaria Action Coalition provided expert technical assistance to countries in Africa in the areas of effective treatment and prevention of malaria during pregnancy, including intermittent preventive therapy. Over the last year this technical assistance has contributed significantly to revisions of outdated treatment policies in **Senegal, Ghana, Rwanda, and Zambia**, and to increased implementation of revised policies on appropriate drugs in the **Democratic Republic of the Congo, Tanzania, and Kenya**. In Tanzania, provision of intermittent preventive therapy as part of antenatal care has more than doubled to reach more than 60 percent of women attending antenatal services.

Sustainable provision of affordable bednets. The NetMark Project, the Global Health Bureau's innovative public-private partnership for increased sustainable access to insecticide-treated bednets in Africa, has launched activities in six countries. Sales of nets have topped 1 million in the first year of activity. NetMark also brought together key RBM partners to identify and document models for targeting subsidized nets to pregnant women and infants. Models for targeted subsidies are now being widely implemented in **Malawi, Mali, Ghana, Uganda, Zambia, Senegal, and Tanzania**.

Higher-quality malaria drugs. The Bureau for Global Health has funded the United States Pharmacopeia Drug Quality and Information Program to strengthen national drug regulatory authorities, improve the manufacture of pharmaceuticals through good manufacturing practices, and include drug quality control in national malaria programs. In collaboration with RBM and national malaria programs, staff members



Photo by Dr. Dipo Otolofin, E.

were trained at 17 sentinel surveillance sites in six countries in Southeast Asia and Africa to collect and test antimalarial drugs for quality using low-technology screening methods. Sentinel surveillance sites and malaria control programs will be linked to create regional warning systems for poor-quality drugs found in the market. As part of the United States-Japan Common Agenda, a new collaborative effort is underway to provide laboratory equipment to back up the Program's surveillance effort. The Program has also provided technical assistance in good manufacturing practices to selected producers of malaria drugs in **Cambodia, China, Laos, and Vietnam.**

Surveillance

The ability to control infectious diseases requires effective comprehensive surveillance and response capacity. Effective surveillance is a prerequisite for establishing local, national, regional, and global priorities; for planning, mobilizing, and allocating resources; for detecting epidemics in their early stages; and for monitoring and evaluating disease prevention and control programs. Surveillance includes the process of detecting diseases through a standardized information collection system that ensures data quality, analyzes and interprets the data, gets information to individ-

uals who can act on it, and facilitates the necessary response to address the problem. The system is structured to deal with routine health threats and epidemic diseases. Early and complete detection of infectious diseases allows earlier control and containment, which are especially important as diseases like polio and guinea worm come close to being eradicated. Whatever the specific public health problem, surveillance and response capability must be built on a foundation of skills in such areas as case detection, epidemiology, data analysis and interpretation, laboratory diagnostics, and appropriate response.

In consultation with its partners, USAID has reviewed needs at the local, national, regional, and global levels, and has developed a program reflecting these needs and utilizing USAID's particular advantages. The Agency's disease surveillance program stresses the development of a strong local and national foundation for collecting, analyzing, and using public health information. USAID is contributing to the development of this foundation through technical assistance and participation in regional and global initiatives.

USAID Strategy and Interventions

The basis of USAID's strategy for promoting more effective use of surveillance information is to build local capacity to collect, analyze, and use information. To accomplish this, USAID supports direct assistance to countries and also supports regional and global organizations that can facilitate this goal. The primary areas of USAID support are:

- Strengthening the use of information through behavior change strategies;
- Improving diagnostic capability;
- Developing country-based field epidemiology skills;
- Improving the ability to act on surveillance information and respond effectively; and

- Developing appropriate analytical tools for local use.

Key Achievements

Integrated disease surveillance and response.

The north of **Ghana** is particularly prone to epidemics of infectious diseases. Four wild polio cases were detected in the past year, meningitis epidemics recur annually, and the incidence of guinea worm cases has risen steeply. USAID has focused its support on implementing the WHO-developed concept of integrated disease surveillance and response (IDSR) in the country's three northern regions. USAID provided financial and technical assistance to strengthen the ability of the Ghana Health Service's surveillance systems to respond quickly and effectively to the threat of epidemics. In 2003, USAID trained 376 health personnel, clinicians, and district and regional health managers; provided 83 facilities with IDSR materials; and supported the employment of a Health Service epidemiologist to supervise IDSR implementation in the north. IDSR is currently functional in eight districts and will be fully implemented in all 24 northern districts in fiscal year 2004. Full implementation is expected to have a lasting impact on the threat of infectious diseases and on polio and guinea worm eradication in Ghana.

Case detection, reporting, and follow-up. The USAID-supported surveillance system in **Peru** comprises 4,731 health facilities that represent 62 percent of all health facilities in the country. Weekly reports are received from virtually all participating facilities. The system detects and follows up probable and confirmed cases of infectious diseases. No cases of polio have been detected for the last 12 years, and no measles cases have been found for more than three years. The system has proved extremely sensitive, accurate, and quick in detecting and reporting cases and outbreaks of emerging and

re-emerging diseases, including yellow fever, plague, dengue, and malaria.

Early warning reporting of vector-borne diseases.

USAID-funded activities to strengthen routine reporting of vector-borne diseases in **Nepal** under the Early Warning Reporting System are proving effective. The System recently enabled the government to quickly identify and respond to a malaria outbreak in a remote western region. In 2002, 13 percent of malaria outbreaks were identified and responded to, compared to fewer than 5 percent in prior years.

Antimicrobial Resistance

Over the past half century, antimicrobial therapies – especially antibiotics for pneumonia, TB, and other diseases, and antiparasitic drugs for malaria – have been important weapons against infectious microbes. However, the widespread and often indiscriminate use of these drugs has contributed to the emergence of drug-resistant strains of infectious organisms. As a result, diseases once manageable by available therapies – including pneumonia, bacterial dysentery, malaria, tuberculosis, and various sexually transmitted infections – are becoming increasingly more difficult and costly to treat. These resistant strains move readily across national borders, and many have made substantial inroads in the United States.



Photo by WHO/TBP/Davenport, J.

The increasing levels of antimicrobial resistance threaten to reverse two decades of progress in global health. Ensuring that countries and donors devote adequate attention to having systems in place to manage drugs appropriately and monitor emerging resistance is a priority.

In 2001, WHO released its *Global Strategy for Containment of Antimicrobial Resistance*, a document representing expert consensus on interventions needed to contain antimicrobial resistance and fill remaining research gaps. In response, USAID is supporting activities and interventions such as strengthening drug and therapeutics committees, improving infection control in district-level hospitals, improving the management and use of essential medicines, and conducting research on better case management. There is a new focus on assisting countries receiving Global Fund support with guidance on how to assess and monitor levels of drug resistance to tuberculosis, malaria, and HIV/AIDS. At the same time, issues of drug resistance that specifically affect child health outcomes – such as pneumonia, malaria, and diarrheal diseases – will not be neglected.

USAID Strategy and Interventions

To achieve the objective of preventing and slowing the spread of antimicrobial resistance, USAID's efforts focus on the following key areas:

- Improving the understanding of antimicrobial resistance;
- Developing methods to detect antimicrobial resistance; and
- Responding to data on antimicrobial resistance and drug use.

Key Achievements

Providing guidance to Global Fund countries. An enormous proportion of Global Fund

resources will be for procurement of essential HIV/AIDS, TB, and malaria drugs. To contain drug resistance, recipient countries must be concerned with building systems to manage and use these drugs appropriately and with monitoring the emergence of drug resistance. USAID's Bureau for Global Health has helped WHO develop comprehensive guidance for countries receiving Fund support to be published in 2004.

Tracking resistance patterns. Better information is needed on the epidemiology of vaccine-preventable bacterial infections, particularly those caused by *S. pneumoniae* and *H. influenzae*, which are leading agents of mortality among children in developing countries. From 1993 to 2003 in **India**, the Indian Clinical Epidemiology Network tracked patterns of antimicrobial resistance and serotype distributions of these isolates in six hospital surveillance sites across the country. The resulting information has provided the Indian government and neighboring countries with good evidence of high levels of resistance to cotrimoxazole in pneumococcal and *H. influenzae* infections. This evidence has influenced the management of patients, particularly children who have meningitis, pneumonia, or septicemia. Information on serotype distributions will be important in designing future vaccine programs to reduce acute respiratory infections and meningitis in children.

Improving treatment regimens. In the **Philippines**, USAID partners are supporting an initiative to promote “rapid-cycle quality improvement for infection control.” Treatment guidelines, a structured approval process, provider education, standardized admitting forms, and an audit process are being field-tested in Manila. In one hospital, use of the correct antimicrobial regimen for surgical prophylaxis increased from 50 to 89 percent of patients. Discussions have been initiated with the Philippines Department of Health about



Photo by CCF/Williams, J.

disseminating these infection control methods to other hospitals.

Identifying drug resistance factors. Improper prescribing by pharmacists, self-prescribing by individuals, and counterfeit or poor-quality medications contribute to malaria drug resistance in **Cambodia**. In an effort to improve prescription practices and ensure that effective medications reach consumers, USAID supported two research studies to determine the extent of poor medication practices. The studies

found that only 11 percent of people with symptoms of malaria received the nationally recommended first-line therapy; that 41 percent of people receiving treatment for malaria did not take the full course of medication; and that 50 percent were self-prescribing with medications obtained in the private market. In addition, many malaria drugs for sale were of poor quality and not registered in the country. The research results have been shared with neighboring countries to warn them of these poor-quality products.

III. Child Survival and Maternal Health

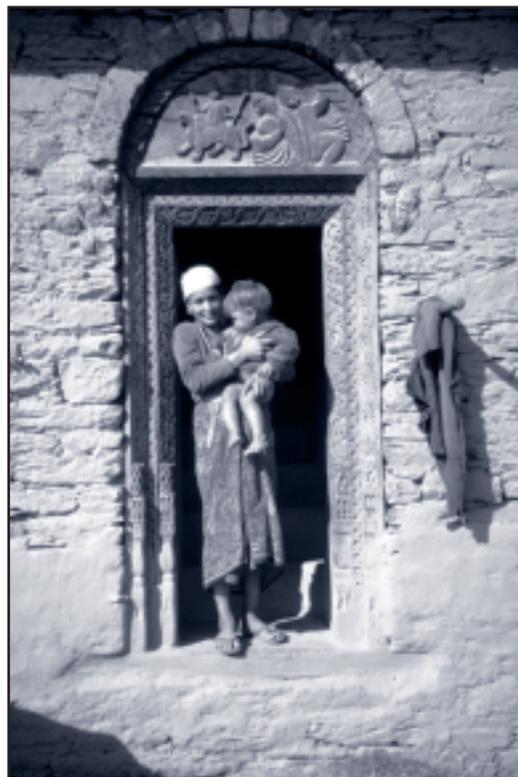


Photo by Jacoby, C.

III. Child Survival and Maternal Health

A vicious cycle of poverty, malnutrition, and infectious diseases threatens the probability that children in developing countries will grow up into healthy and productive adults. But simple child health interventions can achieve quick and significant public health results. USAID-supported research has found, for example, that training community health workers to diagnose and treat pneumonia in children could prevent one-third of the deaths from that disease.

Worldwide, 10.5 million children will die this year. Six million could survive if simple, cheap, and widely known treatments for diarrhea, pneumonia, malaria, and other illnesses were provided, according to a meta-analysis completed during 2003. This new data on child mortality is refocusing USAID’s efforts to save children in five of the six countries where more than half the deaths occur – India, Nigeria, Pakistan, the Democratic Republic of the Congo, and Ethiopia. (USAID does not work directly in China, the sixth country.) USAID will also increase its focus in 36 other countries, which combine with the five mentioned above to account for 90 percent of global child deaths. Resources are being targeted to low-cost treatments and healthy behaviors that prevent disease and death, such as exclusive breastfeeding for the first six months of life. USAID funds support improving the delivery of these low-cost treatments and providing information and motivation to target populations to adopt healthy behaviors that can save children's lives.

Communicable diseases remain major killers of children in developing countries. Even though great strides have been made in defeating some of them (most notably polio), communicable diseases still represent seven

out of the top 10 causes of child deaths and account for about 60 percent of all child deaths. Overall, the 10 leading causes represent 86 percent of all child deaths, and we have the tools to prevent most of these deaths.

Infant Mortality by Region/Country Group 1960 and 2002		
Region or Country Group	Infant Mortality Rate (1960)*	Infant Mortality Rate (2002)*
Sub-Saharan Africa	152	106
Middle East and North Africa	157	46
South Asia	148	70
East Asia and Pacific	140	33
Latin America and Caribbean	102	27
CEE/CIS and Baltic States	78	33
Industrialized Countries	31	5
Developing Countries	141	62
Least Developed Countries	170	99
World	126	56
* Number of infant deaths per 1,000 live births		
Source: UNICEF, <i>The State of the World's Children, 2004</i>		

In many Latin American, Asian, and Near Eastern countries, perinatal conditions such as birth asphyxia, birth trauma, and low birth-weight have replaced infectious diseases as the leading cause of death among children and are now responsible for one-fifth to one-third of these deaths. In sub-Saharan Africa, malnutrition, malaria, lower respiratory tract infections, and diarrheal diseases remain among the leading causes of child mortality, accounting for 45 percent of all deaths.

USAID is committed to improving the health and well-being of children and families. Its child survival strategies and activities address the following areas:

Pneumonia, Diarrhea, and Integrated Approaches to Child Health: USAID supports programs that address acute respiratory infec-

Leading Causes of Death, Children < 5 Yrs Developing Countries, 2002		
Cause	Number (000's)*	% All Deaths
Perinatal Conditions	2,375	23.1
Lower Respiratory Infections	1,856	18.1
Diarrheal Diseases	1,566	15.2
Malaria	1,098	10.7
Measles	551	5.4
Congenital Anomalies	386	3.8
HIV/AIDS	370	3.6
Pertussis	301	2.9
Tetanus	185	1.8
Protein Energy Malnutrition	138	1.3
Other Causes	1,437	14.0

Source: WHO. World Health Report, 2003.

tions and diarrheal diseases, two of the biggest killers of children under 5, as well as integrated approaches that improve household and community practices related to health and nutrition.

Immunizations: USAID is a leader in the global fight to halt vaccine-preventable diseases. Over the last 30 years, USAID support has helped increase the percentage of children in developing countries immunized against

measles, diphtheria, pertussis, polio, and tuberculosis from 5 to 70 percent.

Polio Eradication: The United States plays a leading role in the global campaign to eradicate polio, one of the largest public health initiatives and most successful public-private partnerships in history.

Nutrition: Although malnutrition on its own is a small cause of death, it contributes greatly to child deaths from other causes. To address malnutrition, USAID promotes breastfeeding, improved feeding practices for children and women, micronutrient supplementation, and food fortification.

Maternal and Neonatal Health: USAID's maternal and neonatal health programs emphasize the use of skilled birth attendants at delivery, the importance of recognizing complications of pregnancy and delivery, and the need for families and communities to be prepared for birth emergencies.

Child Survival: USAID Leadership Forms a Partnership for Action

Many children are not being reached by existing effective interventions that could save their lives, as shown in figure 1 on page 30. This situation has raised concerns about the adequacy of the current levels of investment in these interventions and their implementation to achieve the Millennium Development Goal of reducing mortality among children by two-thirds by 2015. The commitment of the global community to achieving this feasible goal is being thwarted simply because these interventions are not being implemented on a wide enough scale to reach children in need.

In response to these concerns, USAID and a number of agencies with a major interest in child health (including WHO, UNICEF, the World Bank, and the Gates Foundation) have joined hands in the Child Survival Partnership to refocus international efforts to reduce child mortality and scale up proven child survival interventions. USAID played a lead role in developing this collaboration.

The Partnership already has taken several important steps. In February 2003, a group of public health researchers met in Bellagio, Italy, to define what needs to be done to save approximately 6 million children from dying of preventable causes each year. In the summer of 2003, the British medical journal *The Lancet* published the Bellagio team's findings in a series of five articles highlighting key child survival issues. These articles have provided the foundation for the start of a newly energized and far-reaching global child survival initiative.

The Lancet articles reported that every year 10.8 million children under age 5 die, largely due to preventable causes such as pneumonia, diarrhea, malaria, and illnesses in newborns. Forty-two developing countries account for 90 percent of all childhood deaths, and just six (India, Nigeria, China, Pakistan, the Democratic Republic of the Congo, and Ethiopia) account for more than half. Six million of these deaths could be prevented by universal coverage with proven, affordable child survival interventions such as oral rehydration therapy, micronutrients (especially vitamin A and zinc), insecticide-treated bednets, measles immunizations, antibiotics for pneumonia, newborn care, exclusive breastfeeding, and household hygiene.

Following the articles' publication, the Child Survival Partnership formed working groups to move interventions to scale, monitor and evaluate global progress, and advocate for greater attention and resources, reflecting the members' determination for their global energy to become real action at the national level. USAID assumed a central role in advocating rapid progress and has led the way in funding and guiding the activities of the working groups. USAID and its principal partners are currently developing strategies and plans for scaling up child survival interventions in countries in Africa and Asia building upon the existing efforts of USAID and others. These initial planning steps are leading to the scaling up of a focused package of proven interventions to reinvigorate child survival efforts at the national and community level. Implementation of such strategies and plans in some of the neediest countries is expected in fiscal year 2004.

III. Child Survival and Maternal Health

Pneumonia, Diarrhea, and Integrated Approaches to Child Health

Each year, more than 4 million children die of pneumonia and diarrhea, which together account for more than 40 percent of childhood deaths worldwide. Virtually all of these deaths occur in the developing world, and the majority of them – more than 3 million – could be prevented with effective, affordable, and sustainable interventions currently at our disposal. Despite progress in many countries, the unmet need for these interventions – i.e., the number of children not receiving them – remains extremely high (see figure 1). USAID is committed to scaling up these interventions to achieve country-level impact through the continuing integrated development and implementation of cost-effective delivery strategies and technologies at the household, community, and facility levels.

USAID Strategy and Interventions

Pneumonia

Of the more than 2 million children who die from pneumonia every year, nearly two-thirds could be saved by known interventions such as appropriate treatment with antibiotics and reduced exposure to indoor smoke.

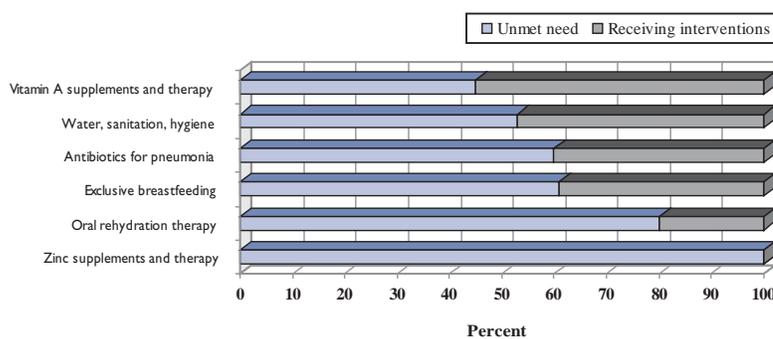
Unfortunately, progress in reducing mortality from pneumonia has been extremely slow or – as in

most countries – nonexistent. Part of the problem lies in the difficulty of scaling up pneumonia diagnosis and treatment. Unlike diarrhea, which caretakers often can identify and treat at home, managing pneumonia requires contact with a trained health worker. Because most families in developing countries do not have timely access to affordable health services, many children die without ever seeing a trained provider. For the poor this is an especially acute problem. As figures 2 and 3 demonstrate, poor children are in “double jeopardy” – they have the greatest need for health services but typically are least likely to receive them.

