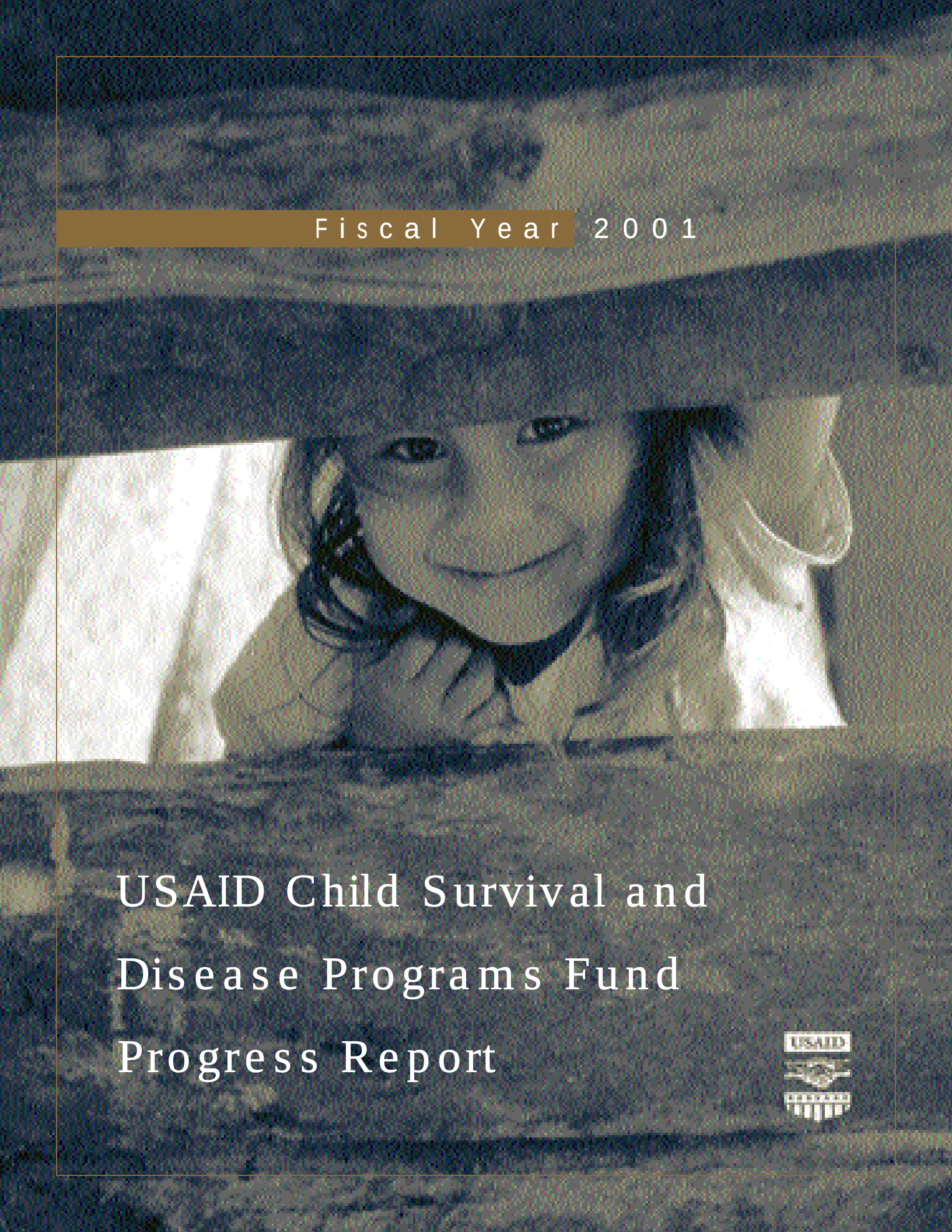
Fiscal Year 2001



USAID Child Survival and Disease Programs Fund Progress Report

Fiscal Year 2001

USAID Child Survival and Disease Programs Fund Progress Report

United States Agency for International Development

This document was prepared by USAID
in conjunction with
the Population, Health and Nutrition Information Project.

Cover photograph by PAHO/Armando Waak

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Acronyms and Abbreviations

AD	auto-disable (syringe)
AEEB	Assistance to Eastern Europe and the Baltic States
AFP	acute flaccid paralysis
AIDS	acquired immunodeficiency syndrome
AIN	*Atencion Integral a la Ninez* (Honduras)
AMR	antimicrobial resistance
ANE	Asia/Near East
ARI	acute respiratory infection(s)
ARV	antiretroviral
BCG	bacillus Calmette-Guérin (TB vaccine)
CIDA	Canadian International Development Agency
CORE	Child Survival Collaborations and Resources Group
CSD	child survival and diseases
CSGP	Child Survival Grants Program
CS/MH	child survival/maternal health
DCOF	Displaced Children and Orphans Fund
DFID	Department for International Development (U.K.)
DHS	Demographic and Health Survey
DOTS	directly observed treatment, short-course (TB)
DPT	diphtheria, pertussis, tetanus
DPT3	three DPT immunizations
DRC	Democratic Republic of the Congo
DTC	drug and therapeutic committee
E&E	Europe and Eurasia
EFA	Education for All
ESF	Economic Support Fund
FSA	FREEDOM Support Act
FY	fiscal year
GAIN	Global Alliance to Improve Nutrition
GAVI	Global Alliance for Vaccines and Immunization
GDF	Global TB Drug Facility
GER	gross enrollment ratio
HIV	human immunodeficiency virus
ICC	interagency coordinating committee
ILO	International Labor Organization
IMCI	Integrated Management of Childhood Illness
ITN	insecticide-treated bed net
IVACG	International Vitamin A Consultative Group

LAC	Latin America/Caribbean
MDR	multidrug-resistant
MDR-TB	multidrug-resistant TB
MHO	mutual health organization
MTCT	mother-to-child transmission (HIV/AIDS)
NGO	nongovernmental organization
NHA	national health account
NID	national immunization day
NIH	U.S. National Institutes of Health
ORS	oral rehydration salts
ORT	oral rehydration therapy
PAHO	Pan American Health Organization
PEI	Polio Eradication Initiative
PHN	population, health, and nutrition
PIH	pregnancy-induced hypertension
PVC	Office of Private and Voluntary Cooperation (USAID)
PVO	private voluntary organization
QA	quality assurance
R-ORS	oral rehydration salts, reduced salt formulation
SIGN	Safe Injection Global Network
SP	sulfadoxine-pyrimethamine
STI	sexually transmitted infection
TB	tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VAD	vitamin A deficiency
VCT	voluntary counseling and testing
VOA	Voice of America
WHO	World Health Organization

Executive Summary

For 40 years, the United States Agency for International Development (USAID) has helped children throughout the world grow into healthy, productive adults. Progress in child survival, disease control, and basic education has long been, and remains, among the Agency's major accomplishments. According to UNICEF's end-of-decade report on progress achieved since the 1990 World Summit for Children, 3 million fewer children died as a result of preventable causes in 2000 than in 1990. USAID assistance was instrumental in this achievement, as well as in successes in other areas of child and maternal health, in the fight against HIV/AIDS and other infectious diseases, and in basic education.

Nonetheless, millions of men, women, and children in the developing world continue to die from preventable causes every year. Challenges to improving the health and basic education of people in low-income countries remain. Success in facing these challenges, while substantial, has been uneven across nations and regions and within nations.

In 1985, Congress created the Child Survival Program to demonstrate the United States' commitment to saving children's lives. In 1986, in response to the growing awareness of the rapidly spreading HIV/AIDS epidemic, USAID initiated a substantial prevention effort. In 1997, Congress created the Child Survival and Disease (CSD) Programs Fund, combining USAID's child survival, maternal health, HIV/AIDS, and basic education programs into a single account. In 1998, funding was added for an infectious disease prevention and treatment program, concentrating on tuberculosis, malaria, antimicrobial resistance, and disease surveillance. In both 2000 and 2001, increased resources were made available to combat HIV/AIDS and other infectious diseases. In 2001, Congress created the Vulnerable Children line item to better address the needs of displaced children and orphans and children affected by HIV/AIDS.

This report documents key activities and accomplishments funded by the CSD Programs account as well as activities with direct child survival and disease control objectives funded by the Economic Support Fund (ESF), the FREEDOM Support Act (FSA), the Assistance to Eastern Europe and the Baltic States (AEEB) account, and the Food for Peace program. In FY 2001, CSD funding allocations were made in the following categories:

Child Survival and Maternal Health: $295 million financed immunization initiatives, maternal health and nutrition programs, activities to strengthen health systems and national and local capacity to deliver health services, and other core child survival and related activities. Of the $295 million, approximately $27 million supported polio eradication efforts; $25 million supported micronutrients activities, including combating iodine deficiency; and approximately $50 million funded maternal health and survival initiatives.

Basic Education: $103 million supported basic education programs, giving priority to primary education. Programs emphasized improving the quality of student learning and increasing equity by reducing gender and other gaps in educational opportunities.

Vulnerable Children: $30 million supported programs to benefit vulnerable children, including almost $14 million for displaced children and orphans and approximately $15 million for children affected by HIV/AIDS.

HIV/AIDS: $289 million supported HIV/AIDS prevention, care, and treatment programs. The Agency's "expanded response" strategy identified 17 high-priority countries for increased

funding or rapid scale-up of existing programs. Africa, where the epidemic is most severe, received more than half of these resources. USAID continues to be a major supporter of the Joint United Nations Programme on HIV/AIDS (UNAIDS).

Infectious Disease Initiative: $124 million supported USAID's programs to reduce the threat of infectious diseases, including approximately $44 million to combat tuberculosis, $49 million for malaria, and almost $30 million to address other infectious diseases, antimicrobial resistance, and disease surveillance and response capabilities.

In addition to the contributions from the CSD account, more than $123 million from the ESF, FSA, AEEB, and Food for Peace accounts supported maternal and child health, HIV/AIDS, and infectious disease programs in selected countries, principally in the Middle East, Eastern Europe, and Eurasia.

Highlights

USAID programs have accomplished much for child survival, infectious disease control, and basic education. Some recent highlights follow:

- **Immunizations:** Several years ago, USAID selected 14 countries for intensive work on immunization. The Agency also encouraged numerous other countries to expand their efforts to strengthen immunization systems. Some unique activities initiated with this funding include a private-sector vaccine endowment for Armenia, a renewed focus on the "unreached" in the Dominican Republic, and a coordinated effort to build immunization systems in West Africa. In five countries where USAID has had a long involvement, immunization coverage rose from 45.5 percent in 1999 to 50.8 percent in 2000, representing an additional 400,000 children protected from childhood diseases each year.
- **Global Alliance for Vaccines and Immunization (GAVI):** USAID reinforced its commitment and support for this important global initiative through increased funding and technical assistance. The Agency awarded a $48 million grant to GAVI's Vaccine Fund and played a leading role in developing policies on injection safety, the use of vaccine vial temperature monitors, and financial sustainability. In less than two years of operation, GAVI has approved applications for assistance from 53 of 74 eligible countries. In the next five years, with $800 million in funding support, GAVI assistance to countries is expected to extend immunization services to an additional 80 million children, saving 2 million lives.
- **Nutrition:** Malnutrition is a factor in more than half of the child deaths in developing countries. USAID supports better nutrition through breastfeeding promotion, micronutrient supplementation, food fortification, and improved feeding practices for women and children. Over the last several years, the percentage of children exclusively breastfed to age 4 months has increased in many USAID countries, including Bolivia, Malawi, Egypt, and Bangladesh. USAID is helping 15 countries conduct semiannual vitamin A supplementation distributions, nine of which are national in scope. In 2002, USAID will expand these high-impact interventions.
- **Controlling Diarrheal Diseases:** According to UNICEF's review of child health at the end of the 1990s, deaths of young children from diarrheal diseases have been reduced since 1990 by 50 percent, thereby achieving a key child survival goal. USAID contributed to this achievement by promoting the use of oral rehydration therapy and home-based management of childhood diarrhea and by improving sanitation and hygiene in more than 20 USAID-supported countries.
- **Maternal and Neonatal Health:** In the past year, USAID supported WHO, the World

Bank, UNFPA, and UNICEF in setting worldwide standards for addressing life-threatening maternal and newborn complications through the publication of *Managing Complications in Pregnancy and Childbirth.* This manual, translated into seven languages, provides information on state-of-the-art obstetric practices, filling a large gap in the training of health professionals.

- **Basic Education:** In 2001, USAID supported basic education programs in 25 countries in the Africa, Latin America/Caribbean, and Asia/Near East regions, placing priority on primary school access, quality, and equity. These programs increased opportunities for girls and improved student achievement through teacher training in child-centered approaches and the use of information and education technology. Through increased community involvement in education decision making and program planning, higher school enrollments and lower dropout rates were achieved. Activities also supported education policy reform, including provisions for adequate local funding and enhanced local expertise in education planning, management, evaluation, and curriculum development.
- **HIV/AIDS:** USAID is the largest bilateral donor of HIV assistance, providing more than one-third of all international HIV/AIDS funding. USAID's programs are helping to alter the course of HIV/AIDS epidemics in countries such as Cambodia, Senegal, Zambia, Uganda, and the Dominican Republic.
- **Tuberculosis:** USAID emphasizes successful TB detection and treatment through its support of the "directly observed treatment, short-course," or DOTS, strategy. In recognition of the need to meet serious shortfalls in TB drugs, USAID joined global partners in developing the Global TB Drug Facility to provide grants-in-kind of essential TB drugs. This mechanism achieved a 30 percent reduction in TB drug prices in 2001 and increased the availability of these drugs.
- **Malaria:** In 2001, USAID launched activities in Africa aimed at substantially expanding the use of insecticide-treated bed nets. The potential impact of widespread use of nets and other insecticide-treated materials in malaria-endemic countries is substantial. It is estimated the use of nets alone could save more than 600,000 lives annually.

Partnerships

Global progress in child and maternal health, disease control, and basic education continues. As a recognized leader in development assistance and one of the largest bilateral donors, USAID is at the forefront of efforts to mobilize partnerships of international agencies, governments, nongovernmental organizations, foundations, universities, voluntary organizations, and private companies to address global health concerns. In recent years, such partnerships have been established in support of nutrition, child immunizations, and prevention and control of infectious diseases such as TB, malaria, and HIV/AIDS. These partnerships will complement USAID's ongoing bilateral programs to further improve the health, education, and well-being of developing-country populations.

Challenges for the Future

Progress in child survival, maternal health, basic education, and control and prevention of HIV/AIDS and other infectious diseases needs to accelerate, not only to improve global health but also to foster sustained development. Achieving this requires the sustained financial and programmatic commitments of the United States and other partners in these areas. In the spring of 2002, the United States and almost all the world's other countries will participate in a Special Session of the United Nations General Assembly to assess the progress made toward the goals of the 1990 World Summit for

Children. USAID will take this opportunity to renew its commitment to child survival, basic education, and combating HIV/AIDS and other infectious diseases as a cornerstone of its development strategy.

I. A New Era of Partnerships

USAID has long recognized that development objectives can best be met through the collaborative efforts of many stakeholders. Today, as global health needs receive increasing attention, many new partners are joining forces with traditional bilateral and multilateral donors to invest in public health. Resources from foundations, private companies, and nongovernmental organizations (NGOs) are on the rise. Accordingly, USAID in recent years has refocused its efforts to develop strategic partnerships to address global health issues. These partnerships, based on common goals, shared visions, and joint strategies, strive to bring substantial new resources, ideas, and technologies to address health problems in developing countries.

USAID today provides support and leadership for many global health partnerships. These partnerships complement USAID's existing programs, while USAID contributes its considerable field presence, access to governments, technical expertise, and networks of local development partners. Notable, and among the most recent, of these health partnerships are the STOP TB Initiative, Roll Back Malaria, the Global Alliance for Vaccines and Immunization, the Global Alliance to Improve Nutrition, and the Global Fund to Fight AIDS, Tuberculosis, and Malaria.

STOP TB Initiative: USAID played an integral role in developing and generating support for this initiative. The Initiative's priorities include expanding delivery of the "directly observed treatment, short-course," or DOTS, treatment strategy at the country level; implementing a "DOTS Plus" strategy for multidrug-resistant tuberculosis; addressing HIV/AIDS and TB co-infection; and developing new TB drugs, vaccines, and diagnostics. USAID participates with the World Health Organization (WHO) and other partners in STOP TB's governance structure, and USAID resources support the STOP TB secretariat hosted by WHO. The Global TB Drug Facility, funded in part by USAID, is an essential component of STOP TB that secures a timely supply of high-quality TB drugs and expands access to them.

Roll Back Malaria (RBM): This partnership began in 1998 and involves governments, development agencies, professional associations, commercial organizations, research groups, the media, and representatives from civil society. Its goal is to cut the world's malaria burden in half by 2010. RBM's six elements are: 1) a dynamic global movement; 2) well-coordinated action; 3) focused research; 4) evidence-based decisions; 5) multiple prevention efforts; and 6) rapid diagnosis and treatment. USAID coordinates with national and regional RBM partners and works closely with RBM's Geneva secretariat, regional WHO offices, and international and U.S. government partners to formulate RBM's agenda and technical strategies. USAID has been active in promoting strong operational links between RBM and maternal and child health programs such as Integrated Management of Childhood Illness and Making Pregnancies Safer.

Global Alliance for Vaccines and Immunization (GAVI): An alliance between private industry and public service organizations, GAVI is typical of the new wave of global partnerships. GAVI brings together a broad spectrum of traditional and new partners (including the Bill & Melinda Gates Foundation, multinational organizations, bilateral agencies, NGOs, government health programs, research institutes, and the pharmaceutical industry) who are committed to increasing the availability of essential lifesaving vaccines in developing countries. Formed in 1999, the partnership's mission is "to save children's lives and protect people's health through the widespread use of vaccines with a particular emphasis on developing countries." GAVI's partners believe that no child should die from a preventable disease for lack of a vaccine.

GAVI's objectives are to improve access to and expand use of vaccines, accelerate vaccine research and development, and make immunization coverage a centerpiece in the design and assessment of international development efforts. GAVI is a coordinating mechanism that is revitalizing national, regional, and international immunization programs. Through country grants, GAVI's Vaccine Fund provides financial support for improving national immunization programs; purchasing and delivering vaccines, auto-disable syringes and safety boxes; and conducting vaccine research.

Global Alliance to Improve Nutrition (GAIN): GAIN is a newly formed alliance of public- and private-sector organizations that seeks to eliminate dietary vitamin and mineral deficiencies. GAIN's primary strategy is to provide grants to developing countries for commercially sustainable food fortification programs. GAIN's members include bilateral donors, foundations, multilateral agencies, and private organizations. By reducing micronutrient deficiencies, GAIN aims to reduce child and maternal mortality, reduce health care costs, and improve productivity. The program will build on studies that have documented a 30 percent reduction in child mortality from improved micronutrient intake. USAID's current partners in GAIN include the Bill & Melinda Gates Foundation, the Canadian International Development Agency (CIDA), the World Bank, the United Nations Children's Fund (UNICEF), WHO, food companies, and nongovernmental and private voluntary organizations. USAID provides direct funding assistance and technical assistance through existing USAID nutrition projects.

Global Fund To Fight AIDS, Tuberculosis, and Malaria: This fund is USAID's newest partnership. United Nations Secretary-General Kofi Annan announced the Fund's launch in July 2001. It is now under development with a number of contributing partners, including bilateral donors, multilateral agencies, private foundations, private companies, NGOs, and developing-country representatives. The Fund will complement bilateral programs and support an integrated approach to combating AIDS, tuberculosis, and malaria, combining prevention, treatment, and care. The Fund's goal is to leverage increased resources to support prevention and treatment programs in the fight against these three diseases. By mid-January 2002, more than 20 countries, as well as foundations, private corporations, and private individuals, had pledged more than $1.7 billion in support of the Fund.

Partnerships such as these are a vital complement to USAID's bilateral programs in support of child and maternal health, basic education, and combating HIV/AIDS and other infectious diseases.

II. Child Survival and Maternal Health

Photo by PAHO/Armando Wesk

II. Child Survival and Maternal Health

Progress Achieved and Challenges Ahead

USAID programs support the goals set in 1990 at the United Nations World Summit for Children. A decade after the Summit, in preparation for the U.N. General Assembly Special Session on Children, UNICEF assessed the world's progress in reaching these goals. In "We the Children: End-decade review of the follow-up to the World Summit for Children" (www.unicef.org/specialsession/documentation/index.html), UNICEF reports that while many nations have made great strides in protecting the health and well-being of their children, others have far to go.

In the last decade, rates of child death decreased in all developing regions. According to UNICEF, 3 million fewer children died in 2000 than in 1990. Today, thanks to oral rehydration therapy, fewer children are dying from diarrheal disease, though it remains a major cause of child death. Between 1989 and 1999, the percentage of children exclusively breastfed to 4 months of age increased 18 percent in developing regions, contributing to improved health and nutrition of newborns. Many countries continued to improve their immunization coverage. Worldwide partnerships and financial commitments by governments, nongovernmental organizations, U.N. agencies, and private foundations have increased vaccine availability, safety, and quality. Improvements have likewise occurred in vitamin A coverage. More children than ever are attending school. Latin America in particular has progressed in primary school attendance, with more than 90 percent of primary school-age children now attending.

Progress in child survival has been uneven, however. While many children and families have received the benefits of immunizations, vitamin A, increased breastfeeding, and improved treatment of life-threatening diarrhea and pneumonia, the needs of many others remain unmet.

Meeting this unmet need is one of the critical challenges facing global efforts to improve child survival and health. These efforts will require special attention to three major components of the unmet need:

1.) Unaddressed causes of neonatal and maternal mortality:
Child health interventions in the past decade did not effectively address neonatal survival. Newborns are too

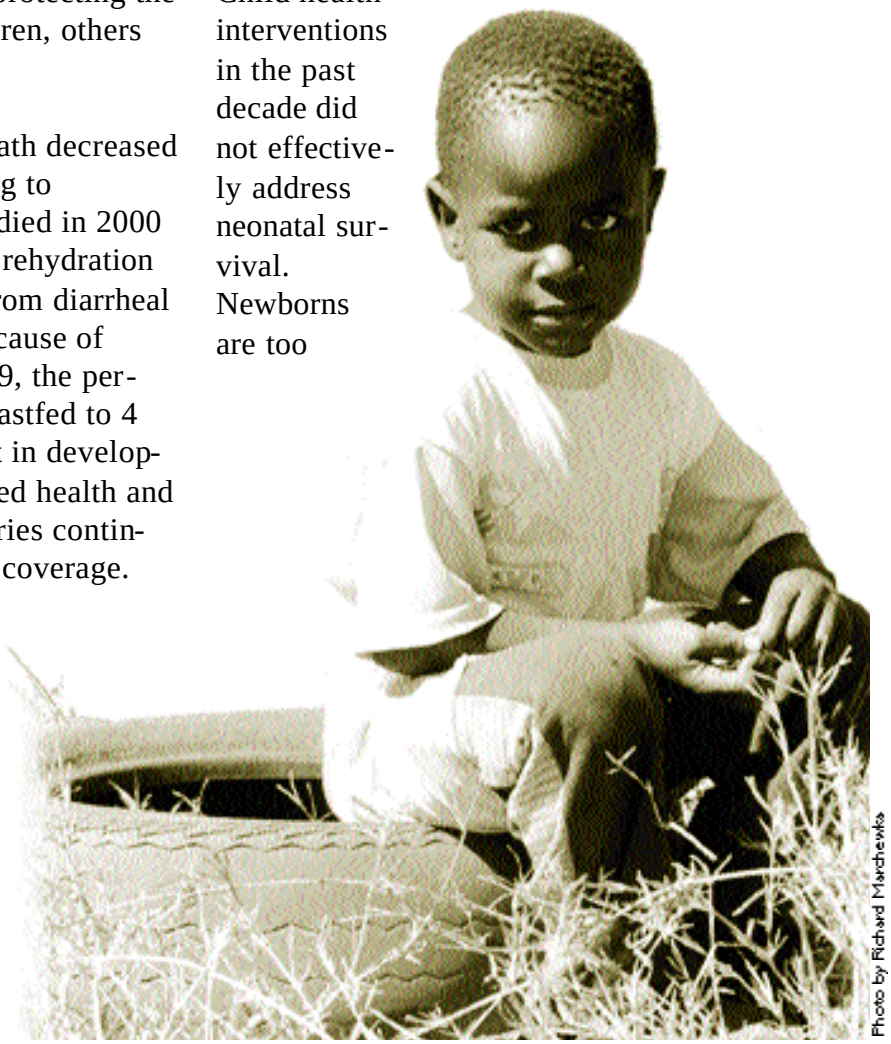
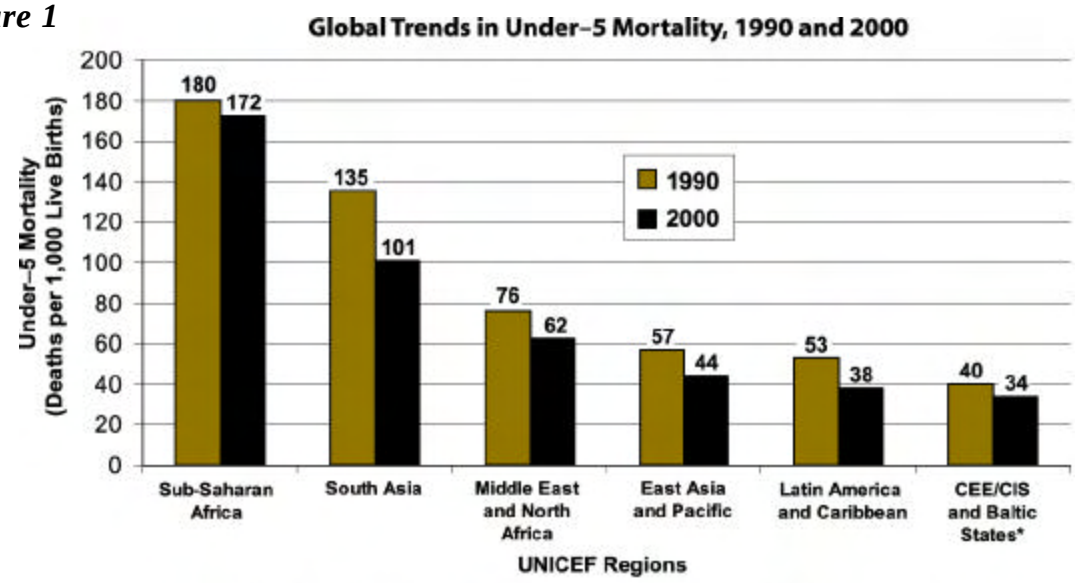


Photo by Richard Marchewka

Figure 1



*Central and Eastern Europe/Commonwealth of Independent States and Baltic States

Source: UNICEF. We the Children: End-decade review of the follow-up to the World Summit for Children. Report of the Secretary General. http://www.unicef.org/specialsession/documentation/index.html

young to benefit from oral rehydration therapy, immunizations (except for some maternal immunizations during pregnancy), and other standard child survival interventions. In most countries, more than half of infant deaths occur in the first month of life. The major causes of newborn deaths include low birthweight due to malaria in pregnancy and chronic maternal malnutrition; inadequately managed deliveries; infections; and neonatal tetanus.

These causes bring into focus the link between the survival of newborns and the survival and health of their mothers. More than half a million mothers in the developing world die every year from conditions associated with pregnancy, childbirth, and the postpartum period. When a mother dies, the chances of her newborn surviving decline.

USAID now has experience with a set of interventions that address high rates of maternal and newborn mortality. Minimal adequate antenatal care, the presence of trained health care personnel at delivery, and good postpartum care are critical for the survival of mothers. In Indonesia, a large USAID- and World Bank-supported program that makes nurse midwives available as resources and back-ups for traditional birth attendants has recently begun to bring down rates of maternal mortality. Other programs are showing that maternal care during pregnancy (especially improved nutrition, tetanus immunization, presumptive treatment for malaria in endemic areas, and detection and treatment of life-threatening infections) can significantly increase newborn survival and health. A challenge for the new decade is to expand these interventions into effective full-scale programs in many countries.

2.) Underserved geographic areas: As figure 1 indicates, rates of infant and child mortality remain high in Southern Asia and sub-Saharan Africa. Inadequate financial and human resources for health services constrain many countries in these regions. As a result, these countries have weak national health care systems that cannot deliver adequate care to large segments of their populations.

Within countries, rural areas are often significantly underserved. UNICEF and USAID data confirm that rural children often have higher mortality rates and receive less health care than their urban counterparts (although poor urban populations also suffer from lack of services in many countries).

Continued high rates of illness and mortality in underserved areas demand immediate attention. Increased outreach and special strategies to reach underserved areas are needed, especially for immunization, vitamin A, and antenatal care services. Public health systems alone are unable to meet the need for improved services. They must be supplemented by providers from the private sector, such as physicians and drug dispensers, and by the services of NGOs and private voluntary organizations (PVOs). PVOs especially have a long tradition of delivering health care services to populations beyond the reach of public health systems.

3.) Poverty: A large part of the remaining burden of childhood disease and mortality falls on children in poor families. Illness and malnutrition are themselves important reasons why families remain in poverty. Poverty does not discriminate geographically. In many countries, child health and nutrition among the poorest of the urban poor are worse than among the rural poor. Systematically improving the health and nutrition of the poorest families and children, especially in combination with improved education and literacy, can help lift families out of poverty.

In the long term, countries and their international partners need to re-examine and possibly restructure their health efforts to ensure that services reach the poorest families. In the short term, special outreach and community-based services, combined with increased resources, are essential to reach the poorest families and children, especially in countries with weak health care systems.

