SEMI-ANNUAL REPORT

1 October 1989 - 31 March 1990

Cooperative Agreement

AID/DPE-5972-A-00-7057-00

AIDSTECH/FAMILY HEALTH INTERNATIONAL • Durham • NC 27713 • USA

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EXECUTIVE SUMMARY

AIDSTECH is emphasizing the development and implementation of programs to slow the spread of HIV infection in developing countries. The first year of the project was spent assessing needs and program opportunities, determining priorities for resource allocation and programming, and learning to work within a complex set of relationships around the world to develop and establish programs. In the second year, the project focused on program implementation, on refining technical and regional strategies, and on further strengthening the AIDSTECH team.

In light of experience gained in the past two years and the roles now being played by other donor agencies, the third year is one of further development of AIDSTECH's role and a refocusing and refining of program priorities.

AIDSTECH continues its commitment to prevention, with priority given to efforts to slow sexual transmission of the HIV virus through education, condom distribution and prevention and treatment of STDs, and efforts to prevent blood transmission through technical assistance for blood screening programs. In its third year, AIDSTECH has developed major, multifaceted programs in 14 countries. More focused programs are underway in another 16 countries (see Table 1 below).

Since the award of the Cooperative Agreement, AIDSTECH has worked on 124 projects and specific technical assistance programs in 36 countries. Table 2 (Page 2) shows AIDSTECH's overall activities by program area and region and a breakdown by completed, ongoing and planned programs and activities.

Table 1
AIDSTECH Program Focus

Extensive Program Countries	Focused Program Countries
Burkina Faso	Burundi
Cameroon	Malawi
Ghana	Mali
Kenya	Niger
Zaire	Nigeria
Zimbabwe	Tanzania
Dominican Republic	St. Vincent
Dominica	Grenada
Antigua	Trinidad
St. Lucia	Barbados
Haiti	Bolivia
Mexico	Brazil
Philippines	Ecuador
Thailand	El Salvador
	Peru
	Indonesia

Twenty-three projects and specific technical assistance programs in 17 countries have been completed: four in the area of sexual transmission, eleven in blood transmission, five in surveillance, two in health care finance, and one to train health care providers in disease control procedures.

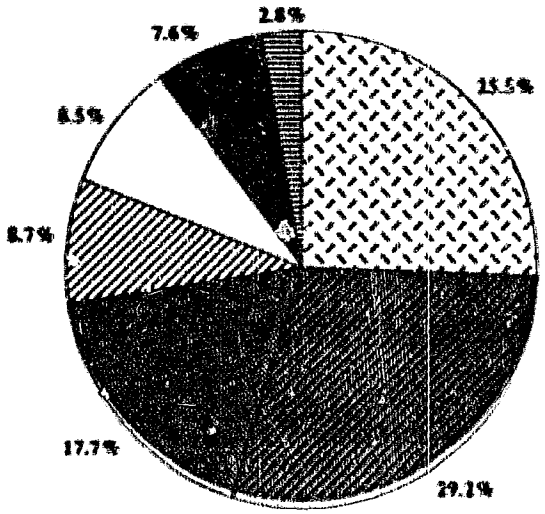
A total of 72 projects and activities are ongoing in 28 countries. An additional 29 projects/activities are under development in 17 countries.

A shift in the allocation of program resources has occurred since 1987 (Page 3). In the first year of the program, most expenditures (72.4%) went into AIDSTECH program management, conference sponsorship, information dissemination and country