Solutions, however, do exist. A recent meta-analysis funded by USAID has reconfirmed the impact of community-based management of pneumonia in preventing deaths among children. Trained community health workers can safely and accurately diagnose and treat pneumonia in the home or community and thus lower child mortality dramatically. USAID has been a leader in advocating this approach among poor and underserved populations and has taken the initiative in introducing it in West Africa based on a model developed with USAID funding in Nepal.

Figure 1

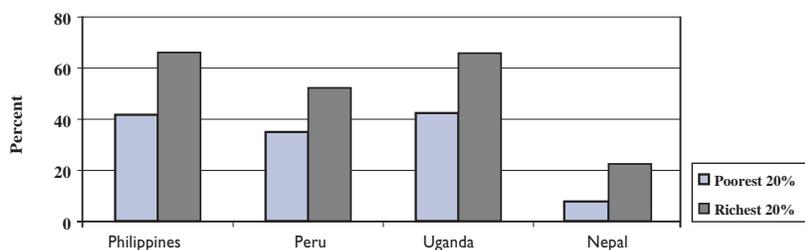
Unmet Need for Proven Child Survival Interventions, Children Under 5 Years of Age



Source: Adapted from Jones G, et al. “How many deaths can we prevent this year?” *The Lancet* 2003; 362:65-71.

Figure 2

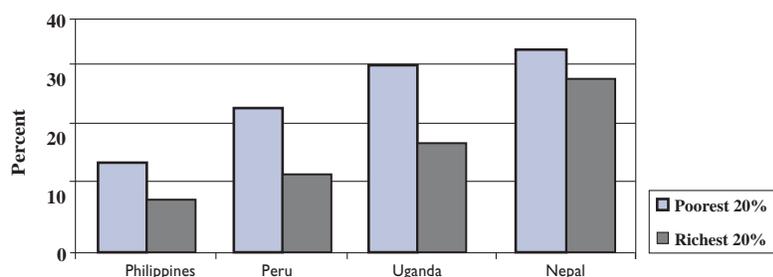
Proportion of Pneumonia Cases in Children Under 5 Treated With Antibiotics by Socioeconomic Status in Selected Countries (%)



Source: Adapted from Jones G, et al. "How many deaths can we prevent this year?" *The Lancet* 2003; 362:65-71.

Figure 3

Pneumonia Prevalence in Children Under 5 by Socioeconomic Status, Selected Countries



Source: Adapted from the World Bank's Multi-Country Reports by HNP Indicators on Socio-Economic Inequalities (<http://www.worldbank.org/poverty/health/data/statusind.htm>).

Diarrhea

Despite great progress in recent decades in managing diarrhea, it still accounts for nearly 1.5 million childhood deaths each year. Nearly 90 percent of these deaths could be prevented through the widespread implementation of simple, affordable interventions such as oral rehydration therapy (ORT); safe water, sanitation, and hygiene practices; and continued feeding during and after illness.

USAID has made great strides in improving the availability and use of ORT, especially home-available fluids and oral rehydration solution (ORS), and now is pursuing further reductions in

diarrhea-related illness and death through continued expansion of ORT coverage to underserved populations. USAID has been a leader in developing new and improved diarrhea treatments, such as a reduced osmolarity ORS that decreases stool output and shortens the duration of illness. USAID is also promoting the adjunctive use of zinc in treating diarrhea and is working with partners in Bangladesh to scale up zinc therapy through a variety of approaches, including commercial marketing.

As an important complement to treatment, USAID is also focusing on preventing diarrhea through hygiene improvement measures such as safe household water, effective hand washing, and sanitary disposal of human feces. This cluster of hygiene practices, supported by adequate water supply and sanitation infrastructure, has been shown to reduce diarrhea prevalence in young children by as much as two-thirds.

Integrated Approaches

USAID continues to support integrated approaches to child health at the household, community, and facility levels. At the household level, these actions include integrated behavior change efforts aimed at health promotion, disease prevention, illness recognition, and appropriate home management and care seeking. At the community level, USAID is supporting integrated programs such as Integrated Community Child Care (AIN, from the Spanish *Atención Integral a la Niñez*), which began in Honduras as a community-based growth promotion activity but has evolved into a model for comprehensive community-based health care.



Photo by Unknown

AIN is now being expanded to other parts of Latin America and Africa.

At the facility level, USAID also continues to support Integrated Management of Childhood Illness (IMCI). Developed by WHO and UNICEF in close collaboration with USAID and other partners, IMCI addresses pneumonia, diarrhea, other childhood illnesses, and malnutrition in a unified and systematic way. IMCI has an important role to play in improving the quality of facility-based health services for populations with adequate access to services. In some countries, IMCI has stimulated investment in community-level services as well. A recent multidonor review has identified limitations in IMCI's ability to deliver key interventions to underserved populations, especially in countries with very weak health care systems. The review concluded that IMCI should be seen as one tool among many for responding to the health and nutrition needs of

children in developing countries. USAID continues to work toward improving family access to quality health services, whether in the home, community, or facility.

Key Achievements

Community-based management of pneumonia. Pneumonia kills 5,300 children in **Senegal** a year. Up to 46 percent of these deaths could be easily prevented with simple protocols for accurate diagnosis and an inexpensive antibiotic. A USAID-supported project is working with the government, UNICEF, and other partners to teach community-based health workers how to manage acute respiratory infections in children under age 5 and how to provide antibiotic treatment for pneumonia. Training has been provided to 75 percent of community-based health providers in four districts, and more than 1,000 children with acute respiratory infections have received care. When scaled up nationwide, community-based management of pneumonia will have the potential to prevent nearly 2,500 deaths of children under age 5 annually.

Home treatment of diarrhea. In **Kazakhstan** and **Turkmenistan**, the USAID-supported “Keeping Children Healthy” program addressed people’s poor knowledge of home treatment of diarrhea. Piloted in specific areas of each country, the campaign used marketing strategies and television and radio announcements to inform mothers and other caregivers about diarrhea’s danger signs, home care for a child who has diarrhea, and the importance of breastfeeding. After one year of project activity, 33 percent of people in target areas of Kazakhstan knew that a child with diarrhea should receive the same amount of food and increased liquids, compared with national baseline estimates of 18 percent. In Turkmenistan, the percentage of people who wrongly believed that a child with diarrhea

should receive much less food than normal declined from 62 to 11 percent.

Increasing diarrhea treatment through ORS sales. According to **Cambodia's** 2000 Demographic and Health Survey, nearly 20 percent of children under age 5 suffer from diarrhea, but only 50 percent of these children receive ORT. In a project area where ORT use was only 15 percent, USAID supported sales of ORS packets via a village shopkeeper program managed by a Cambodian organization. Nearly 500 participating shops supported 570 outreach workers and Buddhist nuns who provided education about diarrhea care to 33,000 women. The program generated sales of more than 20,000 ORS packets in just the first half of 2002. Overall use of ORT increased to 41 percent, nearly triple the 15 percent figure.

Changing hygiene behaviors. In the **Democratic Republic of the Congo**, diarrhea currently accounts for one-quarter of deaths of children under 5. USAID developed a hygiene behavior change activity to decrease cases of diarrhea. Operating out of 50 health centers covering 10 health zones with 62,500 house-

holds and a population of 375,000, the program promotes hand washing, covered water storage, and use of a hygienic latrine. The activity will be scaled up in 2004 and eventually serve 8 million people, including 242,000 children under age 5. Combined with activities to improve access to water supply and sanitation infrastructure, the activity is expected to reduce diarrheal disease by at least 50 percent.

Training health promoters in integrated care. In **El Salvador**, USAID has helped the Ministry of Health train community-based health promoters to address the main causes of death in children under age 5. All 1,687 of the Ministry's health promoters have been trained in IMCI, growth promotion, and essential newborn care. The project has also helped implement integrated mass media strategies in support of child health. Early results are encouraging. Trained promoters now correctly treat diarrhea – the second-leading cause of death among children under 5 in El Salvador – 60 percent of the time.



Photo by JHU/Goodsmith, L.

III. Child Survival and Maternal Health

Immunizations

Immunizations continue to save millions of children's lives each year and remain one of the mainstays of child survival programs. Immunizations prevent diseases such as measles, which kills a reported 644,000 children each year. In 1980, less than 10 percent of the world's children under 1 year of age received their full series of immunizations. By 1990, this figure had risen to about 73 percent. During the 1990s, however, immunization coverage did not maintain a steady increase, and many countries even saw declines in coverage. Today, UNICEF estimates global coverage for diphtheria-pertussis-tetanus (DPT3) vaccinations – the standard indicator for completed immunizations – at 75 percent. Coverage in developing countries varies widely, however, with Africa lagging behind other regions.

Achieving and maintaining high immunization coverage requires intensive, sustained efforts to ensure that all children complete their full vaccination series. This involves making primary care services accessible to all children, providing high-quality services, and addressing behavioral obstacles that may inhibit coverage. Working closely with its partners, USAID has developed a comprehensive strategy to address these issues and has mobilized a broad array of expertise to build high-quality sustainable immunization programs.

GAVI and the Vaccine Fund. The Bureau for Global Health continues its successful partnership with the Global Alliance for Vaccines and Immunization (GAVI) and its financing mechanism, the Vaccine Fund. GAVI is a public-private alliance of international organizations, governments, vaccine manufacturers, and research institutes working to increase



Photo by Franco, R.

child immunization coverage globally. Through USAID, the United States is the largest of the Fund's eight current government supporters, having contributed nearly \$160 million in the past three years. The Fund raises resources for developing countries to improve infrastructure, introduce new and underused vaccines, and provide safe injection equipment. In late 2003, USAID rotated off GAVI's Board of Directors but assumed a seat on the Board's advisory panel. In addition, USAID has a leadership role in the Financing Task Force's core group and other critical areas. GAVI and the Vaccine Fund are now supporting enhanced immunization programs in about 70 countries.

USAID's efforts to enhance and leverage GAVI investments at the country level are centered on building capacity for sustainable immunization financing. In 2003, seven coun-

tries received GAVI assistance for strengthening routine immunization services. On the global level, USAID is providing leadership for sustainable immunization financing, related communication and advocacy, and monitoring and evaluation through immunization system strengthening.

Boost Immunization Initiative. In 1999, USAID’s Bureau for Global Health launched its Boost Immunization Initiative to strengthen national immunization programs in USAID-assisted countries with stagnating or falling vaccination coverage rates. The Initiative is a collaboration between the USAID Bureau for Global Health and various USAID country missions to develop specific strategies for helping countries improve their immunization programs. Through the Boost Initiative, USAID has substantially increased its investment in immunizations and revived its global leadership role in the immunization field. This renewed focus on immunization is already having an impact in priority countries. As figure 4 shows, DPT3 coverage in 12 countries assisted through the Boost Initiative increased from 46 to 57 percent, almost a 25 percent increase.

In 2003, USAID provided additional support to Ethiopia and the Democratic Republic of the Congo under the Boost Initiative. In India, Pakistan, and Angola, USAID provided support for national immunization advisers from



Photo by WFP/Bizzarri, G.

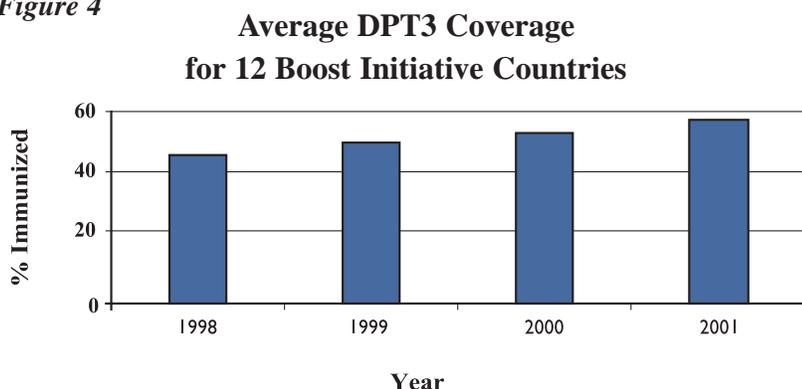
WHO. These advisers work closely with GAVI and other USAID-supported projects to ensure that immunizations are a high government priority and countries receive the best possible technical advice to improve their programs.

USAID Strategy and Interventions

USAID’s immunization strategy involves:

- Improving immunization quality through improved vaccine handling and safe injection practices;
- Increasing coverage through increased demand for and availability of immunization services;
- Introducing new and underutilized vaccines; and
- Supporting disease control initiatives for measles mortality reduction and polio eradication.

Figure 4



Source: USAID.

Key Achievements

Extending local successes. In **Uganda**, immunization coverage declined during the 1990s from around 90 percent early in the decade to 37 percent by the end of the decade. A USAID-funded project was asked to develop local models for increasing coverage that could be adapted for use nationally. In Lira

district, there was a 20 percent increase in coverage in one year and a 42 percent reduction in children who do not complete their full series of immunizations.

Institutional support. The national immunization program in **Peru** achieved excellent results in the 1990s, with coverage in target groups reaching 95 percent for basic vaccines. The program also attained full financial sustainability. Immunization coverage dropped alarmingly last year, however, due to political and administrative turmoil in the Ministry of Health. USAID helped rebuild the institutional structures that maintain vaccination coverage, which has returned to 95 percent.

Strengthening vaccine logistics. In **Haiti**, countrywide logistics problems such as cold-chain failures and vaccine stock-outs resulted in low immunization coverage in an area of about 2.6 million people (one-third of the national population). USAID worked with a health care delivery network of nongovernmental organizations to strengthen vaccine delivery systems and undertake immunization campaigns within the network. Immunization coverage in the network increased from 62 to 80 percent in the past year.

Measles and polio protection. In recent years in **Afghanistan**, vaccination rates among the country's 11 million children have fallen to dangerously low levels. In 2002, USAID immunized nearly 4.3 million children against measles and polio, preventing an estimated 20,000 deaths.

Preventing disease outbreaks. USAID helped **Guatemala's** Ministry of Health carry out three special national immunization campaigns in 2002. The campaigns vaccinated 95 percent of 1- to 5-year-old children against measles and rubella and averted a potential measles outbreak following reported low vaccination

coverage in 2001. No measles cases have been reported since the campaigns ended.

Revitalizing routine immunizations. In the **Democratic Republic of the Congo**, USAID is revitalizing routine immunization services despite severe political and economic instability, including a civil war that has divided the country since 1998. Between 1998 and 2002, the number of immunized children in the country more than doubled as a result of improved service quality, effective communications, and successes in strengthening the health system.

Community follow-up. In **India**, a USAID-funded private voluntary organization implemented the Ballia Rural Integrated Child Survival Project in eastern Uttar Pradesh between October 1998 and September 2002.



Photo by Waak, A.

Project activities to improve immunization coverage included training female community workers to follow up with families to ensure children receive all their immunizations. Immunization coverage increased from 21 to 88 percent.

Logistics and human resources. USAID is helping [Eritrea](#) build the foundation of an effective immunization program. USAID has helped establish a cold-chain system for delivering vaccines around the country, strengthened the polio surveillance system, and trained health workers in program management. As a result, completed DPT and polio immunization coverage for children 12 to 23 months of age has increased from 48 to 83 percent.



Photo by Shapera, T.

III. Child Survival and Maternal Health

Polio Eradication Initiative

As one of the leading bilateral donors to the global campaign to eradicate polio, the United States has allocated more than \$260 million to USAID's Polio Eradication Initiative (PEI) since 1996. Through PEI, USAID is one of the partners assisting WHO's global polio eradication effort. To date, an independent commission has certified three of the six WHO regions polio-free: the Americas (certified in 1994), the Western Pacific (2000), and Europe (2002). More than 3 billion people – half the world's population – in 134 countries and territories now live in areas that are polio-free.

As of February 2004, 758 polio cases had been confirmed worldwide for 2003, a substantial decline from the 1,922 confirmed cases reported for 2002. Almost half of the 758 cases were the result of an outbreak in Nigeria, during which 347 cases were detected. Two historical poliovirus reservoirs, Ethiopia and Sudan, have detected no wild poliovirus in well over a year and appear to have joined the Democratic Republic of the Congo and Bangladesh as former reservoirs now polio-free. The seven remaining endemic countries, from highest to lowest risk of continued polio transmission, are India, Nigeria, Egypt, Pakistan, Afghanistan, Somalia, and Niger. Within the high-risk countries, ongoing polio transmission is largely limited to specific geographic areas (Bihar and Uttar Pradesh states in India, for example, and Kaduna and Kano states in northern Nigeria). In addition, nine countries (Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Cote d'Ivoire, Ghana, Lebanon, and Togo) had imported cases in 2003, mainly from Nigeria. Targeted immunization activities quickly fol-



Photo by PAHO/Waak, A.

lowed the detection of these cases to contain the spread of the virus.

USAID Strategy and Interventions

USAID supports national immunization days (NIDs) and other special immunization campaigns that supplement and strengthen routine immunization services. Support includes assistance for advocacy, communications, social mobilization, microplanning (the process of developing a detailed work plan for carrying out polio immunizations), and the logistics of delivering oral polio vaccine under temperature-controlled conditions. PEI support assists with improvements in polio surveillance, laboratory accreditation, and research into the best ways for supplemental immunization campaigns to reach children in marginalized populations or populations reluctant to accept



Photo by Franco, R.

immunization. To that end, PEI assistance emphasizes building effective partnerships; strengthening health systems; supporting supplemental immunizations; improving acute flaccid paralysis surveillance and laboratory investigation; and improving information collection and use.

Key Achievements

Building effective partnerships. Through partnerships with UNICEF, WHO, bilateral projects, and the CORE group of U.S.-based nongovernmental organizations, USAID pro-

vides technical expertise and facilitates collaborative activities to combat polio. USAID mission and Washington staff also work with other donors at interagency coordination meetings and other technical and informal meetings. In October, the 57 heads of state and governments of members of the Organization of the Islamic Conference (OIC) adopted a resolution urging its polio-endemic member countries to accelerate eradication efforts and calling on the international community to mobilize funds to stop polio transmission by 2005. USAID polio eradication teams in **Nigeria, Pakistan, Egypt, Afghanistan, Niger, and Somalia** are using the resolution to advance program activities. The commitment expressed by the resolution comes at a critical time because six of the seven remaining endemic countries are OIC members.

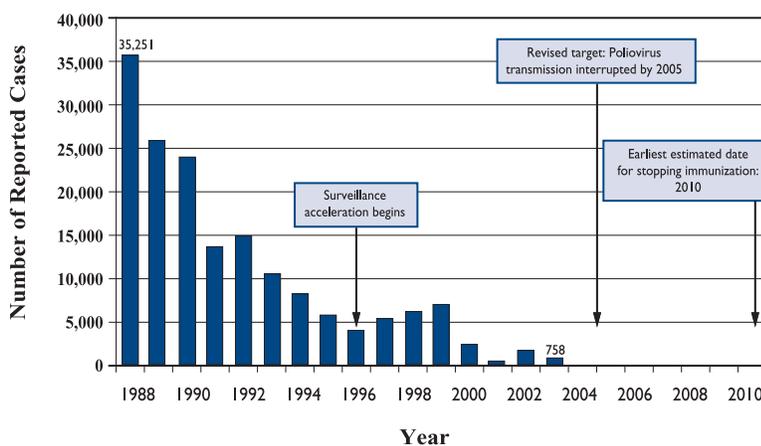
Strengthening health systems. USAID supports the Joint Expanded Program on Immunization. Its polio teams made country visits to the **Democratic Republic of the Congo, Ethiopia, Sudan, Bangladesh, and Pakistan** to document efforts at strengthening health systems through routine immunization services and surveillance. USAID has supported such improvements to routine immunization services as cold-chain management, interagency

coordination, integrated surveillance approaches, data analysis workshops, and vitamin A distribution during immunization activities. USAID also emphasized surveillance expansion, microplanning, and monitoring and evaluation.