Photo by Curt Carnemark/World Bank

II. Child Survival and Maternal Health

Immunizations

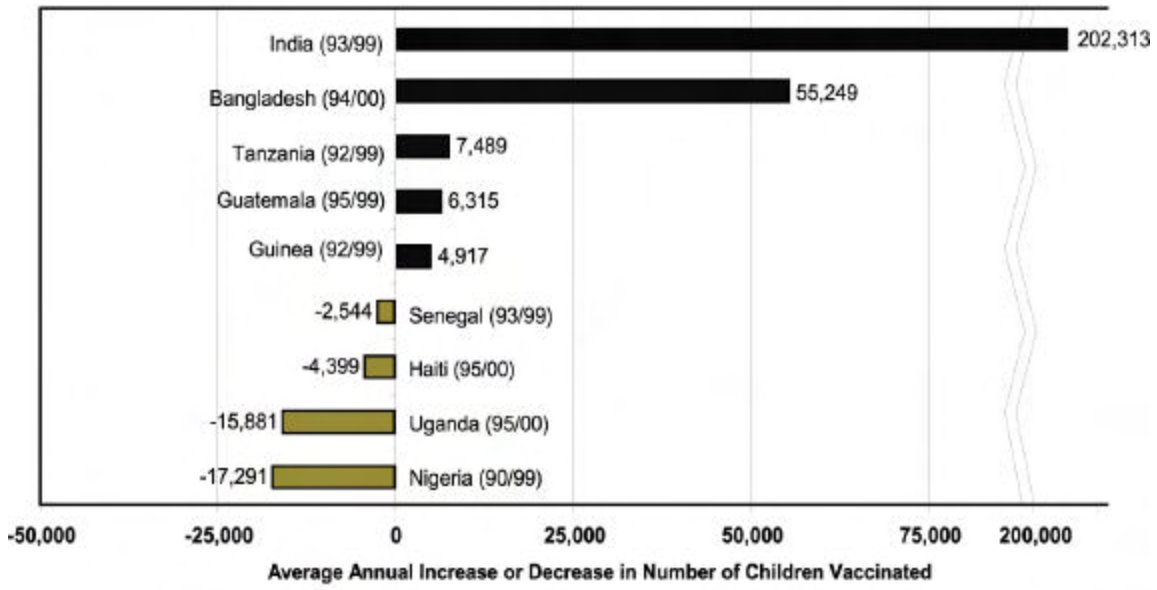
Childhood immunizations are one of the most cost-effective interventions for protecting the lives and improving the health of children in developing countries. Programs to immunize children against diphtheria, pertussis (whooping cough), tetanus, polio, measles, and tuberculosis, all killer childhood diseases, are mainstays of USAID child health programs. In the 1980s and early 1990s, USAID financial and technical support helped many countries upgrade their immunization programs and achieve dramatic improvements in coverage against these diseases. In recent years, USAID support has helped expand immunization coverage against hepatitis B and *Haemophilus influenzae* type b.

Many national programs, however, have been unable to sustain their early improvements in immunization coverage. Immunization programs today operate in a different environment from just a few years ago. National health systems are decentralizing, and the private sector's role is growing. In addition to providing age-specific routine immunizations to all children, some national programs are supporting a critical phase of polio eradication focusing on small target populations. New vaccines with tremendous potential for preventing childhood deaths are becoming available, and international donors have provided substantial funding to introduce them. In some countries, however, the health infrastructure and national financial commitment required to deliver new services have not kept pace with these changes.

In 1999, USAID responded to declining and stagnating rates of immunization coverage (such as those seen for the African, Central American, and Caribbean countries in figure 2) by establishing the Boost Immunization Initiative. This initiative brought immunizations back to center stage in USAID's child survival program by providing technical support to countries to solve the operational and management problems associated with sustaining and expanding immunization programs.

Figure 2

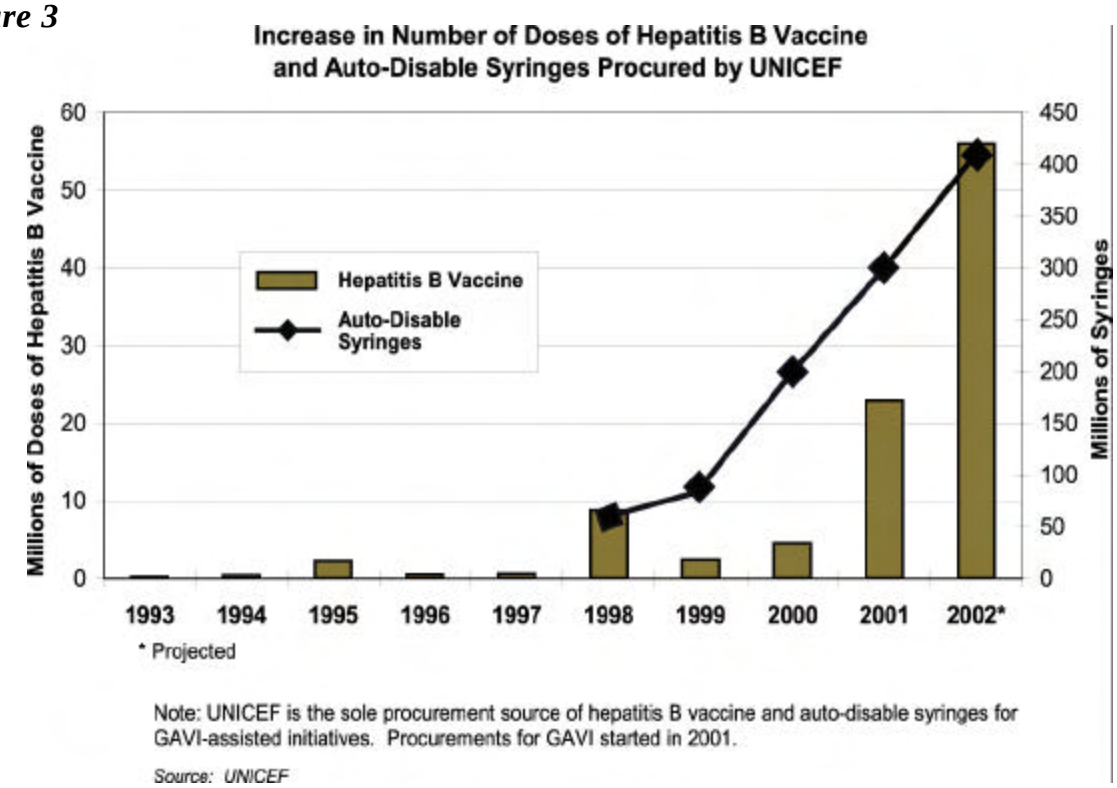
Average Annual Change in Number of Children Receiving Their Full Round of Three DPT Immunizations



Note: Dates of the two surveys used in calculating average annual change in the number vaccinated are provided in parentheses after the country name.

Source: Demographic and Health Surveys, countries with two surveys (most recent in 1999 or 2000), and U.S. Bureau of the Census.

Figure 3



USAID continues to support medical and technical advances in vaccine development, delivery, and safety. Introducing new vaccines requires substantial inputs of funding and improved vaccine logistics. USAID is assisting such efforts through its support for the Global Alliance for Vaccines and Immunization (GAVI) and the GAVI Vaccine Fund, which provides funds for new vaccines and infrastructure support to qualified countries. These efforts are reinvigorating immunization programs. Figure 3 shows the impact of the Vaccine Fund on the utilization of underused vaccines. Following the establishment of the Fund in 2000, for example, hepatitis B vaccine purchases increased dramatically.

USAID is also a major supporter of the Safe Injection Global Network (SIGN). Unsafe, unsanitary injection practices are an obstacle in many countries to increasing immunization coverage. Ensuring immunization safety requires new technologies, resources, improved program management, and safe injection behaviors. SIGN is developing and providing ways to solve injection safety problems. The substantial increase in developing-country purchases of auto-disable (AD) syringes (syringes that can be used only once) is an indication of the impact of the new focus on safety. In addition to increased hepatitis B vaccine purchases, figure 3 shows the steady increase in UNICEF's procurements of AD syringes.

USAID Strategy and Interventions

In response to the changed immunization environment, USAID has implemented a comprehensive approach that makes the best use of Agency resources and meets needs not addressed by other assistance programs. In all activities, USAID takes advantage of its capacity for in-country technical assistance, innovative technology and research, and testing and developing new approaches through its network of governmental and private sector organizations.

The objectives of USAID's approach are improvements in immunization services and

coverage, new vaccine development, and improved immunization safety. Coverage and service quality are strengthened through:

- Improved immunization planning and performance monitoring at the local level
- Better coordination of donor activities at the country level
- Improved communications about immunization services to increase demand and encourage completion of vaccination series

USAID supports new vaccine development through:

- Participation in GAVI
- Financial support to the Vaccine Fund for the purchase of vaccines
- Development of country-level procedures for using new vaccines
- Activities to increase demand for vaccines
- Selected vaccine trials

Activities to improve immunization safety include:

- Identification of behavioral obstacles associated with injection safety
- Development of improved vaccine-handling procedures and support to SIGN
- Development of safer injection and disposal technologies

Key Achievements

Boost Immunization Initiative. For the Boost Initiative, USAID selected 14 countries for intensive immunization program activities while also encouraging many other countries to increase efforts to strengthen their immunization systems. Some of Boost's activities include a private-sector vaccine endowment for Armenia, a renewed focus on “reaching the unreached” in the Dominican Republic, and a coordinated effort to build immunization systems in West Africa. In five countries where USAID has had long-term involvement (the Democratic Republic of the Congo, the Dominican Republic, Ethiopia, Ghana, and Mozambique), DPT3 coverage increased from 45.5 to 50.8 percent between 1999 and 2000. This increase represents 400,000 additional children protected from diphtheria, pertussis, and tetanus each year.

Global Alliance for Vaccines and Immunization. USAID has reinforced its commitment and support for GAVI through increased funding and technical support. The Agency awarded a $48 million grant to GAVI's Vaccine Fund and played a leading role in developing policies on injection safety, the use of vaccine vial monitors, and financial sustainability. In less than two years of operation, GAVI has approved assistance applications from 53 of the 74 eligible countries. In the next five years, with $800 million in funding support, GAVI assistance to countries is expected to protect an additional 80 million children from vaccine-preventable diseases.

Training and Mobilization in Madagascar. In Antananarivo and Fianarantsoa provinces, which contain half of Madagascar's population, USAID supports management training and community mobilization in support of immunization activities. Between 1997 and 2000, DPT3 coverage improved from 76 to 80 percent in Antananarivo and from 35 to 57 percent in Fianarantsoa. USAID assistance also helped Madagascar qualify for $15 million of support from GAVI to introduce new vaccines and expand immunization coverage over the next five years.

National Program in Guinea. USAID provides financial support and technical assistance to Guinea's national immunization program. Assistance is directed at improving administration and management in the Ministry of Health and raising public awareness of the importance

of immunization. Preliminary data indicate that Guinea now is immunizing approximately 5,000 more newborns per year than in 1992.

Immunization Coverage in Rural Guatemala. In August 2000, the department of Solola in Guatemala's western highlands reported low immunization coverage of children less than 1 year old. USAID helped Ministry of Health staff carry out a situation analysis, which found that Solala's immunization services were characterized by poor information management, a lack of coordination within the health sector, and limited health communication with the community. USAID helped the Ministry develop a new strategy that includes regular data collection on immunization coverage; improved communication in the health sector and with other groups providing immunization services; operational planning; and information, education, and communication campaigns to inform the public about the importance of immunizations. By the end of the year, measles coverage had increased from 52 to 88 percent, BCG coverage for tuberculosis from 63 to 92 percent, DPT coverage from 62 to 94 percent, and polio coverage from 62 to 94 percent.

Photo by PAHO/Armando Wasik

Improved Program Management in Bangladesh. USAID, the Ministry of Local Government, and local NGOs support improved planning, training, and vaccine logistics to increase immunization rates in urban areas not served directly by the Ministry of Health. Immunization coverage for all vaccines increased from 52 percent in 1999 to 59 percent in 2001 as a result of these programs.

Spotlight on Indonesia: Hepatitis B Vaccinations at Birth with Uniject

The transmission of hepatitis B from mothers to babies at birth is a significant health problem in many areas of the world. Hepatitis B vaccine is most effective if the first dose is given at birth, but this is seldom possible because many children in developing countries are born at home. To help remedy this problem, USAID supports the development and distribution of a single-dose, prefilled injection device called Uniject™. Uniject enables midwives and traditional birth attendants to give injections to infants born at home in rural and hard-to-reach parts of the world.

In Indonesia, a multipartner collaboration is now using Uniject to give newborns throughout the country a first dose of hepatitis B vaccine at birth. An Indonesian vaccine manufacturer fills Uniject devices with vaccine. The Ministry of Health's immunization program purchases and distributes the devices. Between November 2000 and September 2001, almost 300,000 Indonesian newborns were immunized with hepatitis B vaccine administered by Uniject devices. The Indonesian government intends to use Uniject to provide immunizations of hepatitis B vaccine at birth to all newborns, approximately 5 million per year. Partners in this large and important collaboration include the vaccine manufacturer, the Uniject manufacturer, the Indonesian government, USAID, and nongovernmental agencies.

Hepatitis B Immunizations in Central Asia. For the last 10 years, USAID has been one of the leading donors supporting immunization services in the states of the former Soviet Union. In Kazakhstan, the government revised its immunization schedule in 1998 to include hepatitis B. The government purchased vaccine to cover all newborns, and more than 90 percent of newborns now receive hepatitis B immunizations. Kyrgyzstan also revised its routine immunization schedule to include hepatitis B, and approximately 80 percent of newborns were vaccinated in 2000. USAID assistance to the governments of Uzbekistan, Turkmenistan, and Tajikistan has enabled them to apply for GAVI assistance to provide hepatitis B vaccine to newborns. Estimates indicate that when hepatitis B programs become operational in all five Central Asian Republics, approximately 10,000 lives will be saved per year.

Technical and Funding Support in Armenia. USAID provides technical support to the Ani & Narod Memorial Fund for purchasing vaccine and ensuring a stable and sustainable vaccine supply in Armenia. USAID has also contributed $400,000 to the Fund. Armenians in the United States are raising another $1 million to help the Fund procure enough vaccine to protect the approximately 35,000 children born in Armenia each year from diphtheria, pertussis, tetanus, polio, measles, tuberculosis, rubella, and mumps.

Future Perspectives

USAID will continue to dedicate resources to improve immunization coverage, establish access to new lifesaving vaccines, and ensure immunization safety. The Agency will pursue these objectives through its continued participation in GAVI and SIGN, its support for national immunization programs through the Boost Initiative, and technical assistance for building national capacity to design, implement, and sustain immunization services.

Photo by PAHO/Armando Wasik

II. Child Survival and Maternal Health

Polio Eradication Initiative

USAID plays a leading role in the global effort to eradicate polio. Since the launch of its Polio Eradication Initiative (PEI) in April 1996, USAID has provided more than $160 million for polio eradication. In the 2001 fiscal year, the Agency programmed approximately $27 million for polio eradication, an increase of about $2 million over previous years.

USAID's polio initiative aims to eradicate polio while strengthening the immunization and disease control systems that are essential for child health care in developing countries. PEI also generates partnerships with international organizations and donors who target other important children's immunization and health issues.

The polio eradication campaign is the largest public health initiative in history and one of the most successful public-private partnerships. To date, the combined efforts of Rotary International, WHO, UNICEF, the U.S. Centers for Disease Control and Prevention, USAID, national governments, nongovernmental organizations, and other "polio partners" have averted more than 250,000 deaths and 4 million cases of paralysis. The campaign is breaking the chains of poliovirus transmission and rapidly reducing the number of cases of wild poliovirus in circulation. Globally, the number of polio cases in 2001 (reported through January 2002) was 498, compared with 2,971 cases in 2000. Only 14 countries had confirmed cases of wild poliovirus, compared with 23 in 2000 and 125 in 1988.

The Americas, WHO's Western Pacific Region (including China), Europe and Eurasia, and parts of Southern and East Africa now are free of wild poliovirus. In September 2000, at a "polio summit" chaired by United Nations Secretary-

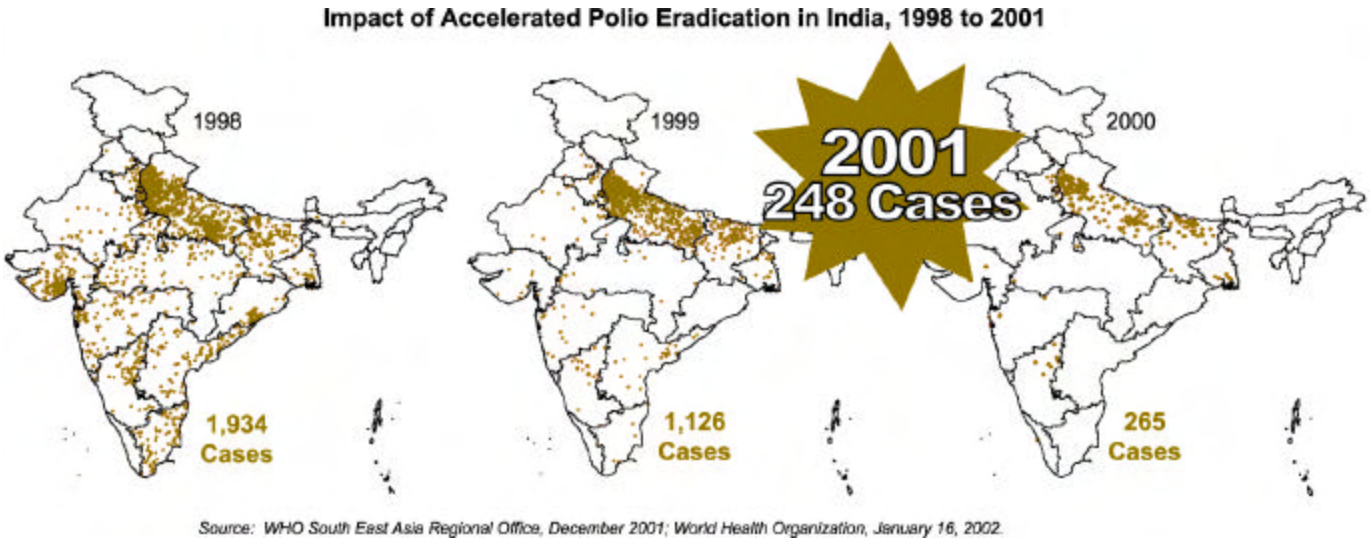


Figure 4. *Regional progress in South Asia has been dramatic. The number and geographic distribution of polio cases in India declined from 1,934 cases in 314 districts in 1998 to 248 cases in 62 districts in 2001.*

General Kofi Annan, WHO announced a new target date of 2002 (formerly 2000) for interrupting poliovirus transmission and reiterated the goal of certifying the world polio-free by 2005.

The remaining pockets of virus transmission are on the Asian subcontinent (Afghanistan, India, and Pakistan); in the Near East and Horn of Africa (Egypt, Ethiopia, Somalia, and Sudan); and in other areas of Africa (Angola, Democratic Republic of the Congo, Chad, Niger, and Nigeria). The priority in these areas is to improve the quality of national immunization days (NIDs), which target all children less than 5 years old whether they have been immunized before or not. In 2000, NIDs campaigns immunized more than 550 million children. In 2001, synchronized multicountry NIDs were held in West and Central Africa, reaching nearly 85 million children through extraordinary cooperation among countries. Many countries have started to collect data on "zero-dose" children (children who have never received polio vaccine). The proportions of these children have declined substantially in India and the Democratic Republic of the Congo.

Surveillance of new cases of acute flaccid paralysis (AFP), the signal condition for polio, also has improved. All countries now have a surveillance system for reporting AFP cases. While many countries still do not meet certification-standard quality, improvements are noticeable. Today, 128 of the 149 laboratories in WHO's global polio laboratory network are fully or provisionally accredited, and all countries have access to an accredited lab.

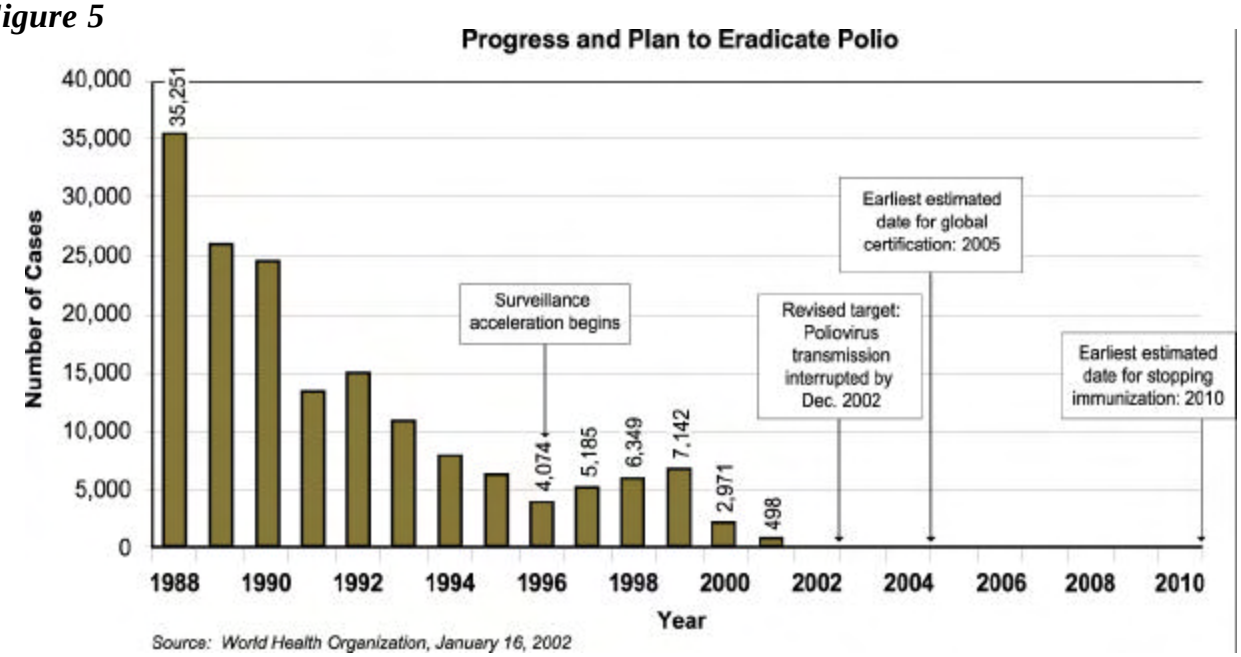
In late 2000 and 2001, outbreaks of vaccine-derived poliovirus in the Dominican Republic, Haiti, and the Philippines served as a wake-up call about the importance of maintaining routine immunizations and accelerating research on controlling virus transmission. This research, along with the ability of countries to implement reliable containment procedures for laboratory samples of poliovirus, will guide future decisions on how and when to stop polio immunizations.

USAID Strategy and Interventions

USAID's polio eradication efforts reflect a continued political commitment to the global initiative. USAID is at the forefront of providing the necessary support for improving communication, advocacy, and social mobilization to ensure that every child under age 5 receives oral polio vaccine. USAID funds research on the best ways to reach all children, particularly those in hard-to-reach groups who are reluctant to accept immunization. Agency funds help countries implement NIDs by supporting microplanning sessions and logistics assistance to "cold chain" activities for storing and delivering vaccine under the necessary temperature-controlled conditions. In major poliovirus reservoir areas, USAID supports additional

Photo by Glen Ivers/Lutheran World Relief

Figure 5



supplemental immunization activities. USAID funds also support improvements in AFP surveillance and laboratory accreditation.

USAID plays a leading role in interagency coordinating committees (ICCs). These committees coordinate and review polio activities at the international, regional, national, and subnational levels. USAID is active at all these levels. The ICCs invite partner agencies to help develop work plans and budgets based on epidemiologically sound strategies. They identify necessary country policies and resources and work to resolve problems. USAID supports expanding ICCs to include representatives from NGOs and move beyond polio to other areas of immunization and disease control. The expansion to NGOs has been most successful in countries where NGOs that belong to the Child Survival Collaborations and Resources (CORE) Group are working. The USAID-supported CORE Group polio project funds U.S.-based and local NGOs to become involved in polio eradication.

Key Achievements

An external review of USAID's Polio Eradication Initiative concluded that "USAID has made a significant contribution to the global polio eradication initiative and this contribution is acknowledged and appreciated by partners and by recipient countries." In addition to supporting NIDs and ongoing activities of the global initiative, USAID's polio eradication activities were successful in the following areas:

U.S. PVO Involvement. USAID funds the CORE Group of PVOs to provide subgrants to 19 U.S.-based NGOs working in Angola, India, Bangladesh, Nepal, and Uganda. Seventeen of the NGOs reported collaborating with national-level NGOs to increase polio immunization coverage during NIDs, to improve social mobilization and surveillance, and to use matching funds to provide assistance to families with polio-affected children. Sixteen NGOs detected and reported AFP cases. Fourteen tracked zero-dose children – one NGO in Bangladesh identified 13,502 zero-dose children in the first round of NIDs and 9,079 in the second round.

Voice of America Collaboration. The Voice of America (VOA) provides a steady supply of programming targeted to countries where polio

remains endemic. In 2001, VOA produced more than 1,000 polio-related news reports, public service announcements, feature stories, promotions, and special programs. In the past three years, VOA has broadcast more than 2,600 reports and sent 23 reporters to 22 countries where they filed reports in 19 languages. VOA reporters convey news about NIDs and report on the polio eradication program, the human costs of polio, and the impact of polio eradication on health systems. They also interview polio eradication personnel and counter rumors and misinformation about polio and polio immunization.

"Days of Tranquility" and Safe Corridors in Conflict Countries. In October and November 2000, United Nations Secretary-General Kofi Annan called for "Days of Tranquility" in the Democratic Republic of the Congo (DRC) to ensure that children in conflict areas could be immunized during immunization days. USAID, the largest donor to polio eradication in the DRC, was a major participant in negotiating the Days of Tranquility. In early 2001, VOA's Pashto and Dari language coverage of polio eradication efforts in Afghanistan encouraged authorities to mobilize vaccination teams and helped create safe corridors in regions of conflict to allow vaccinators to operate safely.

Surveillance in Angola. In Cuanza Sul and Cuanza Norte provinces and Ganda and Kuito municipalities, CORE partners created an integrated commission that investigates areas where suspected AFP cases are reported. The commission monitors the collection and shipment of stool samples through radio contact. Active surveillance is improving, and AFP cases are detected sooner after the onset of paralysis than they were previously. After two AFP cases were detected in the first quarter of 2001, a supplementary immunization day was conducted in Ganda municipality. PVOs are working with national and provincial health authorities to improve stool sample collection and timely communication of test results to the local level.

Approaching Eradication: 2000-2001 Accomplishments

99% decrease in all polio cases between 1988 and 2001*

83% decrease in all polio cases between 2000 and 2001*

Number of countries suspected to have wild poliovirus cases: 14 in 2001,* down from 23 in 2000

20% improvement in surveillance between 1999 and 2000

No type II poliovirus detected since October 1999

** 2001 figures reported as of mid-January 2002*

Future Perspectives

Substantial challenges remain in the coming critical years. These challenges will likely affect the time frame and costs of the global program. Although many organizations continue to provide funds and volunteers to the effort, these contributions are not enough. Political commitment is fragile in a few countries, and some have become complacent and allowed the quality of their programs to slip. Greater commitment, resources, and funding from the international community are needed.

Difficulties and costs vary. Reaching all children under age 5 requires many vaccination teams. While surveillance in Asia is improving, in Africa it lags behind global standards, and more surveillance officers and better surveillance systems are needed. In view of the outbreak of vaccine-derived poliovirus cases in the Dominican Republic and Haiti in 2000, accelerated research is needed to develop strategies for stopping polio immunization, now expected to take place no earlier than 2010.

Countries in conflict pose special difficulties. Reaching every child during NIDs is a major challenge. Despite Days of Tranquility, access to some children remains limited, and large numbers do not receive vaccine. In Angola, for example, nearly one-third of the country's children are not accessible because of the country's civil war.

Maintaining momentum in the face of these challenges is a priority for the polio partners. USAID is committed to accelerating activities and encouraging other organizations to continue the progress achieved to date.

Photo by PAHO/Armando Wisk

Promoting Breastfeeding and Reducing Malnutrition and Micronutrient Deficiencies

Photo by United Nations

Working with partners throughout the world, USAID's nutrition programs have helped decrease serious malnutrition rates in developing countries. Nonetheless, persistent and widespread moderate malnutrition continues to compromise the survival and growth of millions of children. "Hidden hunger" caused by micronutrient deficiencies, especially vitamin A deficiency, has a direct relationship with children's risk of mortality. WHO has declared malnutrition to be a contributing factor in more than half of all child deaths, and there is evidence that 83 percent of these deaths are associated with only moderate malnutrition.

The nutritional status of infants and children is also a critical element in their future health and development. Poor nutrition initiates a vicious cycle. Undernourished adolescent girls become malnourished women and give birth to low-birthweight babies who are deprived of essential nutrients both before and after birth. USAID's program focuses on improving the nutrition of mothers, mothers-to-be, and infants and young children at every stage of this cycle.

USAID Strategy and Interventions

USAID's nutrition programs aim to prevent malnutrition and micronutrient deficiencies in children and women of reproductive age. The key components of the program are:

- Promotion of breastfeeding and appropriate infant feeding
- Micronutrient supplementation and food fortification
- Community-based nutrition initiatives
- Food security initiatives

For infants and young children, USAID promotes immediate initiation of breastfeeding and exclusive breastfeeding up to 6 months of age, followed by appropriate infant foods, food fortification, and improved feeding practices. USAID supports vitamin A for all children 6 to 59 months of age through high-dose supplementation or food fortification, as well as the participation of communities in monitoring their children's nutritional health and designing locally appropriate and effective nutrition activities.

For women of childbearing age, USAID supports iron folate supplementation (especially for mothers-to-be and lactating mothers); nutrition education to promote dietary diversity and intake of nutrient-rich foods; and strategic use of Public Law 480 Title II fortified foods to benefit both women and children.