Table 2
AIDSTECH Projects and Activities by Region

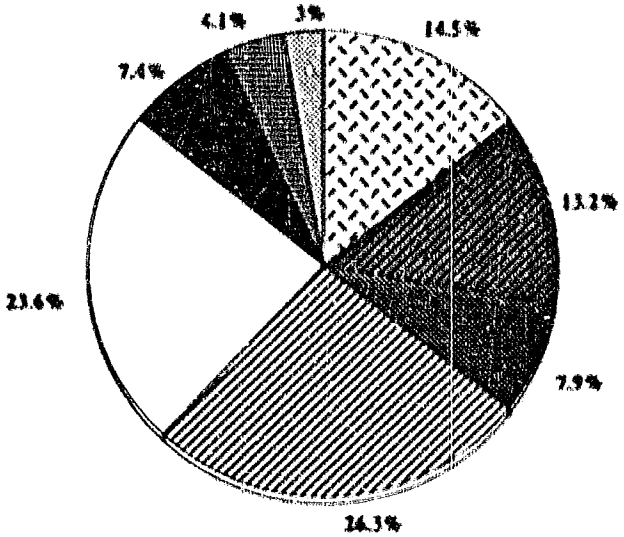
	Africa	Latin America/ Caribbean	Asia/ Near East	Total
Completed Projects/Activities				
Sexual Transmission	3	0	1	4
Blood Transmission	9	2	0	11
Surveillance	0	4	1	5
Health Care Financing	1	1	0	2
Training	1	0	0	1
Subtotal	14	7	2	23
Ongoing Projects/Activities				
Sexual Transmission	16	19	6	41
IVDU Transmission	0	0	2	2
Blood Transmission	5	9	2	16
Surveillance	4	2	0	6
Modeling	1	1	0	2
Health Care Financing	0	3	1	4
Training	0	1	0	1
Subtotal	25	34	11	72
Planned Projects/Activities				
Sexual Transmission	6	11	1	18
Blood Transmission	1	0	0	1
Surveillance	0	1	0	1
Health Care Financing	2	3	0	5
Training	0	4	0	4
Subtotal	9	19	1	29
Total Projects/Activities				
Sexual Transmission	25	30	8	63
IVDU Transmission	0	0	2	2
Blood Transmission	15	11	2	28
Surveillance	4	7	1	12
Modeling	1	1	0	2
Health Care Financing	3	7	1	11
Training	1	5	0	6
Total	48	60	13	124

AIDSTECH Total Program Expenditures



FY 1988

- Management
- Conferences/Information
- Needs Assessment
- Sexual Transmission
- Blood Transmission
- Surveillance/Modeling
- Health Care Finance
- Other Programs



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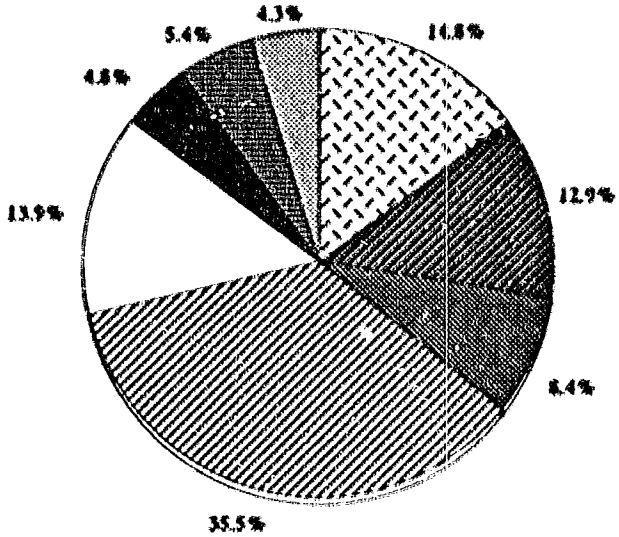


FY 1990

- Management
- Conferences/Information
- Needs Assessment
- Sexual Transmission
- Blood Transmission
- Surveillance/Modeling
- Health Care Finance
- Other Programs

needs assessments; with 27.6% was spent on program areas. This pattern changed dramatically in the second and third years, when 64.4% and 63.9% was spent on AIDSTECH program areas.

The charts on pages 3 and 5 also show changing AIDSTECH program emphasis. Projects to prevent sexual transmission have grown as a percentage of total program expenditures (Page 3) and program area expenditures (Page 5). Sexual transmission projects accounted for about 50% of program area expenditures by 1990. Blood transmission projects initially provided needed supplies and equipment and accounted for much of the program's expenditures during the first two years. AIDSTECH has decreased its efforts in this area as WHO has increased its role, as reflected in the reduction of program expending to 14% in 1990 (Page 3).