Supporting supplemental immunizations. USAID supported several rounds of large-scale supplemental immunization activities in **Pakistan**, one of the three major remaining poliovirus reservoirs. Independent district-level

Figure 5

Progress and Plan to Eradicate Polio



Source: World Health Organization, February 2004.

monitoring provided follow-up. USAID funds polio surveillance and communications in Pakistan through WHO. Thirteen other countries conducted large-scale immunization activities targeting over 200 million children.

Acute flaccid paralysis surveillance and laboratory investigation. USAID is a major funder of surveillance for acute flaccid paralysis (AFP), the signal condition for polio. As a result, nearly all countries in WHO's Africa, Eastern Mediterranean, and South Asia regions have achieved certification-standard surveillance. Globally, nearly 38,000 cases of paralysis were investigated with appropriate action taken to determine if a case was due to polio. A significant number of countries – 28 of 46 countries in the Africa region, 21 of 23 in the Eastern Mediterranean, and 9 of 11 in South Asia – have integrated measles, tetanus, or other diseases into their AFP surveillance systems. All of the laboratories in the global laboratory network are accredited and receive USAID support.

Improving information collection and use of data. Bureau for Global Health funds are supporting research, policy dialogue, and cost-effectiveness studies of immunization policy after polio eradication is certified. USAID also supports the WHO Global Polio Eradication Program in its activities to collect poliovirus data and program information from around the world. Through post-NIDS monitoring, surveillance reviews, and the use of USAID staff as international observers, USAID works to ensure that relevant data and information reach in-country program administrators and are put to effective use.

Lessons Learned

Globally, the greatest threat to polio eradication is the funding gap of at least US\$130 million for polio eradication activities from 2004 to 2005. This has already caused

unprecedented cancellations of activities in high-risk countries, a 30 percent cutback in surveillance budgets, and shorter staff contracts. With only seven remaining endemic countries, it is crucial to maintain the necessary funding to finish the job. USAID urgently appealed to donors and partners in late 2002 to help meet the 2003 need for \$75 million for polio eradication activities. These efforts have allowed polio campaigns to continue as planned in endemic countries. The funding gap for 2004 is \$40 million.

Over the past decade, USAID and its partners have demonstrated that strong high-level political commitment is the key to successful polio eradication. Maintaining this commitment remains a challenge, particularly in the seven countries that remain polio-endemic. It is imperative that governments understand that as wild poliovirus is increasingly contained, commitment must be maintained from the national level down to the district level (especially in countries like India and Nigeria where states and provinces enjoy relative autonomy). USAID technical advisors engage with high-profile officials at all levels to ensure that supplementary immunization activities are successful and wild poliovirus transmission interrupted as quickly as possible.

Countries that are no longer polio-endemic also need to maintain their commitment. Until wild poliovirus is eradicated, the threat of importa-



Photo by Franco, R.



Photo by Franco, R.

tions into polio-free areas undermines the global eradication effort. Continued transmission in Nigeria, for example, threatens the polio-free status of other countries in the region. All countries must protect their children and maintain certification-standard surveillance.

It is not enough to simply administer polio vaccinations. People must be informed of the benefits of ensuring their children are vaccinated. In addition, parents and other caregivers must know where and when they can obtain vaccinations for their children. USAID continues to provide leadership for polio

communication activities and supports year-round polio information broadcasts by the Voice of America in polio-endemic countries.

Gaining access to all children, including those in areas affected by conflict or marginalized in cities and other densely populated areas, remains critical to polio eradication. Key areas in conflict-affected countries include the Kandahar region of Afghanistan and the Mogadishu area of Somalia. In conflict areas, negotiations can ensure that immunization efforts continue. Despite dangers and challenging conditions, USAID and its partners in polio eradication have negotiated temporary cease-fires to enable vaccinators to reach children in Afghanistan, Angola, the Democratic Republic of the Congo, Sri Lanka, Sudan, Sierra Leone, and Somalia on truce days or in designated zones. Surveillance can also continue to allow for monitoring of polio eradication activities. In India, USAID has learned the value of working through non-governmental organizations to gain access to minority children in Uttar Pradesh state.

III. Child Survival and Maternal Health

Nutrition

Malnutrition is a contributing factor in more than half of all child deaths worldwide. A combination of inadequate food and poor nutrition (insufficient protein, energy, and micronutrients) exacerbates illness and puts malnourished children at risk of death. In addition, it is known that poor maternal nutrition adversely affects child health and that improving a woman's nutrition significantly affects her health and reduces child morbidity and mortality.

USAID nutrition programs support the United Nations Millennium Development Goals of reducing by half the proportion of people who suffer from hunger and reducing by two-thirds the mortality rate of children under 5 by 2015. In 2003, a study on the importance of nutrition in child survival indicated that a five percentage point reduction in the prevalence of low weight-for-age (the primary measure of malnutrition) among children less than 5 years old could reduce under-5 mortality by 13 percent. Stimulated by this dramatic finding, and taking advantage of the knowledge gained in recent years about effective approaches to malnutrition, USAID is intensifying its efforts to eliminate malnutrition through programs focusing on women and children.

USAID Strategies and Interventions

USAID's nutrition program has four significant components:

- **Food security in countries unable to produce and distribute adequate food for their people:** USAID provides food aid to the most vulnerable countries; works to improve agricultural productivity; supports activities to improve nutrition in households; and collaborates with research

institutions and other groups to improve the technical capacity of countries to address food security. This is becoming increasingly important in the context of families and communities affected by HIV/AIDS.

- **Proper infant feeding, especially exclusive breastfeeding of infants through their first six months of life:** USAID advocates for policies that enable and encourage women to exclusively breast-feed their infants. USAID provides education and support using interpersonal communication strategies, group activities, and media to promote breastfeeding among mothers of newborns. The Agency also supports introducing appropriate and nutritious weaning foods at six months and other beneficial practices such as increased frequency of feeding and improved diversity and quality of complementary foods. In the context of preventing mother-to-child transmission of HIV infection, HIV-positive mothers are counseled and supported to either exclusively breastfeed or exclusively formula feed for six months and to thereafter provide adequate replacement foods while avoiding breastfeeding. This is based on recent findings that mixed feeding (partial breastfeeding) is associated with higher rates of HIV transmission than full breastfeeding or artificial feeding.
- **Reduction of micronutrient malnutrition, especially through adequate**



Photo by WFP/Brodeur, A. K.



Photo by WFP/Hughes, C.

intake, and community therapeutic care of malnourished infants.

Key Achievements

Food Security

Private voluntary organizations and food aid. In fiscal year 2003, the nutritional status of children improved as a result of five-year food security programs managed by private voluntary organizations that combine maternal and child health and nutrition programs with Title II food aid. Final evaluations have been completed for 90 percent of the programs and have found an average reduction in the prevalence of stunting (low height-for-age) of 2.4 percentage points per year over a four- to five-year period. Eight programs in **Ethiopia**, **Haiti**, and **Honduras** documented average annual reductions of 3.7 percentage points between 1996 and 2002. Reductions in stunting and low weight-for-age improve child survival – USAID’s 29 Title II private voluntary organization health and nutrition programs have saved an estimated 48,000 children’s lives annually.

Drought and famine relief. USAID responded to the ongoing drought emergency in eastern and central **Ethiopia** with technical assistance to support the efforts of the Agency’s disaster assistance program and to enhance the resources given to mitigate the emergency. This technical assistance helped develop strategies to meet urgent nutritional requirements, strengthen the overall health system response, and meet critical non-food needs in order to avoid additional mortality. USAID also supported studies to improve its ability and that of private voluntary organizations to respond to emergencies by simplifying sampling methods for identifying hot spots. Another study looked at responding to situations of large-scale famine through the promising “community therapeutic care” approach and at extending coverage for treating severe acute malnutrition at home with

vitamin A, iodine, and iron intake:

USAID emphasizes vitamin A supplements for children 6 to 59 months of age to reduce vitamin A deficiency. Research has demonstrated that vitamin A supplements can reduce mortality among these children by an average of 23 percent. The Agency also supports salt iodization and iodized oil programs aimed at reducing iodine deficiency. To combat anemia, USAID is coordinating activities that improve dietary intake of iron with programs that address non-nutritional causes of anemia.

- **Increased capacity of communities to take charge of their own nutritional well-being:** USAID is helping communities increase their role in improving their own nutritional well-being through growth monitoring and promotion programs, improved food security, breastfeeding, micronutrient

specially designed ready-to-use therapeutic foods. Community therapeutic care is a community-based approach for managing large numbers of acutely malnourished people in times of stress. It treats the majority of the severely malnourished at home and uses outreach teams to promote community participation and behavioral change.

Infant Feeding

Integrated approaches. In three regions of **Bolivia**, a network of international organizations and local nongovernmental organizations used counseling and home visits to incorporate USAID-supported breastfeeding practices into their integrated maternal/child/reproductive health interventions. The exclusive breastfeeding rate for infants under 6 months old increased from 54 percent in 2000 to 65 percent in 2003. Fewer cases of diarrhea were found among exclusively breastfed infants.

Micronutrient Programs

Global partnership for food fortification. Interest in food fortification as a means of reducing micronutrient deficiencies expanded dramatically in fiscal year 2003. The Global Alliance for Improved Nutrition (GAIN) was established as a public-private partnership, largely in response to USAID's advocacy for national food fortification programs to reduce micronutrient deficiencies among vulnerable populations. USAID's Bureau for Global Health is one of GAIN's major supporters and has helped six countries (**Eritrea**, **Ghana**, **Morocco**, the **Philippines**, **Uganda**, and **Zambia**) and the Central America region develop GAIN proposals. Morocco was awarded one of GAIN's initial four grants in 2003.

National fortification programs. Through advocacy, training, communications, and improved quality assurance, the **Philippines** made progress toward implementing mandatory

fortification of donated foods with iron, vitamin A, and other nutrients in 2004. In **Bangladesh**, a technology trial for fortifying wheat with vitamin A was completed, and a randomized control trial demonstrated the efficacy of the fortification in improving vitamin A status. Following several years of USAID assistance, **Zambia** and countries throughout **Central America** are now fortifying sugar with vitamin A commercially without USAID assistance.

Vitamin A supplementation. In fiscal year 2003, USAID supported vitamin A supplementation programs in 26 countries, 20 of which distribute vitamin A during designated "child health weeks" (or days) when families bring their children to local health facilities. National coverage rates using such approaches include 66 percent in the **Democratic Republic of the Congo**, 90 percent in **Ghana**, 81 percent in **Zambia**, 83 percent in **Madagascar**, 82 percent in **Indonesia**, and 86 percent in the **Philippines**. The short but concentrated child health promotional campaigns have even achieved good coverage in countries with ongoing civil conflicts such as **Nepal** and the **Democratic Republic of the Congo**.

New supplement formulations. Research has demonstrated the efficacy of new foods and forms of micronutrient supplements, including spreads (calorie-dense foods that can be fortified with a variety of micronutrients) and sprinkles (micronutrient supplements that can



Photo by WFP/Hockstein, E.

Ghana's Integrated Approach to Anemia Control

Anemia during pregnancy increases the risk of a mother dying in childbirth, as well as the likelihood that the baby will be born prematurely or with low birthweight. The challenge of preventing anemia lies in its multiple causes, which include a variety of dietary, environmental, and physiological factors. In Ghana, where nearly 65 percent of pregnant women are anemic, the nutrition education, antenatal care, malaria, and parasite control units of the Ministry of Health have long had their own anemia programs, but these have not been coordinated or integrated. USAID has helped put anemia control for women and children higher on Ghana's national health agenda and is helping the government address this multidimensional problem with an integrated approach that is having immediate results.

With USAID support, the government has:

- Developed a national anemia control policy and strategy;
- Prepared protocols for addressing the major causes of anemia during pregnancy – including malaria – that will be used in 2,200 health centers;
- Initiated training and ensured supervision of 3,000 health personnel on the use of counseling tools and media products with mothers and their children; and
- Designed a communications campaign for advocacy and to generate public awareness of anemia in women and children and ways to treat and prevent it.

The communications program is encouraging 750,000 women to come for antenatal care at least four times during pregnancy to learn about the need to eat iron-rich foods, to take iron-folate supplements consistently, and to take advantage of malaria and de-worming treatments for themselves and their families. Pregnant women involved in early supplement trials reported improved health and increased energy as a result.

USAID, the government, and other partners are collaborating to ensure that women and their babies have access to the full range of anemia control services, including trained health care workers, counseling tools, and adequate drugs and supplements at every antenatal care clinic throughout the country so they can lead healthy and productive lives.

be added to complementary infant foods). In 2003, the Bureau for Global Health continued to explore operational issues involved with introducing these sources of nutrition in large-scale programs.

Lessons Learned

It has long been recognized that malnourished children are more susceptible to illness, disability, and death than adequately nourished

children. Until recently, however, nutritionists were unable to propose tangible, measurable, effective means of reducing malnutrition. This is no longer the case – with expanded and sustained successes in recent years, USAID has learned that with proper community and peer support, women are more likely to exclusively breastfeed their newborns. We have discovered that mothers value micronutrient supplements and will bring their children for supplements as long as supplies are maintained and



Photo by May, M.

providers know how to deliver them. We have also learned that communities can take charge of many of the factors contributing to poor child nutrition and mobilize resources to negate them. Households and communities can address malnutrition independently of health facilities, with mothers and volunteers delivering a number of nutrition-related services with more skill and enthusiasm than health care workers whose focus is treating disease.

Successful donor-supported nutrition programs – especially periodic vitamin A supplementation through “child health” promotions – can also serve to stimulate political commitment in countries with weak or poorly financed health care systems. Governments have realized that using the anchor of vitamin A distributions to provide additional services (such as immunizations) is one of the best ways to reach families with sporadic access to health facilities.

II. Child Survival and Maternal Health

Maternal and Neonatal Health

Despite some national successes, maternal mortality remains high in the developing world. More than 500,000 women still die each year from complications of pregnancy and childbirth. Progress toward the Millennium Development Goal of a three-quarters reduction in the maternal mortality ratio (currently 400 deaths per 100,000 live births) between 1990 and 2015 has been mixed. Substantial achievements in some countries have been offset by stagnation and decline in others beleaguered by war, economic difficulty, and HIV/AIDS. In sub-Saharan Africa, women face a 1-in-16 lifetime risk of maternal death (compared with the 1-in-2800 risk to women in developed regions), and some African countries have documented substantial increases in maternal mortality in the past decade.

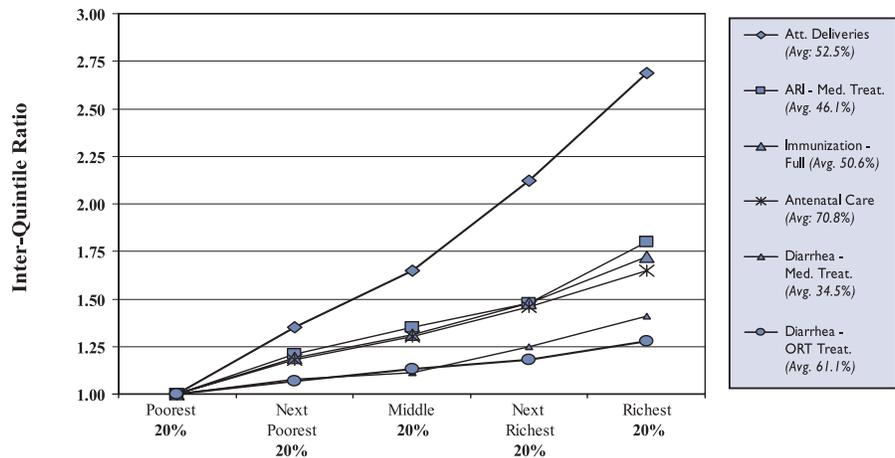
Maternal health, nutrition, and care during pregnancy and childbirth are closely linked to newborn health. More than 4 million newborns die each year and nearly as many are stillborn. Despite successes in reducing infant and child mortality, newborn deaths still account for a large proportion of under-5 mortality. As infant and child mortality are reduced, neonatal mortality will play a relatively larger role in under-5 mortality.

The use of a skilled attendant at birth is a critical intervention for reducing the risk of maternal death. Recent analysis has uncovered large disparities in the use of skilled birth attendants during childbirth. Women in the lowest household wealth quintile are far less likely to have a skilled attendant at delivery than those in the highest quintile. As figure 6 shows, this disparity by economic status is even greater for skilled attendance at delivery than for other health interventions such as immunizations and treatment of diarrheal diseases and acute respiratory infections.

Countries with USAID maternal health programs are gradually achieving increases in the use of skilled attendants at birth. In 2003, a skilled attendant was on hand for an estimated 52 percent of births in these countries, compared with about 42 percent in 1993. Even with this progress, many women and newborns still lack access to the proven life-saving interventions skilled attendants can provide, such as control of maternal bleeding and newborn resuscitation.

Figure 6

Use of Basic Health Care Services, Poor-Rich Differences, Average of 44 Countries



Source: Davidson R. Gwatkin. "Overcoming the Inverse Care Law." 2002 Leverhulme Lecture. Liverpool School of Tropical Medicine. Liverpool, U.K. September 17, 2002.

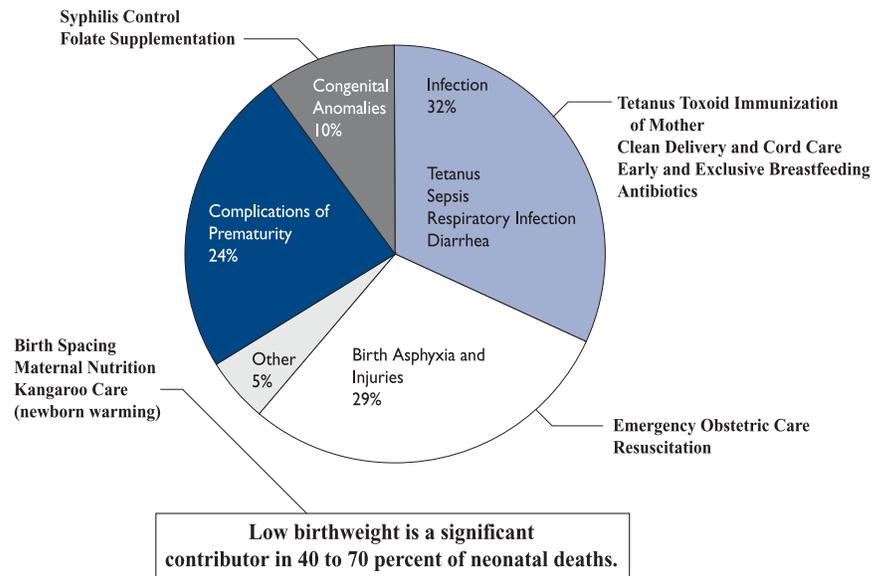
In 2003, 72 percent of pregnant women in districts with USAID maternal health programs made at least one visit to an antenatal care provider. However, far fewer made four visits, the recommended number to receive the care needed to improve maternal and neonatal health outcomes of pregnancy.

USAID Strategy and Interventions

USAID's approach to maternal and newborn health emphasizes the well-being of the mother/fetal-newborn dyad. Essential components include optimal timing and spacing of pregnancy for maternal and infant health; prevention and control of infections such as tetanus, syphilis, malaria, and HIV before and during pregnancy; and optimal nutrition. All pregnant women need skilled antenatal care, safe delivery, and immediate postpartum and newborn care. To enhance the capacity to respond to often unpredictable and unpreventable complications, USAID supports programs that deliver highly effective services to manage hemorrhage, prevent and treat infection, control hypertension, identify and treat prolonged labor, treat abortion-related complications, resuscitate newborns, and treat acute neonatal infections.