Breastfeeding and Infant Feeding Practices

Breast milk's nutritional, immunologic, and hygienic properties make it an infant's best food. Breast milk is even more important to child health in developing countries, where

exposure to pathogens in water and foods increases the frequency and intensity of infectious diseases in young children. Exclusive breastfeeding (no foods or liquids other than breast milk) is the optimal way to preserve a baby's health in the initial months after birth.

USAID programs promote breastfeeding and appropriate infant feeding. They also aim to counter cultural practices that discourage optimal feeding practices. Women in some cultures, for example, deny their newborns the benefits of the first milk, or colostrum, for many hours or even days. In other cultures, women expose their children to pathogens by not exclusively breastfeeding them for the first six months of infancy. Mothers in resource-poor countries are often unable to introduce nutritionally adequate foods at the right time to complement breastfeeding. USAID's programs help mothers shift from these practices to more appropriate breastfeeding and infant feeding practices.

Key Achievements

- Faced with a more than 50 percent malnutrition rate among children, USAID and other partners helped the Ministry of Health in **Madagascar** introduce the Champion Communities Initiative, an effective community-based nutrition education program. The percentage of women initiating breastfeeding

Breastfeeding and HIV Infection: USAID Research and Recommendations

Safe breastfeeding of infants is one of the most complex and controversial aspects of mother-to-child HIV/AIDS transmission. In environments where HIV-infected women know their HIV status and infant formula is safe, affordable, and culturally acceptable, avoidance of breastfeeding by HIV-infected mothers can prevent all postnatal mother-to-child transmission. However, the use of infant formula in low-resource settings is often unsafe and associated with high rates of illness and death. Policy makers and programs in such settings face the dilemma of choosing between recommending breastfeeding (and the possibility of mother-to-child HIV transmission) or recommending infant formula with its increased risk of infant illness and mortality.

Recent research findings provide more information for decision makers. These findings demonstrate that infants who are exclusively breastfed – i.e., infants who receive no other liquids, milks, or solid foods before 6 months of age – have a lower risk of acquiring HIV through breastfeeding than infants who receive mixed feeding.

USAID's agency-wide breastfeeding policy guidance for field programs supports exclusive breastfeeding for the first six months and then, for mothers who have HIV infection, a shortened duration of breastfeeding if a safe alternative is available. USAID recommends this schedule of exclusive breastfeeding as a viable and good choice for child survival, even in HIV-endemic areas.The policy recognizes that decisions on infant feeding must be based on local circumstances, within the framework of informed choice and confidentiality. HIV-infected women should receive counseling that includes information about the risks and benefits of different infant feeding options. This information must take into account the availability, affordability, and safety of these options. The final decision should be the woman's, and she should be supported in her choice.

immediately after childbirth increased from 34 to 73 percent in project areas.

- USAID achieved increases in breastfeeding in **Bolivia** through work with local partners and the Ministry of Health. Early initiation of breastfeeding (within one hour of birth) increased from baselines of 38-56 percent to 60-64 percent in program areas. Exclusive breastfeeding increased from 50 to 60 percent between 2000 and 2001, and initiation of complementary foods at age 6 months rose from 53 to 63 percent.
- In **India's** Bihar state, one of the country's poorest, a culturally sensitive program is working to change inappropriate infant feeding practices that contribute to high infant mortality. These practices include discarding colostrum, introducing unsafe liquid foods prematurely, and delaying the introduction of solid foods. After locally acceptable behaviors to address these practices were introduced in Ranchi district, exclusive breastfeeding rates increased from 12 percent in 1999 to 28 percent in 2001, and 53 percent of women initiated breastfeeding in a timely fashion, up from 29 percent.

Micronutrient Supplementation and Food Fortification

Micronutrient deficiencies exist even in populations whose diets are thought to be adequate. In parallel with programs to improve diets, USAID supports programs to address specific micronutrient deficiencies, especially vitamin A, iron folate, and iodine.

Vitamin A deficiency (VAD) can cause anemia, retarded growth, and impaired vision, including blindness. VAD also reduces resistance to infections, thus contributing to more severe and prolonged childhood illness. USAID-funded studies were the first to demonstrate that vitamin A supplements can reduce child mortality by 23 to 34 percent in areas where VAD is common and basic child survival services are lacking. Many countries now distribute vitamin A capsules, which offer protection from VAD for four to six months, along with polio vaccine during national immunization days (NIDs). Recognizing that NIDs are being phased out as large geographic areas become polio-free, USAID has taken the lead in helping countries establish and monitor programs to distribute vitamin A independently of NIDs.

USAID also is committed to iron folate supplementation to reduce the number of women and children who suffer from anemia due to a lack of iron in their diet. Iron-deficiency anemia hinders cognitive development in children and in Africa accounts for as much as 25 percent of maternal deaths. Low-dose iron supplementation programs can produce a 50 percent reduction in anemia.

Micronutrient supplementation programs are capable of achieving high coverage in a relatively short time. Fortification of foods already in the diet has greater potential for sustainability, however, because costs are shared with consumers and the private sector. In addition, fortifying foods that everyone eats benefits people of all ages, not just children.

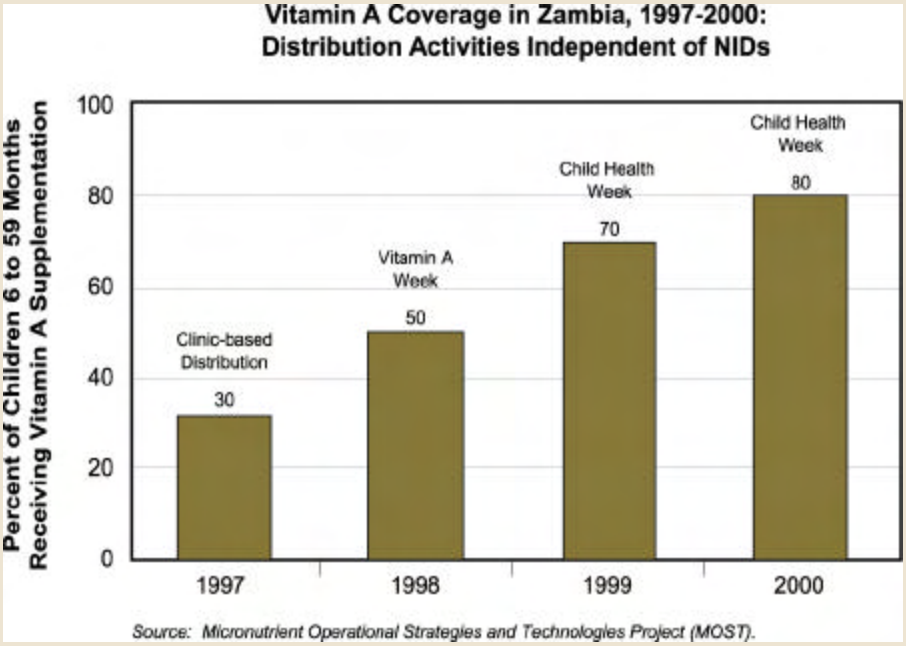
The global effort to combat iodine deficiency is a good example of a sustainable and successful fortification program. Iodine deficiency remains the leading cause of preventable mental retardation and loss of intellectual potential among children in developing countries. Its effects on physical and mental development begin before birth. USAID supports the global effort led by UNICEF and Kiwanis to iodize household salt. In 2001, USAID provided $3.9 million to UNICEF to expand and strengthen salt iodization programs in 18 countries in Asia, Africa, Eastern Europe, and Eurasia. Today, more than 70 percent of the world's household salt is iodized, protecting as many as 90 million newborns each year from iodine deficiency.

Vitamin A Coverage: Supplementation Activities in 15 Countries

USAID now helps 15 countries carry out semiannual distributions of vitamin A capsules. In 2002, the Agency will further expand this high-impact intervention.

Figure 6 below illustrates the successful introduction of a second round of high-dose vitamin A supplementation to children in Zambia in between NIDs distributions. In 1997, 30 percent of all children 6 to 59 months of age received a vitamin A supplementation through a clinic-based distribution system. In 1998, a "Vitamin A Week" was introduced and coverage rose to 50 percent. In 1999 and 2000, other preventive child survival services were combined with vitamin A distribution in a "Child Health Week," and coverage reached 80 percent. As NIDs are phased out in Zambia, Child Health Weeks will be implemented twice yearly to ensure continued high vitamin A coverage.

Figure 6



Key Achievements

- In 2000, **Ghana** achieved more than 80 percent vitamin A coverage of children 6 to 59 months of age. High-dose supplements were used in the first two national distribution rounds, which were conducted independently of NIDs.
- USAID stimulated the adoption of a policy to build a national vitamin A distribution program in **Uganda**, which previously had given little attention to vitamin A supplementation.
- Surveys in **Nicaragua**, which fortifies wheat flour and provides pregnant women with iron supplements, showed a decline in anemia rates from 34 percent in 1993 to 24 percent in 2000.
- USAID is the leader in developing guidance for vitamin A programs based on scientific research and program experience. USAID shares its expertise with the **International Vitamin A Consultative Group** (IVACG), an international forum of experts. Based on current evidence, IVACG has recommended providing increased and more frequent doses of vitamin A for infants and lactating women.
- In 2001, USAID contributed to the formation

of the **Global Alliance to Improve Nutrition** (GAIN), an international coalition of bilateral and multilateral donors, foundations, and the private sector. GAIN addresses specific nutrition issues, with food fortification its first priority.

- In the **Philippines**, USAID supports a five-year strategy to provide half of the recommended daily allowance of vitamin A, iron, and iodine through food fortification. Legislation mandating fortification of wheat flour, vegetable oil, sugar, salt, and rice with appropriate micronutrients has been passed. USAID assisted in the negotiations between the public and private sectors about implementing and enforcing the legislation.

Community-Based Initiatives

Overburdened health care delivery systems are often unable to give nutrition the attention and resources it requires. Therefore, programs that help communities take an active role in their children's nutrition are needed. Techniques used by health facilities, such as growth monitoring and nutrition education, can also be effective when implemented by communities with parental participation.

Key Achievements

- In **Honduras**, increases in exclusive breastfeeding and improved complementary feeding were recorded in communities participating in the *Atencion Integral a la Ninez* (AIN) program. Because of its success in Honduras, the AIN program is being replicated in nine other countries.
- **Guinea** is one of eight countries that have successfully implemented the HEARTH model for raising community awareness of malnutrition, empowering communities to seek local solutions, and teaching healthy behaviors to families. In 38 HEARTH districts in Guinea, 85 percent of 980 participating malnourished children gained weight.
- In **Benin**, exclusive breastfeeding increased from 19 percent in 1996 to more than 50 percent in 2000 in areas where the "minimum package" (MinPak) of nutrition interventions was introduced. MinPak emphasizes six priority actions that can be implemented at several points in a child's early life to ensure a mix of preventive and curative services.

Food Security

In "food-secure" countries, people have both physical and economic access to sufficient food to meet their dietary needs for a productive and healthy life. Food security is closely linked to nutrition issues in developing countries. The USAID nutrition program's main components – promoting breastfeeding, providing micronutrients, and empowering communities to take charge of their nutrition – are all part of the effort to make nations food-secure.

USAID also addresses food security issues such as agricultural production and food aid. Agricultural production contributes not just to farmers' incomes but also to their nutritional health and economic productivity. In situations where natural and manmade disasters curtail agricultural production or market processes are interrupted, emergency relief is often required to help people survive.

Key Achievements

- In **Nigeria**, USAID is promoting community-based education and the use of "quality protein maize" to improve the quality of a readily available food that is widely used to complement breast milk. Despite the country's potential for food production, 36 percent of Nigerian children under age 5 are malnourished.
- Since February 2000, continuous food relief in targeted areas of **Ethiopia** and the provi-

sion of enriched supplementary food under USAID's Title II program are helping to overcome the effects of the country's long-term drought. Despite deteriorating conditions, stunting rates in program areas in Tigray declined from 56 percent in 1997 to 51.5 percent in 2000. USAID has been working with the government and PVO partners to strengthen nutrition programs and extend the integration of food aid and financial assistance.

Future Perspectives

Community-supported breastfeeding networks and national supplementation programs are becoming well established in developing countries. USAID now faces the challenges of taking its nutrition initiatives to scale and building more sustainable programs. USAID is working with partners from the donor community and the private sector to meet this challenge. GAIN is an example of such a partnership.

USAID-supported research has provided the groundwork for many of its current nutrition programs. USAID now is supporting research in Ghana and Bangladesh to replicate a study in Nepal that reported a dramatic impact of vitamin A on maternal mortality. If the findings are positive, vitamin A supplementation for mothers will become a future program intervention. Other promising research areas include the use of zinc supplements to decrease mortality from diarrhea, pneumonia, and malaria; ways to increase the impact and scale of community-based intervention programs; and the impact on health and survival of combinations of micronutrients compared with single micronutrients.

Photo by Richard Franco

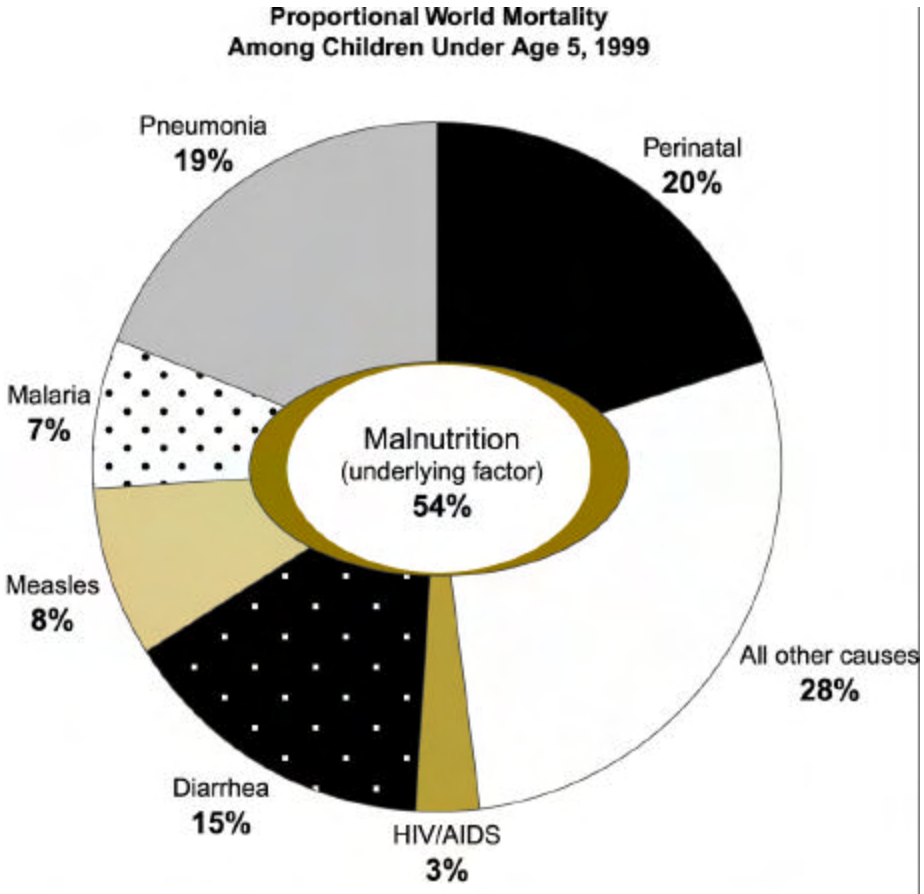
II. Child Survival and Maternal Health

Acute Respiratory Infections, Control of Diarrheal Diseases, and Integrated Management of Childhood Illness

During the 1980s and 1990s, child survival and disease programs focused in particular on diarrhea, vaccine-preventable diseases, and acute respiratory infections (ARI) as causes of child mortality. These programs, particularly those aimed at diarrhea and vaccine-preventable diseases, contributed to significant declines in mortality. Nonetheless, as shown in figure 7, ARI and diarrhea remain among the leading causes of death among children. ARI, mostly pneumonia, is the second leading cause of death in children under age 5, killing more than 2 million annually. Mortality due to diarrhea also remains high, although deaths attributed to diarrheal diseases worldwide declined by more than half, from 3.3 million to 1.5 million, between 1990 and 1999 (*WHO Bulletin*, 2000).

In the mid-1990s, UNICEF and WHO, with substantial USAID support, developed the Integrated Management of Childhood Illness (IMCI) strategy as a new approach to sustaining and accelerating declines in child mortality. Since its introduction, IMCI has brought together interventions directed at diarrhea, ARI, malaria, malnutrition, and measles. In recent

Figure 7



Source: Evidence and Information for Policy/WHO, Child and Adolescent Health and Development, 2001. On line www.who.int/child-adolescent-health/inegr.htm

years, USAID has supported expanding the use of the IMCI strategy at the community and household levels as part of a concerted effort to extend the coverage of child health care and the use of basic services to previously unreached populations in the poorest countries.

USAID Strategy and Interventions

Acute Respiratory Infections. The 1990 World Summit for Children established a goal of a one-third reduction of ARI-associated deaths in children under age 5 by 2000. This goal was not achieved. According to the World Bank, ARI accounts for 30 to 50 percent of child visits to health facilities and 20 to 40 percent of child hospitalizations. Although most cases of pneumonia can be effectively treated with low-cost antibiotics, medical care is often sought too late in the course of the illness. Achieving a major impact on ARI-related mortality requires an expanded effort to 1) promote timely recognition of danger signs by mothers and other caretakers and 2) provide access to appropriate treatment. Comprehensive immunization against *Haemophilus influenzae* type b (Hib) and high levels of DPT3 and measles vaccination coverage are also cost-effective ways to prevent ARI deaths in children.

USAID programs and research focus on ARI prevention, early recognition of ARI, and proper care of children with ARI. USAID recognizes the importance of immunizations in controlling ARI and of monitoring bacterial resistance where widespread antibiotic treatment is required.

USAID's ARI efforts promote:

- Prevention through improved nutrition and breastfeeding, immunization, and reduced indoor air pollution
- Early ARI recognition and improved home management by caregivers
- Prompt recognition of symptoms and signs of pneumonia by health workers
- Rapid treatment with antibiotics in accordance with national treatment policies
- Rapid referral of the most serious ARI cases

Diarrheal Diseases. In the 1960s, USAID supported basic and applied research that led to the development of oral rehydration salts (ORS), a simple and effective remedy to replenish fluids and essential minerals lost through dehydration. Oral rehydration therapy (ORT), which combines ORS with breastfeeding in infants and other fluids and supplemental feeding in older children, was introduced in the 1970s and became a cornerstone of diarrheal disease control programs worldwide. At the World Summit for Children in 1990, more than 150 countries pledged to attain 80 percent ORT coverage by 1995, with the goal of achieving a 50 percent reduction in diarrheal mortality by 2000. Table 1 shows the progress made toward the coverage target in different regions.

Today, the challenge is to reach populations not yet covered by ORT and promote adequate care and care-seeking actions at the household and community levels to prevent diarrhea-related illness. USAID supports interventions against diarrheal disease that extend the reach of ORT programs, improve hygiene and sanitation at the household and community levels, and develop more effective means of preventing and treating diarrhea.

Key Achievements

- In **Nepal**, where USAID assistance has contributed to a 50 percent reduction in under-five mortality over the past 15 years, a USAID program helped improve the quality of treatment of children with pneumonia by female community health volunteers. In program areas, 96 percent of cases are treated according to standard drug regimens.
- Research in the **Gambia** shows that rates of pneumonia are reduced by about 25 percent in children who receive Hib vaccine. Hib

Table 1 Estimates of ORT (ORS and/or recommended home fluids), 1993 and 2000

	Estimates of oral rehydration therapy use during episodes of diarrhea (%)	
Region	**1993**	**2000**
Sub-Saharan Africa	43	64
Middle East and North Africa	51	60
South Asia	19	69
East Asia and Pacific	49	81
Latin America and Caribbean	58	58
Developing Countries	40	69

Sources: La Force Marc F. et al. 2001. A Better Future for Children: Progress Toward World Summit Goals for Health and Nutrition. Arlington, VA: BASICS II.
UNICEF. 2001. The State of the World's Children 2001. New York: UNICEF.

immunizations are now part of the Gambia's national immunization program. The results of the Gambia research contributed to GAVI's decision to promote the use of Hib vaccine in national immunization programs.

- USAID-supported research in several Asian, African, and Latin American countries found that daily zinc micronutrient supplements can help protect preschool-aged children against acute lower respiratory infections and acute watery diarrhea. WHO has concluded that zinc is safe and effective for treating the latter condition.
- In **Uzbekistan**, USAID funded a mass media and community education campaign to increase mothers' knowledge of appropriate care for children with diarrhea. The campaign targeted approximately 35,000 women with children under age 5 in the state of Ferghana. Surveys before and after the campaign revealed that the number of women who would give more liquids during diarrheal illness to prevent dehydration increased by 21 percent and those who would give more food to avoid weight loss increased by 42 percent.
- WHO research supported by USAID is leading to new recommendations about a reduced salt formulation of oral rehydration solution (R-ORS). The WHO research found that R-ORS decreased by 33 percent the need for intravenous fluids in children hospitalized for acute non-cholera diarrhea, a considerable cost saving. WHO is in the process of recommending global introduction of the R-ORS formulation.
- In **El Salvador**, USAID supports hygiene education and has helped the country establish potable water and sanitation facilities throughout the country. The number of cases of diarrhea reported in children under age 5 decreased by between 14 and 65 percent from the baseline level in nearly 90 percent of the sites where latrines, potable water, and behavior change activities were introduced. This approach is being replicated in areas where access to potable water and sanitation decreased after the earthquakes of 2001.
- In the **Democratic Republic of the Congo**, USAID provided access to clean water and latrines in seven Kinshasa markets that serve the majority of the city's 6 million inhabitants. The units are maintained by NGOs and the private sector through funds generated by their use. Hygiene education teams use the units as sites for teaching the market community about hygiene. In less than one year, the knowledge of food vendors and restaurant managers about the causes of diarrhea, and their practice of hygiene behaviors known to reduce diarrheal disease, showed two- to fivefold increases.

USAID Strategy and Interventions: IMCI

USAID was a major supporter of the clinical and applied research that developed the IMCI strategy, and the Agency continues to support its implementation and expansion. By 2001, with USAID and WHO support, the strategy had been implemented in 86 countries.

IMCI began as a facility-based approach focusing on health worker skills and health system improvements, but it has now expanded to include key community and household practices that can promote child health and survival. USAID's efforts increasingly are directed toward IMCI's community and household component.

Key Achievements: IMCI

- An interagency working group comprising UNICEF, WHO, the World Bank, partner collaborating agencies, and the PVO CORE Group, is testing an IMCI costing tool in Bolivia, Nepal, and Nigeria. The tool will help project costs for IMCI start-ups, expansions, and recurrent expenditures. A costing element for the community component of IMCI is being tested in Honduras.
- USAID is funding a "gold standard" study in **Uganda** as part of the WHO Multicountry Evaluation of IMCI. This study will assess and document the impact of IMCI on family

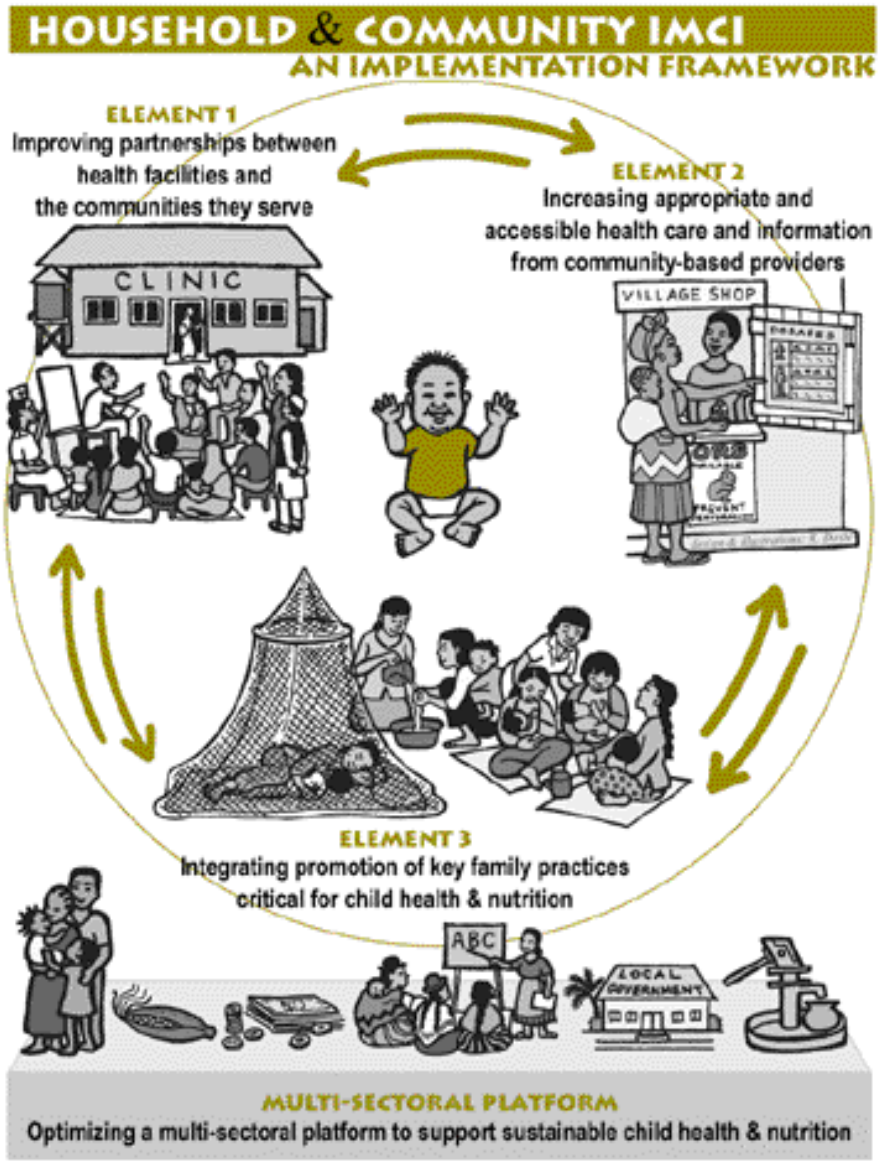


Figure 8. *USAID and the CORE Group of 38 U.S. PVOs have developed this implementation framework for the community/household component of IMCI. The framework has been disseminated to eight countries in USAID's Latin America/Caribbean region and has been endorsed and applied by a number of PVOs in country programs worldwide.*

Source: Child Survival Technical Support Project (CSTS), Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI. CORE, BASICS II 2001. Kathy Strauss Design.

behaviors, child nutrition, and mortality. Uganda is one of the African countries fully implementing all three IMCI components (health facility, training, community/household). The Uganda study has defined a minimum package of indicators for monitoring IMCI implementation, especially the community/household component.

- In **Ecuador's** Imbabura province, USAID supported the development of modules for facility- and community-based IMCI and also supported training for workers. From 1994 to 1999, the proportion of Imbaburan children under age 5 with diarrhea who received more fluids increased from 36.3 to 45.9 percent, while nationally the proportion decreased from 57 to 44.4 percent. The proportion of children in Imbabura who received more fluids and the same or more food during their illness increased from 5 to 24.7 percent, while nationally it decreased from 25.1 percent to 18.3 percent.
- **Senegal** carried out a national assessment of the Drug Management for Childhood Illness (DMCI) tool developed by USAID to help central and local health managers identify drug-related difficulties in implementing IMCI. The assessment findings will feed into a strategic plan for selecting interventions to solve drug management problems.

Future Perspectives

USAID will continue to support efforts to define IMCI within a broader health and development context. The emphasis on community needs presents possibilities for engaging the public- and private-health sectors and achieving impacts on a larger scale. USAID will explore these and other investment opportunities for reducing infant and child mortality. USAID will continue to explore the use of Hib vaccine and other new vaccines that offer promise for primary prevention of severe ARI and diarrheal disease.

Photo by PAHO/Armando Wesk

Maternal and Neonatal Health

Despite improvements in maternal health and survival in most developing countries, approximately 500,000 women die of pregnancy-related causes worldwide each year. Most of these deaths, as well as most illnesses and disabilities related to pregnancy and birth, are preventable. Figure 9 shows the lifetime risk of maternal death in different parts of the world.

Maternal health is essential to child survival and health. From birth, an infant relies on its mother for support and nourishment. Children under age 5 whose mothers die from pregnancy-related causes have a three to 10 times higher risk of dying within two years than if their mothers had survived. Maternal health is especially important to the survival of newborns, who account for about half of the world's infant deaths annually.