AIDSTECH is moving away from its earlier efforts to establish HIV sentinel surveillance and national STD sentinel surveillance. WHO has clearly taken the lead in these areas and AIDSTECH will not duplicate these efforts.

AIDSTECH's first priority is to slow and prevent the sexual transmission of HIV infection. The strategy for accomplishing this includes:

- identifying groups at high-risk for sexual transmission;
- developing AIDS educational programs targeted to those groups and their sexual partners; and
- promoting condom use and assuring accessibility of condoms through institutionalized distribution networks.

AIDSTECH is also emphasizing control of STDs as part of its sexual transmission strategy. There is strong evidence that STDs, especially those that cause genital ulcers, are an independent risk factor for HIV transmission. AIDSTECH's STD strategy includes improving methods of STD surveillance for program evaluation and improving the integration of components of the AIDS control programs into the primary health care system through clinics that provide STD diagnosis and treatment.

Some of the major lessons learned in the first two years are the importance of institutionalization of programs to assure their continuation, the necessity of expanding intervention programs to reach the partners of the targeted high-risk behavior groups, and the necessity of making condoms available and accessible as an integral part of interventions.

The demand for technical assistance to implement blood screening programs continues to be high. AIDSTECH's strategy is to give assistance in:

- strengthening blood screening programs;
- improving blood transfusion practices; and
- encouraging free and voluntary blood donations by persons not at risk of HIV infection.

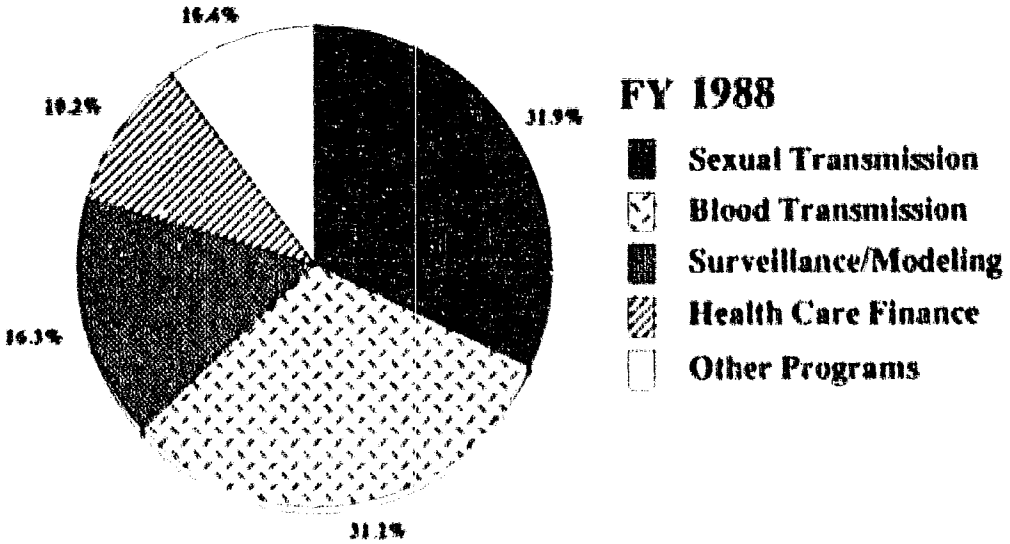
AIDSTECH's research has demonstrated that the HIVCHEK test is appropriate for use in district hospitals as a cost-efficient alternative to conventional testing for HIV-1 and that two simple, rapid tests can be used in sequence as an alternative to the costly, more complex ELISA-Western blot sequence.