Approximately half of the births in USAID-assisted countries occur outside health facilities, and in many places where USAID works more than 80 percent of births occur in the home. To address these conditions, USAID is pioneering low-cost community-level interventions and technologies. These include hygiene and sanitation education, malaria prevention through use of insecticide-treated bednets and provision of an antimalarial drug during pregnancy, iron-

Figure 7 Major Causes of Neonatal Death and Associated Interventions



Source: Adapted from Zupan, 2000.

folate supplements for improved maternal nutrition, promotion of optimal breastfeeding practices, and birth preparedness (including planning for transportation, blood donors, appropriate referral sites, and emergency funds in case of birth complications).

Key Achievements

Planning for emergencies. USAID-supported community mobilization programs teach women planning to deliver at home and their families how to recognize maternal and newborn problems and prepare for emergency transport to a health care facility in the event of a complication. In 32 communities in **Nicaragua**, a USAID-supported project trained traditional birth attendants in basic delivery care, including how to determine when a mother must be referred to more advanced medical care. The program also improved community preparedness for pregnancy and birth emergencies. As a result, 47 percent of pregnant women developed individual birth

and emergency complication plans, 25 percent of the communities established emergency funds, and 56 percent of the communities established emergency transportation systems between October 2001 and December 2002. Similarly, in three districts in West Java, **Indonesia**, a USAID-supported birth preparedness campaign works with husbands, midwives, and citizens in 100 villages in 15 districts to encourage them to notify a health professional of a pregnancy in the family, identify a potential blood donor for the mother, save funds for a possible pregnancy-related emergency, and develop birth transportation plans. The percentage of births attended by midwives in program districts increased from 66 percent in 1999 to 72 percent in 2003.

Safer home births. In many places where USAID works, neither emergency nor routine medical delivery services will be available in the near-term future. In these areas, promoting healthier home practices for pregnancy and birth is essential. In a 36-month model program tested in 11 villages and 29 hamlets in rural Uttar Pradesh, **India**, mothers and their home birth attendants were taught healthy birth practices, including recognition of and responses to life-threatening problems. In the program areas, 85 percent of women and families implemented some lifesaving action for hemorrhage when needed, and a quarter of newborns with serious problems were referred to an emergency health facility. Additionally, tetanus toxoid immunization of pregnant women increased from 37 to 76 percent, use of iron supplements increased from 1 to 36 percent, and (in a break with centuries of local tradition) more than two-thirds of women breastfed their infants within an hour after birth.

Outreach to communities. A USAID program in **Indonesia** focused on improving newborn care in the critical first seven days of life. The program, implemented between 2000 and 2003 in East and West Java, trained 1,500 physi-



Photo by WFP/M. Herring

cians, midwives, and supervisors to promote the use of skilled attendants at delivery, increased postpartum/newborn home visits, and hepatitis B immunizations. Postpartum/newborn visits in program areas increased from 53 percent of homes to 70 percent, and hepatitis B immunizations at birth increased from 45 to 62 percent of infants. With Indonesian government funding and other support, the program is being replicated in 25 new districts in East and West Java.

Quality of care. Despite progress in reducing maternal mortality in **Honduras**, the maternal mortality ratio in the country is approximately 110 maternal deaths per 100,000 live births, more than six times higher than in the United States. More than 60 percent of maternal deaths in the country are due to hemorrhage and hypertension, often the result of failure to use maternal care services or the poor quality of these services. In response, USAID helped the Secretariat of Health implement a continu-

ous quality improvement program that monitors compliance with care standards, identifies and analyzes areas of poor-quality service and care, and implements improvement plans. In one region of the country, correct monitoring of women during labor increased from 34 to 93 percent over a 15-month period after quality improvement teams worked in seven hospitals, maternal clinics, and health centers. These improvements saved maternal lives by teaching providers when and how to address delivery complications.

Financing services. Throughout the world, health care fees continue to deter the use of lifesaving skilled care at delivery. Poor families typically lack funds to pay for high and often unpredictable maternity care fees. In **Rwanda**, where only 31 percent of women delivered their babies with the assistance of a health professional in 2000, USAID helped the Ministry of Health test a prepayment insurance program in three health districts serving approximately 1 million people. In the first year of the program, 8 percent of the population signed up for the program at an annual cost of \$7.50 per household. Medical service utilization by insured persons increased to four times that of the uninsured. Insured women were also twice as likely as uninsured women to deliver with a skilled birth attendant present.

Preventing postpartum hemorrhage. Postpartum hemorrhage is the leading cause of maternal mortality worldwide, contributing to the deaths of approximately 130,000 women each year. Women in developing countries face the greatest risk of death from hemorrhage because they often deliver without the assistance of a trained health professional. Trained health care workers can manage complications and administer lifesaving drugs to reduce disability and death from hemorrhage. In response to this problem, USAID supported a field test in rural **Indonesia** that confirmed the acceptance and safety of the self-administered oral drug misoprostol for treating postpartum hemorrhage. USAID's Bureau for Global Health also launched a special initiative to prevent postpartum hemorrhage in **Zambia, Ethiopia, Benin, and Mali** by training birth attendants and correcting drug supply and storage problems.

Increasing maternal and neonatal health care coverage. The 2000 National Maternal Mortality Study in **Egypt** reported that maternal mortality declined dramatically from 174 maternal deaths per 100,000 live births in 1992-93 to 84 maternal deaths per 100,000 live births in 2000 (changes in maternal mortality are often so slow that they can only be observed in 10-year increments). This improvement is attributed to improved obstetric care, increased access to family planning, and education of women and their families about seeking prompt care for problems during pregnancy, all part of USAID-supported programs. Mortality among infants born to mothers who died from maternal causes also declined. Data from Demographic and Health Surveys show that between 2000 and 2003, use of key maternal and neonatal health services has continued to improve as well. For example, the percentage of births attended by trained health personnel increased from 61 to 69 percent, and the percentage of mothers delivering at home who received postpartum care rose from 4 to 20 percent.



Photo by PAHO/Waak, A.

Maternal Health and Survival Improves in Guatemala

Sustained support for maternal and neonatal health is essential. A newly reported population-based study in Guatemala has documented a 30 percent decline in maternal mortality from 219 maternal deaths per 100,000 live births in 1989 to 153 maternal deaths per 100,000 live births in 2000. This significant progress is attributed to the continued support and hard work of Guatemalans, their government, and USAID. Since 1989, USAID and the Guatemalan government have worked together to support health care standards, curriculum development, community education, health provider training, service delivery improvement, and monitoring and evaluation activities.

Reducing neonatal deaths through quality services. In an effort to improve the quality of care for newborns in **El Salvador**, USAID supported the training of all of the country's 1,687 community health promoters in selected aspects of newborn care. USAID also supported patient counseling training for health workers in 27 of the 28 maternity hospitals and one Social Security hospital, where about 40 percent of children in El Salvador are born. In addition, the project developed training materials and monitoring instruments and trained staff in a use of a "mother-baby" package of essential care services in all 28 hospitals.

Lessons Learned

Home births without a skilled attendant remain a major challenge in maternal health. Over the last decade, maternal health programs have taught women, traditional birth attendants, and family and community members how to recognize serious complications of pregnancy and childbirth. These interventions have brought about gradual progress, but additional multiple approaches, including more sustained efforts to provide caring, culturally

appropriate, facility-based services and feasible financing strategies, are needed to accelerate improvements.

International attention has turned away from maternal and neonatal health and survival toward HIV/AIDS and other infectious diseases. While education and advocacy will remain important, maternal and neonatal programs will need to forge partnerships with other programs (such as Roll Back Malaria and programs for preventing mother-to-child HIV transmission) in order to conserve scarce human and financial resources while improving outcomes of all programs.

Strategies must be devised to scale up programs to achieve public health impact without significantly reducing program quality. "Improvement collaboratives" between maternity care providers are proving to be a promising approach. First pioneered in the United States and now being tested for maternal and neonatal health programs in other countries, improvement collaboratives identify talent and promote collaboration between facilities using modern information technologies to share experiences and monitor program results. This approach will be used in Russia and in the Latin America and Caribbean region to improve quality of care.

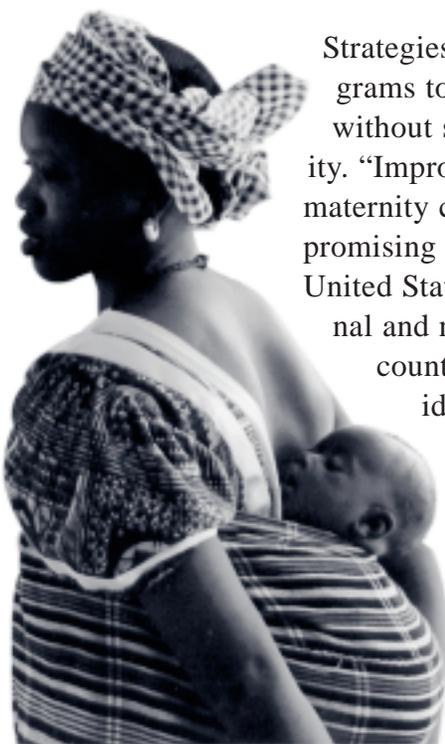


Photo by BASICS/Sanghvi, T.

IV. Vulnerable Children



Photo by World Bank

IV. Vulnerable Children

Famine, natural disasters, war, HIV/AIDS, parental death, physical disabilities, and economic and social crises are undeniable realities for unconscionably large numbers of the world's children. USAID supports programs to help families and communities meet the needs of vulnerable children through three activities: the Displaced Children and Orphans Fund (DCOF), programs for blind children, and programs for other vulnerable children. The core objective of these programs is to strengthen family and community capacity in responding to the special physical, social, educational, and emotional needs of displaced children and orphans; mentally and/or physically disabled children, including blind children and children with hearing loss; and older children and adolescents in need of social integration and vocational/technical training.

The Displaced Children and Orphans Fund began in 1989 with the realization that increasing numbers of children were losing the care and protection of their natural families, were being affected by war or HIV/AIDS, and were living or working on the streets. DCOF currently supports programs in 19 countries providing technical assistance and funding to address the humanitarian and long-term developmental needs of vulnerable children.

USAID Strategy and Interventions

DCOF primarily supports programs and approaches that strengthen the capacity of families and communities to provide displaced children and orphans with care, protection, and support. Programs are specifically designed to address the needs of:



- Children affected by armed conflict;
- Street children;
- Children with disabilities;
- Other children separated from appropriate care-giving situations;
- Children affected by HIV/AIDS; and
- Orphaned children.

DCOF supports programs that are community-based with local ownership and implementation. They involve children as active participants, are culturally grounded, and take collaborative and strategic approaches.

For children orphaned or otherwise affected by HIV/AIDS, USAID is a partner in President Bush's Emergency Plan for AIDS Relief, which will provide care and support to 10 million people living with and affected by



Photo by Unknown

HIV/AIDS and will dedicate 10 percent of funds to orphans and vulnerable children. USAID's strategy is to support projects that increase the capacity of communities and families to provide care and support for these children. Additional information can be found in chapter I of this report.

In addition to the above DCOF and HIV/AIDS-related activities, USAID's War Victims Fund is a dedicated source of financial and technical support for blind children and children with disabilities caused by antipersonnel landmines or preventable diseases (such as polio) that might result from lack of immunizations due to interruptions caused by conflict.

More than 75 percent of the 1.4 million blind children worldwide live in developing countries. Through grants to the International Eye Foundation, Helen Keller Worldwide, and

other partners, USAID is leading the way with innovative programs in developing countries to restore vision to thousands of these children and prevent blindness in many more. Activities include strengthening eye health programs for children and integrating them into other health services; supporting cataract surgery centers; school-based screening and provision of eye-glasses; and rehabilitation programs to help visually disabled children achieve scholastic and economic independence.

Activities for other vulnerable children identify and support innovative approaches to problems that put children at risk, such as family breakup. Examples of such activities include support for youth centers for street children and vocational training.

Key Achievements

De-institutionalizing child care.

Institutionalization of orphans and other vulnerable children was a standard practice in **Romania** during the Soviet era. One of USAID's primary strategies for assisting vulnerable Romanian children has been to support alternatives to institution-based care. A new program in three counties served 7,500 children, exceeding its 2002 goal by 67 percent. The use of large dormitory institutions to house children decreased by 17 percent. Community-based child welfare services were simultaneously developed to replace old institutions. Nationally, the number of children using alternative services increased from almost zero in 1997 to more than 56,000 in 2002. Public awareness, improved capacity of nongovernmental organizations, and increased use of professional social workers, standards of care, and community care alternatives are transforming the entire child welfare system.

Services for street children. As the economic crisis in **Indonesia** persists, more families must

rely on income earned by their young children on city streets. A USAID-supported organization has forged partnerships with 32 nongovernmental organizations in four large cities to provide programs and services, including education tutorials, vocational training, creative arts, and health education, to some 6,100 street children. The program has also facilitated access to government health services for street children through agreements with municipal health departments. Street children and their families are now able to receive routine community-based preventive health care and have access to emergency care. In addition, grant assistance to child protection agencies in three provinces is supporting advocacy on behalf of street children and for new child protection legislation. The goal of the program is to take these children off the streets where they are exposed to possible sexual abuse and exploitation.

Meeting the needs of street children. Two problems facing children in **Peru** are drug use and the risk of becoming street children. In Lima, an estimated 1,000 children live on the streets. Most street children do not have contact with their families, have abandoned school, live in gangs, and abuse drugs. USAID-funded projects in Peru meet these children's basic needs for food, clothing, and medical care while helping them develop employment skills and reintegrating them into school and their families. The projects also help at-risk children and adolescents avoid falling prey to the drug trade.

Restoring a safe environment. Millions of children in **Afghanistan** are suffering the burdens of war – displacement, loss of homes and loved ones, injuries from landmines – and severe hunger from the worst drought in recent history. In early 2003, USAID awarded a grant to assist 50,000 war-affected children with emotional and material support. A consortium of organizations will collaborate with local communities and government ministries to identify threats to children and youth; promote a safer environment through material assistance, income-generating activities, and psychosocial support; and develop educational, social, and economic opportunities for children and youth.

Reintegrating children of war. For peace in **Sierra Leone** to be long-lasting, the energy of the country's youth must become a productive and constructive force for peaceful change and development. Since March 2000, more than 45,000 war-affected youth and ex-combatants in more than 2,000 sites have participated in USAID's Youth Reintegration



Photo by IDRC/Colvey, S.

Training and Education for Peace Program. In fiscal year 2002, USAID-funded activities in targeted districts assisted 23 community organizations. More than 1,900 ex-combatants and war-affected youth participated in civic works projects that facilitated their reintegration into society, and 84 microenterprise groups established small businesses to generate income for youth.

Assistance to hearing-impaired children. In **Vietnam**, a recently completed program for hearing-impaired children screened more than 800,000 children and identified more than 15,000 with hearing disabilities. The activity enabled 1,448 children with hearing disabilities to study in inclusive classrooms. It also developed a training manual for inclusive education of hearing-impaired students and trained 1,535 teachers in its use.

Services for blind and other sight-impaired children. The Seeing 2000 program has saved the sight of more than 14,000 children in 13 countries. Over 200,000 children have benefited from eye examinations and treatment in this program, which is operated by a USAID-funded private voluntary organization. In **Indonesia**, the USAID-funded Indonesia Childhood Blindness Program

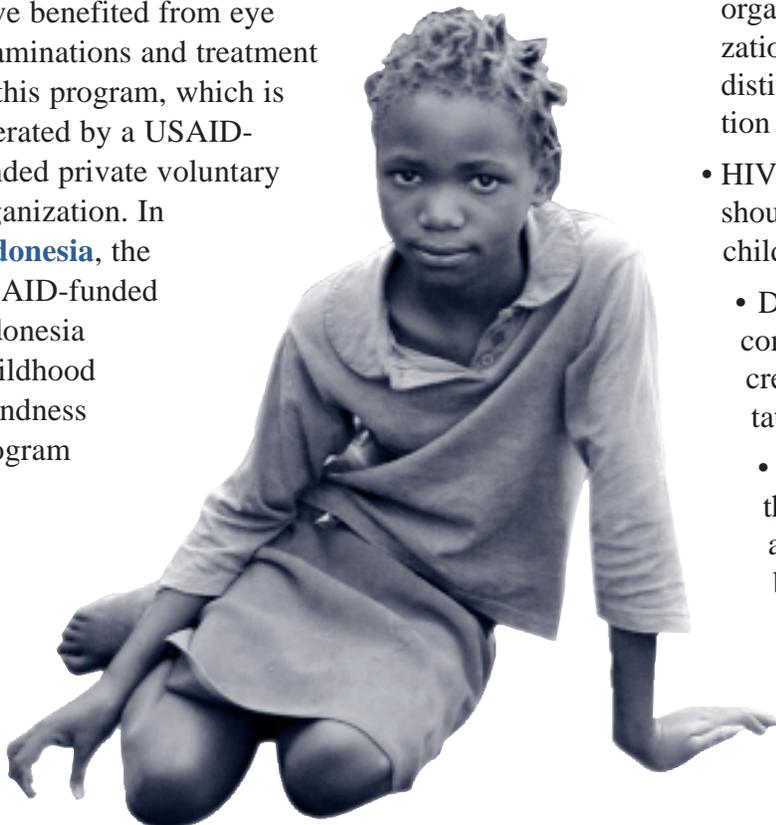


Photo by WFP/Barton, B.

offers eye screenings and education services and serves as a national model for offering medical services to blind and other visually impaired children. A USAID-supported project in **Nepal** and **Cambodia** is improving the access of rural women and children to eye care services. In Cambodia, the number of practicing ophthalmologists will triple in the next three years. The project will test schoolchildren and provide eyeglasses at low or no cost to those in need. USAID is working with local nongovernmental organizations to develop vocational training programs for sight-impaired children.

Lessons Learned

With nearly 15 years of experience, USAID programs for vulnerable children are guided by a number of basic principles:

- Family and community are the greatest sources of care and protection for children and should constitute the foundation of all interventions.
- Governments, donors, nongovernmental organizations (including faith-based organizations), and private sector groups all have distinct roles to play in the care and protection of vulnerable children.
- HIV/AIDS awareness and prevention should be incorporated into programs for children and youth where appropriate.
- Donors should focus on strengthening community capacity. They should avoid creating heightened, unsustainable expectations and long-term dependency.
- Programs (especially those assisting the reintegration of children affected by armed conflict) should identify and build on non-harmful traditional belief systems, structures, and practices.

V. Family Planning and Reproductive Health



Photo by World Bank/Carnemark, C.

V. Family Planning and Reproductive Health

Family planning is a crucial public health intervention. Family planning provides multiple benefits by:

- Saving the lives of mothers, babies, and siblings;
- Enabling couples to choose the timing, spacing, and number of their children;
- Improving quality of life at the household level; and
- Contributing to population-resource balance at the national and global levels.

With family planning, women can space their pregnancies for optimal health for themselves and their children. They can avoid unintended pregnancies that can lead to abortion-related complications (which claim nearly 80,000 lives a year) and also avoid sexually transmitted infections, including HIV/AIDS. The demand for USAID's programs in reproductive health and family planning remains strong, with the largest-ever cohort of women entering reproductive age (whose numbers are projected to grow by more than 250 million by 2015), the increasing desire of men and women to delay pregnancy and have smaller families, the ongoing HIV/AIDS pandemic, and the continuing need for protection against other sexually transmitted diseases. The health benefits of family planning can include dual protection for women from both unwanted pregnancies and sexually transmitted infections, which is of critical importance to combating the HIV/AIDS pandemic. USAID is seeking the integration of family planning/reproductive health and HIV/AIDS services, a potentially effective strat-

egy for reaching greater numbers of people in more holistic settings to provide information, education, and services.