Maternal health continues to improve in many developing countries, thanks in part to interventions that USAID helped develop and support. Interventions that promote a safe and clean delivery (such as ensuring that trained health

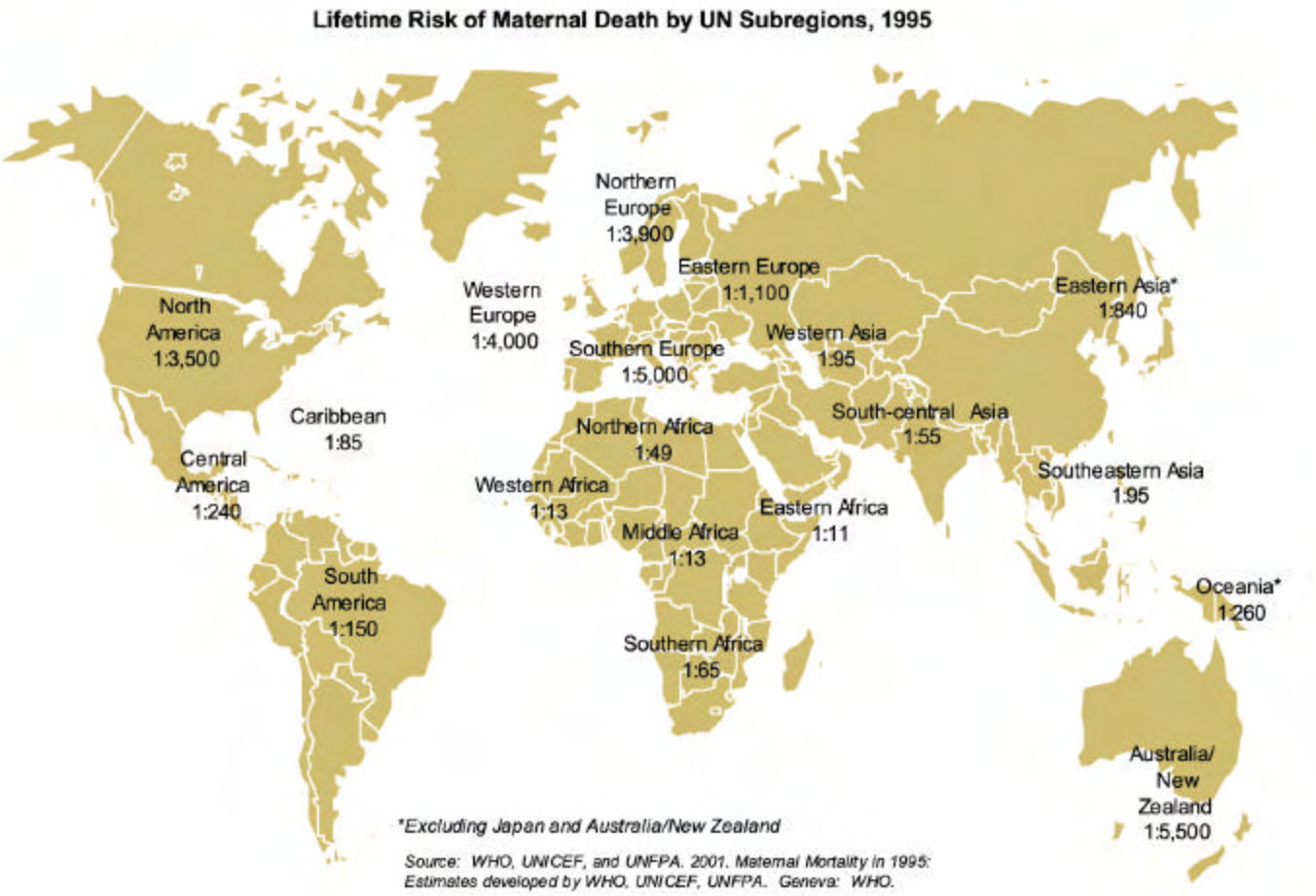


Figure 9. *A recent analysis of global maternal mortality in 1995 found that Africa had the most maternal deaths, having surpassed Asia during the early 1990s. One of every 16 African women will die of pregnancy-related causes, compared with one of every 110 Asian women, one of every 160 Latin American and Caribbean women, and one of every 3,500 North American women.*

personnel attend births, infection prevention during and after delivery, and hemorrhage control) have proved effective for saving the lives of mothers and children.

Figure 10 illustrates the impact of USAID maternal health interventions using trends in deliveries attended by a medically trained person. The average percentage of births attended by trained personnel has increased in all USAID regions over the past decade, although more than half the births in the sub-Saharan Africa and Asia/Near East regions still are unattended.

USAID Strategy and Interventions

USAID's approach to maternal health emphasizes interventions that also have a substantial impact on newborn health. These interventions include:

- Quality prenatal care, delivery, and postpartum services by trained providers
- Management of delivery complications such as hemorrhage, infection, high blood pressure, and prolonged labor
- Promotion of proper nutrition and micronutrients including iron and folate supplementation
- Promotion of early and exclusive breastfeeding
- Counseling on safe health practices during pregnancy, including hygiene and sanitation
- Prevention and treatment of infectious diseases and postpartum infections through clean delivery practices, tetanus toxoid immunization, presumptive treatment for malaria, and syphilis control

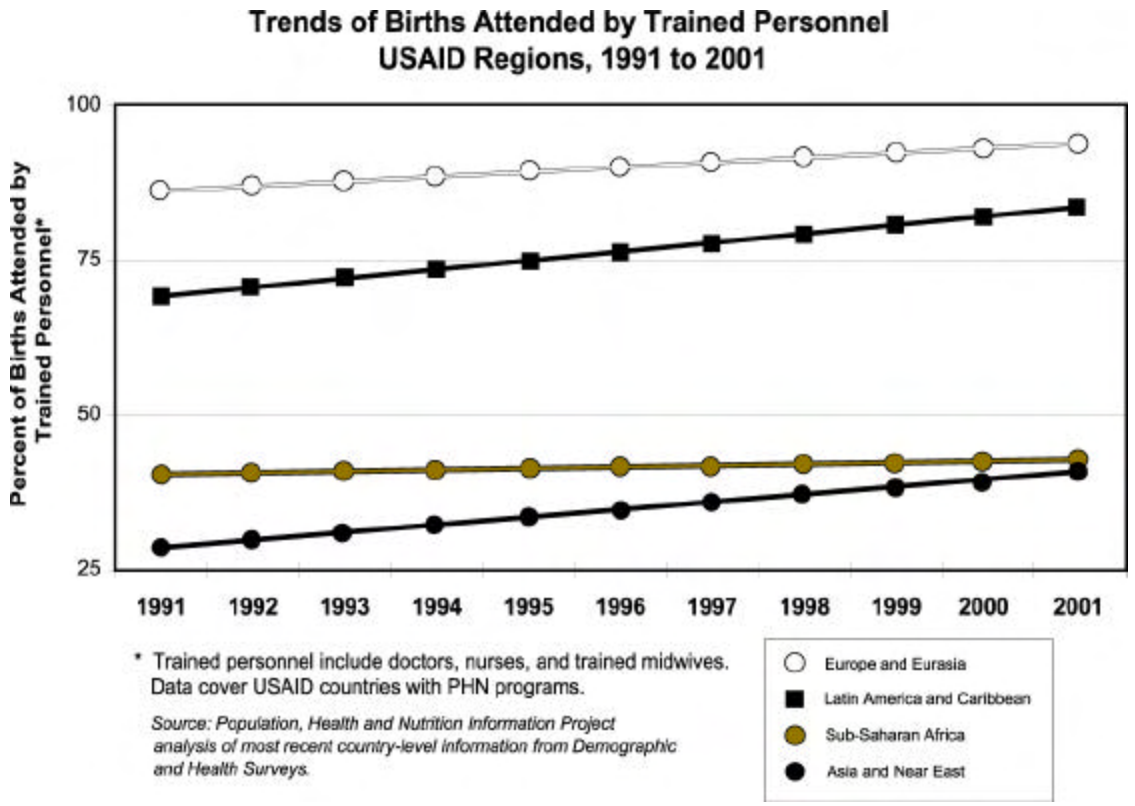


Figure 10. *The percentage of births with "skilled attendance," i.e., births attended by a medically trained person, correlates with maternal mortality ratios (which are imprecise and difficult to measure) and is sometimes used as a proxy indicator of maternal mortality.*

- Prevention of maternal-to-child transmission of HIV/AIDS

USAID studies, designs, and implements innovative approaches to maternal and newborn services, especially for poor and vulnerable populations. In FY 2001, USAID allocated about $50 million for maternal health and survival programs.

Key Achievements

Improving Quality of Care at Delivery. A USAID-supported program has developed a training strategy for skilled birth attendants using recognized standards of care. The strategy builds provider skills and strengthens the quality of facility-based services in developing countries. In 2001, this program funded and disseminated *Managing Complications in Pregnancy and Childbirth*, a manual for district-level midwives and physicians. The manual is a key component of the global strategy to improve policies and practices to reduce maternal and newborn deaths. It has been accepted in many USAID countries and beyond. The manual has been translated into French, Spanish, Russian, Mandarin Chinese, Mongolian, Bahasa (the language of Indonesia and Malaysia), and Laotian, filling the need for better information on state-of-the-art obstetric practices in many countries.

Evidence-Based PIH Guidelines in Russia. USAID maternal health funds have achieved rapid results in the Tver district in Russia, where pregnancy-induced hypertension (PIH) was the leading cause of maternal mortality. USAID provided technical assistance to three hospitals to develop evidence-based guidelines, promoting the use of magnesium sulfate (the drug therapy of choice) and early delivery for mothers with moderate and severe PIH. The guidelines changed the way hospital physicians, nurses, and midwives understand and approach PIH. Since the guidelines were implemented in 1998, no maternal deaths or cases of eclampsia (convulsions) have occurred at the Tver City Maternity Hospital.

Comprehensive Postpartum Services in Jordan. A significant portion of maternal and neonatal deaths occurs in the postpartum period a few days after birth. This period is a crucial time to teach mothers about practices that will enhance their infants' health and survival. In Jordan, the national family planning association recently opened 21 comprehensive postpartum centers around the country to provide breastfeeding and child spacing counseling and infant immunizations. In 2000, 65 percent of women who gave birth in a health facility with a postpartum center returned for postpartum care, up from 6 percent in 1990. The centers have hosted delegations from Egypt and the Palestinian Authority who visited to learn about the program.

Managing Delivery Complications in Guatemala. With USAID technical support, Amatitlán Hospital in Guatemala has made great strides in reducing delivery complications. The hospital serves more than 200,000 people and manages more than 350 births monthly. After incorporating improved childbirth interventions, the hospital reduced cases of postpartum hemorrhage and the use of episiotomy (surgical cuts that are only medically necessary in selected cases) during delivery. By using low-cost postdelivery practices, including the use of pharmaceuticals and uterine massage, the number of transfusions performed for postpartum hemorrhage declined. Episiotomies among first-time mothers also declined, from nearly 100 percent to just 4 percent. These changes in practice improved the health of mothers while greatly reducing costs for hospitalization, transfusion equipment, sutures, anesthetic, sterilization, and laundry.

Malaria Control in Tanzania. A mother with malaria is at risk of anemia, premature delivery, and delivery of a low-birthweight baby, placing her and her infant at risk of illness and death. In an effort to control malaria during pregnancy and improve birth outcomes, USAID in 2000 played an important role on a national task force in Tanzania that changed the national malaria policy. The new policy includes presumptive treat-

Spotlight on the Philippines: Healthy Pregnancies through Midwife Clinics

In 2000, the innovative Well-Family Midwife Clinic program in the Philippines established 50 new private-sector midwife clinics, bringing the number of USAID-assisted clinics in the country to 240. Approximately 1.6 million women of reproductive age have access to maternal and child health services through the national midwife clinic network. Between 1997 and 2000, the clinics provided more than 850,000 services. With USAID support, the program has given participating midwives the knowledge, skills, and basic clinic equipment to become health entrepreneurs. They provide quality child spacing and maternal and child health services for a modest price, thus promoting continuation of their services after project funding ends. The midwives fund the construction of their clinics, and their service fees sustain clinic operations and provide them with income. Two new clinics in Mindanao offer Muslim women a culturally sensitive alternative to public sector services by providing additional privacy and respecting the women's concern for modesty during routine checkups. The midwives working in Mindanao work closely with community and religious leaders and campaign for continued education for women and their families on the importance of antenatal care.

ment of malaria with sulfadoxine-pyrimethamine (SP), replacing the less effective chloroquine. This treatment substantially improves birth outcomes and maternal health during pregnancy. USAID assistance helped Tanzania forecast its national SP requirements and revise maternal and child health cards used for monitoring malaria treatment during pregnancy.

Preventing Mother-to-Child HIV/AIDS Transmission in Zambia. One out of every five Zambian adults is infected with HIV, and about one-third of infants born to HIV-infected mothers contract the virus during pregnancy, at birth, or through breastfeeding. For HIV-positive women who breastfeed, exclusive breastfeeding is the safest method of reducing mother-to-child HIV transmission, so with USAID assistance the Zambian Ministry of Health has added voluntary HIV counseling and testing to its antenatal services. The counseling about safe infant feeding choices has helped prevent an unnecessary decline in exclusive breastfeeding, thus preserving its nutritional and immunologic benefits. In the project area, exclusive breastfeeding of infants less than 6 months old by mothers who did not know their HIV status increased from 56 percent in 2000 to 76 percent in 2001.

Future Perspectives

USAID will continue to support national health policies that promote maternal health. It will also promote service quality and demand for maternal health services. Research areas will include causes of maternal mortality, ways to connect women with health services and increase the attendance of skilled personnel at births, community-level treatments for hemorrhage, and effective antenatal care delivery in resource-poor environments.

Photo by WHO/UN

Health Policy and Systems Strengthening

In addition to supporting specific child and maternal health interventions, USAID also helps developing countries strengthen their health care systems. In most countries, health care is delivered through several sectors, which often include government facilities and staff, non-governmental organizations, for-profit health institutions, private practitioners such as physicians and pharmacists, and traditional providers such as birth attendants and healers. The way these sectors organize and deliver care is an important determinant of health care quality.

USAID Strategy and Interventions

USAID's strategy for strengthening health systems draws on approaches used in the United States and adapts them for use in developing countries. The strategy has four components:

- **Health care financing:** Even the poorest country pays for most of the health care it provides its people. The predominant financing mechanisms are free or subsidized services provided by the public sector and fee-for-service in an unregulated private sector. Alternative models such as community-based financing, social insurance systems, and more effective arrangements for provider payments also exist. USAID is helping countries examine alternatives, emphasizing the need for better information on health-related spending as a starting point.
- **Quality of care:** In many countries, trained health care workers are prevented from providing high-quality care because of the way care and service delivery is organized. USAID is helping countries introduce modern methods for ensuring quality and efficiency of care.
- **Pharmaceutical management:** Drugs and related supplies are a major cost in health care and an essential element of many basic services. Taking a systematic approach to pharmaceutical management, USAID addresses: 1) selection procedures for purchasing drugs; 2) systems to forecast pharmaceutical needs; 3) arrangements to procure high-quality supplies under favorable conditions; 4) efficient and accountable distribution of drugs to health care facilities; and 5) appropriate use of drugs by providers and consumers.
- **Health information:** The definitive measure of the effectiveness of a health care system is its impact on the health of the population served. USAID is a leader in the development of rigorous surveys to measure the impacts of health care services and advise policy makers of their significance. USAID also supports the development of routine health information systems, disease surveillance systems, and research on specific issues.

Key Achievements

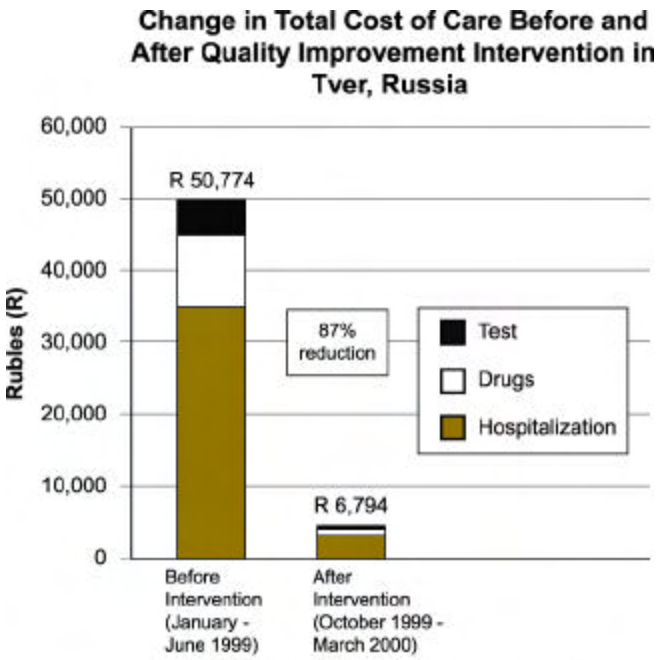
Funding and Resource Allocation in Romania's Hospitals. USAID is helping the Government of Romania implement a more transparent hospital payment system that will reduce dependence on large hospitals for medical care and shift patients and payments to less specialized treatment options. This is an important first step toward achieving a more rational allocation of resources, with a greater proportion of funding going to primary and preventive services. The new system is based on an approach that categorizes "products" in the hospital and uses these categories as the basis for a reimbursement mechanism that better controls expenditures. USAID's pilot activities were instrumental in the government's decision to implement the system in all hospitals within the next three years.

Cost Sharing in Kenya. USAID is helping Kenya improve its health care financing and build sustainable health care systems through support for cost-sharing instruments and management training. Results indicate that the initiative will generate an additional $11 million for health services in its first year.

Determining Financing Needs for Ghana's Immunization Program. In collaboration with WHO, UNICEF, and the U.K. Department for International Development (DFID), USAID provided technical leadership to help Ghana's Ministry of Health conduct its first analysis of the costs of its child immunization program. The analysis suggested specific options for improving financial support for the program. The Global Alliance for Vaccines and Immunization has recommended the research methodology as a "best practice" for other countries.

Community Development of Mutual Health Organizations in Mali. USAID is helping groups in two communities in Mali establish mutual health organizations (MHOs). MHOs are community-based organizations that generate funds for basic health services by allowing residents to prepay for care when they have funds available, such as at harvest time. Members are not turned away if they are unable to pay fees at the time of service. In the Mali communities, USAID held workshops with key stakeholders to educate them about MHOs and employed a local artist to create leaflets to inform the public. The MHO movement is based in the tradition of village solidarity, and USAID's strategy is to strengthen and expand this indigenous approach.

Obstetrical Emergencies in Uganda and Russia. Obstetric staff in a major referral hospital in Uganda recognized that pregnancy-induced hypertension (PIH), a major cause of maternal death and stillbirth in Ugandan hospitals, was a quality of care problem. With USAID assistance, they found that providers followed established procedures for PIH management less than 6 percent of the time. The quality improvement team chose a low-cost solution – posting a special patient record specifying critical tasks at the patient's bedside. This record was modeled on the "critical pathway," an innovation developed in U.S. hospitals. In the first year, compliance with procedures rose to 90 percent; life-threatening complications occurred in 7 percent of patients, down from 17 percent; and stillbirths dropped from 38 to 18 percent of births. In Tver, Russia, a more comprehensive application of modern quality assurance (QA) methods to PIH included a cost analysis, shown in figure 11.



Source: Abdallah, H. O. Chernobrovkina, A. Karatkova, R. Massoud, and M. Schlegova. "Impact of new evidence-based guidelines on the cost of managing pregnancy-induced hypertension in hospitals, Tver, Russia." Under review for publication for USAID by the Quality Assurance Project (QAP): Bethesda, MD.

Figure 11. *This graph shows the notable cost savings achieved when modern quality assurance methods were applied to cases of pregnancy-induced hypertension in Tver, Russia. As described in the "Maternal and Neonatal Health" section of this report, the intervention also substantially reduced PIH-related delivery complications and maternal mortality.*

Improvements in Malaria Treatment in Malawi. The staff in a small rural clinic in Lifuwu, Malawi, applied modern QA methods to analyze why 23 percent of patients treated for malaria returned for re-treatment within a week. They discovered that many patients were not completing their treatment, which involved a relatively new drug. The staff also used QA methods to develop and test a solution to the problem based on better patient education and supervision of treatment. The solution proved effective, with the decline in re-treatments saving an estimated $181 annually in drug costs and 29 days of staff time.

Photo by PAHO/Armando Wasik

Drug and Therapeutic Committees. USAID has developed a multidisciplinary training course about drug and therapeutic committees (DTCs), which are an effective means for helping hospitals improve their drug selection procedures, treatment guidelines, and drug use. The course objectives are to stimulate creation of DTCs, improve their functioning, and build the technical capacity of developing countries to expand the DTC approach. In collaboration with WHO, international training courses were held in Indonesia and Kenya with 78 participants from 38 countries. All country groups developed work plans that USAID will monitor, with results and achievements to be posted on a recently launched DTC Web site.

Improving Procurement of Drugs and Other Commodities. USAID addresses drug and commodity procurement issues by focusing on specific health conditions and providing targeted procurement technical assistance and training. Effective procurement policies promote transparency and accountability in purchasing arrangements, minimize waste and corruption, and contribute to the efficient use of resources to procure products of assured quality. USAID experts have designed procurement training materials and conducted country and regional workshops. A regional TB Drug Procurement Workshop in Kenya provided training to procurement officials and TB program managers from 10 African countries. Officials and managers now are able to obtain quality products on the international market at improved prices through properly structured competitive tenders.

Guidelines for Drug Sellers in Kenya. In Kenya's Bungoma district, malaria is the leading cause of death and also causes about 40 percent of hospital admissions and outpatient visits. Small private drug sellers are the most common source of malaria treatment, but the quality of care they provide is poor. A recent study found, for example, that the drug approved by the national malaria program accounts for only 2 percent of drug seller sales. USAID helped district officials test a low-cost program to change drug seller practices by explaining national malaria guidelines to the vendors who supply Bungoma's estimated 500 drug sellers and by providing a poster of the guidelines for the sellers to display in their shops. The intervention resulted in a ninefold increase in correct treat-

ments at a cost of $0.12 per additional properly treated case. The intervention is being expanded at the request of Kenyan officials.

National Health Accounts. Since 1997, USAID has played a leading role in helping countries improve their health financing information base by using national health accounts (NHAs). USAID spearheaded the formation of regional NHA networks in Latin America and the Caribbean, the Middle East and North Africa, and East and Southern Africa. Through these and other efforts, 54 developing countries now can draw upon NHA information to improve their health financing policies. Using NHA-provided information, Kenya is considering enlarging its National Hospital Insurance Fund into a broader social health insurance scheme that could cover the poor. The South African government has enacted laws to correct inequities in health funding by allocating funds based on health needs and outcome indicators. In Guatemala, NHA information has enabled the government to revise its goals and policies based on the potential to meet actual needs.

Future Perspectives

USAID will continue to help countries formulate financing solutions that provide poor and vulnerable groups with access to basic health services. In quality assurance, USAID will promote the use of evidence-based guidelines, with a major focus on helping health care systems meet the challenges posed by new standards of care in HIV/AIDS and child health. The Agency will also explore the use of simple, inexpensive drug screening and detection methods to help countries build their capacity to combat drug quality problems, which contribute to the growing threat of antimicrobial drug resistance. USAID plans to make NHA information more useful by breaking it down by subnational levels and interventions. Based on the results of a pilot study in Haiti, a network of experts to promote best practices in health information systems is under development.

Photo by Tuli/WHO

III. Basic Education
A Critical Component of Development

Photo by Ray Witlin/World Bank

III. Basic Education

A Critical Component of Development

Photo by PAHO/Armando Wook

"Literacy and learning are the foundation of democracy and development."

President George W. Bush,
April 21, 2001

"Education and training are fundamental building blocks in our collective effort to reduce poverty, alleviate hunger, improve health, develop economies, and defeat HIV / AIDS."

USAID Administrator Andrew Natsios,
August 21, 2001

Education is a fundamental building block of any stable society. Through education, countries develop their human resources; in building these resources, they contribute to the world economy and better manage their nation's wealth.

Basic education – which provides basic literacy, numeracy, and core skills such as problem solving – is especially critical to development. Investments in expanded and improved basic education have been linked to faster and more equitable economic growth, reduced poverty, and strengthened democracy and civil liberties. Expanded and improved basic education of girls and women contributes to improved family health, lower fertility, greater participation in civil society, and enhanced status for women.

In FY 2001, USAID provided close to $103 million from its Child Survival and Diseases account to support basic education programs in 25 countries. USAID defines its basic education activities as "efforts aimed at improving primary education, secondary education, early childhood development, literacy training for out-of-school adolescents and adults, or training for teachers at any of these levels." The critical link is a concern that, regardless of gender, residential location, family income, ethnicity, language, or physical capability, emerging generations gain literacy, numeracy, critical thinking, and the life-skills needed for effective, productive living.

Within this broad definition, USAID policy gives priority to strengthening primary education. In countries where almost all children have access to primary education of acceptable quality, USAID Missions have greater flexibility to shift their focus to other basic education areas, such as secondary schooling and adult literacy.

Education for All: Supporting Basic Education

USAID's emphasis on improving educational access, quality, and equity, particularly at the primary level, coincides with a decade of work by the Education for All (EFA) Coalition. Founded in 1990, the EFA Coalition includes representatives from governments, international agencies, nongovernmental organizations, and professional associations, as well as experts in education. In April 2000, the Coalition met in Dakar, Senegal, to recommit itself to achieving universal access to free and compulsory primary education in developing countries by 2015.

Other EFA objectives include eliminating differences in the primary enrollment ratios of boys and girls, increasing completion of primary school by all children, and decreasing grade repetition.

Global Progress in Primary School Participation

USAID is committed to the EFA goal of universal quality primary education. USAID-assisted countries have succeeded in providing more access to and equity in primary education and in increasing primary school completion rates.

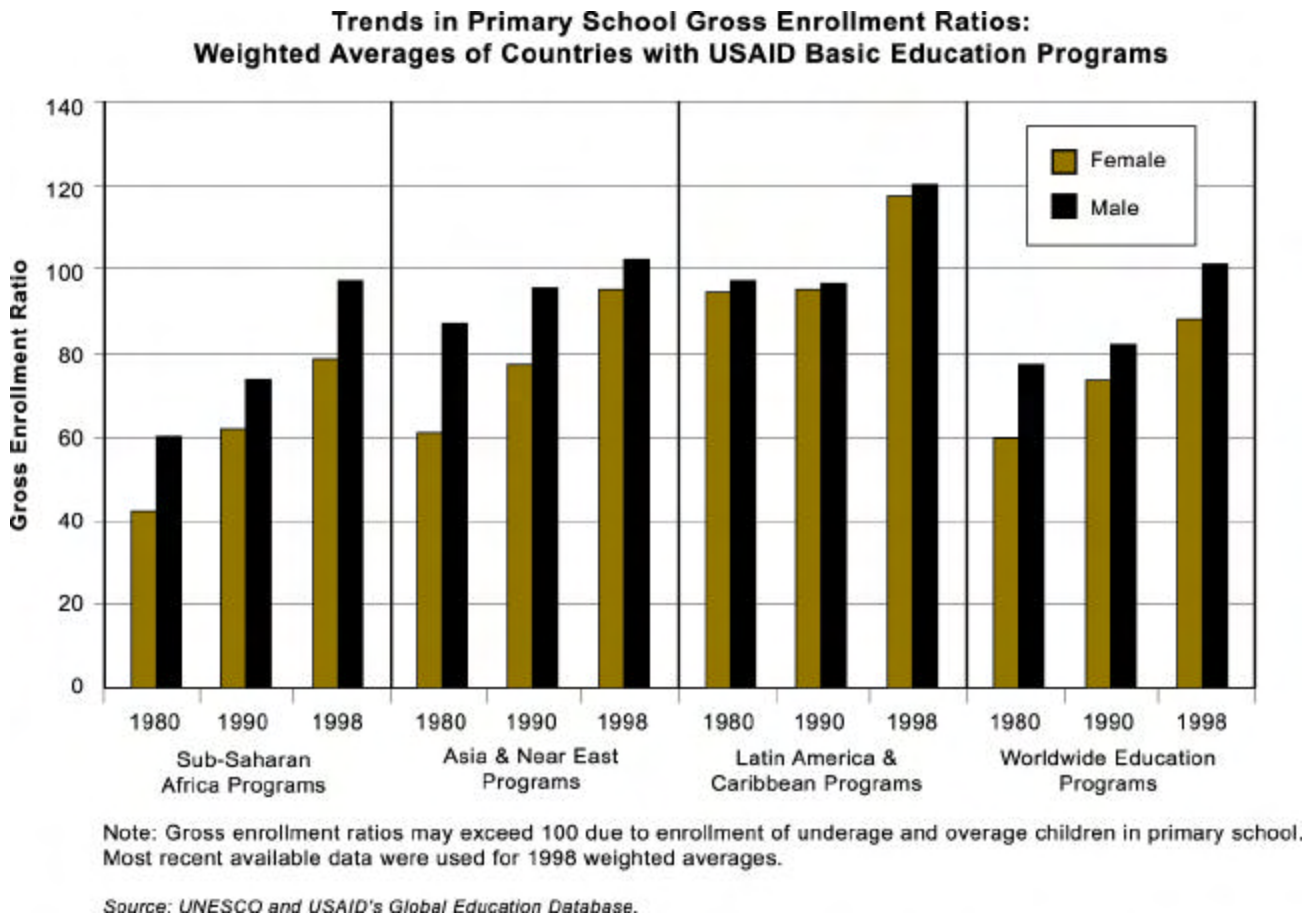


Figure 12. *This figure shows the weighted averages, aggregated by region, of gross enrollment ratios (GERs). The GER is the total number of children of any age enrolled in primary school divided by the population of children of primary school age. Increases over time in GER reflect reductions in the number of children not in school. Countries with large populations and small programs and countries with programs that are just starting are not included.*

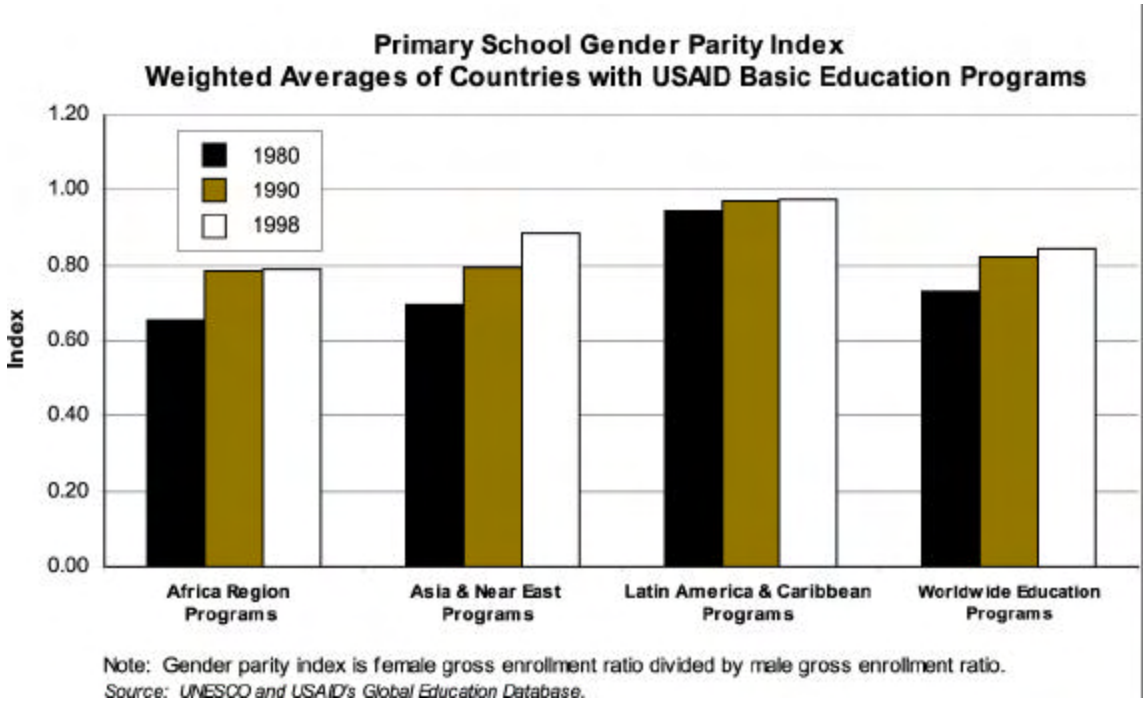


Figure 13. *This figure shows the weighted averages, aggregated by region, of gender parity in countries where USAID has basic education programs. The gender parity index is the female GER divided by the male GER. Girls continue to have lower access to education compared to boys. Countries with large populations and small programs and countries with programs that are just starting are not included.*

- **Access:** Since 1990, access to education has improved in countries with USAID basic education programs. Substantial increases in enrollments have occurred. Between 1990 and 1998, for example, boys' enrollment in school increased from 83 to 102 percent (as seen in figure 12, gross enrollment may exceed 100 percent because of underage and overage children enrolled in primary school). Enrollment of girls increased from 72 to 89 percent.
- **Equity:** The gap between girls' and boys' enrollment has decreased, but progress varies by region. As figure 13 shows, the gender gap is smallest in the Latin America and Caribbean region and largest in sub-Saharan Africa.
- **Completion:** Available data suggest that primary school completion will continue to present challenges in the coming years. Figure 14 shows that in most countries with USAID basic education support, less than half of the 25-and-older population has completed primary school.