Recent research finds that birth intervals of three to five years are associated with the lowest risk of child illness and death. Children born three to five years after their next oldest sibling are nearly 2.5 times more likely to survive than children born less than two years after their next oldest sibling. Mothers benefit from spacing births as well. Women whose children are spaced 27 to 32 months apart are less likely than women with children spaced 9 to 14 months apart to die as a result of pregnancy or to suffer from poor health outcomes during and after pregnancy.

The benefits of family planning extend beyond health. Family planning helps ensure that family size matches a family's economic resources. It can be instrumental in improving the family's quality of life by influencing not only health but also family stability, the care



Photo by May, M.



Photo by World Bank

and welfare of children, and a woman's freedom to engage in activities such as employment, leisure, education, and community involvement. As a woman enjoys greater opportunities and family income rises, the family is able to spend more money on the education and nutrition of the children, thus continuing the cycle of opportunity.

In fragile environments, population pressure has harmful effects on the environment. The ability to plan family size means slower population growth and contributes to conservation of natural resources. USAID has been a leader in international family planning for nearly four decades, and experience has shown that programs that include attention to the interactions of health, family planning, the environment, agriculture, and income generation yield better results in terms of both efficiency and sustainability than programs pursued separately.

USAID Strategy and Interventions

USAID's reproductive health and family planning activities in developing countries and countries in transition include:

- Improved delivery and quality of services through training of health professionals, upgrading of family planning facilities, and strengthening of information, management, and procurement systems;
- Integrated family planning and maternal and child health services;

- Wide dissemination of family planning information through mass media, education, and community-level communication activities;
- Provision of family planning services through the private sector and nongovernmental organizations as well as government health systems;
- Improved contraceptive supply and availability, especially for poor and underserved rural populations, through social marketing;
- Collaboration with national governments to improve policies, planning, and financing for family planning;
- Development of new contraceptive products, including natural family planning methods, to give couples greater opportunity to match methods to their personal preferences, religious beliefs, or cultural norms;
- Development of new approaches to service delivery; and
- Survey data collection and analysis and improved monitoring and evaluation.

USAID's Office of Population and Reproductive Health also supports special initiatives to address emerging issues. These initiatives include efforts to integrate family planning and HIV/AIDS programs, eradicate female genital cutting, develop guidelines for delivering lifesaving post-abortion care, and increase male involvement in reproductive health and family planning.

Key Achievements

Responding to unmet demand. In three poor western regions of **Honduras**, USAID has focused on high levels of unmet demand for family planning services. USAID-funded activities included staff training; facility and service improvements in the government health network; outreach and counseling; and provision of contraceptives. The impact of

these efforts has been pronounced – family health surveys show a national decline in total fertility from 4.9 children per woman in 1996 to 4.4 in 2001. The census confirms a decline in population growth from 3.1 percent annually in 1988 to 2.6 percent in 2001. Recent data show an encouraging increase in contraceptive prevalence (the percentage of women using a family planning method) in rural areas from 40.4 percent in 1996 to 54.6 percent in 2001. In one region, family planning practice saw a 50 percent increase in the past year.

Increasing contraceptive prevalence. The 2000 Demographic and Health Survey in **Cambodia** found a national contraceptive prevalence rate of 19 percent. To respond to the high unmet demand for contraceptives, USAID supports a local community health association that provides technical and capacity building assistance to clinics and hospitals. According to a 2001 survey, contraceptive prevalence among women of reproductive age reached 30 percent in areas covered by the health association. By 2002, contraceptive prevalence reached 37 percent in all areas receiving USAID assistance.

Preventing future abortions through post-abortion care. Post-abortion care programs address the physical and emotional needs of women after an abortion or miscarriage and improve the quality of care for women with post-abortion complications by making services more accessible, humane, and comprehensive. The goal of USAID's post-abortion care strategy is to reduce maternal mortality and morbidity and prevent repeat abortions. Efforts have been prioritized geographically to maximize program impact, with a focus on countries with high maternal mortality and high rates of unsafe abortion in Africa, Latin America, and Asia. In **Zambia**, post-abortion care services now operate in six of nine provinces, up from three provinces in 2001. Of 6,000 post-abortion clients, approximately 60 percent started using a modern

family planning method after counseling, helping to avoid unintended future pregnancies.

Improving services. Between 1997 and 1999, contraceptive prevalence in **Senegal** remained relatively constant at 8.2 to 8.4 percent. Since 2001, USAID has provided improved comprehensive family planning services to couples in almost half of the country's health districts. The program provides contraceptives, training, communication, and supervisory services. In 2003, a survey in the USAID-assisted areas found a contraceptive prevalence rate of 14 percent among women living in union, a substantial increase since 1999. USAID is also working in other districts throughout the country, and in 2004 a Demographic and Health Survey will estimate national contraceptive prevalence.

Social marketing. In **Kenya**, USAID teamed up with the U.K. Department for International Development to support a family planning social marketing initiative. As sales of hormonal contraceptives have increased over the past three years, their unit cost to consumers has fallen dramatically to \$0.50 per packet of pills. During this period, the number of unintended pregnancies has fallen, probably as a result of increased contraceptive use.

Changing attitudes through education. Ten years ago, family planning was a sensitive topic in **Jordan**. In mosques, many religious



Photo by May, M.

leaders criticized family planning clinics and nongovernmental organizations that provided family planning information and services. In order to better understand people's perceptions of religious teachings on family planning, USAID supported a number of surveys that found that 40 percent of respondents did not know what Islamic law stated about family planning. In response, the National Population Commission, with USAID support, conducted a national communications campaign called "Religious Leaders Lead the Way" and published two books in Arabic on Islam and reproductive health. Attitudes began to change among religious leaders, who began to advocate for family planning and sanction the use of modern contraceptive methods. Contraceptive prevalence subsequently increased from 27 percent for modern methods and 38 percent for all methods in 1990 to 41 percent for modern methods and 56 percent for all methods in 2002.

Reaching the "hard to reach." In 2001 in **Romania** (where abortion was very common), USAID launched the five-year, \$10 million Romanian Family Health Initiative to focus on expanding access to family planning services in primary health care settings, mostly in rural areas. By June 2003, the Initiative had covered 1,558 of 5,600 family planning service delivery points nationwide, 75 percent of them in rural areas. Activities were closely coordinated with the Ministry of Health in all 42 counties and included basic family planning training for primary health care professionals (including general practitioners, family doctors, and nurses); implementation of a logistics management system; technical assistance and capacity building for local health authorities; distribution of free contraceptives to the poor; and awareness campaigns. In addition, a national reproductive health strategy, endorsed by WHO and the first of its kind in USAID's Europe/Eurasia region, was developed and adopted in 2003. USAID



helped institute new norms for family planning services and a national logistics management system to reduce contraceptive stock shortages. This system is critical to meet demand, as USAID-supported communication efforts have brought about a greater than tenfold increase in condom and oral contraceptive use.

Increasing contraceptive availability through social marketing. In **India's** most populous state of Uttar Pradesh, use of modern family planning methods is low and unmet need is high. Surveys show that more than 7 million couples in the state want to wait at least two years before having their next child (or to stop childbearing altogether), but are not using a family planning method. To assist, USAID provided technical and financial support for contraceptive social marketing efforts. USAID advocated for changing all government brands of oral contraceptives from high-dose to low-dose formulations, which have fewer perceived and actual side effects. Government pills now match commercial formulations, which are more acceptable to clients and providers. In addition, condom sales in rural areas in 2003 increased to 103 million, up from 54 million in 2000. In 2003, 45 percent of mid-sized villages (where more than 60 percent of the state's 112 million rural population live) had at least one outlet that had condoms

and oral contraceptives regularly available, up from 19 percent in 2000.

Assisting policy change. For many years in **Guatemala**, national policies toward reproductive health programs limited the dissemination of even basic information on modern family planning methods. In September 2000, with USAID guidance and support, the Ministry of Health and Social Assistance took the historic step of integrating reproductive health and family planning programs into the national health care system, making services more accessible, especially in underserved rural areas. Preliminary data from a 2002 survey showed a remarkable three-year 13 percent increase in use of family planning, with 43 percent of married women or women living in union using contraceptives compared with 38 percent in 1999.

Expanding the method mix with natural family planning. Since 1985, projects funded by the USAID Bureau for Global Health have developed simple, modern, and effective methods of natural family planning to broaden the mix of available methods acceptable in varying cultural and religious contexts. The most recent, the Standard Days Method, has been well received. With USAID-supported technical assistance, this method was successfully introduced in two districts of **Peru**. More than 700 couples started using the Standard Days Method in the first 10 months that it was available. Most of these couples had never used a reliable family planning method or had not used one in the previous three months. Very few pregnancies have been reported among these new users. The feasibility of offering the method in a regular service environment, its high contraceptive efficacy, and its adoption by a population at high risk of closely spaced pregnancies (and thus high maternal and infant morbidity and mortality) have led the local and national government to request technical assis-

tance in expanding the Standard Days Method to other districts.

Sustaining contraceptive supplies. As donors have become less able and willing to provide all needed contraceptives to developing countries, a USAID-supported project has been working with governments to develop self-reliance in contraceptive supply. In **Bangladesh**, a populous country with a highly successful family planning program and large supply requirements, USAID assistance has enabled the government to project its needs and procure contraceptives using World Bank funds. To date, more than \$150 million worth of contraceptives have been procured by the government for both public and private sector programs.

Lessons Learned

Sharing best practices is critical to improving USAID's reproductive health and family planning programs and, ultimately, to improving the lives of families in the countries USAID serves. To strengthen integrated health programming in Egypt, for example, programs are now applying and scaling up evidence-based best practices developed and applied in other countries, including a comprehensive post-abortion care model, a pregnancy checklist, use of birth spacing guidelines, and an incentive system based on quality-of-care indicators.



Photo by CCP



Photo by PAHO/Waak, A.

USAID's work has leveraged dollars far exceeding the original investment. New resources from the private sector support USAID reproductive health and family planning objectives in more than 30 countries. These additional funds have enabled grantees to extend the reach of clinical activities to new countries, provide bridge funding if resources decline unexpectedly, and explore new clinic-based reproductive health issues such as obstetric fistula and prevention of mother-to-child HIV transmission. During the past five years, one clinical services agreement leveraged almost \$30 million, agreements with U.S. citizen-supported nongovernmental organizations leveraged more than \$45 million, and a four-year private commercial sector agreement leveraged \$9.5 million.

Networks have increased the capacity of USAID-supported nongovernmental organizations to do more and different services. In Nicaragua, the NicaSalud Network serves a marginalized population of more than 420,000 people. NicaSalud has increased the percentage of married women of childbearing age using family planning from 56 to 70 percent and increased the percentage of births spaced at least 36 months apart from 21 to 32 percent. In Malawi, the USAID-funded Umoyo NGO Network, serving 3 million people, has effectively combined family planning and HIV interventions. Umoyo reported that 33 percent

of men used a condom during their last sexual encounter and that over a two-year period, 24 percent of men and 19 percent of women utilized voluntary counseling and testing services.

Major international private voluntary organizations have added family planning to their services due to USAID programming and leadership. Recognizing that a large, united, and multisectoral effort could improve efforts to increase use of HIV/AIDS, child survival, and reproductive health and family planning services, USAID funded a nongovernmental organization networks project. Prior to this, few large private voluntary organizations had integrated reproductive health and family planning programs into their development programs. At the end of 2003, adolescent health became an integral part of one organization's sponsorship programs; three others had increased their reproductive health and family planning projects from four to more than 90; and private voluntary organizations created sustainable networks that raised their own funds, totaling about \$20 million, for services after the project ended.

VI. Facing Complex Emergencies – From Relief to Development



Photo by WFP/Barton, B.

VI. Facing Complex Emergencies – From Relief to Development

A complex emergency is a situation in which natural disaster, civil strife, war, or political conflict results in large-scale civilian casualties or displacement, property loss, and the disruption of basic services and infrastructure. These all pose a major threat to human life. Most deaths associated with complex emergencies occur among infants and children under age 5. Of the 10 countries in the world with the highest infant mortality rates (ranging from 122 deaths per 1,000 live births to 165 deaths per 1,000 live births), seven are affected by war or civil strife. Almost two-thirds of countries with USAID missions have been affected by armed conflict in the past five years.

Since 1990, the leading causes of death among refugees and internally displaced persons have been diarrheal diseases, acute respiratory infections, measles, and other common preventable infectious diseases. HIV/AIDS is also a threat to countries in the midst of crisis. The brutal circumstances of war aggravate all the factors that fuel health crises. Disruption of infrastructure prevents access to basic health services and compounds these adverse circumstances. This results in higher mortality rates from many causes and in moderate and severe malnutrition among the most vulnerable populations.

USAID uses its leadership and technical expertise in child survival and health to address public health needs in settings of disaster, crisis, and unrest, and to strengthen the collaboration between humanitarian assistance during the immediate emergency and develop-

ment assistance during recovery and rehabilitation. The goals of these interventions are twofold – to reduce mortality and other adverse outcomes, especially in children under 5 and women of childbearing age, and to control key infectious diseases that occur in complex emergencies.

In countries experiencing a complex emergency, the response to the crisis and the transition from humanitarian relief to development are optimized when three factors are given priority:

- High-impact, proven health development interventions are expanded into the complex emergency setting;
- New tools and approaches are applied to catalyze the expansion of these interventions; and
- The planning for the transition from emergency activities to longer-term health development is smooth and seamless.

Expanded use of high-impact interventions.

The expansion of high-impact proven health development interventions in complex emergency settings has made a significant difference in lowering morbidity and mortality rates both in general populations and in more vulnerable subpopulations. Immunizations against vaccine-preventable diseases are highly effective in stopping the rapid spread of communicable diseases, notably measles and meningitis. In some crisis situations, recognition of the importance of this public health intervention has facilitated cease-fires for national immunization days and key surveillance activities. Along with immunizations, vitamin A supplementation decreases morbidity and mortality from infectious diseases. This important vitamin is often administered at the same time as immunizations or nutrition activities. Providing clean water and good sanitation improves environmental health for all and reduces diarrhea and outbreaks of diseases such as cholera. Insecticide-treated bed-nets help protect families and children against

vector-borne diseases like malaria. The use of clean-cord birth kits by midwives decreases the risk of complications from infection in new mothers and their newborns. Reproductive health care interventions also include treatment for violence against women, which often occurs in times of civil and ethnic conflict.

New tools and approaches. New tools and approaches expand the use of high-impact interventions and facilitate effective responses to health needs in complex emergency settings. Practical and scientifically sound tools such as rapid diagnostic tests quickly identify and confirm cases of communicable diseases, thus allowing timely treatment and prevention of further spread of disease. New emergency food products have been designed to meet caloric and micronutrient requirements in special populations (such as people with HIV infection or otherwise affected by HIV/AIDS) that standard food assistance packages cannot meet. One-day combination treatment options have facilitated malaria treatment in emergency settings and increased the feasibility of rapidly treating large and susceptible populations who migrate into high malaria zones. Even in the midst of chaos, the use of auto-disable syringes and single-dose vials minimizes confusion, reduces human error, and increases medical safety.

Well-planned transitions. A key challenge before us is to identify strategies that support the most effective transition from disaster assistance and emergency aid to longer-term development. Such strategies are crucial in countries where health problems such as high rates of HIV/AIDS or low immunization coverage existed prior to a current emergency. USAID addresses these challenges with strategies jointly designed by Agency staff who specialize in humanitarian assistance and staff experienced in health development programming. The transition is already underway in countries such as the Democratic Republic of the Congo and Sudan, where USAID is devel-

oping viable health zones and promoting longer-term priority health interventions such as essential drugs, microscopes for hospitals, small equipment for vaccine storage, and national treatment protocols. These interventions are helping to re-establish basic primary health care services for populations in areas long beset by civil conflict.

VII. Research, Technical Innovation, and Systems Strengthening



Photo by Unknown

VII. Research, Technical Innovation, and Systems Strengthening

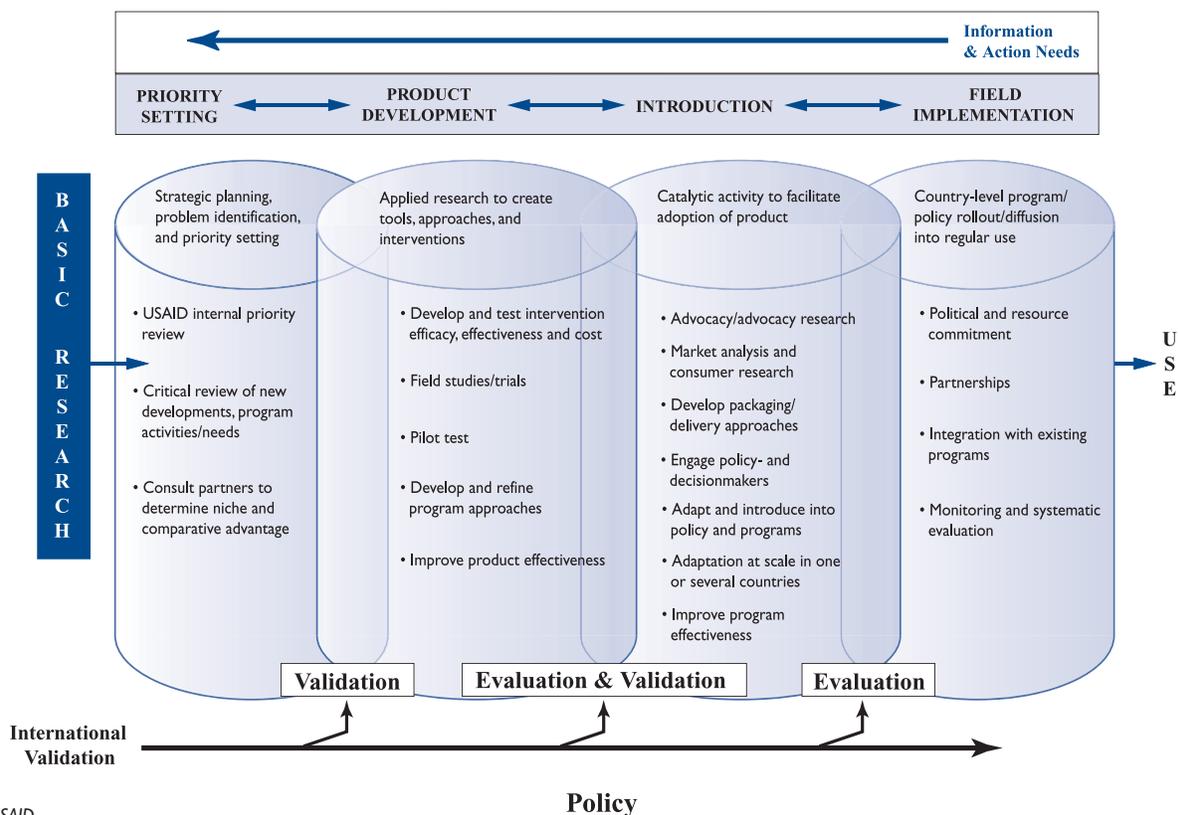
USAID's Bureau for Global Health is a world leader in developing effective and affordable solutions to serious public health problems in developing countries. Its commitment to research and innovation has created the evidence base for its activities aimed at reducing transmission of HIV/AIDS and other infectious diseases, child and maternal mortality, and unintended pregnancies. While the Agency does not generally support basic research, its

investments in applied program and policy research and technical innovations have laid the foundation for many remarkable achievements in global public health.