USAID Strategy and Interventions

USAID's approach to expanding access to quality basic education, especially for girls and other underserved populations, includes five important components: 1) classroom quality; 2) community participation; 3) institutional strengthening; 4) policy reform; and 5) girls' education.

Classroom Quality

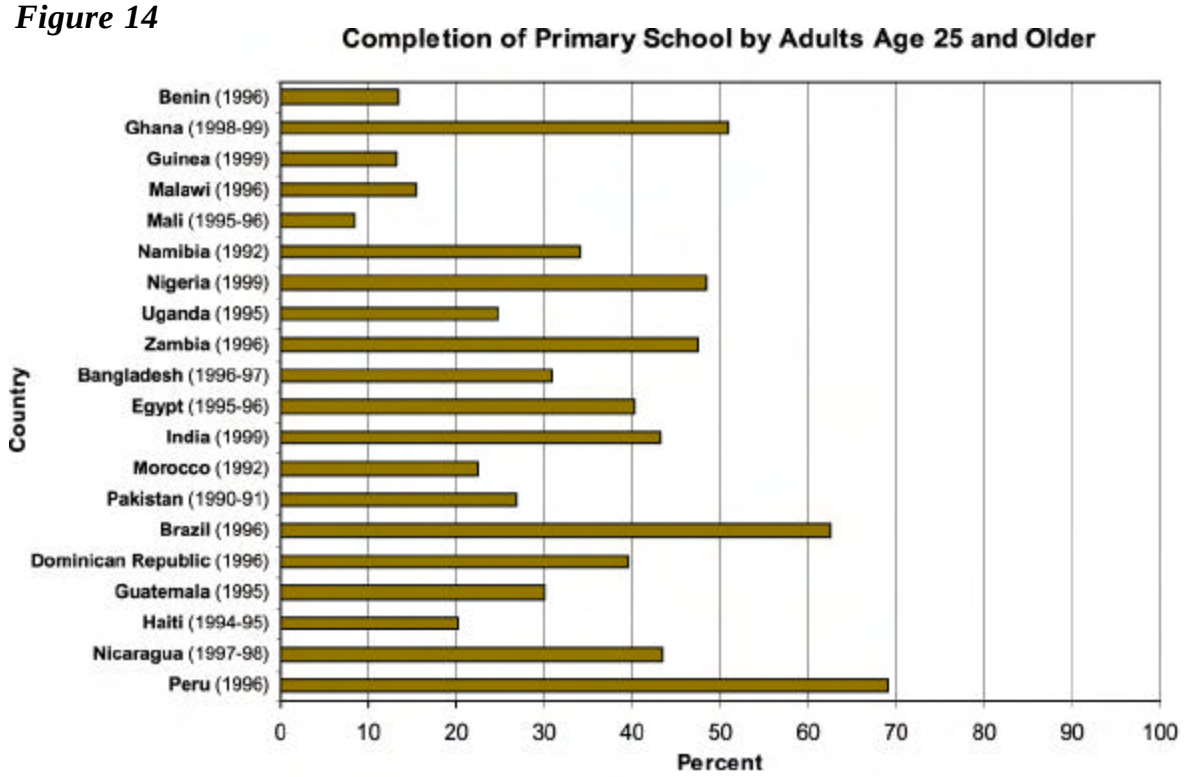
The poor quality of basic education in developing countries often discourages enrollment and reduces the benefits to parents of sending their children, particularly girls, to school. Many efforts to address classroom quality have focused on quantitative elements, such as student-teacher ratios, class size, and numbers of books and materials. USAID's approach to improving quality extends beyond these elements to the quality of the classroom experience and the relevance of the curriculum to socioeconomic and cultural conditions.

Recently, USAID has focused on training teachers in child-centered approaches that promote active learning, creative thinking, and problem-solving skills, and on assessing student learning so the teaching process can be modified to meet students' educational needs. USAID also encourages increased access to and appropriate use of information technologies, including hardware, software, and communication technologies that facilitate the exchange, processing, and management of information and knowledge. Instructional technologies range from radio and other traditional communication vehicles to newer technologies for distance learning, such as Internet-based and broadcast technologies for learning both inside and outside the classroom.

Key Achievements

In **Haiti**, USAID helped improve the quality of public and private schools by developing support clusters of five to seven schools. Cluster members meet three times a semester to collaborate on improving instructional quality. To date, 64 clusters have been established. In one cluster, members built a training center to facilitate the exchange of teaching strategies with cluster members and other clusters. Statistics

Figure 14



Note: Figure includes USAID basic education program countries with available Demographic and Health Surveys.

Source: Demographic and Health Surveys, analyzed by USAID's DHS EdData activity.

Regional Programs and Issues

During FY 2001, USAID Missions initiated or continued basic education activities in 25 countries in the Africa, Asia/Near East, and Latin America/Caribbean regions.

Africa		Asia/Near East	Latin America/Caribbean	
Benin	Namibia	Bangladesh	Brazil	Haiti
Ethiopia	Nigeria	Egypt	Dominican Republic	Honduras
Ghana	South Africa	India	El Salvador	Jamaica
Guinea	Uganda	Morocco	Guatemala	Nicaragua
Malawi	Zambia	Pakistan		Peru
Mali				

Regional programs and activities reflect educational issues and challenges that each region faces.

Africa: National initiatives to attain universal primary education and education support activities have brought about unprecedented increases in school enrollments in several African countries. In six of the 11 USAID-assisted countries, at least two-thirds of primary school-age children are enrolled in school. From 1990 to 1995, the primary gross enrollment ratio increased in seven countries, with Malawi showing the largest increase (66 percent). While such increases are positive developments, in some countries they have also had negative effects, most notably a decline in instructional quality as teachers, classrooms, and instructional materials are in insufficient supply to meet the increased demand. In addition, crisis situations such as natural disasters, armed conflicts, civil unrest, and particularly the HIV/AIDS pandemic, threaten primary school access, completion, and instructional quality. HIV/AIDS has left many countries with shortages of teachers and administrators and millions of families with fewer resources for schooling.

Asia/Near East: While many countries in the region have at least 75 percent of school-age children enrolled in school, others continue to lag behind, especially in girls' primary school enrollment. For example, girls' primary school enrollment as a percentage of total enrollment is 42 percent in Morocco and 43 percent in India. Women's literacy rates are particularly low in Nepal (20 percent), Bangladesh (25 percent), Morocco (30 percent), and India and Pakistan (both 34 percent). Poor teacher training and a generally low quality of education are other major challenges for Asia/Near East countries. Many countries in the region have significant problems with abusive child labor, debt bondage, and indentured servitude in agriculture, formal and informal industry, domestic service, and street vending.

Latin America/Caribbean: In this region, educational quality and equity, grade repetition, and completion pose greater challenges than access and enrollment. Primary school enrollment rates are generally high, ranging from 79 percent in Guatemala to 97 percent in Brazil. Gains in enrollment are less likely to be found among children from indigenous populations, both in rural and poor urban areas. Despite high enrollment rates, the majority of the children who begin primary school do not complete fourth grade.

indicate that students attending USAID-supported schools perform better than students in schools without USAID support and pass the sixth grade school-leaving examination at a higher rate than the national average.

With USAID assistance, **Namibia** is working to improve teacher quality using computer-assisted teacher-training centers. Four computer centers support professional development and activities for teachers and school administrators. In August 2001, USAID supported training for 350 teachers, advisory teachers, principals, and school inspectors. Teachers have also been trained to use an online data bank to report environmental-monitoring data collected by their students. To maximize their educational impact, the centers are also open to students, who have been able to apply to schools online, work on distance education assignments, and conduct research. In addition, a Peace Corps volunteer has worked at one center with local deaf and blind students.

Community Participation

Research shows that education programs that generate meaningful community participation can increase the participation of underserved populations. USAID's approach involves raising awareness of the importance of primary education, particularly for girls, and building parent/community participation in educational decision making and reform.

Key Achievements

In **Ethiopia**, more than 1,300 schools participate in the USAID-sponsored Community Schools Grants Program. USAID has promoted community participation through the program, and communities have contributed more than double what schools have received in grants. Communities have improved school facilities, provided environments more conducive to female students, and increased community participation in day-to-day school management. In areas with USAID support, dropout rates have declined in almost 60 percent of the schools.

In **Ghana**, USAID-assisted schools have increased community participation. Results include improved teacher attendance; increased student enrollments, particularly for girls; improved rates of homework completion; the establishment of school lunch programs; and construction of new school latrines. In 2000 and

Spotlight on Zambia: Interactive Radio Instruction

Recognizing the growing number of children unable to benefit from traditional formal schooling, the Government of Zambia launched its Interactive Radio Instruction program in 2000 with USAID support. The program provides, via radio, a comprehensive education program based on Zambia's national curriculum. Out-of-school youth – particularly orphans and other vulnerable children without other access to education – receive daily instruction through 30-minute broadcasts. In addition to the essential curricular components, broadcasts include health and life-skills messages and other practical advice for young people. Trained mentors use the broadcasts to lead participatory active learning classes. The mentors, venues, and radio receivers are supplied by the local communities. By July 2001, approximately 8,000 children were enrolled in the program at 174 registered centers. Competency testing of pilot participants showed a 20 percent increase in mean performance scores. Retention also improved, with 78 percent of children attending for the duration of the pilot period. Based on these results, the Ministry of Education is field-testing new programs for higher grades.

2001, 1,500 Parent-Teacher Association members, traditional community leaders, and elected leaders received training in strengthening school management structures and monitoring school performance. The Ministry of Education has decided to expand the training program throughout Ghana.

Institutional Strengthening

Education reform is more likely to be sustained if professional staff has the necessary technical knowledge, managerial skills, and resources. USAID works to strengthen the ability of education ministries to handle the many tasks involved in managing basic education systems, including the effective use of human and financial resources. Several Missions are working to improve national systems of teacher training; others are sponsoring the adoption of modern educational information systems.

Key Achievements

In **Jamaica**, USAID supported an analysis of the teacher training college curriculum that coincided with a new national primary school curriculum. Findings were incorporated into revisions of the colleges' curricula for language, arts, mathematics, science, and social studies, making them gender-fair and more consistent with the content and assessment procedures of the primary schools. The curricula are being implemented with USAID assistance.

In **Benin**, USAID provides technical assistance for coordinating curriculum development, teacher training, and textbook development. More than 1 million textbooks and workbooks were developed and produced in country for second-grade students in 4,500 primary schools. Two local companies did the printing and gained valuable experience in printing pedagogical materials. The Ministry of Education and parents worked together to distribute the materials. USAID will continue to support gender-fair curricula and materials for other primary grades.

In sub-Saharan Africa, HIV/AIDS threatens to undermine the progress made by many education ministries in building institutional capacity and strengthening education systems. In **Malawi**, **Namibia**, and **Zambia**, the USAID-funded African Mobile Task Team on HIV/AIDS in Education has supported strategic and implementation planning by education ministries to mediate the impact of HIV/AIDS on education.

Policy Reform

USAID encourages countries to adopt policies that promote primary education, allocate adequate resources for education, and create systems in which stakeholders are responsible for policy development and implementation. The emphasis has shifted from centralized education bureaucracies to more decentralized and democratic systems. Participatory processes involve stakeholders at the ministry, regional, and local levels in policy development and program reform. Removing barriers to girls' school participation is a primary concern.

Key Achievements

In **Uganda**, the adoption in 1996 of a policy of free universal primary education through seventh grade for four children per family has brought about an enormous increase in school enrollment from 2.9 million in 1996 to 6.8 million in 2000. USAID is working with the government to ensure that education receives an adequate share of the budget. Over the past seven years, the share going to education has increased from 22 to 31 percent; a minimum of 65 percent of this amount is allocated to primary education. More than 10,500 schools receive grants that provide discretionary funds for certain expenditures. Over the next three

years, 26,000 permanent classrooms will be built. The pupil/textbook ratio for core subjects has improved from 23:1 to 6:1 since the policy was implemented. The upsurge in enrollment has led to unacceptably high pupil/teacher ratios, but in response, the government, in conjunction with USAID and other funding agencies, has launched a national teacher recruitment drive. In 2001, the number of teachers increased to 106,629, from 90,963 in 2000, and class size declined accordingly.

In **Honduras**, the devastation caused by Hurricane Mitch in 1998 created an opportunity to rebuild and transform the education system. Using the National Proposal for Education Reform developed by USAID in collaboration with the Ministry of Education, civil society groups, and other donors, USAID drafted a results framework that identifies major education reform results and indicators to measure their achievement. This proposal serves as a road map for developing a reform strategy. USAID supports components of the proposed reforms through activities to improve student achievement in the early primary grades and to make the curriculum for the seventh through ninth grades applicable to both formal and distance education systems. USAID also provides technical assistance to the Ministry of Education for developing a new preschool curriculum.

In **El Salvador**, USAID is supporting the Ministry of Education's transition to a decentralized education system by providing technical training to improve the organizational efficiency of education services. Significant strengthening of local capabilities to conduct educational research has led to policy reforms in the Ministry. The Ministry adopted policy recommendations to systematize measurement of education access, relevance, and impact; establish pedagogical and administrative advisors who work closely with teachers and school directors to improve classroom educational quality; and develop a model community development center to promote greater community involvement in schools. USAID also helped the Ministry reform laws to increase the efficiency, empowerment, and accountability of professional teachers.

Girls' Education

Improving girls' education first requires overcoming various barriers to sending girls to school and then creating classroom environments that facilitate their learning, performance, and school completion. Strategies that address economic, social, and cultural issues often convince parents to enroll their daughters. In the classroom, active and participatory learning and problem-solving activities raise the performance levels of both girls and boys. USAID's approach to improving girls' education focuses on policy reform, incentives, and participatory teaching strategies. It involves the private sector, media, NGOs, and local communities in raising public awareness and promoting girls' participation.

Key Achievements

In **Peru**, USAID works through the National Network for Girls' Education to increase consciousness of the importance of girls' education and the constraints affecting quality education for girls. The Network, which consists of representatives from government, Peru's Congress, the business and religious communities, media, NGOs, and donors, helps develop policies and programs to expand school access for girls, especially in rural areas. The Network developed a Rural Girls' Education Bill, which the Congress passed in 2001.

In **Egypt**, USAID supports a comprehensive program to educate 6- to 14-year-old girls who have dropped out of school or have never enrolled. The program includes school construction and renovation, quality improvements in teaching, community participation, training for supervisors and headmasters, applied technolo-

gies, and new approaches to teaching about the environment and science. The program benefits at least 28,000 girls each year and will enroll more than 1 million children over the 40-year lifespan of the program's newly built schools.

Future Perspectives

Continued progress in basic education depends on meeting the following challenges.

- **HIV/AIDS:** With increasing numbers of affected families and children – plus teacher shortages due to absenteeism, illness, and death – the HIV/AIDS pandemic threatens to disrupt education in stable as well as fragile education systems. Africa has the highest prevalence of HIV/AIDS, but the pandemic is spreading in India, Latin America, the Caribbean, Eastern Europe, and the former Soviet states. These regions soon will feel impacts on their education systems similar to those already experienced in Africa.
- **Conflict:** Over the past five years, nearly two-thirds of the 75 countries that host USAID Missions experienced some form of civil conflict. In many cases, these conflicts undermined years of social and political progress. In FY 2001, at least 20 countries experienced some form of conflict. Currently, 20 million to 40 million persons are internally displaced, and an estimated 12 million are refugees. One in six are children who need basic education to break out of the poverty cycle.
- **Abusive child labor:** Abusive child labor, defined by the International Labor Organization (ILO) as "dangerous and/or exploitative labor practices that place children at risk to their health, morals, or safety," is the most pervasive source of child abuse in the world today. The ILO estimates that 250 million children ages 5 to 14 are engaged in economic activities, with 120 million working full time and 130 million combining work with schooling. As of September 2001, child labor in the forms of slavery, trafficking, prostitution, pornography, street vending, and/or work in agriculture or domestic services was reported in 69 of the 75 USAID-supported countries.

USAID will continue to lead and participate in activities that help countries achieve the Education for All goals by 2015. Achieving universal primary education is not an easy task. Creating and maintaining quality education programs for children in schools facing increasing enrollments will challenge all aspects of education systems.

USAID is working to ensure that its basic education programs meet countries' growing needs. Innovations in information technology will help countries meet these challenges. Computer-assisted training increasingly is becoming an effective mechanism of improving teaching quality. Interactive radio programs provide excellent supplemental, and in some cases substitute, classroom activities.

In Africa, USAID's Education Sector Support strategy will build African capacity to provide children with quality primary education. The strategy promotes African-led, classroom-based national education reforms supported through policy analysis, public dialogue, management capacity building, and increased expenditures on education.

USAID cannot address these challenges alone. USAID's approach involves partnerships with public- and private-sector institutions. With effective implementation, collaborative efforts can extend the impact of available funds, provide access to new resources, and build capacity and sustainability. Through its Global Development Alliance, USAID plans to work

cooperatively with NGOs, private foundations, universities, private companies, and other development partners to create entrepreneurial alliances that can have profound effects on USAID-supported countries. The potential benefits to public school systems are many and include a more community-oriented private sector, funds, technical assistance, and in-kind donations of facilities, materials, equipment, and human resources.

IV. Vulnerable Children

Photo by PAHO/Armando Wook

IV. Vulnerable Children

Displaced Children and Orphans Fund

USAID's Displaced Children and Orphans Fund (DCOF) has established effective approaches to working with local communities and nongovernmental organizations to provide care and support for vulnerable children. Vulnerable children are defined as those living without the protection, care, or support of parents. DCOF-supported activities assist children affected by war, children affected by HIV/AIDS, street children, and children with disabilities. DCOF programs focus on care and protection issues pertaining to the physical, psychosocial, legal, and economic well-being of these children. In addition to providing direct services, programs are designed to increase the ability of local service providers to address the needs of vulnerable children, thereby enhancing program sustainability. To date, the Fund has invested more than $107 million in 40 countries, primarily through NGOs and private voluntary organizations.

USAID Strategy and Interventions

DCOF promotes community-based programs for its four target populations. These initiatives are generally small in scope and often field-test methodologies for replication or expansion into larger programs.

Children Affected by War. Sixty percent of DCOF-supported programs assist children affected by war. These programs identify, document, and trace these children, and reunify them with their families. Local NGOs follow up children served by these programs to ensure that reintegration is working. Children and young people affected by conflict, whether through forced conscription, physical intimidation, mutilation, or sexual exploitation, need special attention to successfully reintegrate into their families and communities. DCOF supports programs that focus on demobilization, tracing, and psychosocial support for former child soldiers and children separated from their families in violent spots around the world.

Children Affected by HIV/AIDS. Worldwide, 13.2 million children have lost their mother or both parents to AIDS. Millions more are living with parents who are ill or with families that must stretch scarce resources to care for them. DCOF assistance strengthens the abilities of families and communities to care for these children. Most of USAID's assistance to children made vulnerable by HIV/AIDS is now supported under a program described in the next section of this report.

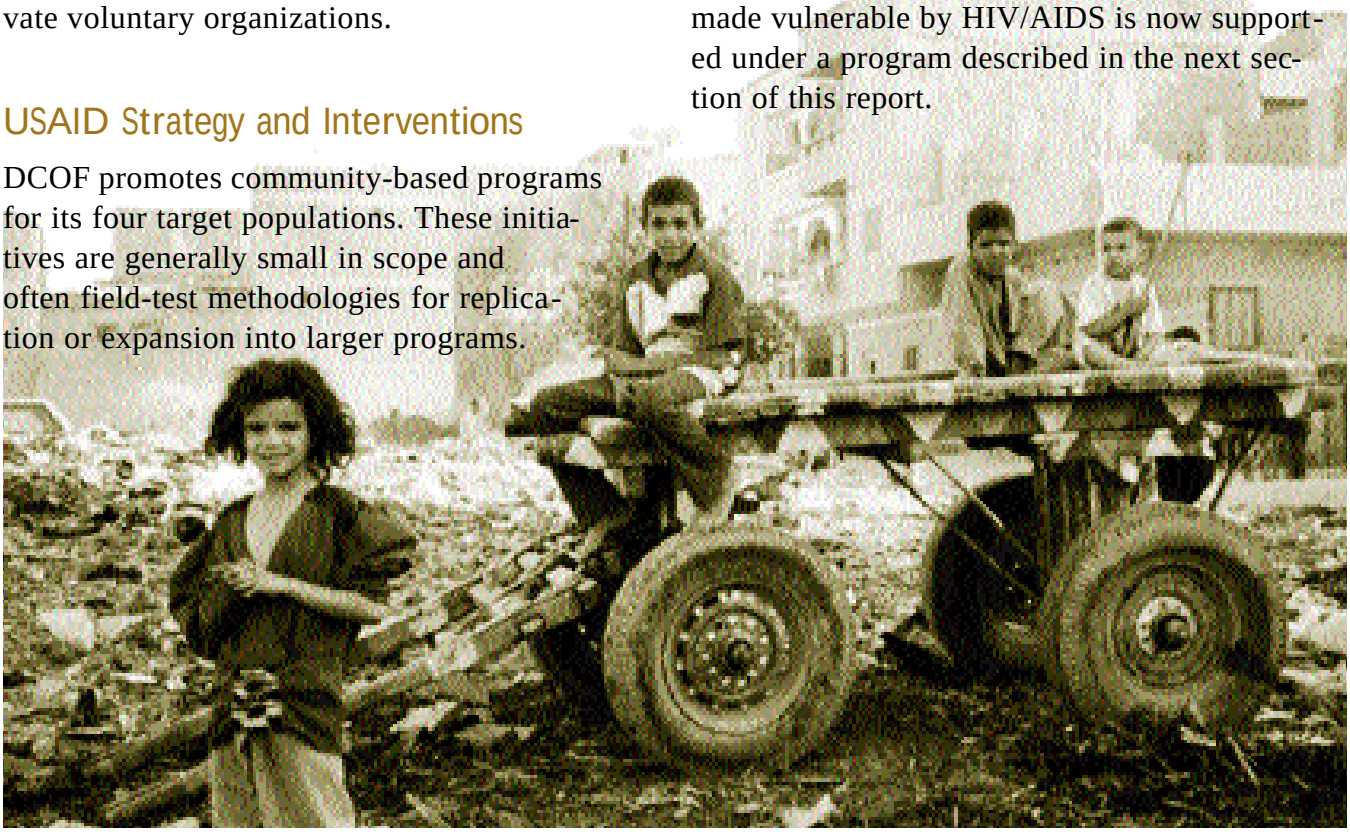


Photo by Ellyn W. Ogden/USAID

Street Children. DCOF programs target at-risk youth to prevent them from joining the estimated 100 million children worldwide who are working or living on the streets. Programs strengthen and support families, communities, and local organizations as the primary resources for the care and protection of these children. DCOF-supported programs directly benefit children through life-skills training and nonformal education. They assist at-risk families by supporting income-generating activities.

Children with Disabilities. A relatively new target group for DCOF assistance, these children face stigma, isolation, and institutionalization. DCOF supports community-based programs to care for children and provide them with life-skills training so they can participate in and contribute to community life.

Photo by Mike Jay Browne

Key Achievements

Last year, approximately 365,000 children benefited from DCOF support. Important activities on behalf of displaced children, orphans, and other vulnerable children included the following:

- In northern **Uganda**, two USAID-supported reception and reintegration centers temporarily house formerly abducted children until their families are located. In 2001, more than 4,000 children were helped to return home, enroll in school, and reintegrate into their communities. Local NGOs that help monitor the reunification process provide follow-up.
- In **Rwanda**, a USAID project is working to reunify children in residential centers with their families and reintegrate them in their communities. The project has demonstrated that children who were once considered untraceable can be located using innovations such as mobility maps and targeted radio announcements. A network of local NGOs and community leaders assists these children once they are returned to their families.
- In the **Democratic Republic of the Congo**, USAID works with thousands of young people to help prevent them from living and working on the streets. This initiative has established protection networks for vulnerable children. It has set up recreation centers and launched projects to improve access to health services, prevent parent/child separation, and promote a legal framework for addressing youth issues. USAID also provides assistance for former child soldiers, 96 of whom are currently enrolled in agriculture and livestock training programs.
- In **Indonesia**, DCOF funds are supporting more than a dozen local NGOs in their work with street children, whose national numbers may well exceed 120,000. The focus is on improving the vocational and educational skills of these children, especially girls, and on developing alternatives to living in the street. Other important objectives include increasing the capacity of the NGOs to pro-

vide services and strengthening advocacy efforts on behalf of these children at the national level.

- In **Angola**, about half of the estimated 3 million persons displaced by the country's 16-year civil war are children. These include displaced children, orphans and unaccompanied children, former child soldiers, and victims of or witnesses to violence. DCOF activities support efforts focusing on community reconciliation, conflict resolution, income generation, school enrollment, and social integration. As a result of these activities, more than 1,100 adults have been trained to identify and respond to the psychosocial needs of children and adolescents. More than 58,700 children are served by these community-based initiatives.
- In **Romania,** USAID assistance has supported the establishment of a community-based, family-focused child welfare system to reduce dependence on institutionalization and to increase the involvement of parents, community organizations, and local government in child care. USAID's efforts in three target counties set the stage for a national decentralization of the child welfare system through the formation of county-level Departments of Child Protection and multi-sector commissions to review child protection cases. The number of children served in the target counties increased from 1,159 to 3,328 between 1997 and 2000. In addition, a rural network of 28 social workers prevents abandonment in rural areas.

Future Perspectives

In the coming year, USAID will replicate and expand its programs for unaccompanied children and children affected by war. In addition to family reunification and community integration, USAID programs will provide these children with access to medical services and educational and economic opportunities. USAID will continue to support programs that help children with disabilities improve their quality of life and expand their participation in mainstream educational, recreational, and social activities.

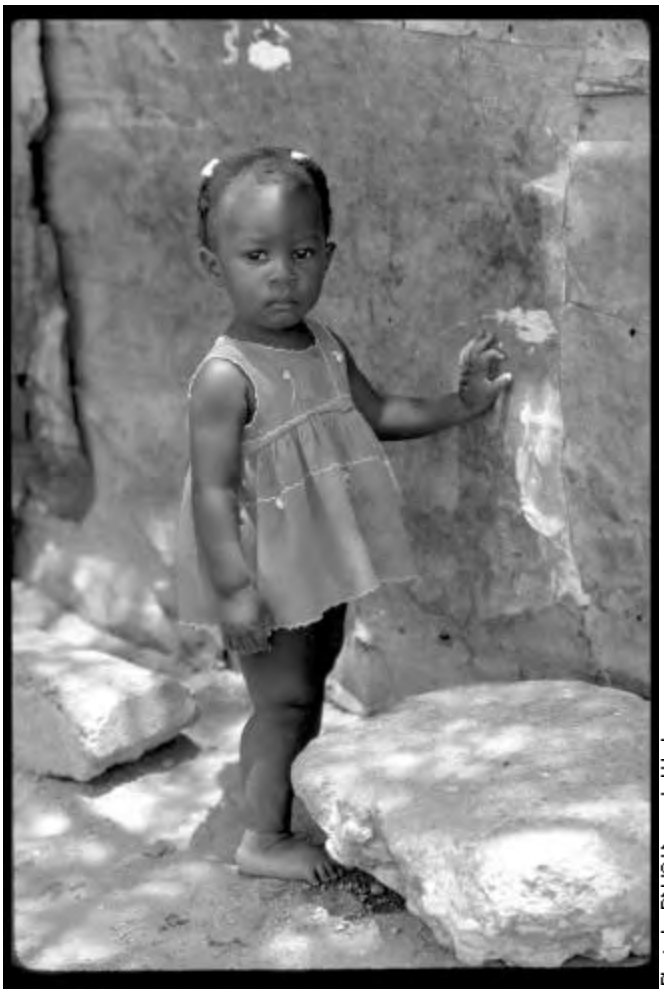


Photo by PAHO/Armando Waak

IV. Vulnerable Children

Children Affected by HIV/AIDS

Photo by Richard Matchewka

One of the most tragic consequences of HIV/AIDS is its devastating impact on the well-being of children, especially their emotional and physical health. Children who contract HIV/AIDS themselves and children of sick and dying parents are affected. Since the HIV/AIDS pandemic began, approximately 13.2 million children – most of them in sub-Saharan Africa – have lost their mother or both parents due to AIDS. The USAID report *Children on the Brink 2000* estimates that by 2010, more than 44 million children in 34 developing countries will have lost one or both parents. Most of these deaths will result from AIDS.

The impact of the growing populations of children affected by HIV/AIDS – on the children themselves, the families that care for them, and the communities where they live – is substantial. The effects on the children go beyond their loss of immediate family security and safety. Many of these children must assume adult responsibilities at a very young age. They often must provide care for ill or dying parents, take over farm and household work, care for younger siblings, and earn money for basic necessities. As family resources dwindle, children give up school, have less access to health care, and become vulnerable to malnutrition. In sub-Saharan Africa, many of the child health improvements of the past two decades are rapidly unraveling in the face of HIV/AIDS.

In the past 12 years, USAID has emerged as a global leader in addressing some of the enormous challenges posed by the HIV/AIDS pandemic. In recent years, USAID has called the world's attention to the tragedy of children affected by HIV/AIDS. USAID currently is funding more than 60 initiatives in 22 countries and is also providing support for activities at the regional and global levels. Most of these initiatives are implemented by nongovernmental organizations and local community groups. Many of them are the result of cooperation and collaboration with other international donors such as UNICEF or other U.S. government agencies such as the Centers for Disease Control and Prevention and the Peace Corps.

USAID-supported initiatives provide direct assistance to community organizations and build the capacity of local groups to provide improved services to larger pools of beneficiaries. These services include providing material assistance (such as food, school fees, shelter, clothing, and blankets), counseling, and community-based child care; developing community schools; supporting parents in succession planning (planning for their children's future care); and establishing volunteer visiting programs. USAID also helps community organizations that are trying to reduce the stigma and discrimination aimed at persons living with HIV/AIDS and their families.

USAID Strategy and Interventions

USAID is working with other international organizations to reach the goal of providing

community care and support to 25 percent of HIV/AIDS-affected children in high-prevalence countries by 2007, a global target set at the 2001 United Nations Special Session on HIV/AIDS. USAID's activities help communities develop and sustain strategies to meet children's needs by focusing on:

Family care and support: The overwhelming majority of orphans and other children affected by HIV/AIDS are cared for by immediate family members or in extended families. Strengthening the capacity of families to provide care is essential to mitigating the impact of AIDS on children and adolescents.

Community-based responses: Strengthening community support for vulnerable children is a USAID priority. Support can take such forms as home-based care, psychosocial support, and assistance with school fees or income-generation activities.

Social and policy environment: USAID is building the capacity of governments and community organizations to provide a supportive environment for children affected by HIV/AIDS. Activities include advocating for legal protection, transforming public perceptions to reduce stigma, and strengthening public education about HIV/AIDS prevention and mitigation.

Research and information sharing: USAID supports research into program design and results in order to identify sustainable programs that effectively meet the needs of children affected by HIV/AIDS.

In addition to allocating specially marked funds for orphans and vulnerable children, USAID also supports HIV-affected children through ongoing programs supported by the Education for Development and Democracy Initiative, Title II Food for Peace funds, and basic education funds.

Key Achievements

USAID accomplishments on behalf of children affected by HIV/AIDS in the past year include the following:

- Working as partners in **South Africa**, USAID and the Nelson Mandela Children's Fund used microfinance and community support initiatives to improve the ability of households to support orphans and vulnerable children. The activity targets 250,000 affected children.
- In **Uganda**, USAID-supported researchers are assessing the impact of an orphan support program on children's physical, educational, and emotional well-being. The project has collected information on family coping mechanisms and inheritance practices when a family member dies. This information will help future programs target orphans and vulnerable children. The project also is assessing a succession-planning program for HIV/AIDS-affected families.
- In **Malawi**, the Community-Based Options for Protection and Empowerment project helps villages and districts form AIDS committees to identify and care for orphans and other vulnerable children. The committees provide support for home-based care, income generation, HIV prevention, psychosocial support, and school fees.
- In **Cambodia**, a national coordinating organization works with local NGOs to help them integrate care for orphans and children affected by HIV/AIDS with ongoing prevention activities. The NGOs also introduce HIV/AIDS-affected families to community support activities such as funeral funds and community savings plans.
- Research activities produced a guide for improving food security and nutrition in HIV/AIDS-affected households. The design and effectiveness of interventions to address the physical and psychosocial needs of vulnerable children and help parents and

families with succession planning are other areas of research.

Future Perspectives

USAID will continue to support community initiatives to assist HIV/AIDS-affected children and strengthen the families and communities that care for them. Reaching the vast numbers of children made vulnerable by AIDS requires action at the global, regional, national, and local levels. USAID will continue to work with other donors, national governments, PVOS and NGOS, faith-based organizations, and other stakeholders to unify and expand responses for children and adolescents affected by HIV/AIDS.

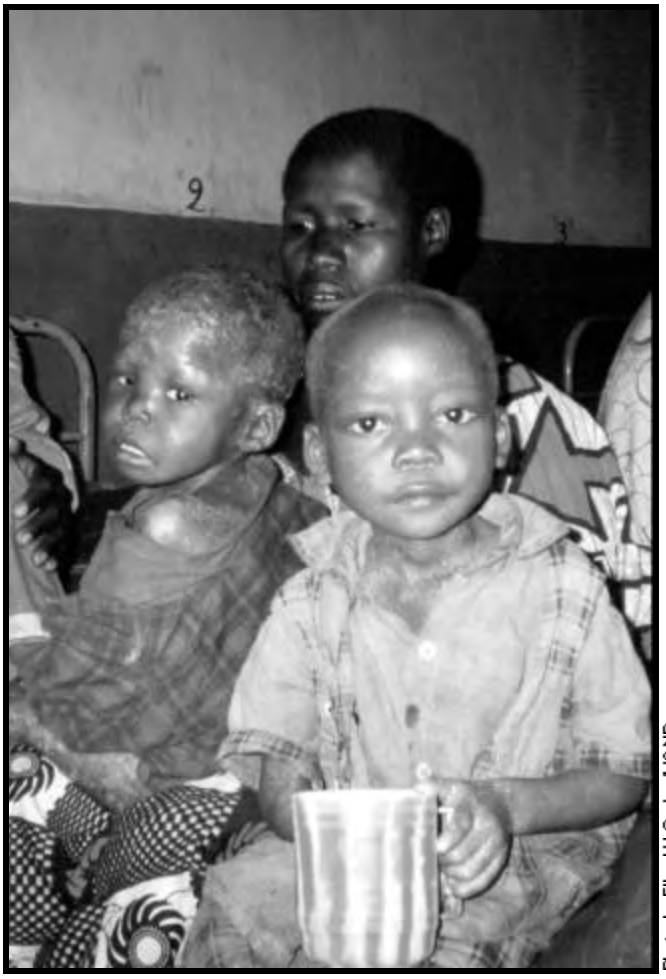


Photo by Ellyn W. Ogden/USAID

V. HIV/AIDS

Photo from Population, Health and Nutrition Information Project

V. HIV/AIDS

Every six seconds, someone new around the world is infected with the human immunodeficiency virus (HIV) that causes AIDS. AIDS is devastating entire continents and undermining progress in health and social and economic development. Life expectancies are falling; child mortality is rising; and standard indicators of economic growth, literacy rates, and food production are declining. Today, 40 million people have either HIV infection or AIDS. Ninety-five percent of these people live in the developing world; most of them suffer and die from AIDS in the prime of their lives.

Children also are affected. In 2000 alone, 500,000 children died of AIDS, and another 600,000 were newly infected, most of them because of mother-to-child transmission of HIV. Again, developing countries account for more than 95 percent of these deaths and infections.

Since initiating prevention programming in 1986, USAID has led the effort to address HIV/AIDS in developing countries. Since that time, USAID has been the largest bilateral donor in HIV/AIDS assistance, providing more than $1.7 billion in aid. USAID is working in more than 50 of the hardest-hit countries around the world, with an intense focus in 20 countries that already have severe epidemics or are at risk of rapid increases in infections.

Figure 15

People Living with HIV/AIDS in 2001: 40 Million Worldwide

Source: UNAIDS/WHO. 2001 AIDS Epidemic Update: December 2001. Geneva: UNAIDS.

In 2001, the United States expanded its response to the HIV/AIDS pandemic. USAID's HIV/AIDS budget substantially increased to include $289 million in CSD Programs funding, $15 million for children affected by HIV/AIDS, and $28 million from other accounts. The Agency also contributed $100 million to the Global Fund to Fight AIDS, Tuberculosis, and Malaria. USAID coordinated efforts both within the U.S. government and the international donor community to help mobilize a global response to the pandemic. This response has established the following shared international targets to be accomplished by 2007:

- Reduce HIV prevalence among 15- to 24-year-olds by 50 percent in "high-prevalence" countries (countries where more than 1 percent of the adult population ages 15 to 49 is infected with HIV)
- Maintain prevalence below 1 percent among 15- to 49-year-olds in "low-prevalence" countries (countries with less than a 1 percent infection rate but with trend data and levels of risk behaviors that suggest the rate could increase)
- Ensure that at least 25 percent of HIV-positive mothers in high-prevalence countries have access to interventions to reduce HIV transmission to their infants
- Ensure that countries can provide basic care and psychosocial support services to at least 25 percent of HIV-infected persons in high-prevalence countries
- Ensure that countries can provide community support services to at least 25 percent of children affected by HIV/AIDS in high-prevalence countries

USAID Strategy and Interventions

USAID's "expanded response" is designed to improve the ability of developing countries to prevent an increase in HIV/AIDS and provide services to infected persons and those otherwise affected by the epidemic. These include family members of people with HIV/AIDS, orphans, and vulnerable children. USAID is strengthening its financial and technical support for selected high-prevalence and low-prevalence countries.

USAID's HIV/AIDS program includes the following major approaches:

- Preventing the transmission of HIV
- Providing care, treatment, and support to individuals and communities affected by HIV/AIDS
- Addressing the needs of children affected by HIV/AIDS
- Increasing national and international surveillance capacity
- Increasing the capacity of health systems to address HIV/AIDS
- Providing technical leadership through research
- Working in partnership with donors, national governments, and community groups
- Creating an environment that supports HIV/AIDS prevention and care

The achievements described in the country examples on the opposite page demonstrate how these approaches, when applied in comprehensive programs, can significantly impede the course of HIV/AIDS epidemics in developing countries.

Preventing HIV Transmission

Prevention remains the cornerstone of USAID's programs. Preventing further HIV transmission and mitigating the effects of HIV/AIDS are essential to meeting USAID's broader goals of increasing economic growth, decreasing poverty, increasing agricultural productivity, and protecting human health.

In many developing countries, young people between the ages of 15 and 24 are the most vul-

Comprehensive Programs and Country-Level Results

Encouraging Signs in Cambodia. After first spreading rapidly in high-risk groups, HIV/AIDS reached Cambodia's general adult (ages 15 to 40) population. The USAID program in Cambodia focuses on behavior change, condom social marketing, cross-border prevention programs, policy and advocacy, and piloting and scaling up reproductive health and sexually transmitted disease services for vulnerable populations. While HIV prevalence remains high in Cambodia, there has been a significant and encouraging decline in the adult prevalence rate from 3.9 percent in 1997 to 2.8 percent in 2000. The rate of HIV infection among sex workers under 20 years of age dropped from more than 40 percent in 1998 to 23 percent in 2000. This decline can be attributed in part to a reduction in new infections in high-risk groups and a "100 percent" condom use policy in commercial sex establishments.

Prevention Achieves Results in Uganda. HIV/AIDS weighs heavily on Uganda. At the end of 1999, an estimated 820,000 Ugandans were living with HIV/AIDS, and 1.7 million children had lost their mother or both parents to the disease. USAID's HIV/AIDS program supports a comprehensive program of high-quality voluntary counseling and testing, care and support, programs for orphans and vulnerable children, behavior change communication, and condom social marketing. With strong leadership and aggressive prevention and care interventions, Uganda reduced its national HIV prevalence by 50 percent between 1992 and 1999. Uganda's HIV prevention programs have become a model for developing countries attempting to curb HIV/AIDS.

Targeting Young Adults in Zambia. At the end of 1999, 19.7 percent of Zambian adults were living with HIV/AIDS. The impact of HIV/AIDS is particularly strong on families, as the number of orphans (currently estimated at 650,000) continues to increase. USAID's HIV/AIDS efforts in Zambia are implemented through partnerships with communities, the government, nongovernmental organizations, the private sector, and other donors. Activities include behavior change communication, condom social marketing, voluntary counseling and testing, prevention of mother-to-child transmission of HIV, care and support programs for orphans and people living with HIV/AIDS, and assistance to community-based organizations in developing effective responses to the disease. A USAID-supported mass-media campaign targeted at young adults has contributed to more consistent condom use and delayed onset of sexual activity. Between 1993 and 1998, HIV prevalence among 15- to 19-year-olds declined by 42 percent. National data have also indicated a reduction, from 17 to 11 percent of respondents, in reported casual sexual behavior.

nerable to HIV infection. Young people at high risk of infection are targeted to change risky behaviors through abstinence, faithfulness, and the use of condoms to slow the spread of the virus. In high-prevalence areas, progress toward broad development goals cannot continue if these behavioral issues are not addressed. Prevention efforts are needed in low-prevalence areas to ensure that HIV/AIDS rates remain low and do not threaten development.

Prevention activities aim to slow and eventually reverse rising HIV infection rates. The Agency's approach is to reduce the risk factors that contribute to HIV transmission by:

- Developing mass-media and intensive interpersonal interventions to change high-risk sexual behavior
- Treating other sexually transmitted infections
- Increasing demand for and access to con-

doms and other essential commodities

- Preventing mother-to-child transmission of HIV
- Promoting voluntary HIV counseling and testing

USAID gives particular attention to broadening proven approaches that can be incorporated into national strategies. Today, more than a dozen USAID programs in Asia and Africa have adopted voluntary counseling and testing (VCT) as one of their core interventions. VCT has proved to be highly effective at promoting sustained behavior changes that slow transmission of HIV. VCT can serve as a portal to a range of preventive behaviors, including interventions to reduce mother-to-child HIV transmission, reduce high-risk behaviors, and overcome stigma associated with HIV/AIDS. USAID and its partners have introduced refinements such as community counseling and referral and the use of rapid "same-day results" HIV testing to increase the reach and effect of VCT. Studies in **Kenya** and **Uganda** are exploring how to expand voluntary testing among young people after earlier studies demonstrated that effective counseling helps to reduce HIV infection in youth populations.

Another promising USAID project in **Uganda** focuses on treating and preventing the spread of other sexually transmitted infections (STIs) that greatly increase the likelihood of HIV infection. The project uses social marketing to promote prepackaged STI treatment kits containing antibiotics, condoms, information, and partner referral cards to men between 18 and 25 years of age. In 10 months, the project sold 6,474 kits. Cure rates for STIs increased from 47 to 84 percent. Condom use doubled, and more than half of patients reported notifying their partners. The intervention is expanding nationwide. Social marketing of these "one-stop shopping" kits may also help increase access to effective STI treatment in other limited-resource countries.

Providing Care, Treatment, and Support

Care and treatment for those affected by HIV/AIDS are inseparable from preventing further HIV/AIDS transmission. Increasing the availability of care is a fundamental component of USAID's strategy. USAID funds 25 care, treatment, and support projects in 14 countries, using a "prevention-to-care continuum" approach that expands traditional prevention programming to include voluntary counseling and testing, economic strengthening, psychosocial support, home-based care, and research on innovative strategies. Other efforts focus on preventing and treating AIDS-related illnesses such as tuberculosis, which is the leading cause of AIDS-related death and accounts for 35 percent of AIDS deaths in sub-Saharan Africa. USAID is working to help countries develop essential health care infrastructures that will be able to expand access to services as care and treatment options continue to evolve.

Addressing the Needs of Children

USAID's interventions to help children affected by HIV/AIDS focus on the most severely affected countries and draw upon community resources to develop programs and solutions. See the "Children Affected by HIV/AIDS" section of this report for detailed information on these interventions.

Increasing Surveillance Capacity

USAID has long recognized the importance of collecting surveillance data to track the expanding HIV pandemic and measure the effect of prevention interventions. In 1987, USAID allocated funds to the U.S. Census Bureau to collect and analyze HIV surveillance data and provide technical assistance to country programs. The resulting HIV/AIDS Surveillance Database collects information from a wide variety of surveys and studies presented in medical and scientific

Mother-to-Child Transmission of HIV

The vast majority of children with HIV contract the virus via mother-to-child transmission (MTCT). MTCT can occur in three ways – during pregnancy, during delivery, or through breast-feeding. MTCT causes about 10 percent of all new HIV infections and is seriously undermining the substantial gains made in child health over the last few years. Today, infant mortality rates throughout Eastern and Southern Africa are nearly 70 percent higher than they would have been without the HIV/AIDS epidemic.

The most effective way to prevent MTCT is to prevent women of reproductive age from becoming infected with HIV. However, millions of women around the world are already infected, and many more will become infected. For these women, the following interventions, demonstrated by USAID-supported studies to be valuable and effective, are available to help protect their infants:

- Strengthening health, family planning, and safe motherhood programs
- Improving antenatal services
- Introducing voluntary confidential counseling and testing services
- Offering short-course antiretroviral (ARV) prophylactic treatment to HIV-positive pregnant women
- Counseling and supporting women to undertake safe infant feeding practices

USAID has invested more than $6 million to introduce a comprehensive package of MTCT interventions, including ARV prophylaxis, at pilot sites in Zambia and Kenya. Approximately 2,600 women have received services at these sites. The sites have improved antenatal services by training health workers and upgrading facilities. They also provide HIV test kits and give women access to safe obstetrical practices that reduce MTCT during delivery. In addition to preventing MTCT, these interventions improve the overall health of mothers and children by improving prenatal, delivery, and postpartum care.

literature, international conferences, and the press. The database compiles and analyzes the information and makes it available to countries, donors, nongovernmental organizations, and others. This information also is used to track HIV patterns and trends.

In collaboration with the U.S. Centers for Disease Control and Prevention, USAID helps countries develop their own surveillance programs. Surveillance activities are being expanded to better portray a diverse and changing pandemic, increase technical assistance to national surveillance programs, and expand training for developing-country epidemiologists and service providers.

USAID, WHO, the Joint United Nations Programme on HIV/AIDS (UNAIDS), and other partners are collaborating to implement second-generation surveillance systems. These systems aim to improve the ability of current systems to yield high-quality behavioral and biological data that will illuminate trends in the pandemic and help care and prevention programs reduce the spread of HIV infection. These second-generation systems will provide a better understanding of the factors driving the epidemic, especially with regard to subpopulations at the highest risk of infection, and help ensure that technical expertise and funds are tailored to country-specific needs.

Increasing Health System Capacity

In many countries, HIV/AIDS severely challenges already distressed health systems. The pandemic raises anew the issues of determining resource needs; allocating resources between prevention and care; securing HIV/AIDS budgets from national policy makers; developing HIV/AIDS protocols; ensuring the availability of resources such as drugs and personnel; and determining human resource policies and needs. As a world leader in health systems research and development, USAID has developed an array of tools and approaches that can help developing countries address these challenges. These include national health accounts that aggregate and track public-sector health spending; innovative financing arrangements; programs for comprehensive pharmaceutical management; and initiatives to increase the quality of care and improve human resources management.

Leadership in Research and Technology

A hallmark of USAID's HIV/AIDS program is the biomedical and behavioral research to develop and evaluate new tools for preventing HIV transmission and mitigating the effects of AIDS. Research results are used to improve service delivery for those living with HIV/AIDS and to design effective prevention interventions. Currently, USAID supports applied research in 21 countries, including research to develop and improve approaches to:

- Reaching youth with effective HIV prevention messages
- Integrating HIV testing services into existing health care settings
- Improving programs to prevent MTCT
- Developing a safe and effective HIV vaccine and vaginal microbicides
- Assisting children affected by HIV/AIDS
- Reducing the stigma of HIV/AIDS so affected persons can access available services

Partnerships with Donors, Governments, and Community Groups

HIV/AIDS poses broad challenges that USAID cannot address alone. A distinctive feature of USAID's HIV/AIDS program is collaboration with partners, including donors, national governments, nongovernmental organizations, and a range of host country and U.S.-based institutions and community organizations. These relationships provide the foundation for USAID's expanded response to HIV/AIDS and bolster efforts to build sustainable systems, use participatory approaches, and incorporate lessons learned.

The Community-Based Options for Protection and Empowerment project in **Malawi** is typical of USAID's partnership arrangements. USAID funds the project, which helps communities reach out and care for their vulnerable neighbors, including orphans and families affected by HIV/AIDS. The project provides technical assistance to local organizations and churches and since 1995 has provided care and support to 12,583 orphans and vulnerable children in four districts. Both the Episcopal Conference of Malawi and Save the Children collaborate with the project on HIV/AIDS prevention and mitigation initiatives.

In another project in **Namibia**, Catholic AIDS Action is working in three regions to provide HIV/AIDS prevention and education services for parents, teachers, and pupils. The organization helps cover school expenses and meet other costs for a group of orphans and children affected by HIV/AIDS.

At the regional level in **Central America**, the Central America HIV/AIDS Prevention Project supports NGOs in seven countries (Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama) by promoting strategic alliances among networks, improved data collection, and electronic and personal information sharing.

Creating a Supportive Environment

HIV/AIDS programs need a supportive context to be effective. USAID seeks innovative approaches to mitigate stigma and discrimination, food insecurity, lack of infrastructure, and gender inequality that may increase communities' vulnerability to HIV/AIDS and facilitate its spread.

A key area of intervention is advocacy for legislative and policy changes to assist and protect persons living with HIV/AIDS. In **Zambia**, a USAID project helped educate the public about HIV-related discrimination in order to learn more about incorporating such issues into HIV/AIDS prevention and care programs. The project worked with three Zambian NGOs to address human rights and HIV/AIDS issues and had three components: 1) an assessment of the legal rights of persons living with HIV/AIDS in Zambia; 2) a mass-media advertising campaign to convey the message that persons who have HIV/AIDS cannot be fired, denied employment, or discriminated against because of their HIV status; and 3) training of counselors to provide legal advice and referrals for persons living with HIV/AIDS who responded to the media campaign. As a result of the project, about 70 people with HIV/AIDS came forward to seek advice and referrals. The initiative will be expanded with support from USAID and other donors to include other countries and issues.

Future Perspectives

The global community is rising to meet the challenges of HIV/AIDS through a new international strategy and new partnerships. In 2001, the United Nations hosted a historic meeting on HIV/AIDS attended by leaders from around the globe. More than 180 countries pledged to increase their commitment to HIV/AIDS and meet specific goals for fighting the pandemic in the coming years. The newly established Global Fund to Fight AIDS, Tuberculosis, and Malaria is receiving pledges from corporations, foundations, and countries worldwide. As of mid-January 2002, these pledges exceeded $1.7 billion.

Photo by PAHO/Armando Wasik

VI. Infectious Disease Initiative

Photo by Irwin Shorr

VI. Infectious Disease Initiative

USAID's Infectious Disease Initiative seeks to "reduce the threat of infectious diseases of major public health importance." This 10-year effort, which began in 1998, focuses specifically on tuberculosis, antimicrobial resistance, malaria, and infectious disease surveillance and response. Other major infectious diseases, such as acute respiratory infections, diarrheal diseases, vaccine-preventable diseases, and HIV/AIDS are addressed through USAID's child survival/maternal health programs and the Agency's comprehensive HIV/AIDS efforts.

Under the Infectious Disease Initiative, USAID works in collaborative partnerships with the U.S. Centers for Disease Control and Prevention (CDC), WHO, the U.S. National Institutes of Health (NIH), universities, and nongovernmental organizations to develop strategies in priority areas threatened by infectious diseases. The Agency plays a critical role in the continued development of global initiatives and strategies, including STOP TB, the Global TB Drug Facility, Roll Back Malaria, and the development of a global response to antimicrobial resistance.

Tuberculosis

Although a cure has existed for more than 50 years, TB kills more than 2 million people annually and is one of the world's leading causes of death due to infectious disease. Every day, 20,000 people develop active TB and 5,000 die from the disease. A single person with untreated infectious TB can infect between 10 and 15 new people each year. Significant progress in combating the global TB epidemic during the past 10 years has been offset in some parts of the world by increases in TB in persons with HIV/AIDS and by multidrug-resistant TB.

Photo by Ellyn W. Ogden/USAID

Currently, 22 high-burden countries remain global priorities.

USAID Strategy and Interventions

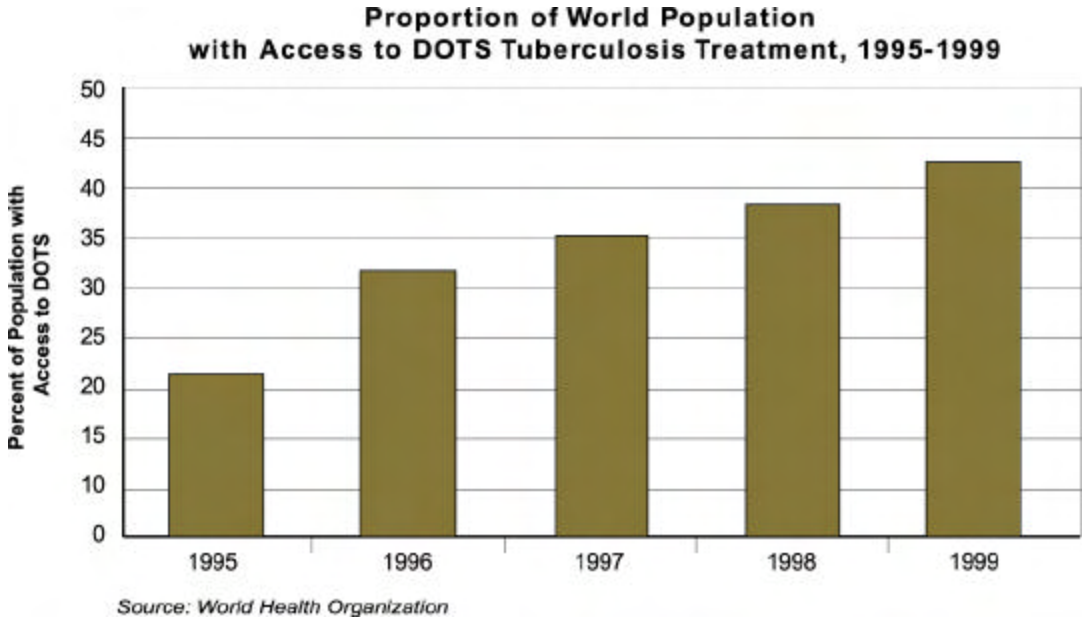
USAID is committed to addressing the global TB burden. The Agency's strategy focuses on:

- Expanding programs in countries with the greatest TB burden, high HIV/AIDS prevalence, and epidemics of multidrug-resistant TB
- Continuing investments in global and regional partnerships, including expanded research efforts
- Expanding the cadre of TB experts in collaboration with CDC, NIH, WHO, and nongovernmental organizations

In FY 2001, USAID assisted 31 countries and regional programs in the fight against TB, up from 18 in 2000. In these countries, USAID promotes the "directly observed treatment, short-course," or DOTS, strategy. This approach to TB control increases cure rates by 20 to 50 percent, reduces TB deaths by 10 to 39 percent, and prevents the emergence of multidrug-resistant TB. The DOTS goal is to detect 70 percent of infectious TB cases and successfully treat 85 percent of those detected cases by 2005.

TB drugs are an essential part of the DOTS strategy. Many countries, however, face serious problems in financing, ordering, and distributing

Figure 16



TB drugs. To address these problems, USAID and the STOP TB partners in 2001 created the Global TB Drug Facility (GDF). The GDF is designed to rapidly and efficiently provide grants-in-kind of essential TB drugs to countries in need. The GDF reviews applications from countries and contracts with procurement agents to provide high-quality TB drugs for use in DOTS programs. Through the standardization of drug products, a bulk-buying procurement system, and competitive bidding, the GDF has cut the cost of TB drugs needed for a six-month course of treatment to $10, a 30 percent reduction from previous international drug prices.

Key Achievements: TB

Applied DOTS Research in Brazil. Over the last two years, USAID, in partnership with the Gorgas Memorial Institute, has conducted applied research to adapt the DOTS approach for use in Brazil. The program has achieved an 84 percent treatment success rate in a rural area adjoining Rio de Janeiro, a significant achievement in a country with a 40 percent default rate of treatment completion. In 2002, this model program will expand to other parts of Rio de Janeiro.

Global TB Drug Facility Country Assessments. USAID participated in GDF country assessments in Moldova, Tajikistan, Kenya, and Uganda. Recommendations for improving systems performance were developed to help ensure that drugs procured under the GDF will reach patients as intended.

Developing a Rapid TB Diagnostic. USAID supported the development of a simple diagnostic test for rapid diagnosis of *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis disease. In 2002, the diagnostic will be evaluated in well-controlled prospective field trials in several sites in Africa, Asia, Europe, and Eurasia.

STOP TB in Cambodia, Vietnam, Philippines. With USAID support, the STOP TB Initiative in WHO's Western Pacific Region helped Cambodia, Vietnam, and the Philippines expand their TB control efforts. USAID provided technical support for developing five-year strategic plans and budgets for TB control; monitoring DOTS implementation; developing approaches to address HIV/TB co-infection; monitoring the quality of TB drugs; and strengthening drug

supply management.

Battling Multidrug-Resistant TB. USAID is working with WHO, the International Union Against TB and Lung Disease, and the Gorgas Institute on surveys of multidrug-resistant TB (MDR-TB) in Cambodia, India, and Morocco. The survey results will be used to monitor the effectiveness of DOTS programs and prevent the further emergence of MDR-TB.