In addition to research and technical innovation, USAID supports improvements in health systems. USAID experts work closely with national and international specialists to implement innovative approaches to systemic problems and thereby strengthen program effectiveness and sustainability. Improvements in such areas as information collection, analysis, and use, for example, help governments improve planning and resource allocation. Other areas where USAID supports health system improvements include health care financing, supply management for drugs and other health care commodities, organization of services, and human resource management.

Figure 8

Pathway From Research to Field Implementation and Use



Source: USAID.



Photo by WHO/TBP/Hampton, G.

Key Achievements

Research

Impact of the HIV/AIDS epidemic on the workforce. An ongoing study in **South Africa** is estimating the costs of HIV/AIDS to private and public sector organizations and the returns on investments in prevention and treatment. The research has found that the impact of HIV/AIDS on businesses is variable and depends on firm size and sector. Most importantly, it is demonstrating that employer investments in prevention and treatment will have positive financial returns for most large employers and at most levels of the labor force, especially skilled labor. Employers are heeding this message – one firm implemented a treatment program immediately upon seeing research that demonstrated the potential for positive returns. The National Treasury Department is using the research to assess the potential costs and benefits of the national AIDS treatment program.

Microbicides and AIDS vaccine research. USAID is actively developing microbicides (female-controlled chemical barriers to the AIDS virus). USAID is also supporting the International AIDS Vaccine Initiative and its efforts to accelerate the development and introduction of new vaccine candidates. In the past year, both microbicide and vaccine candidates have advanced to clinical trials, the next

step in developing a licensed product for use in the future.

Operational research. USAID addressed a number of operational research issues. The Agency convened a meeting on youth and HIV/AIDS to discuss what research is available on preventing risk-taking among youth and to review specific country case studies to see what programs could be scaled up. Other research found that getting men involved in HIV testing and infant feeding led to higher use of services to prevent mother-to-child transmission of HIV.

Behavior change studies. USAID has carried out pioneering studies in the area of behavior change for successful HIV prevention. USAID funded a six-country study on the ABC behaviors – abstinence, being faithful (partner reduction), and correct and consistent use of condoms as appropriate – that found that in countries with prevalence declines, ABC behaviors increased.

Male circumcision and HIV prevention. Clinical trials are currently underway to review whether male circumcision has a strongly protective effect on HIV transmission. USAID is supporting research in Haiti, Zambia, Kenya, and South Africa to learn more about issues of safety, complications, acceptability, feasibility, and logistics issues involved in developing pilot demonstration services for safe and affordable male circumcision and male reproductive health.

Use of zinc in treating diarrhea. A large study in **Bangladesh** has compared use of oral rehydration solution (ORS) alone and use of ORS with zinc (20 mg/day for two weeks) during episodes of diarrhea in 8,070 children between the ages of 3 and 59 months. With the zinc formulation, there was a 23 percent shorter duration, a 25 percent reduction in hospitalizations, a 50 percent reduction in non-injury

deaths, and a 62 percent reduction in the inappropriate use of antibiotics. USAID is supporting further effectiveness studies in three other countries in Africa and Asia and has begun to plan for the potential introduction of the zinc formulation worldwide.

Hib vaccine. A five-year study in **Indonesia** of the usefulness of *Haemophilus influenzae* type b (Hib) vaccine has evaluated the ability of the vaccine to prevent pneumonia and meningitis in 55,000 children under the age of 2. Preliminary findings indicated that the vaccine was highly effective in preventing laboratory-confirmed Hib meningitis. It was also effective in preventing clinical meningitis in cases that were not confirmed as Hib by laboratory methodology, suggesting that the vaccine was more effective in preventing meningitis than would be suggested by microbiologic surveillance alone. The impact of Hib vaccine on pneumonia was less clear. The study did not identify a statistically significant impact on radiologically confirmed pneumonia or other pneumonia measurements. The team did observe a small but significant impact on both mild and severe pneumonia in infants who received Hib vaccine. Further analysis of these findings is being undertaken.

Malnutrition. An assessment of the importance of nutritional risk factors as part of disease burden found that underweight and iron, vitamin A, and zinc deficiencies are among the top 10 risk factors in high-mortality countries. Underweight contributes to 15 percent of disability-adjusted

life-years,* and each of the three micronutrient deficiencies accounts for about 3 percent. Undernutrition is the underlying cause of more than half of child deaths in low-income countries and accounts for 45 to 61 percent of deaths due to measles, pneumonia, diarrhea, malaria, and other infectious causes.

Vitamin A supplementation of newborns. Research in southern **India** found that supplementing infants at birth with 50,000 IU of vitamin A reduced mortality in the first six months of life by 22 percent. This outcome supports an earlier finding in a USAID-supported trial in Indonesia. Additional studies in Bangladesh will look further at the efficacy of vitamin A supplements in reducing risks of early infant death in South Asia.

Preventive use of zinc supplements. In a study in **India**, zinc supplementation in full-term, small-for-gestational-age infants resulted in a

* *The disability-adjusted life-year (DALY) is an indicator of the time lived with a disability and the time lost due to premature mortality, thus measuring the loss from living a shorter life with disease rather than having a longer life without disease. DALYs are used to help assess the global burden of disease and to provide a measure of health care outcome to use in cost-effectiveness analyses of health interventions.*



Photo by CCP/ Palmer, A.

66 percent reduction in mortality. Currently, three large studies are further evaluating the impact of daily zinc supplementation on overall childhood mortality; these studies will be completed in the next two years.

Maternal micronutrient supplementation. A study in **Nepal** found that daily antenatal iron-folate supplements reduced low birthweight and infant mortality by 15 to 20 percent. The finding supports increased emphasis on iron-folate supplements for pregnant women throughout South Asia. Antenatal use of a multiple micronutrient supplement improved birthweight but failed to reduce infant mortality. These findings suggest that birthweight and infant health and survival should be evaluated in antenatal nutrition research. They also suggest caution in developing policies to supplement pregnant women with multiple micronutrients without adequate evidence of public health benefit.

Policy options for orphans and vulnerable children. There are currently 2.35 million orphans in **Uganda**, representing 20 percent of the child population. One in four households has at least one orphan. An ongoing situation analysis conducted by USAID, universities, international organizations, and the Ugandan government identified issues for resolution and provided the basis for developing strategies to address them. The situation analysis also provided the evidence base for a successful application to the Global Fund to Fight AIDS, Tuberculosis,

and Malaria for \$56 million to address the needs of orphans.

Technical Innovation

Improved oral rehydration salts formulation.

An improved ORS formulation, known as reduced osmolarity ORS, which USAID helped develop in recent years, became available for worldwide distribution in 2003. The new formulation reduces the duration and severity of illness caused by acute diarrhea. The formulation is also projected to cost 17 percent less than the former formulation.

Manufacturers in India will be able to produce the new formulation in time for the country's 2004 diarrhea season.

Jadelle contraceptive implant system.

Jadelle, a contraceptive implant system developed with USAID support, was originally approved for three years of use in 1996. Continued research on its long-term effectiveness and safety enabled the U.S. Food and Drug Administration to

approve it for five years of use in late 2002. This will significantly enhance the method's cost-effectiveness and enable public sector agencies such as USAID to provide this highly effective, long-acting, safe, and affordable contraception to women in developing countries.

The TwoDay Method. A simple method of natural family planning, the TwoDay Method (TDM) was developed with USAID support and is currently undergoing clinical trials in



Photo by WHO

Peru, Guatemala, and the Philippines. TDM is based on a very simple algorithm that helps women observe their vaginal secretions and understand the fertile and infertile times of their menstrual cycles. The method is another opportunity for integrating natural family planning methods into multimethod programs. Unlike the Standard Days Method, women with any cycle length can use TDM. Preliminary data from the trials indicate that TDM can be more than 95 percent effective when used correctly and about 89 percent effective in typical use.

Systems Strengthening

Improving drug availability. The health systems of many countries lack the capacity to manage and use drugs appropriately. As global initiatives increase world drug supplies, USAID is working to improve drug management by helping health systems improve their needs estimates and procedures for selecting, procuring, distributing, and using drugs. For example, USAID is helping 14 countries in **East, Central, and Southern Africa** improve their drug management as well as their ability to negotiate lower drug prices, and USAID has helped **Rwanda** assess its capacity to provide HIV/AIDS drugs on a national scale.

Health care financing. The following examples illustrate USAID programs in this critical area. In the **Philippines**, the National Health Insurance Program increased its population coverage from 48 percent in 2001 to 54 percent in 2003. Operations research in **Kyrgyzstan** allowed the health system to reduce unnecessary spending on hospital beds, increase staff salaries, and more than double the drug budget. In **Guatemala**, the government increased funds to fight causes of infant and maternal mortality by 40 percent based on the findings of a national health accounts study. In **sub-Saharan Africa**, an evidence-based modeling tool was developed to help officials plan the financing

of new malaria drugs. In **Rwanda**, the “health mutuelles” prepayment system has improved financial access to health care, enrolling 13 percent of the population in USAID-supported districts. **Zambia** has launched prepaid health service discount cards, and revenues from increased user fees were used to improve the medical drug supply in one district. In **Uganda**, the Private Health Providers’ Loan Fund has made small-scale loans to 500 clinics since January 2001. The repayment rate is 97 percent, and recipients have invested in drugs, equipment, and renovations. The program has also provided business and credit management skills training.

Reforming the health delivery model. In **Kyrgyzstan**, USAID implemented a pilot program to transform the health care system from a specialist-dependent system into a cost-effective primary health care model. As a result, more Kyrgyzstanis are now choosing family doctors over specialists. The primary health care sector is capturing 58.2 percent of outpatient visits nationally, compared with 15.5 percent in 2000. New payment systems and incentives for delivering high-quality, low-cost care now cover 39 percent of facilities, up from 7.3 percent in 2000. The program has gained support for scaling up nationally from other donors, including the World Bank, the U.K. Department for International Development, WHO, the Swiss Development Corporation, and the Swiss Red Cross.

Human resources management. In response to a perceived nursing shortage in a health facility in **Eritrea**, USAID helped develop a strategy for improving nursing productivity after a study revealed that management practices were inefficient. The study identified such problems as unreliable scheduling, rigid staffing patterns, poor use of skilled staff, excessive staff time devoted to non-patient care, and a lack of consequences for poor performance.



Photo by WHO

Lessons Learned

Continued progress in global health depends on the evidence base that research can provide. USAID's presence in developing and transition countries, the connections it forges between research and field programs, and its own technical capabilities provide the Agency with a comparative advantage in this endeavor. Success also depends on the Agency's strong partnerships with private voluntary organizations; host-country governments and organizations; universities; American businesses; international agencies; other donor countries; and other U.S. government agencies. An important part of the USAID research program involves strengthening the capacity of host-country personnel and institutions to conduct research, solve problems, and make their own contributions to improving programs and policies.

There is encouraging evidence that the effort to strengthen health care systems can produce measurable improvements. In all areas of health care, however, health systems are now challenged to respond to new global norms for quality. It is widely accepted that care should follow standardized evidence-based guidelines. For health services in most developing countries, this focus represents a fundamental change.

Today, health systems face other difficult challenges as well, most notably those emerging

from the HIV/AIDS pandemic. Providing adequate coverage for HIV/AIDS care and treatment is a larger task than most systems are now capable of handling. It is also a complex task, because, as a chronic disease, HIV/AIDS requires close coordination among care providers and support organizations in order to deliver effective services. The pace of health system improvement so far falls short of what will be required, and commitments to continuous improvement are still not the norm. Globally, efforts to develop quality improvement techniques, evaluate them, and apply them in new settings are inadequate. The challenge will be to use the resources now becoming available in ways that leave health systems permanently stronger.

VIII. Partnering for Success



Photo by CCP/Wray, R.

VIII. Partnering for Success

USAID programs operate through an increasing number of partnerships. USAID's partners are public and private, small and large, bilateral and multilateral, and almost any possible combination of such organization types. These partnerships fall into three primary groups – those with or among nongovernmental organizations, those with commercial private sector companies or mixed types of organizations, and those with other bilateral and multilateral donors. Each kind of partner possesses unique strengths, skills, networks, and resources.

The relationships built through partnerships advance USAID's goals through shared visions, technical cooperation, and the allocation of resources toward common development goals. By investing time and resources to build partnerships, USAID builds upon its own comparative advantages to improve the health, well-being, and quality of life for people in developing countries. USAID and its partners often work as a donor coordination committee in individual countries to build productive relationships with government ministries and community organizations in order to facilitate effective and efficient approaches to meeting local needs.

Historically, USAID has forged many successful partnerships at the country and global levels to achieve maximum program impact. A few examples of strong ongoing and new partnerships from 2003 follow.



Photo by WHO/TBP/Van den Hombergh, J

Partnerships With Nongovernmental Organizations

Faith- and community-based partnerships fighting HIV/AIDS. These partnerships were among the most important of USAID's partnerships with nongovernmental organizations in 2003. USAID works with over 715 community- and faith-based organizations as vital partners in the struggle against AIDS. Since the program began in 1986, USAID has invested 18 years in building community- and faith-based organization capacity and networks worldwide. USAID manages two small-grants programs for these organizations. Through the CORE (Communities Responding to the HIV/AIDS Epidemic) Initiative, USAID provides strategic assistance – organizational development, direct grants, and other support – to community- and faith-based groups in developing countries. USAID established the second small-grants program, Community REACH, to facilitate the efficient flow of grant funds to organizations playing valuable roles in the fight against HIV/AIDS, including regional and local nongovernmental organizations, universities, and faith-based organizations. Other successful faith-based partnerships include:

- In **Cambodia**, Norea Peaceful Children is a nongovernmental organization established by the Wat Norea Buddhist monastery to provide support and shelter for orphaned

Child Survival and Health Grants Program

Since 1985, USAID's Child Survival and Health Grants Program (CSHGP), formerly the Child Survival Grants Program, has supported U.S. private voluntary organizations to carry out field programs in maternal and child health, nutrition, family planning, HIV/AIDS, and infectious diseases. The program emphasizes activities that strengthen the capacity of local partners to implement programs that achieve sustainable benefits that will continue after USAID funding ends. Private voluntary organizations work with local partners to increase program coverage and develop and implement well-designed, technically sound, cost-effective programs. CSHGP-funded programs are integrated with other development activities such as microcredit, agriculture, and humanitarian assistance to achieve the greatest possible impact.

During fiscal year 2003, CSHGP provided \$22 million in support of 79 projects in 35 countries implemented by 27 private voluntary organizations and local partners. The private voluntary organizations supported by CSHGP – and their local partners – are integral partners in USAID programs. They provide technical expertise in all areas related to child survival and health and have established partnerships and programs in some of the hardest-to-reach areas of the world. Through the CSHGP, USAID is able to reach populations at the community, district, regional, and national levels.

children. With support from USAID, Norea Peaceful Children has expanded its work to provide care and support to orphans and other children affected by HIV/AIDS.

- In 2003, USAID began financing comprehensive HIV/AIDS care, including antiretroviral therapy, at three Catholic-run health facilities in **Rwanda**. The facilities were chosen for their service delivery capacity and community social services and were strengthened by additional staff training, laboratory upgrades, drug supplies, and home-based care support. Following this successful collaboration, these hospitals have provided lifesaving antiretroviral therapy to almost 200 people in their communities. This was the first country where USAID funded the delivery of anti-retroviral therapy and now serves as a model for the future.

Public-Private and Mixed Partnerships

Netmark. An important example of public-private partnerships is the NetMark Project, the

Bureau for Global Health's innovative partnership with Aventis, Siam Dutch, Bayer, BASF, A-Z (Tanzania), Sunflage, and Vastergaarden to increase sustainable access to insecticide-treated bednets in Africa. NetMark has launched activities in six African countries, with sales of nets topping 1 million in the first year of activity. NetMark also brought together key Roll Back Malaria partners to identify and document models for targeting subsidized nets to pregnant women and infants. Models for targeted subsidies are now being widely implemented in **Malawi, Mali, Ghana, Uganda, Zambia, Senegal, and Tanzania**.

Public-private partnerships against HIV/AIDS. USAID emphasizes the importance of creating and sustaining public-private partnerships to benefit HIV/AIDS treatment, prevention, and care programs. Relationships have been initiated this year by the Global Health Bureau with large multinational corporations such as Coca-Cola, Shell Oil, Heineken, Daimler-Chrysler, Johnson and Johnson, and

many others. In addition, \$60 million was leveraged with MTV media.

Microbicide research. USAID works closely with the National Institutes for Health, the U.S. Public Health Service Centers for Disease Control and Prevention (CDC), WHO, Eastern Virginia Medical School, and nongovernmental organizations on microbicide development for prevention of HIV and other sexually transmitted infections. Developing a safe, acceptable, and effective microbicide is a very long and expensive process requiring good public-private coordination. The microbicide Carraguard has passed human safety trials and will soon be tested for large-scale effectiveness.

Global Alliance for Improved Nutrition (GAIN). GAIN is an alliance of public and private sector organizations seeking to improve health by eliminating vitamin and mineral deficiencies. The Alliance was founded with pledges from USAID, the Bill & Melinda Gates Foundation, and the Canadian International Development Agency, and is jointly managed through a cooperative governance structure. GAIN primarily provides grants to developing countries to support food fortification programs and other commercially sustainable approaches. In the spring of 2003, GAIN made its first grants, awarding \$15 million for food fortification activities in five countries in Africa and Asia.

Targeting iodine deficiency with UNICEF and Kiwanis. UNICEF and Kiwanis International have taken the lead in mobilizing the international community and establishing public-private sector partnerships with governments and salt industries to eliminate iodine deficiency in more than 80 countries. USAID has provided funding for programs that help salt industries produce iodized salt at affordable prices, help governments establish the capacity to monitor industry compliance, and

promote consumer demand for iodized salt. In fiscal year 2003, USAID provided \$2.5 million of child survival and health funding to UNICEF to support national public-private sector partnership programs for salt iodization in 16 key countries where most of the remaining iodine deficiency remains.

Partnerships With International Donors

Global Fund to Fight AIDS, Tuberculosis, and Malaria. The Global Fund to Fight AIDS, Tuberculosis, and Malaria was established by international public and private sector partners to leverage increased resources to support prevention and treatment programs in the fight against the three diseases. The fund supports an integrated approach to combating the diseases, combining prevention, treatment, and care. Global Fund partners include governments, bilateral donors, multilateral agencies, private foundations, nongovernmental organizations, and developing-country representatives. USAID missions provide the bulk of the technical assistance from donors for developing proposals and for strengthening capacity for successfully implementing activities. By the end of fiscal year 2003, the Global Fund had approved more than 150 proposals from 93 countries and had made two-year funding commitments of more than \$1.5 billion.

The Joint U.N. Programme on HIV/AIDS (UNAIDS). USAID partners with UNAIDS to prevent HIV transmission, provide care and support, reduce individual and community vulnerability to HIV/AIDS, and mitigate the impact of the epidemic. Under this partnership, national AIDS bodies have been strengthened; monitoring and evaluation systems at the country level have been established; public-private partnerships have been developed; and global advocacy has been promoted. Future collaboration will allow USAID to forge new partnerships and solidify existing ones with political and social leaders.



Photo by May, M.

International AIDS Vaccine Initiative (IAVI).

This initiative works to leverage and apply public and private sector resources in support of the global effort to develop an AIDS vaccine. The cornerstone of the IAVI program is the Vaccine Development Partnership, designed to move promising experimental vaccines into clinical trials as rapidly as possible. In 2003, IAVI's leading vaccine candidate completed early human safety testing in Kenya, the first time human trials were conducted in Africa using a candidate vaccine specifically designed for a primary HIV strain circulating in Africa.