Private-Sector TB Control. In order to expand the use of DOTS in high-burden countries, USAID is beginning to explore ways to improve the quality of TB control in the private sector. With USAID support, CDC and the Philippines Coalition against Tuberculosis have begun developing model programs to improve private-sector TB treatment.

Expanded TB Efforts in Eastern Europe and Eurasia. During the last five years, USAID has expanded its TB efforts in 11 countries in Eastern Europe and Eurasia, including Russia, the Central Asia Republics, Ukraine, Latvia, Lithuania, Estonia, and Kosovo. A USAID-supported treatment and control program in two Russian districts demonstrated the use of DOTS as an effective TB control strategy. In Orel district, a six-month trial achieved an 88 percent treatment success rate in new TB patients and a 60 percent success rate in re-treatment patients. In Ivanovo district, a study investigating treatment failure determined that in addition to MDR-TB, treatment interruption was a major cause of concern. Other achievements include comprehensive training of more than 20 physicians in Latvia in treating MDR-TB.

Future Perspectives: TB

In the coming years, USAID will continue to work closely with host countries, donors, and other partners in four specific areas: expanded TB programs in key countries, continued investments in global and regional partnerships, the development of cadres of TB experts, and research.

USAID will provide technical assistance to TB programs worldwide and help a number of targeted countries significantly expand their DOTS programs. This will include building the commitment and capacity to implement programs effectively, including monitoring and reporting. The Agency will continue its commitment to training and help countries develop expanded work forces with up-to-date skills in TB diagnosis and treatment.

USAID will also explore and implement private sector partnerships that can relieve the financial burden of TB treatment. The Agency will promote cost-effective approaches to care through support for technical advances in pharmaceuticals and diagnostics. As TB and HIV/AIDS programs intersect in treating people co-infected with TB and HIV, increased coordination will be required between these respective areas.

Antimicrobial Resistance

The use of antimicrobial agents has contributed to a significant decline in death and illness from infectious diseases over the past half-century. Unfortunately, the misuse of these agents in treating infectious diseases is undermining health gains by promoting antimicrobial resistance (AMR) to these drugs. Table 2 illustrates the level of AMR for a number of infectious diseases and treatment drugs. Where microbes have developed resistance to medicines, the most deadly infectious diseases have become increasingly difficult and expensive to treat, particularly in developing countries where resources are limited and rates of infectious diseases high. In the absence of safe, effective, and affordable treatments, health programs face the increasing spread of drug-resistant infectious diseases and higher mortality rates.

Table 2: Drug Resistance Levels in Microbes Causing Infectious Diseases

Disease	Causative Agent	Antimicrobial Drug	Drug Resistance Level
ARI	*S. pneumoniae*	Penicillin	12 - 55%
HIV/AIDS	HIV	Antiretrovirals	N/A
Diarrheal Diseases	*S. dysenteriae*	Cotrimoxazole	5 - 85%
Tuberculosis	*M. tuberculosis*	Isoniazid	2 - 38%
Malaria	*P. falciparum*	Chloroquine	30 - 50%
Gonorrhea	*N. gonorrhoeae*	Penicillin	up to 68%

Sources: WHO reports

USAID Strategy and Interventions

USAID's efforts aim to preserve the effectiveness of available and affordable antimicrobials and delay the need for alternative drugs. To meet these objectives, USAID focuses on three key areas: 1) decreasing the use of antimicrobial drugs when not required; 2) ensuring the appropriate use of drugs when they are required; and 3) improving the quality and supply of antimicrobial drugs.

Key Achievements: AMR

WHO Global Strategy for Containment of Antimicrobial Resistance. In 2001, WHO finalized the USAID-supported Global AMR Strategy and published it along with a series of complementary technical reviews commissioned by USAID. To combat AMR, the strategy identifies interventions involving education, regulation, legislation, health policies, and systems strengthening that target key populations, including patients/consumers, drug prescribers/dispensers, and policy makers. USAID and several partner organizations, including WHO, have begun to develop tools and strategies for operationalizing the strategy in developing countries.

Global Advocacy. In the absence of appropriate systems for proper drug management and use, global efforts to make antimicrobial drugs more widely available have the potential to worsen the drug resistance problem. In response, USAID has been working with international health partners and donors to ensure that drug management receives appropriate attention in new initiatives such as the Global Fund to Fight AIDS, Tuberculosis, and Malaria and STOP TB's Global TB Drug Facility. USAID also supported WHO's publication of a special edition of the *Essential Drugs Monitor* that focuses on the global threat posed by AMR. The publication describes the AMR problem and how several developing countries are responding to drug resistance by improving the use of medicines.

Expansion of Malaria AMR Surveillance in South Asia. Emulating the multicountry network recently established in Southeast Asia to monitor and respond to drug-resistant malaria, USAID is supporting WHO's regional New Delhi office in establishing a similar network in South Asia. Standardized information gathered by countries in the region will help policy makers and health officials improve the effectiveness of malaria treatment.

AMR Surveillance and Training in Latin America and the Caribbean. This regional USAID initiative focuses on improving laboratory surveillance for drug-resistant respiratory and diarrheal pathogens and introducing interventions to improve the management and use of antimicrobial drugs. The priority countries are Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, and Peru. Laboratory personnel were trained how to identify bacteria and test for antimicrobial resistance. Six of the nine countries have been fully integrated into a regional AMR surveillance network and quality control system.

Future Perspectives: AMR

USAID and partner organizations will begin to operationalize the WHO Global AMR Strategy at the country level, building on USAID-funded research on guidelines, policies, and tools. This approach will both slow the emergence of drug resistance and benefit health programs (such as IMCI, ARI and diarrheal disease case management, and treatment programs for malaria, TB, and sexually transmitted infections) that rely on antimicrobial drugs to treat infectious diseases.

High concentrations of infectious organisms and high (and frequently unjustified) levels of antibiotic use make hospitals important foci for AMR development. WHO's Global Strategy for Containment of AMR highlights infection control and prudent use of antimicrobial agents in hospitals as key components to address this problem. In response to this issue, USAID is supporting the development of a multidisciplinary approach to prevent and control nosocomial infections in developing-country hospitals. The approach will build on simple, low-cost, low-tech infection control interventions that target the most important factors in the spread of antimicrobial-resistant bacteria in hospitals.

Malaria

While malaria is a global problem, its epidemiology and public health impact vary among the world's geographic regions. In Africa, it poses a particular challenge to public health and social and economic development. Africa currently accounts for 85 percent of the world's clinical malaria cases, and 90 percent of the estimated 2.7 million annual malaria deaths. Infants, young children, and pregnant women are especially vulnerable. If not adequately addressed, the region can expect a 7 to 20 percent annual increase in malaria-related deaths and cases of severe illness. These increases will be largely driven by the emergence and spread of new drug-resistant strains of malaria.

Latin America and South Asia also have extensive areas of malaria transmission, but to date the public health impact has been limited, in part due to the predominance of a less lethal type of malaria parasite.

Since the 1980s, falciparum malaria, the most deadly kind of malaria, has developed high levels of resistance to most of the antimalarial drugs of choice. In Africa, where chloroquine has been an inexpensive and effective front-line treatment for more than 50 years, the spread of chloroquine-resistant malaria has contributed to a two- to-fourfold rise in malaria-related hospital admissions and a two- to-threefold increase in malaria-related deaths. In Southeast Asia and South America's Amazon basin, the past decade has seen an even more ominous increase in drug-resistant malaria that threatens to undermine previous progress in malaria control. The emergence of new and even more lethal strains of falciparum malaria that are resistant to the major treatment drugs (including chloroquine, mefloquine, sulfadoxine/pyrimethamine, and quinine) raises the prospect of the further spread of drug-resistant infections and thus more extensive and lethal malaria outbreaks.

USAID Strategy and Interventions

Since the start of the Infectious Disease Initiative in 1998, USAID has significantly stepped up its efforts in the battle against malaria. These efforts have focused on developing new technologies and approaches for malaria prevention and control; building malaria control networks among U.S. government agencies, multilateral donors, NGOs, and other bilateral donors; "rolling out" the Roll Back Malaria (RBM) initiative; and establishing new malaria programs in more than 20 countries.

Strategically, USAID's efforts are focused in five key areas:

- 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

Key Achievements: Malaria

The "Roll Out" of Roll Back Malaria. Over the past year, USAID has worked closely with the WHO Geneva secretariat for RBM; WHO regional offices for Africa, South Asia, and the Western Pacific; the Pan American Health Organization (PAHO); and a host of other partners to lay out RBM's agenda and formulate its strategic approach. USAID has especially promoted strong operational linkages between RBM and ongoing maternal and child health programs such as Integrated Management of Childhood Illness (IMCI) and Making Pregnancies Safer.

Advances in Malaria Vaccine Development. In partnership with the U.S. Department of Defense, NIH, and the Bill & Melinda Gates Foundation, USAID has focused on developing and testing new malaria vaccines, including a vaccine for field-testing in Kenya and Mali in 2002 and a multicomponent DNA vaccine for initial trials in the United States. With NIH, the Agency is attempting to exploit biotechnical advances in genome sequencing of the malaria parasite to develop a new generation of "designer" vaccines that are expected to be highly effective in protecting against malaria infection.

NetMark: Promoting Healthy Lives Through Prevention. Malaria prevention through the use of insecticide-treated materials is one of RBM's key approaches. As part of its commitment to making affordable insecticide-treated bed nets (ITNs) available on a sustained basis, USAID has launched NetMark project activities in Zambia. NetMark is an innovative regional public-private venture to promote sustainable competitive commercial distribution of ITNs in Africa. By March 2002, NetMark is expected to be fully operational in Nigeria, Senegal, Ghana, and Zambia. The potential impact of ITNs and other insecticide-treated materials in malaria-endemic countries is substantial. Regular use in children can reduce the risk of dying before age 5 by 20 percent and the number of clinical episodes by 50 percent, and it is estimated that the use of ITNs could save more than 600,000 lives annually. The NetMark partnership between USAID and seven of the world's largest manufacturers of bed nets and insecticides is projected to sell 31 million nets and 175 million insecticide re-treatments by September 2004, enough to protect more than 50 million African children.

Slowing the Emergence and Spread of Multidrug-Resistant Malaria. Over the past decade, the emergence and spread of multidrug-resistant (MDR) malaria across the Mekong Basin region of Southeast Asia have posed an especially difficult challenge to planners and policy makers. To respond to this challenge, USAID, with WHO and RBM, established a regional sentinel surveillance network in the six Mekong countries of Burma, Cambodia, China,

Protecting Pregnant Women from Malaria

Each year, an estimated 400,000 perinatal deaths in Africa are caused by complications arising from maternal malaria infection during pregnancy. Placental infection with the malaria parasite has long been recognized as a significant underlying cause of anemia and low birthweight. Recent USAID-supported field trials conducted by the U.S. Centers for Disease Control and Prevention demonstrate that women and their unborn babies can be fully protected from these risks of malaria infection by two treatments of the antimalarial drug sulfadoxine-pyrimethamine (SP) at the beginning of both the second and third trimesters of pregnancy.

Only a few African countries have policies for providing SP through antenatal clinics, so USAID is working to build a "malaria and pregnancy network" that will promote wider use of this antimalarial therapy. With WHO, USAID cohosted an Africa regional meeting in late 2001 on expanded malaria-in-pregnancy activities.

With the Roll Back Malaria initiative, USAID has also set a target of providing 60 percent of pregnant women in Africa with access to two antenatal malaria interventions – intermittent preventive SP treatment and insecticide-treated bed nets. With this two-pronged intervention strategy, RBM expects to reduce by at least half the number of deaths in Africa caused by malaria infection during pregnancy.

USAID played a major role in the research that supports these interventions. Data from Malawi, where intermittent presumptive malaria treatment during pregnancy has been the policy for almost a decade, show that treatment reduces rates of maternal anemia, placental malaria infection, and low birthweight. Malawian women who received at least one treatment during pregnancy had significantly fewer of these outcomes than women who had no treatment. Studies in Kenya have shown that regular use of insecticide-treated nets by women during their first four pregnancies was associated with a 21 percent reduction in "all-cause" anemia and a 47 percent reduction in severe malarial anemia during pregnancy. At delivery, there was a 23 percent reduction in placental malaria, a 28 percent reduction in low birthweight, and a 25 percent reduction in all adverse birth outcomes.

More than 24 million pregnant women, and their unborn children, are at risk from malaria in Africa each year. With high rates of antenatal care attendance, these targeted malaria interventions offer tremendous opportunities to reach and protect these women and their newborns.

Laos, Thailand, and Vietnam to provide routine monitoring of MDR malaria and coordinate responses to it. In addition, USAID has established programs in western Cambodia and along the Thailand-Burma border to deliver more effective preventive and treatment services for populations most at risk from MDR. In a similar undertaking in South America, USAID and PAHO in 2001 established a new Amazon Initiative to support a coordinated regional response to the spread of drug resistance in nine countries in the Amazon Basin.

Developing Simple and Effective Health Technologies. The long-term success of health programs in developing countries requires simple, effective, and affordable interventions, not technologies that may be too expensive, too fragile, or rendered ineffective by adaptive disease pathogens. In this regard, USAID has sup-

ported the development of low-cost, reliable malaria diagnostics suitable for use at rural health facilities. Already, these diagnostics are proving to be an important new tool for managing drug resistance, especially in the Mekong Basin countries of Southeast Asia.

Future Perspectives: Malaria

Additional funds in FY 2001 are being used for such activities as addressing malaria in complex emergencies. There is a growing recognition that African countries in conflict account for a rapidly growing percentage of the deaths due to malaria. Angola, Sudan, and the Democratic Republic of the Congo were specifically targeted this year for expanded support. With WHO, USAID is developing an NGO-based regional capacity to respond to the acute needs posed by Africa's complex emergencies.

USAID is also using increased funds to expand its bilateral programs to 17 countries across Africa and "scale up" a comprehensive malaria package that includes prevention, malaria-in-pregnancy interventions, and improved access to effective treatment. This program is being rolled out in Senegal, Uganda, and Zambia. While most of these expanded efforts will complement ongoing malaria activities in Africa, subregional efforts in South America and Southeast Asia may also be included.

Surveillance

Given the ever-growing threat of infectious diseases such as HIV/AIDS, tuberculosis, malaria, and pneumonia to both developed and developing countries, the need for all countries to maintain an active and effective surveillance and response capacity is critical. In addition to these major infectious diseases, WHO reports approximately 200 outbreaks of diseases of potential international importance annually. These include such diseases as cholera, meningitis, measles, hemorrhagic, fevers, anthrax, yellow fever, and viral encephalitis.

The tasks of identifying these diseases and designing and implementing procedures for their prevention and treatment fall on a country's disease surveillance and response system. As critical as these functions are to the success of public health activities, they are often among the least developed. Obstacles to high-quality surveillance and response in developing countries include poor data collection, analysis, and interpretation skills; inconsistent disease definitions; weak or nonexistent capacity for laboratory diagnostics, epidemiology, and outbreak investigation; poor communications systems; and lack of human and financial resources.

Within this context, USAID has committed resources to building the capacity of countries to detect, verify, analyze, interpret, and respond to disease occurrences and outbreaks. This capacity contributes to the overall effectiveness of national and local health services and promotes better health by preventing the spread of infectious diseases.

USAID Strategy and Interventions

USAID's approach to developing infectious disease surveillance and response capacity is coordinated at the country, regional, and global levels. Perhaps the most important use of USAID resources is to build national-level capacity to detect and respond to infectious diseases, both those of epidemic potential and endemic diseases that are major contributors to mortality. USAID's current national-level work focuses on Tanzania, Ghana, Uganda, and Georgia.

USAID supports regional activities and initiatives that facilitate improved country surveillance and establish the basis for coordinated regional responses to infectious disease outbreaks of global importance. These activities include support for the Integrated Disease Surveillance and Response Initiative in Africa, the European Infectious Diseases Strengthening Initiative in the republics of Eastern Europe and

states of the former Soviet Union, and support for regional laboratory networks in Latin America and Africa.

At the global level, USAID is providing the leadership for cutting-edge research to resolve critical obstacles associated with infectious disease surveillance in developing countries. These include innovative ways to conduct epidemiology training in isolated settings and the development of rapid diagnostic and laboratory capabilities that are less dependent on sophisticated technologies that are difficult to support and apply in developing-country settings.

Key Achievements: Surveillance

Piggybacking with Polio. USAID developed a manual for polio surveillance that also trains health workers to detect other diseases (such as measles, cholera, meningitis, neonatal tetanus, and yellow fever) when they are looking for acute flaccid paralysis. This takes full advantage of the opportunity to enhance polio surveillance beyond the scope of polio alone. The manual is being widely used as a guide to conduct disease surveillance in polio-endemic countries.

Africa Regional Support. USAID supports the WHO's African regional office in designing and implementing the Integrated Disease Surveillance and Response Initiative. To date, 23 countries have conducted assessments of their national surveillance systems, and 15 countries have developed plans of action for improving infectious disease surveillance. Eight countries are on a "fast track" to implement infectious disease surveillance and response at the district level.

Malaria Surveillance. Through its Environmental Health Project, USAID is developing a geographic information system to improve disease surveillance for malaria. This work is taking place in Eritrea, Mozambique, and Nepal. The focus is on establishing ways for local health authorities to better use surveillance information in malaria control efforts so that resources are not wasted and greater health impacts can be achieved at lower cost.

Surveillance Support in Eastern Europe and Eurasia. USAID is supporting the WHO's European regional office in the development of a surveillance system for vaccine-preventable diseases in Eastern Europe and the states of the former Soviet Union. This activity will expand a USAID-funded program in Ukraine that introduced local control over disease surveillance in place of the former slow and cumbersome centralized approach. The activity is currently in the planning stage and will initially target three countries.

Country-Level Activities in Africa. In Tanzania, USAID has negotiated an agreement with the Ministry of Health to provide technical assistance for the development of a national disease surveillance system in at least 12 districts over the next three years. This work will focus attention on building information-gathering and analysis capabilities at the district level, developing a national public health laboratory, and developing a rapid-response capability to investigate and respond to infectious disease outbreaks. Similar work is being conducted in Ghana and Uganda.

Future Perspectives: Surveillance

The most critical area for the future is the development of sustainable country-level surveillance capacities. This will require assistance in case detection and reporting, epidemiological investigation skills, laboratory support, rapid-response capacity, and data analysis and interpretation. The development of country-level capacity is essential to support regional and global initiatives. Another focus is the integration of infectious disease surveillance with other types of health data, including national health expenditure data, drug purchases, immunization coverage, and human

resource allocations. This will help strengthen health care delivery systems by relating management information to disease outcomes.

Photo by Richard Matchewka

VII. PVO Partnerships

Photo by PAHO/Armando Weak

VII. PVO Partnerships

Photo by Richard Franco

USAID's long-standing partnership with private voluntary organizations (PVOs) enables the Agency to pursue child survival, health, disease control, and basic education objectives in community-based programs worldwide. Three funding mechanisms are available for working with PVOs – USAID/Washington-funded agreements, Mission-funded agreements, and the Child Survival Grants Program (CSGP) of USAID's Office of Private and Voluntary Cooperation (PVC). Activities funded through USAID Washington and USAID Missions are described in other sections of this report; this section describes activities under the CSGP.

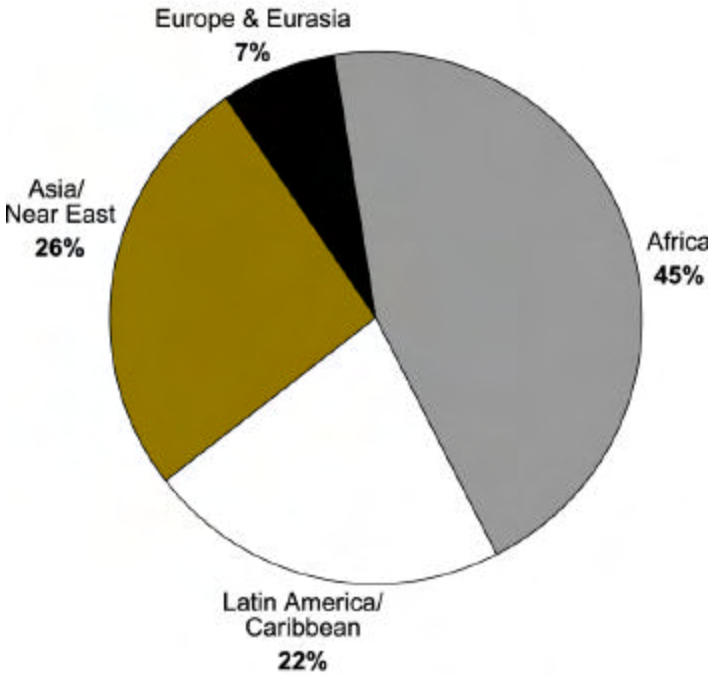
Since 1985, the CSGP has funded more than 300 child survival programs with more than 35 PVOs in 44 countries. It currently funds 73 projects with 25 PVOs in 33 countries, totaling $68.6 million. In FY 2001, funds provided $22.1 million in support of 19 new programs.

CSGP projects help promote infant, child, and maternal survival and health while they also strengthen the organizational, managerial, and technical competencies of their local partners. Under the program, PVOs have established strong partnerships and programs. They have become early implementers of new child survival technologies and approaches, applying them at reasonable cost to enhance their potential for sustainability. The PVOs often integrate their efforts with other activities such as food aid, microcredit programs, water and sanitation, agriculture, and relief efforts. In order to have impacts on difficult-to-reach populations, they harness community involvement and participation.

Over the years, the role of the PVOs has evolved from directly implementing programs to informing national policy and building the institutional capacity of local partners. This is particularly important at a time when health services in many countries are decentralizing and experiencing financial pressures. The PVOs are adept at fostering the financial and institutional sustainability of programs after USAID-funded projects conclude, thus helping to ensure that communi-

Figure 17

Distribution of Child Survival Grants Program Activities by Region, FY 2001



Note: Based on 73 active programs in FY2001.
Source: USAID program reports

ties and populations continue to benefit from improvements in coverage and service quality.

USAID Strategy and Interventions

USAID's competitive grants program applies rigorous, internationally accepted technical and reporting standards to ensure that PVOs deliver high-quality, sustainable child survival interventions in a variety of program settings. The program is open to all USAID-registered PVOs that engage in community child health care programming as part of their international development efforts. Sites where under-five child mortality is greater than 100 per 1,000 births are given high priority.

When the CSGP first began, 90 percent of PVO efforts went to immunization, diarrheal disease, and nutrition. While interventions in these areas still account for about half of PVO activities, over the past 15 years the intervention mix has broadened to address other areas. The program currently includes immunizations; nutrition (including micronutrients, vitamin A, and breastfeeding); control of diarrheal diseases; acute respiratory infections and pneumonia case management; malaria prevention and control; maternal and newborn care; child spacing; and sexually transmitted infections and HIV/AIDS. Within these areas, innovative project designs and strategies include:

- Building local capacity to influence national health policy
- Forming local coalitions of service providers to advocate for improved programs
- Organizing social health insurance mechanisms for mothers and children
- Designing and implementing community-based health information systems for community ownership and management of projects
- Integrating trained traditional providers in referral systems between communities and health facilities

The CSGP's particular strength is that it allows for a diversity of approaches and strategies targeted at local realities. Some projects focus on specific technical areas to bring about policy changes that will impact a larger population; others focus in restricted geographic areas but provide a more comprehensive mix of interventions. The trend today is toward greater integration of services and implementing state-of-the-art methodologies such as the community/household component of the Integrated Management of Childhood Illness (IMCI) strategy.

Photo by Ellyn W. Ogden/USAID

Key Achievements

Successful and innovative approaches to technical programming, capacity building, and sustainability demonstrated by CSGP-funded PVOs include the following:

Empowering Women in Yemen. The Adventist Development Relief Agency organized an informal network of women's groups in Yemen into organizations that disseminate health education messages, reinforce changes in health behavior, and promote empowerment through literacy and small-enterprise development. The program's results suggest positive synergies in the areas of women's health, literacy, and economic empowerment. By the end of the project, the percentage of literate women increased from 5.8 to 10.4 percent; breastfeeding of children ages 20 to 24 months increased from 63 to 78 percent; and the number of families engaged in small

income-generating projects grew from 68 to 90.

Rural Health Services in Tajikistan. Since 1998, Save the Children has substantially increased access to health information and the quality of key maternal and child health services in Tajikistan's Panjikent district. The project has improved the capability of rural health facilities to provide sustainable health services. For the first time in years, essential drugs have been available in 75 village pharmacies, which are operating at full cost recovery after initial start-up contributions from UNICEF.

IMCI: Policy Development and Implementation in Ghana. In many countries, PVOs are taking the lead in promoting and implementing the community/household component of IMCI. They also are contributing to policy development at the national level. In Ghana, the government commended PLAN International's successful community-based IMCI strategies, and PLAN is now a key member of the national coordinating committee for developing community-level IMCI.

Community-Based IMCI in Bolivia. Save the Children incorporated community-based IMCI into Ministry of Health plans and activities in three districts in Bolivia. As a result of health promoter training and other outreach activities, use of Ministry health services is increasing and children are being treated at earlier stages of illness.

Partner Activities in Roll Back Malaria. In partnership with USAID, UNICEF, WHO, and the World Bank, PVOs are contributing to the global Roll Back Malaria initiative by improving access to providers and promoting proper care-seeking behaviors. In Ghana, PLAN International increased its target population's household use of insecticide-treated bed nets from 9 to 54 percent. In 96 percent of the households, children under age 5 now use a bed net. In the International Rescue Committee's malaria activities in Rwanda, community health agents are trained as health animators and educate community groups in malaria prevention, early detection, and the need to seek appropriate treatment.

Child Health Interventions in Nepal. In southern Nepal, PLAN International reported increases in several key child health indicators for four targeted interventions: diarrhea case management, pneumonia case management, maternal and newborn care, and family planning. Strategies include staff training and follow-up; improved supervision; promotion and strengthening of information, education, and communication; development of community partnerships; and implementation of a cost-recovery mechanism. By the end of the four-year project, use of oral rehydration therapy among infants with diarrhea increased from 35 to 74 percent. The percentage of mothers who knew danger signs of severe pneumonia increased from 17 to 75 percent, and deliveries attended by trained health personnel increased from 35 to 65 percent.

Future Perspectives

PVOs are working in a changing environment. Their roles, strengths, and challenges are evolving as they move from direct service delivery to building the capacities of their local partners and preparing them for sustained service delivery. In some of the world's most challenging environments, PVOs will continue to work at the community level even as they expand and build bridges between new health infrastructures and the communities they serve.

Photo by PAHO/Armando Wasik

VIII. A View to the Future

Photo by PAHO/Armando Wasik

VIII. A View to the Future

To achieve the goals of reducing poverty and creating economic growth, developing countries need healthy citizens who have the skills provided by basic education. Healthy, educated individuals are more productive for longer periods of their lives and contribute to increased family incomes and economic growth.

USAID is committed to the goals of improving the health, education, and well-being of developing-country populations. Meeting these goals will improve the living conditions and lifetime prospects of millions of individuals while contributing to long-term development goals such as poverty reduction and economic viability. By focusing on child and maternal health, basic education, and control of infectious diseases such as HIV/AIDS, TB, and malaria, USAID is a leader in reducing human suffering and improving the economic conditions and prospects of people and countries worldwide.

The world has made great progress in child survival, health, disease control, and basic education, but the road ahead remains long. In coming years, the Agency will focus on:

Child Survival and Maternal Health: Through the Global Alliance for Vaccines and Immunization, USAID will commit resources to sustaining and improving immunization coverage. As a leader in the global polio eradication effort, USAID will continue to support accelerated activities in the upcoming critical years. In nutrition, the Agency will promote exclusive breastfeeding and micronutrient programs while providing new resources for food fortification programs through the Global Alliance to Improve Nutrition. USAID will continue to promote maternal health through improved service quality, increased demand for maternal health services, and support for national maternal health policies.

Basic Education: USAID will continue to help countries achieve the Education for All goals by 2015. Achieving universal primary education and creating and maintaining quality education programs in schools facing ever-increasing enrollments will be major challenges.

Vulnerable Children: USAID programs will support family reunification and community reintegration programs for unaccompanied children and children affected by war while also helping them gain access to medical and educational services. USAID will support programs for disabled children to improve their quality of life and expand their participation in mainstream activities. The Agency will continue to support community initiatives to help children affected by HIV/AIDS and work with other partners to expand responses for these children.

HIV/AIDS: Through its “expanded response” to HIV/AIDS, USAID will be a major partner in the global effort to meet the goals identified in 2000 for fighting the pandemic in the coming years. Along with other agencies, foundations, corporations, and governments, USAID will play a substantial role in the newly established Global Fund to Fight AIDS, Tuberculosis, and Malaria.

Infectious Diseases: USAID will work closely with host countries, donors, and other partners to expand TB programs in key countries, with a focus on building political commitment and local capacity to implement effective DOTS programs. Increased malaria funding will be used to expand bilateral programs to 17 countries across Africa and scale up a comprehensive malaria package that includes prevention, protection against malaria in pregnancy, and improved access to treatment. Developing sustainable country-level disease surveillance capacity, essential for regional and global initiatives to succeed, is also a USAID priority.

All of these efforts are global tasks requiring shared commitments. USAID is leading the way

in engaging others in partnerships committed to expanding the resources and expertise directed at solving global health problems. Disease, hunger, and ignorance know no borders and plague people and nations throughout the developing world. USAID, through its Child Survival and Disease Programs Fund and the activities it supports, will remain committed to enhancing child survival, improving maternal and child health, fighting HIV/AIDS and other infectious diseases, and supporting basic education to promote the health, well-being, productivity, and prosperity of individuals and developing countries worldwide.

Photo by PAHO/Armando Wasik

Sources

Abdallay, H. et al. Forthcoming. *Impact of New Evidence-based Guidelines on the Cost of Managing Pregnancy-induced Hypertension in Hospitals, Tver, Russia.* Bethesda, MD: the Quality Assurance Project.

Basic Support for Institutionalizing Child Survival II (BASICS II). 2001. *A Better Future for Children: Progress toward World Summit Goals for Health and Nutrition.* Arlington, VA: BASICS II.

BASICS II and Child Survival Collaborations and Resources Group (CORE). 2001. *Reaching Communities for Child Health and Nutrition: A Framework for Household and Community IMCI.* Arlington, VA and Washington, DC: BASICS II and CORE.

Centers for Disease Control and Prevention (CDC). Division of Reproductive Health. Health Surveys (various countries and years, 1990-2001). Atlanta, GA: CDC.

Communications from USAID Missions regarding fiscal year 2001 activities.

Communications and progress reports from USAID cooperating agencies, grantees, and contractors regarding fiscal year 2001 activities.

Communications from USAID regional bureaus for estimated fiscal year 2001 funding allocations.

Macro International. 2001. "2001 Child Survival Grants Program Review." Child Survival Technical Support Project. Calverton, MD: Macro International.

Macro International and partner organizations. *Demographic and Health Surveys* (various countries and years 1990-2001). Calverton, MD: Macro International.

Partnerships for Health Reform Project. 2001. *Partnerships for Health Reform Project Final Report, 1995-2001.* Bethesda, MD: Partnerships for Health Reform Project, Abt Associates, Inc.

Support for Analysis and Research in Africa (SARA) Project. 2001. "Lives at Risk: Malaria and Pregnancy." Washington, DC: SARA Project.

The Synergy Project. 2001. *Leading the Way: USAID Responds to HIV/AIDS.* Washington, DC: The Synergy Project, TvT Associates.

UNESCO. 2001. "Education Counts." CD Rom. New York: UNESCO.

UNICEF. 2001. *We the Children: End-decade review of the follow-up to the World Summit for Children. Report of the Secretary General.* http://www.unicef.org/special session/documentation/index.html

USAID. 2000. “Maternal Health Programs.” USAID Intervention Briefs series. Washington, DC: USAID.

USAID. 2001. *A woman’s nutritional status affects her children’s health* (Population, health, nutrition fact sheet). Washington, DC: USAID.

USAID. 2001. “Children – the World’s Future.” Washington, DC: USAID.

USAID. 2001. *Ensuring adequate vitamin A intake* (Population, health, nutrition fact sheet). Washington, DC: USAID.

USAID. FY2003 R4 Documentation and Database (various countries). http://www.dec.org/partners/r4/

USAID. Gender Education Database (GED) Online. http://qesdb.cdie.org/ged/index.html

USAID. 2001. *Improved maternal and young child nutrition: Malnutrition, a global epidemic* (Population, health, nutrition fact sheet). Washington, DC: USAID.

USAID. 2001. *Improving young child nutrition-minimizing the risks: Breastfeeding is good for women* (Population, health, nutrition fact sheet). Washington, DC: USAID.

USAID and WHO. 2001. “Newborn Health and Survival. A Call to Action.” Washington, DC: USAID.

USAID. 2001. *The USAID Polio Eradication Initiative 2000 Report to Congress: Reaching Every Child.* Washington, DC: USAID.

U.S. Census Bureau. International Data Base (IDB). http://www.census.gov/ipc/www/idbnew.html

Victora CG, Bryce J, Fontaine O, Monasch R. 2000. Reducing deaths from diarrhea through oral rehydration therapy. *Bulletin of the World Health Organization,* 78:1246-1255.

World Health Organization (WHO). 2001. Evidence and Information for Policy/WHO, Child and Adolescent Health and Development. http:/www.who.int/child-adolescent health/inegr.htm

WHO. 2000. *World Health Report 2000.* Geneva: WHO.

WHO Commission on Macroeconomics and Health. 2001. *Macroeconomics and Health: Investing in Health for Economic Development.* Geneva: WHO. http://www3.who.int/whosis/cmh/cmh_report/e/report.cfm?path=cmh,cmh_report

WHO, UNICEF, and UNFPA. 2001. *Maternal Mortality in 1995: Estimates developed by WHO, UNICEF, UNFPA.* Geneva: WHO.

Financial Annex

Funding Tables

Table 1: FY 2001 Child Survival and Disease Programs Fund Initial Allocations by Bureau and Primary Funding Category CSD Account Only ($ Thousands)

		USAID Bureaus						
Funding Category	**Total**	**AFR**	**ANE**	**E&E**	**LAC**	**Global**	**BHR**	**PPC**
Child Survival & Maternal Health	295,351	81,236	51,374	-	33,678	106,743	20,936	1,384
Vulnerable Children (DCOF)	29,935	17,314	4,291	-	1,646	4,988	1,696	-
HIV/AIDS	289,338	133,673	34,395	4,038	23,021	86,573	6,831	807
Infectious Disease	123,725	40,009	16,512	2,744	17,662	44,805	1,803	190
Subtotal	**738,349**	**272,232**	**106,572**	**6,782**	**76,007**	**243,109**	**31,266**	**2,381**
Basic Education	102,773	66,880	3,960	-	22,737	8,265	459	472
UNICEF Grant	109,758							
Global Fund to Fight AIDS,Tuberculosis, and Malaria*	100,000							
GRAND TOTAL**	**1,050,880**	**339,112**	**110,532**	**6,782**	**98,744**	**251,374**	**31,725**	**2,853**

*FY01 CSD supplemental appropriation

**Initial FY01 CSD appropriation of $1.063 billion reduced by $12.120 million as part of government-wide recission

Notes:

$25 million of CSD Micronutrient Funds are included in the CS/MH line
$26.7 million of CSD Polio Funds are included in the CS/MH line
CSD Vulnerable Children funds include $15 million for Children Affected by AIDS

Source: USAID Office of Management and Budget

Legend:

AFR	Bureau for Africa
ANE	Bureau for Asia and the Near East
E&E	Bureau for Europe and Eurasia
Global	Bureau for Global Programs and Research
BHR	Bureau for Humanitarian Response
PPC	Bureau for Policy and Program Coordination

Table 2: FY 2001 CSD Estimated Allocations by Major Functional Component and Country CSD Account Only ($ Thousands)

Bureau/Country	CS/MH (excluding Polio)	POLIO	DCOF/VUL	HIV	INFECT. DISEASE	BASIC ED	Total CSD
AFRICA							
Angola	1,427	2,375	1,000	1,485	1,000	-	7,287
Benin	1,505	100	-	2,005	828	5,720	10,158
Burundi	-	-	-	-	-	-	-
Dem. Rep. Congo	5,550	2,900	1,005	3,464	1,738	-	14,657
Eritrea	2,520	-	-	1,497	499	-	4,516
Ethiopia	981	2,600	1,894	7,184	1,805	11,622	26,086
Ghana	3,510	500	-	4,454	1,098	5,857	15,419
Guinea	1,908	250	-	2,202	-	4,994	9,354
Kenya	1,080	-	2,095	8,412	1,685	-	13,272
Liberia	850	500	500	-	-	-	1,850
Madagascar	2,625	75	-	1,485	-	-	4,185
Malawi	1,256	75	1,247	5,939	2,334	4,011	14,862
Mali	3,700	300	-	3,167	-	5,266	12,433
Mozambique	4,072	100	499	6,136	1,846	-	12,653
Namibia	-	-	-	1,485	-	2,898	4,383
Nigeria	3,930	2,000	-	11,775	2,495	3,163	23,363
Rwanda	1,167	50	499	4,652	299	-	6,667
Senegal	1,733	150	-	4,502	3,481	-	9,866
Sierra Leone	-	134	1,750	-	-	-	1,884
South Africa	2,475	-	998	9,902	987	3,000	17,362
Tanzania	2,500	-	499	6,928	798	-	10,725
Uganda	2,376	-	2,334	11,382	4,789	8,799	29,680
Zambia	4,620	80	1,995	10,887	3,991	4,965	26,538
Zimbabwe	-	-	499	5,939	-	-	6,438
REDSO/ESA	1,440	-	-	2,680	894	-	5,014
GHAI Core	500	-	-	-	-	-	500
GHAI Sudan	500	-	500	-	-	-	1,000
GHAI Somalia	500	-	-	-	-	-	500
AFR/SD	9,477	4,845	-	7,918	8,943	6,585	37,768
AFR/DP	-	-	-	-	-	-	-
WARP	2,000	-	-	8,193	499	-	10,692
RCSA	-	-	-	-	-	-	-
TOTALS	**64,202**	**17,034**	**17,314**	**133,673**	**40,009**	**66,880**	**339,112**

New Obligating Authority (NOA) - After Pipeline Reductions

Legend:

AFR/SD: Bureau for Africa/Office of Sustainable Development
AFR/DP: Bureau for Africa/Office of Development Planning
GHAI: Greater Horn of Africa Initiative
RCSA: Regional Center for Southern Africa
REDSO/ESA: Regional Economic Development Services Office for East and Southern Africa
WARP: West African Regional Program

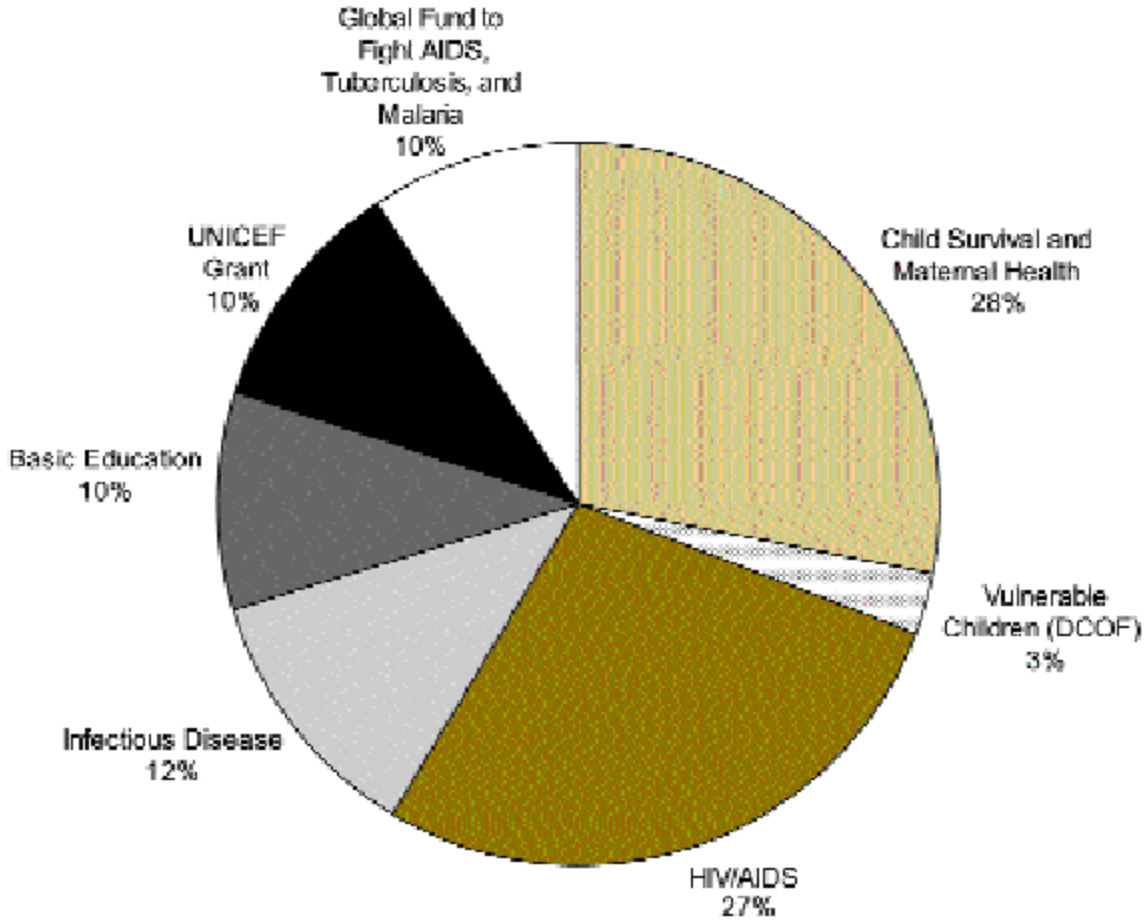
Table 2 (continued): FY 2001 CSD Estimated Allocations by Major Functional Component and Country CSD Account Only ($ Thousands)

Bureau/Country	CS/MH (excluding Polio)	POLIO	DCOF/VUL	HIV	INFECT. DISEASE	BASIC ED	Total CSD
ASIA/NEAR EAST							
Bangladesh	11,000	-	-	3,000	-	1,500	15,500
Burma	2,000	-	-	-	-	-	2,000
Cambodia	-	-	497	7,000	1,923	-	9,420
India	6,323	4,100	1,000	7,993	4,500	700	24,616
Indonesia	14,894	186	-	4,000	500	-	19,580
Morocco	3,494	-	-	-	-	1,488	4,982
Nepal	3,442	-	-	4,000	1,808	-	9,250
Philippines	4,500	-	-	1,500	3,450	-	9,450
Sri Lanka	-	-	300	-	-	-	300
Vietnam	-	-	2,494	-	-	-	2,494
ANE Regional	1,435	-	-	6,902	4,331	272	12,940
TOTALS	**47,088**	**4,286**	**4,291**	**34,395**	**16,512**	**3,960**	**110,532**
LATIN AMERICA AND THE CARIBBEAN							
Bolivia	3,612	-	-	649	2,338	-	6,599
Brazil	-	-	1,297	3,991	2,594	-	7,882
Dominican Republic	1,346	-	349	2,993	1,197	499	6,384
El Salvador	6,716	-	-	499	1,099	6,243	14,557
Guatemala	3,877	-	-	499	-	2,529	6,905
Guyana	-	-	-	798	-	-	798
Honduras	2,500	-	-	2,566	576	3,294	8,936
Jamaica	25	-	-	1,297	-	2,794	4,116
Mexico	-	-	-	1,996	3,991	-	5,987
Nicaragua	4,018	-	-	499	499	1,990	7,006
Peru	6,010	-	-	748	1,747	1,098	9,603
Caribbean Regional	-	-	-	1,497	-	-	1,497
Cent. Amer. Regional	-	-	-	3,692	-	-	3,692
LAC Regional	5,402	172	-	1,297	3,621	4,290	14,782
TOTALS	**33,506**	**172**	**1,646**	**23,021**	**17,662**	**22,737**	**98,744**
EUROPE AND EURASIA							
Kazakhstan	-	-	-	200	-	-	200
Kyrgyzstan	-	-	-	-	-	-	-
Moldova	-	-	-	-	-	-	-
Russia	-	-	-	2,143	1,400	-	3,543
Tajikistan	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-
Ukraine	-	-	-	675	344	-	1,019
Uzbekistan	-	-	-	200	500	-	700
Central Asian Repub.	-	-	-	-	-	-	-
Eurasia Regional	-	-	-	400	150	-	550
Europe Regional	-	-	-	420	350	-	770
TOTALS	**-**	**-**	**-**	**4,038**	**2,744**	**-**	**6,782**
GRAND TOTALS	**144,796**	**21,492**	**23,251**	**195,127**	**76,927**	**93,577**	**555,170**

Table 3: FY 2001 CSD-Related Estimated Allocations via Other Accounts by Major Functional Component and Country ($ Thousands)

Bureau/Country	CS/MH (Excluding Polio)	POLIO	DCOF/VUL	HIV	INFECT. DISEASE	BASIC ED	Total CSD
AFRICA							
Nigeria	-	-	-	1,055	-	-	1,055
Sub-Saharan Africa (PL-480)	-	-	-	10,000	-	-	10,000
TOTALS	-	-	-	**11,055**	-	-	**11,055**
ASIA/NEAR EAST							
Burma	3,492	-	-	-	-	-	3,492
Cambodia	5,755	-	-	750	-	-	6,505
East Timor	-	-	-	997	-	-	997
Egypt	12,512	697	-	1,196	3,986	6,179	24,570
Jordan	7,674	-	-	299	-	-	7,973
West Bank	7,475	-	-	-	-	-	7,475
Yemen	997	-	-	-	-	-	997
TOTALS	**37,905**	**697**	-	**3,242**	**3,986**	**6,179**	**52,009**
LATIN AMERICA AND THE CARIBBEAN							
Haiti	-	-	-	4,350	1,000	-	5,350
TOTALS	-	-	-	**4,350**	**1,000**	-	5,350
EUROPE AND EURASIA							
Albania	3,025	-	-	-	-	-	3,025
Armenia	4,529	-	-	161	30	-	4,720
Azerbaijan	975	-	-	-	-	-	975
Bulgaria	700	-	-	-	-	-	700
Croatia	300	-	-			-	300
Georgia	428	-	-	400	2,144	-	2,972
Kazakhstan	2,786	-	-	1,387	1,469	-	5,642
Kosovo	108	-	-	-	-	-	108
Kyrgyzstan	1,007	-	-	876	680	-	2,563
Moldova	300	-	-	-	-	-	300
Romania	450	-	4,700	747	150	-	6,047
Russia	4,006	-	2,089	2,100	1,750	-	9,945
Tajikistan	836	-	-	107	557	-	1,500
Turkmenistan	50	-	-	123	701	-	874
Ukraine	1,660	-	-	795	1,758	-	4,213
Uzbekistan	2,539	-	-	1,048	903	-	4,490
Central Asian Republics	184	-	-	667	-	-	851
Eurasia Regional	2,663	-	-	663	743	-	4,069
Europe Regional	552	-	-	700	571	-	1,823
TOTALS	**27,098**	-	**6,789**	**9,774**	**11,456**	-	**55,117**
GRAND TOTALS	**65,003**	**697**	**6,789**	**28,421**	**16,442**	**6,179**	**123,531**

FY 2001 Child Survival and Disease Program Funds by Primary Funding Category

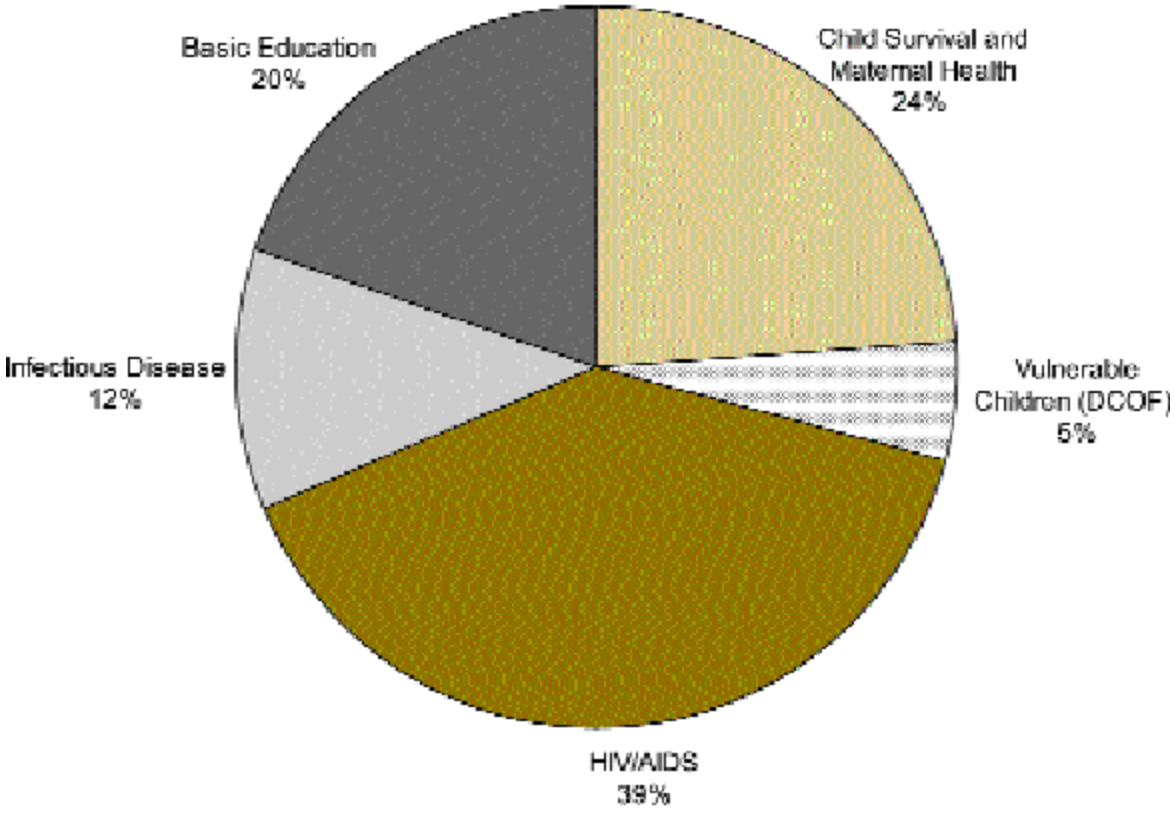


FY 2001 Total Funding = $1,050,880,000

Note: $25 million of CSD Micronutrient Funds and $26.7 million of CSD Polio Funds are included in Child Survival and Maternal Health figures.

Source: *USAID Office of Management and Budget.*

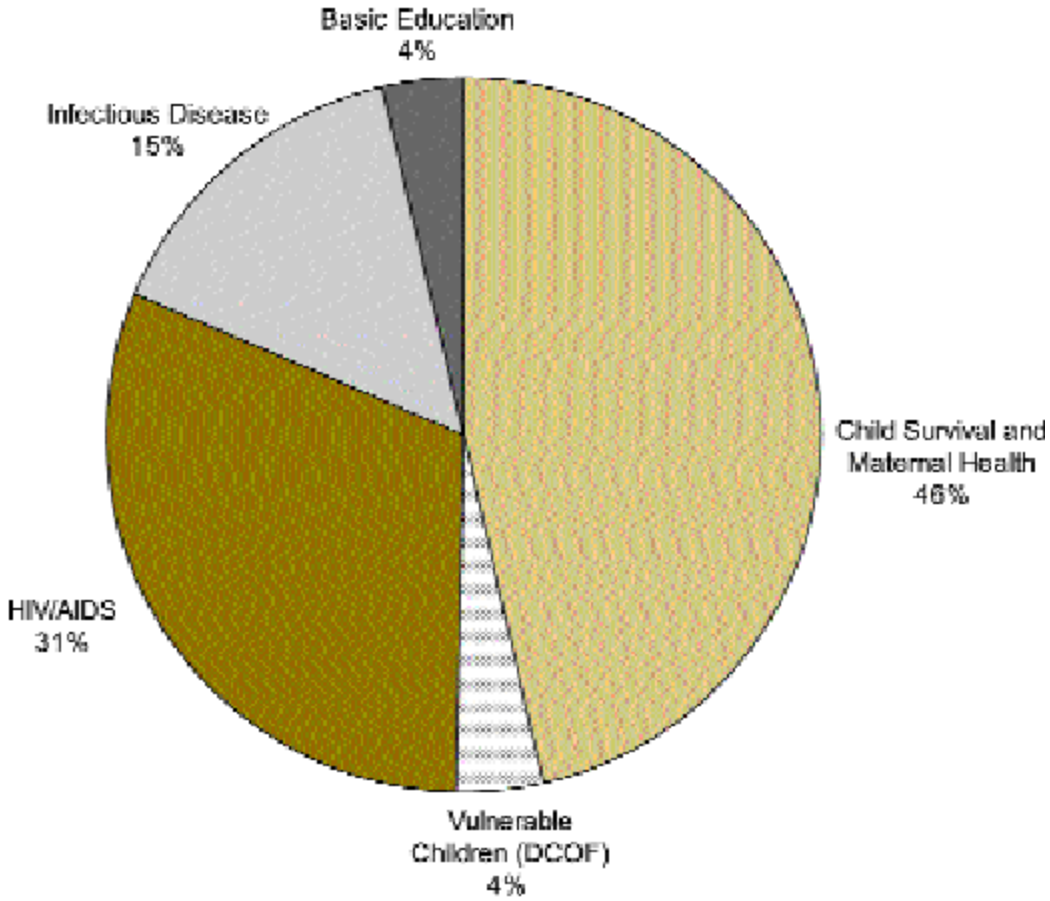
FY 2001 Africa Region Child Survival and Disease Program Funds by Primary Funding Category



FY 2001 Total Funding = $339,112,000

Source: USAID Office of Management and Budget.

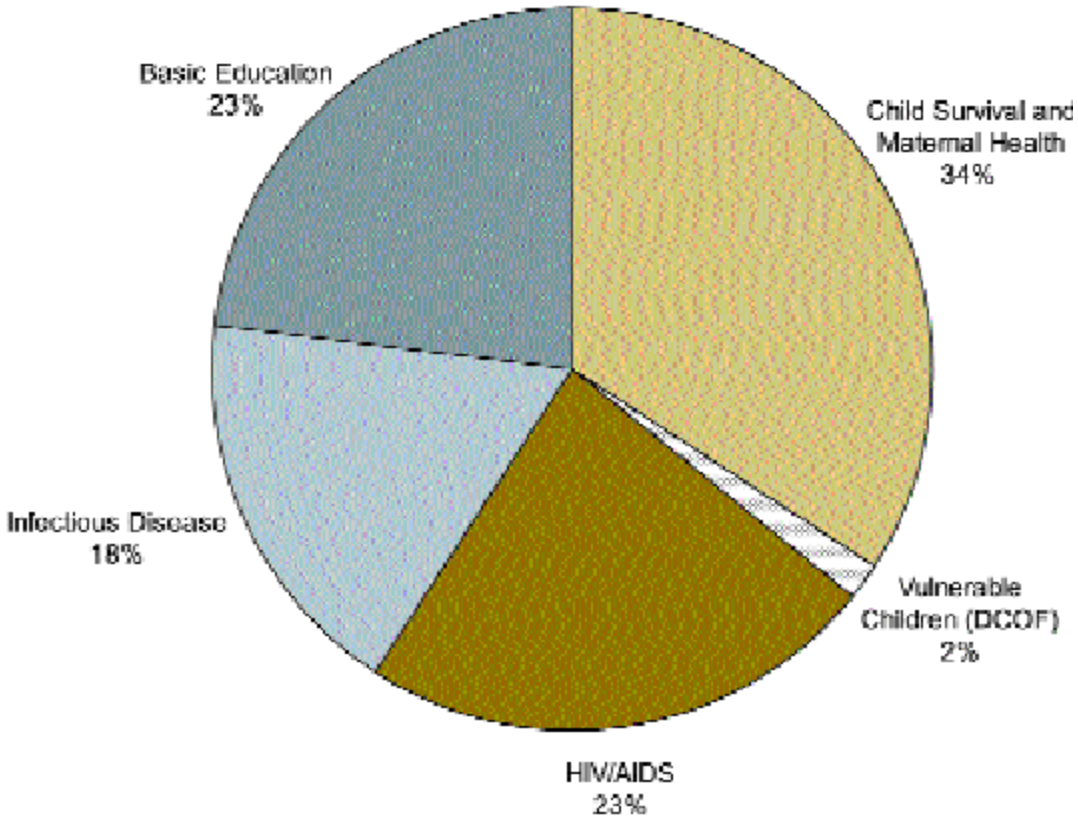
FY 2001 Asia/Near East Region Child Survival and Disease Program Funds by Primary Funding Category



FY 2001 Total Funding = $110,532,000

Source: USAID Office of Management and Budget.

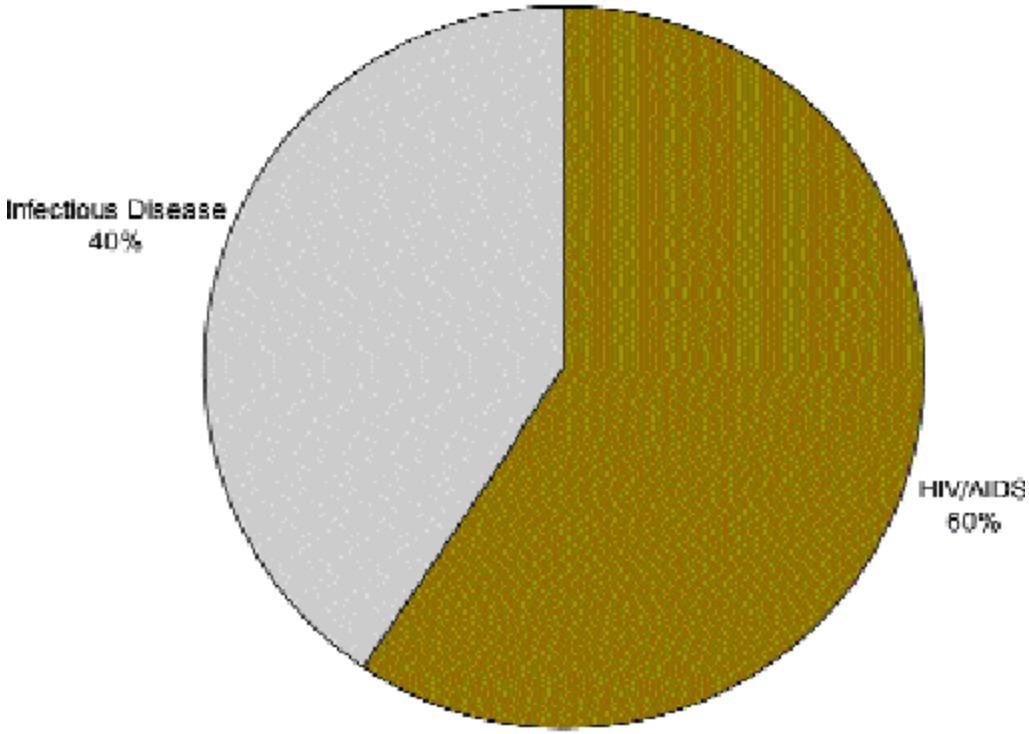
FY 2001 Latin America/Caribbean Region Child Survival and Disease Program Funds by Primary Funding Category



FY 2001 Total Funding = $98,744,000

Source: USAID Office of Management and Budget

FY 2001 Europe and Eurasia Region Child Survival and Disease Program Funds by Primary Funding Category



FY 2001 Total Funding = $6,782,000

Source: USAID Office of Management and Budget