Stop TB. The Stop TB partnership includes WHO, the World Bank, CDC, USAID, multiple nongovernmental organizations and foundations, other multilateral donors, and regional and country representatives from high-TB burden countries. The partnership aims to increase access to effective TB diagnosis and treatment;

increase the availability, affordability, and quality of TB drugs; develop and disseminate a strategy to prevent and manage multidrug-resistant TB; develop and disseminate strategies to reduce the impact of HIV-related TB; support the development of new and improved diagnostic tests, drugs, and vaccines; and promote the adoption of new and improved tools to help ensure access to and affordability of the DOTS approach to TB control. USAID support has helped establish Stop TB partnerships and plans for DOTS expansion in all of the world's high-TB burden countries.

Global Alliance for Vaccines and Immunizations (GAVI).

GAVI works to increase the availability of essential lifesaving vaccines in developing countries. Strategic objectives shared by GAVI partners (who include the Bill & Melinda Gates Foundation, the International Federation of Pharmaceutical Manufacturers, the Rockefeller Foundation, USAID, UNICEF, World Bank, and WHO) are to expand access to and use of vaccines, accelerate vaccine research and development, and make immunization coverage a centerpiece of international development efforts. In its interaction with private industry, GAVI seeks to create markets for private sector sales while at the same time ensuring that prices remain low so that vaccines remain accessible. GAVI and its Vaccine Fund are now supporting enhanced immunization programs in about 70 countries.

Global polio eradication. USAID has a major role as both a donor and coordinator in the global campaign to eradicate polio. The Agency works to plan, finance, supervise, manage, monitor, and evaluate various technical aspects of polio eradication. USAID also provides guidance for program improvement, identifies gaps in program performance, participates in technical consultative and expert groups, and provides technical assistance to missions.

IX. Future Directions



Photo by WFP/Rafirasme, R.

IX. Future Directions

This report has already touched on the new strategic directions that emerged for USAID's child survival and health programs in fiscal year 2003. These include the scaling up of HIV/AIDS programming under the President's Emergency Plan for AIDS Relief, the revitalization of child survival, and increased focus on interventions that will improve workforce health and reduce poverty. These will be accomplished in part by increasing our partnerships with private sector and faith-based organizations.

In addition to these new directions, several other factors will influence the success of health programs.

Implications of global partnerships: The success of partnerships such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and of the expanded programs envisioned by the President's Emergency Plan for AIDS Relief, will have immense long-term implications for developing-country health programs. To meet their coverage targets, these and other global initiatives will dramatically increase the resources available to developing countries. Recipient countries will need improved commodity procurement and distribution systems to manage the projected increases in health commodities such as drugs, vaccines, and reagents. Additional and enhanced human resources will be required at all levels. To sustain increases in coverage rates, countries will need to improve their management, information, and financial systems. Finally, as these initiatives run their course, the ongoing funding needed to pay for these new programs must be identified. USAID will increase its focus on partnering with the



Photo by Lutheran World Relief

private sector and faith-based organizations as part of the answer for these future funding needs and also bring additional efficiencies to global development alliances.

Human resources: Human resources, which represent an estimated 70 to 75 percent of health care costs, are foremost among these needs but have traditionally been neglected by developing-country health sectors. Donors and developing countries now agree that only a comprehensive approach, sustained over years, will produce visible improvements in workforce performance. This will involve increasing the efficiency and accountability of training programs (e.g., application of innovative training strategies, learning-based incentives, and certification programs), expanded use of lower-skilled staff, improved workforce planning, a greater role for the private sector, and partnerships addressing worldwide systems issues and incentives impacting health capacities. Substantially raising the performance of health workforces will require large investments, including debt relief and other creative solutions.

Equity: Equity in health care is an old issue that stubbornly remains on the Agency's future agenda. It is also receiving new attention globally as the disparities between the richest and poorest identify as yet unreached populations. Throughout the developing world, great

inequities in health care persist, despite national indicators that often suggest across-the-board progress. As health services and resources expand under new partnerships and initiatives, their equitable distribution across geographic areas, economic classes, and ethnic, racial, gender, and age groups must be ensured. Recognizing that health for all is central to national development, USAID will continue to emphasize the need to target services and resources to socially and economically marginalized populations.

Workforce health: In truly integrating health interventions into development portfolios such as economic development and agricultural productivity, it is clear that a more concerted look at the health of the workforce is needed. Many of the drains on the health of working-age populations thankfully are already part of USAID's health intervention portfolio. In infectious diseases, for example, AIDS, tuberculosis, and malaria have risen to top global attention. Anemia, maternal mortality, and repeated pregnancy reduce the economic productivity,

strength, and number of women able to parent and contribute to society. New understandings of the cause and progression of elephantiasis are leading to community- and home-based interventions for the millions stigmatized and disabled by lymphatic filariasis. A newer concern for the future is the increase in the developing world of chronic and noncommunicable diseases, including hypertension, stroke, coronary disease, diabetes, and cancer, that are beginning to occur even in countries and populations still struggling with high malnutrition and high maternal, child, and infant mortality. While keeping its core commitments in infectious diseases, child survival and maternal health, and reproductive health and family planning, USAID recognizes that this threat is emerging as a concern for future attention.

The coming years will bring these and other short- and long-term needs and opportunities for protecting and improving the health of developing-country populations. USAID will remain steadfast in its commitment as a global leader in these endeavors.



Photo by Holtz, S.

Financial Annex

Funding Tables

**Table I: FY 2003 USAID's Total Health Budget
by Program Category and Bureau**

(\$ Thousands)

Program Category	AFR	ANE	E&E	LAC	DCHA	GH	Int'l Partners	PPC	Other	Total
Child Survival & Maternal Health	91,339	98,282	25,097	36,562	4,171	68,450	64,510	1,220	113	389,744
Vulnerable Children	4,200	7,070	7,460	1,200	10,384	1,490	–	–	2,481	34,285
HIV/AIDS	338,832	69,508	19,515	48,850	–	65,350	74,022	1,440	5,960	623,477
Infectious Diseases	51,700	32,610	14,421	21,110	–	52,110	–	1,140	–	173,091
Family Planning & Reproductive Health	92,740	123,098	23,407	60,095	–	137,500	5,250	1,510	–	443,600
Global Fund to Fight AIDS, TB, and Malaria	–	–	–	–	–	–	248,375	–	–	248,375
UNICEF	–	–	–	–	–	–	119,220	–	–	119,220
Total	578,811	330,568	89,900	167,817	14,555	324,900	511,377	5,310	8,554	2,031,792

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

**Table 2: FY 2003 Child Survival and Health Programs Fund Budget
by Program Category and Bureau**

(\$ Thousands)

Program Category	AFR	ANE	E&E	LAC	DCHA	GH	Int'l Partners	PPC	Other	Total
Child Survival & Maternal Health	79,339	67,529	–	36,562	4,171	68,450	64,510	1,220	113	321,894
Vulnerable Children	4,200	7,070	–	1,200	10,384	1,490	–	–	2,481	26,825
HIV/AIDS	320,332	66,200	6,000	48,350	–	65,350	74,022	1,440	5,960	587,654
Infectious Diseases	51,700	28,430	–	21,110	–	52,110	–	1,140	–	154,490
Family Planning & Reproductive Health	85,500	85,500	–	56,095	–	137,500	–	1,510	–	366,105
Global Fund to Fight AIDS, TB, and Malaria	–	–	–	–	–	–	248,375	–	–	248,375
UNICEF	–	–	–	–	–	–	119,220	–	–	119,220
Total	541,071	254,729	6,000	163,317	14,555	324,900	506,127	5,310	8,554	1,824,563

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

Table 3: FY 2003 Child Survival and Health Programs Fund Budget by Program Category and Country

(\$ Thousands)

Bureau/Country	CS/MH		VC	HIV/AIDS	Infectious Diseases			FP/RH	Total
	Child Survival & Maternal Health	Polio	Vulnerable Children	HIV/AIDS	TB	Malaria	AMR, Surveillance, & Other ID	Family Planning & Reproductive Health	

AFRICA

Angola	1,250	1,650	1,397	2,500	-	1,000	-	-	7,797
Benin	1,400	-	-	2,000	-	1,000	-	2,238	6,638
Burundi	350	-	-	-	-	400	-	-	750
Congo, Dem. Rep of	5,753	2,573	-	4,000	1,050	1,100	440	1,000	15,916
Eritrea	2,200	-	-	2,300	-	600	-	500	5,600
Ethiopia	3,550	-	-	19,022	1,575	900	400	5,305	30,752
Ghana	3,000	350	-	7,000	-	1,000	800	7,000	19,150
Guinea	2,200	-	-	2,200	-	-	-	2,460	6,860
Kenya	1,250	-	-	26,450	1,575	1,200	-	6,013	36,488
Liberia	1,300	-	527	-	-	300	-	500	2,627
Madagascar	2,418	75	-	2,000	-	600	-	4,200	9,293
Malawi	1,400	-	-	11,500	800	1,500	-	2,280	17,480
Mali	3,300	-	-	4,000	-	1,000	-	5,521	13,821
Mozambique	3,800	-	-	12,801	-	500	300	5,200	22,601
Namibia	-	-	-	7,601	-	-	-	-	7,601
Nigeria	3,400	3,843	-	23,702	2,150	3,000	-	11,816	47,911
Rwanda	1,400	-	318	12,950	-	750	-	750	16,168
Senegal	2,455	150	-	6,000	800	2,500	-	3,262	15,167
Sierra Leone	234	-	550	-	-	-	-	-	784
Somalia	100	150	-	-	-	-	-	-	250
South Africa	2,300	-	-	22,915	1,850	-	-	1,500	28,565
Sudan	200	200	-	-	-	300	-	-	700
Tanzania	1,890	-	-	17,950	-	400	800	4,000	25,040
Uganda	2,459	-	855	27,950	1,650	3,000	-	5,200	41,114
Zambia	5,300	-	-	25,500	-	4,000	-	3,104	37,904
Zimbabwe	-	-	-	9,900	-	-	-	2,023	11,923
AFR/DP	-	-	553	45,580*	-	-	-	-	46,133
AFR/SD	7,180	8,434	-	2,750	1,760	3,660	4,390	2,000	30,174
REDSO/ESA	950	125	-	6,503	650	1,200	-	1,025	10,453
Southern Africa Reg.	-	-	-	5,950	-	-	-	-	5,950
West Africa Reg. Prog.	750	-	-	9,308	-	800	-	8,603	19,461
TOTAL	61,789	17,550	4,200	320,332	13,860	30,710	7,130	85,500	541,071

*Represents MTCT Initiative funding to be transferred to GH-managed instruments for field support or allocated to specific country programs when approved in early FY04.

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

Table 3 (cont.): FY 2003 Child Survival and Health Programs Fund Budget by Program Category and Country

(\$ Thousands)

Bureau/Country	CS/MH		VC	HIV/AIDS	Infectious Diseases			FP/RH	Total
	Child Survival & Maternal Health	Polio	Vulnerable Children	HIV/AIDS	TB	Malaria	AMR, Surveillance, & Other ID	Family Planning & Reproductive Health	

ASIA/NEAR EAST

Afghanistan	19,478	199	4,967	–	3,974	3,974	–	15,883	48,475
Bangladesh	8,800	–	–	3,700	600	–	–	20,000	33,100
Burma	–	–	–	1,000	500	500	–	–	2,000
Cambodia	2,400	–	–	13,800	2,400	1,000	300	2,200	22,100
India	6,626	3,872	–	13,500	3,200	–	1,500	10,740	39,438
Indonesia	10,450	400	503	9,000	2,300	600	–	8,700	31,953
Laos	–	–	–	1,000	–	–	–	–	1,000
Nepal	2,899	–	–	8,700	–	600	1,500	6,200	19,899
Pakistan	8,545	–	–	900	–	–	–	6,200	15,645
Philippines	3,010	–	–	1,500	2,700	–	500	15,217	22,927
Sri Lanka	–	–	300	–	–	–	–	–	300
Thailand	–	–	–	1,500	–	–	–	–	1,500
Vietnam	–	–	1,300	4,500	–	–	–	–	5,800
ANE Regional	850	–	–	7,100	826	1,088	368	360	10,592
TOTAL	63,058	4,471	7,070	66,200	16,500	7,762	4,168	85,500	254,729

EUROPE AND EURASIA

Russia	–	–	–	3,000	–	–	–	–	3,000
Ukraine	–	–	–	1,750	–	–	–	–	1,750
CAR Regional	–	–	–	1,000	–	–	–	–	1,000
Europe Regional	–	–	–	250	–	–	–	–	250
TOTAL	–	–	–	6,000	–	–	–	–	6,000

LATIN AMERICA AND THE CARIBBEAN

Bolivia	3,426	–	–	900	800	600	732	12,136	18,594
Brazil	–	–	1,000	6,300	3,000	–	–	–	10,300
Dominican Republic	3,255	–	–	5,300	1,100	–	753	2,100	12,508
El Salvador	5,136	–	–	500	–	–	300	3,864	9,800
Guatemala	4,689	–	–	500	–	–	300	6,528	12,017
Guyana	–	–	–	4,200	–	–	–	–	4,200
Haiti	4,254	–	–	7,750	1,400	–	–	5,803	19,207
Honduras	2,553	–	–	4,200	733	220	300	5,394	13,400
Jamaica	–	–	–	1,300	–	–	20	2,393	3,713
Mexico	–	–	–	2,200	3,000	–	–	–	5,200
Nicaragua	4,581	–	–	500	–	–	406	4,343	9,830
Paraguay	–	–	200	–	–	–	–	1,959	2,159
Peru	5,246	–	–	1,000	300	1,000	1,609	10,557	19,712
Caribbean Regional	–	–	–	4,233	–	–	–	–	4,233
Central Amer. Reg.	–	–	–	4,950	–	–	–	–	4,950
LAC/RSD-SPO	3,422	–	–	4,517	1,667	2,300	570	1,018	13,494
TOTAL	36,562	–	1,200	48,350	12,000	4,120	4,990	56,095	163,317

Source: USAID Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

Table 3 (cont.): FY 2003 Child Survival and Health Programs Fund Budget by Program Category and Country

(\$ Thousands)

Bureau/Country	CS/MH		VC	HIV/AIDS	Infectious Diseases			FP/RH	Total
	Child Survival & Maternal Health	Polio	Vulnerable Children	HIV/AIDS	TB	Malaria	AMR, Surveillance, & Other ID	Family Planning & Reproductive Health	

CENTRAL PROGRAMS

DCHA	4,171	-	10,384	-	-	-	-	-	14,555
Global Health	63,150	5,300	1,490	65,350	21,220	21,990	8,900	137,500	324,900
PPC	1,220	-	-	1,440	1,040	-	100	1,510	5,310
TOTAL	68,541	5,300	11,874	66,790	22,260	21,990	9,000	139,010	344,765

INTERNATIONAL PARTNERSHIPS

GAVI	59,610	-	-	-	-	-	-	-	59,610
GAIN	2,520	-	-	-	-	-	-	-	2,520
Iodine Defic. Disorder	2,380	-	-	-	-	-	-	-	2,380
UNAIDS	-	-	-	17,883	-	-	-	-	17,883
IAVI	-	-	-	10,432	-	-	-	-	10,432
Microbicide Research	-	-	-	17,883	-	-	-	-	17,883
Commod. Prom. Fund	-	-	-	27,824	-	-	-	-	27,824
GFATM	-	-	-	-	-	-	-	-	248,375
UNICEF	-	-	-	-	-	-	-	-	119,220
TOTAL	64,510	-	-	74,022	-	-	-	-	506,127

OTHER	113	-	2,481	5,960	-	-	-	-	8,554
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Subtotal CSH	294,573	27,321	26,825	587,654	64,620	64,582	25,288	366,105	1,456,968
GFATM*	-	-	-	-	-	-	-	-	248,375
UNICEF*	-	-	-	-	-	-	-	-	119,220
GRAND TOTAL CSH									1,824,563

*GFATM and UNICEF are international partnerships, but funding is attributable to more than one category.

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

**Table 4: FY 2003 USAID's Health Budget From Other Accounts
by Program Category and Country**

(\$ Thousands)

Bureau/Country	CS/MH		VC	HIV/AIDS	Infectious Diseases			FP/RH	Total
	Child Survival & Maternal Health	Polio	Vulnerable Children	HIV/AIDS	TB	Malaria	AMR, Surveillance, & Other ID	Family Planning & Reproductive Health	

AFRICA

Angola	-	-	-	1,000	-	-	-	-	1,000
Congo, Dem. Rep. of	-	-	-	-	-	-	-	2,000	2,000
Djibouti	12,000	-	-	-	-	-	-	-	12,000
Ethiopia	-	-	-	-	-	-	-	2,000	2,000
Kenya	-	-	-	1,000	-	-	-	-	1,000
Malawi	-	-	-	500	-	-	-	-	500
Mozambique	-	-	-	750	-	-	-	-	750
Nigeria	-	-	-	500	-	-	-	2,000	2,500
Rwanda	-	-	-	1,000	-	-	-	-	1,000
South Africa	-	-	-	1,200	-	-	-	-	1,200
Tanzania	-	-	-	800	-	-	-	-	800
Uganda	-	-	-	750	-	-	-	-	750
Zambia	-	-	-	1,000	-	-	-	-	1,000
Sub-Saharan Africa (PL-480)	-	-	-	10,000	-	-	-	-	10,000
West Africa Reg. Prog.	-	-	-	-	-	-	-	1,240	1,240
TOTAL	12,000	-	-	18,500	-	-	-	7,240	37,740

ASIA/NEAR EAST

Egypt	16,484	1,179	-	2,810	504	-	3,676	17,376	42,029
Jordan	9,469	-	-	400	-	-	-	15,030	24,899
West Bank/Gaza	1,621	-	-	98	-	-	-	3,192	4,911
Yemen	2,000	-	-	-	-	-	-	2,000	4,000
TOTAL	29,574	1,179	-	3,308	504	-	3,676	37,598	75,839

EUROPE AND EURASIA

Albania	1,602	-	-	524	3	-	9	1,112	3,250
Armenia	2,507	-	460	100	12	-	88	2,000	5,167
Azerbaijan	912	-	-	78	-	-	-	840	1,830
Bosnia	-	-	1,000	-	-	-	-	-	1,000
Bulgaria	-	-	-	-	-	-	-	800	800
Georgia	483	-	-	762	523	-	1,118	614	3,500
Kazakhstan	2,474	-	-	1,520	1,262	-	-	1,214	6,470
Kosovo	-	-	-	-	-	-	-	535	535
Kyrgyzstan	2,542	-	-	356	786	57	-	1,717	5,458
Macedonia	-	-	-	60	-	-	-	-	60
Moldova	-	-	-	-	2,533	-	-	-	2,533
Montenegro	-	-	-	-	-	-	-	500	500
Romania	400	-	3,900	500	-	-	-	2,897	7,697
Russia	2,789	-	2,100	3,744	2,372	-	176	3,919	15,100
Serbia	-	-	-	-	-	-	-	1,500	1,500
Tajikistan	1,056	-	-	683	470	597	-	644	3,450
Turkmenistan	504	-	-	109	496	-	-	325	1,434
Ukraine	2,307	-	-	2,267	732	-	89	1,925	7,320
Uzbekistan	3,329	-	-	887	1,072	138	-	1,274	6,700
CAR Regional	708	-	-	-	175	-	-	167	1,050
Eurasia Regional	2,836	-	-	1,038	583	-	248	885	5,590
Europe Regional	648	-	-	887	882	-	-	539	2,956
TOTAL	25,097	-	7,460	13,515	11,901	792	1,728	23,407	83,900

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

Table 4 (cont.): FY 2003 USAID's Health Budget From Other Accounts by Program Category and Country

(\$ Thousands)

Bureau/Country	CS/MH		VC	HIV/AIDS	Infectious Diseases			FP/RH	Total
	Child Survival & Maternal Health	Polio	Vulnerable Children	HIV/AIDS	TB	Malaria	AMR, Surveillance, & Other ID	Family Planning & Reproductive Health	

LATIN AMERICA AND THE CARIBBEAN

Bolivia	-	-	-	-	-	-	-	2,000	2,000
Peru	-	-	-	-	-	-	-	2,000	2,000
Caribbean Regional	-	-	-	500	-	-	-	-	500
TOTAL	-	-	-	500	-	-	-	4,000	4,500

INTERNATIONAL PARTNERSHIPS

IDA & MRA	-	-	-	-	-	-	-	5,250	5,250
TOTAL	-	-	-	-	-	-	-	5,250	5,250

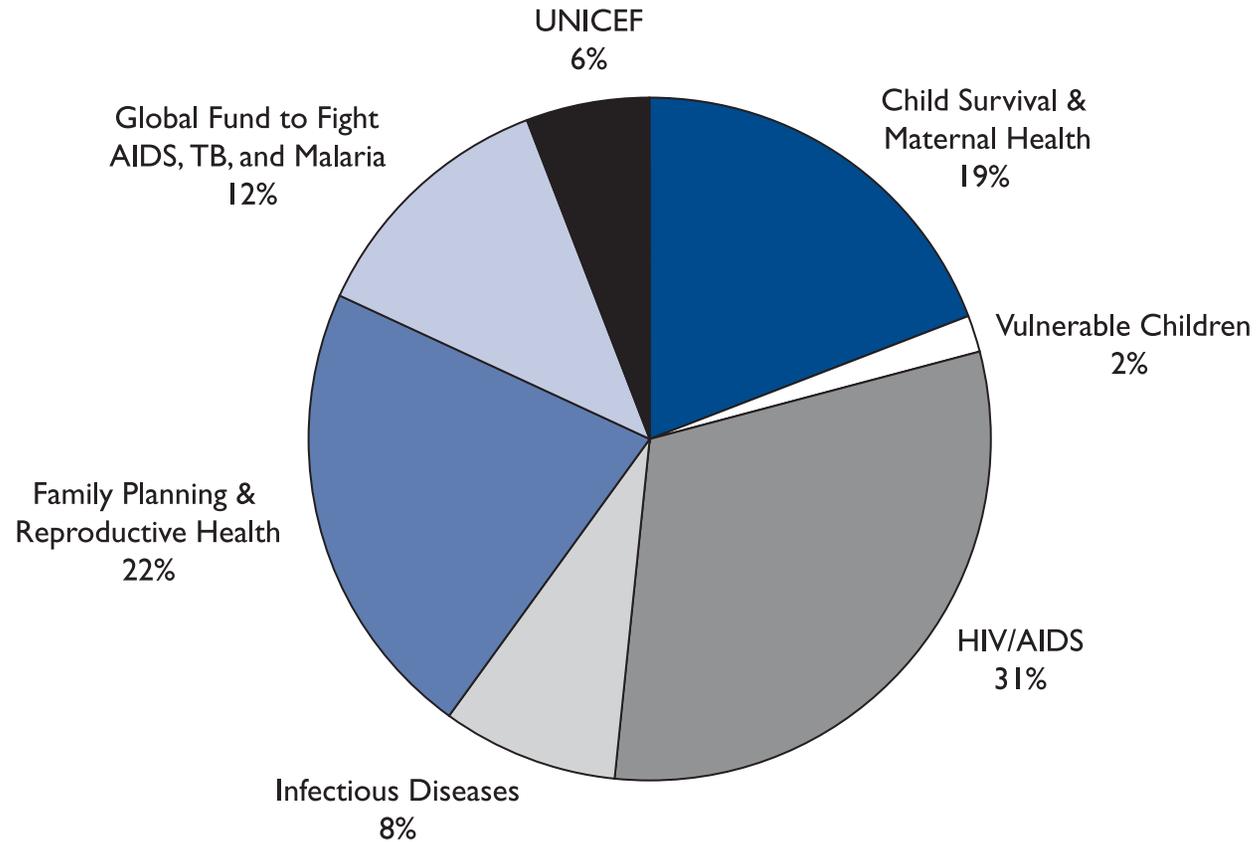
Total Other Accounts	66,671	1,179	7,460	35,823	12,405	792	5,404	77,495	207,229
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Subtotal CSH	294,573	27,321	26,825	587,654	64,620	64,582	25,288	366,105	1,456,968
GFATM*	-	-	-	-	-	-	-	-	248,375
UNICEF*	-	-	-	-	-	-	-	-	119,220
GRAND TOTAL CSH	-	-	-	-	-	-	-	-	1,824,563
TOTAL ALL ACCOUNTS	361,244	28,500	34,285	623,477	77,025	65,374	30,692	443,600	2,031,792

*GFATM and UNICEF are international partnerships, but funding is attributable to more than one category.

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

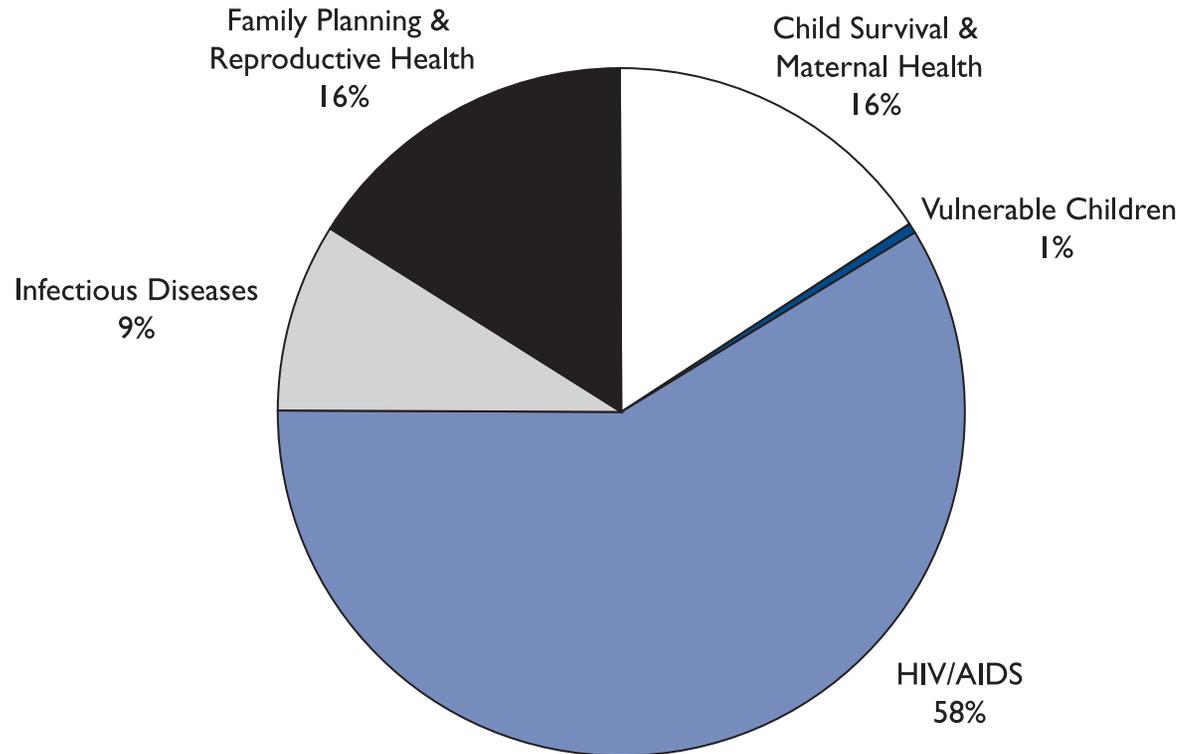
FY 2003 USAID's Total Health Budget by Primary Funding Category



FY 2003 Total Funding = \$2,031,792

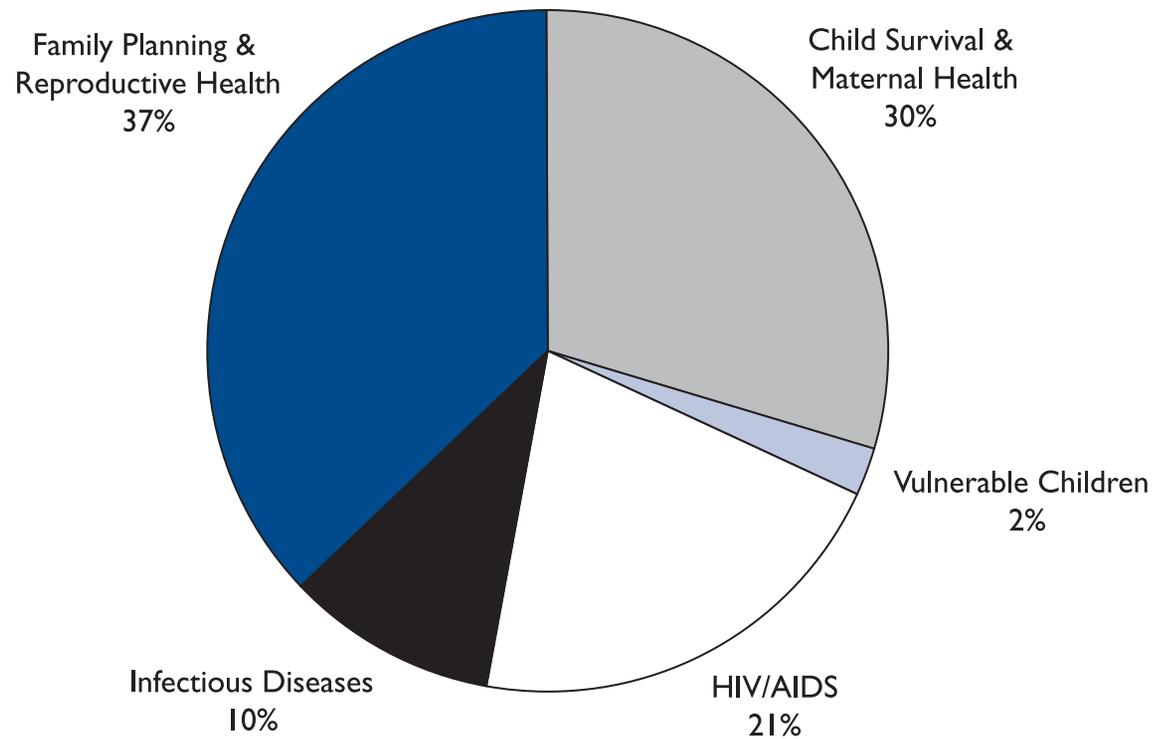
Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

FY 2003 Africa Region Total Health Budget by Primary Funding Category



FY 2003 Total Funding = \$578,811,000

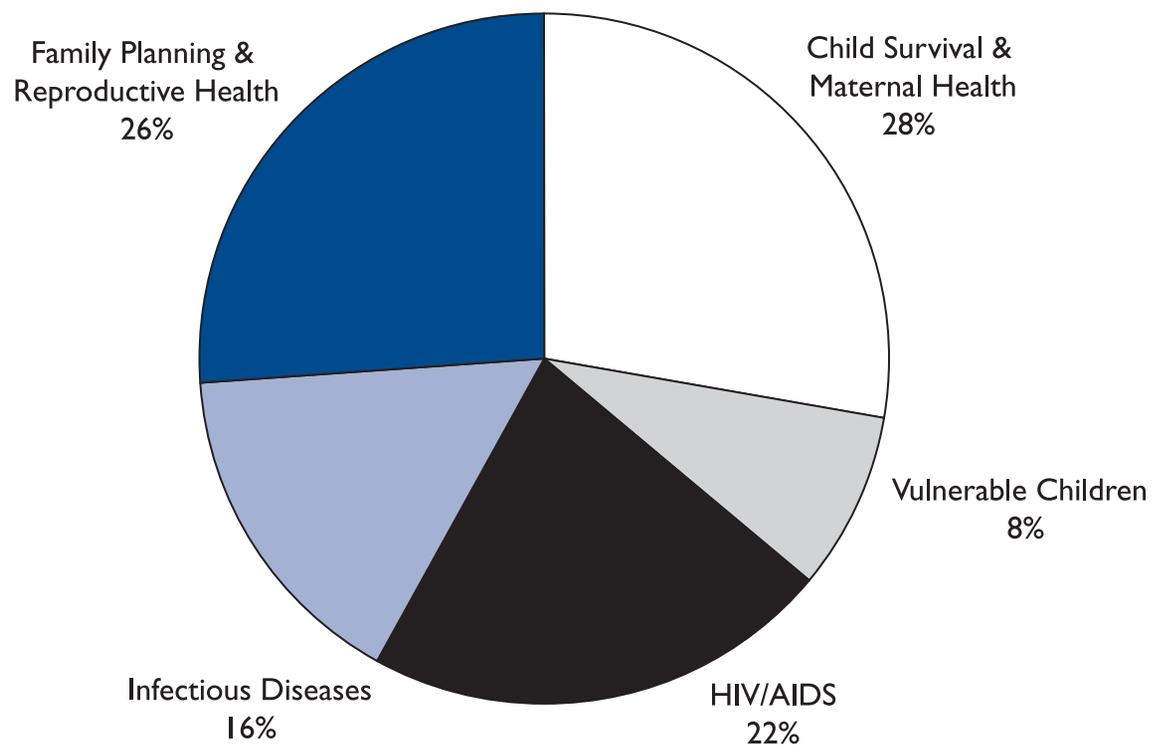
FY 2003 Asia and Near East Region Total Health Budget by Primary Funding Category



FY 2003 Total Funding = \$330,568,000

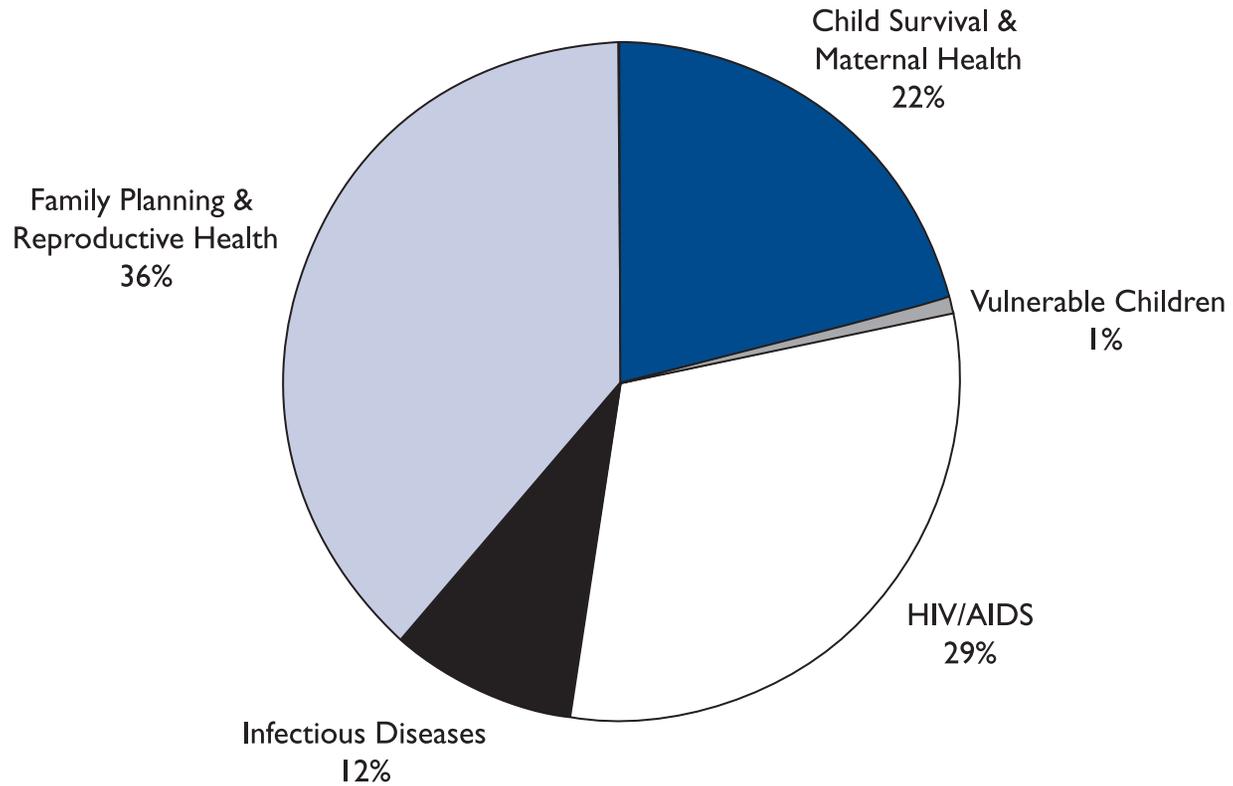
Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

FY 2003 Europe and Eurasia Region Total Health Budget by Primary Funding Category



FY 2003 Total Funding = \$89,900,000

FY 2003 Latin America and the Caribbean Region Total Health Budget by Primary Funding Category



FY 2003 Total Funding = \$2,031,792,000

Source: USAID, Bureau for Policy and Program Coordination, Office of Strategic and Performance Planning

Acronyms and Abbreviations

AEEB	Assistance to Eastern Europe and the Baltic States
AFP	Acute flaccid paralysis
AFR	USAID Bureau for Africa
AFR/DP	USAID Bureau for Africa/Office of Development Planning
AFR/SD	USAID Bureau for Africa/Office of Sustainable Development
AIDS	Acquired immunodeficiency syndrome
AMR	Antimicrobial resistance
ANE	USAID Bureau for Asia and the Near East
CAR	Central Asia Republics
CCP	Center for Communication Programs (Johns Hopkins University)
CDC	Centers for Disease Control and Prevention (U.S.)
CORE	Communities Responding to the HIV/AIDS Epidemic
CSH	Child Survival and Health Programs Fund
CSHGP	USAID Child Survival and Health Grants Program
CS/MH	Child survival and maternal health
DCHA	USAID Bureau for Democracy, Conflict and Humanitarian Assistance
DCOF	Displaced Children and Orphans Fund
DOTS	Directly observed treatment, short course (TB)
DPT	Diphtheria, pertussis, tetanus
DPT3	Three DPT immunizations received before age 1
E&E	USAID Bureau for Europe and Eurasia
ESF	Economic Support Fund
FP/RH	Family planning and reproductive health
FSA	FREEDOM Support Act
FY	Fiscal year
GAIN	Global Alliance for Improved Nutrition
GAVI	Global Alliance for Vaccines and Immunization
GDF	Global TB Drug Facility
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
GH	USAID Bureau for Global Health
HIV	Human immunodeficiency virus
IAVI	International AIDS Vaccine Initiative

Acronyms and Abbreviations *(continued)*

ID	Infectious disease
IDA	International Disaster Assistance
IDRC	International Development Research Centre
Int'l Partners	International Partnerships
IU	International unit(s)
LAC	USAID Bureau for Latin America and the Caribbean
LAC/RSD-SPO	USAID Bureau for Latin America and the Caribbean/Regional Sustainable Development Office and Strategy and Program Office
MDR	Multidrug-resistant
MRA	Migration and Refugee Account
MTCT	Mother-to-child transmission (HIV)
NGO	Nongovernmental organization
NID	National immunization day
ORS	Oral rehydration salts
ORT	Oral rehydration therapy
PAHO	Pan American Health Organization
PEI	Polio Eradication Initiative
PL	Public Law
PPC	USAID Bureau for Policy and Program Coordination
RBM	Roll Back Malaria
REDSO/ESA	USAID Regional Economic Development Services Office for East and Southern Africa
SARS	Severe acute respiratory syndrome
TASO	The AIDS Support Organization (Uganda)
TB	Tuberculosis
TBP	WHO Stop TB Partnership Secretariat
TDM	TwoDay Method
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VC	Vulnerable children
WFP	World Food Programme
WHO	World Health Organization