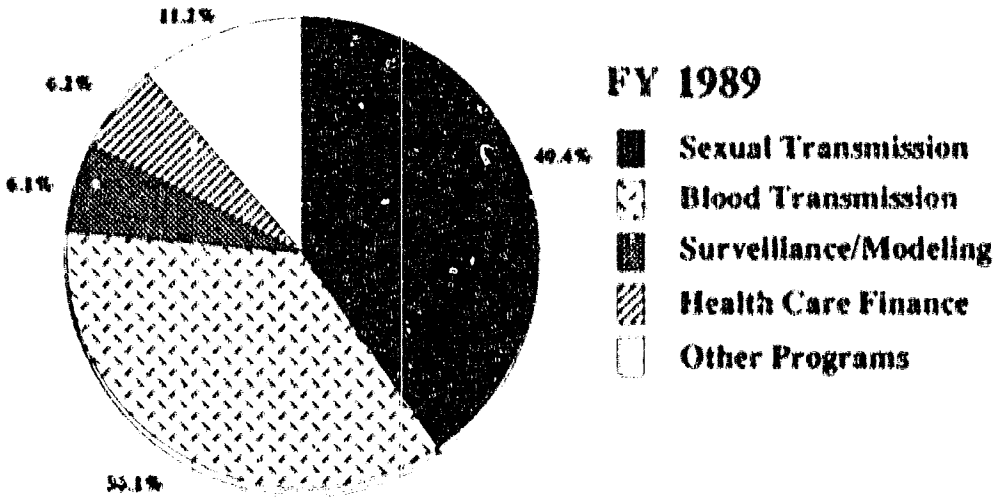
AIDSTECH's surveillance activities are used to determine whether intervention programs are effective in changing people's behavior and slowing the spread of the infection. Targeted STD surveillance helps to verify reported behavior changes more easily than monitoring of HIV incidence.

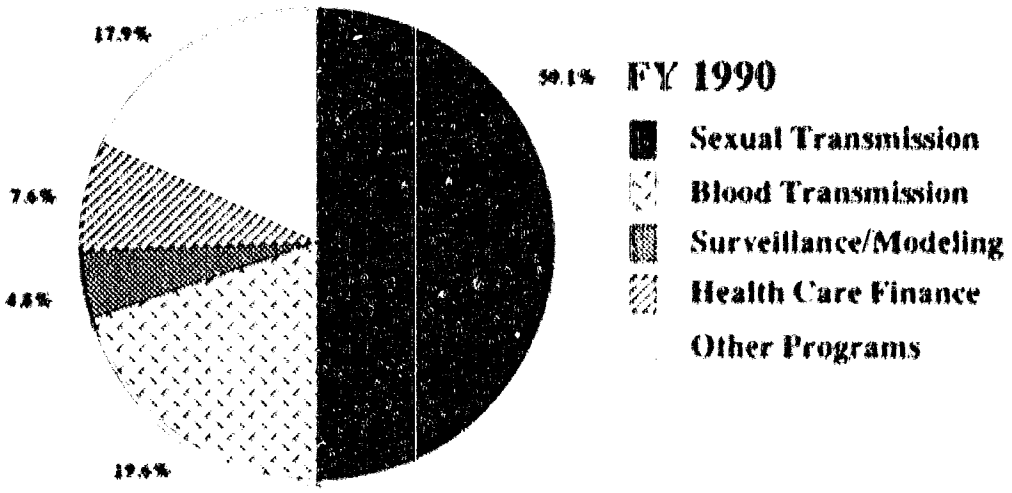
AIDSTECH has learned that HIV sentinel surveillance data are not very useful as an evaluation tool for intervention programs.

AIDSTECH is emphasizing AIDS prevention programs that are cost-effective and sustainable, and is helping to develop methodologies for measuring the economic impact of HIV infection and AIDS. AIDSTECH's strategy is to give assistance in:

AIDSTECH Program Area Expenditures







- determining recurrent costs for AIDS intervention programs, to develop the organizational structures and policies that lead to sustainable interventions;

- developing the ability of local programs to compare the cost-effectiveness of two or more intervention programs, and to assess the cost-effectiveness of different components within an AIDS control intervention program; and

- measuring the economic impact of AIDS.

AIDSTECH research has shown that a significant part of the economic impact of AIDS results from the costs of treating persons with AIDS and that these costs could be reduced through improved planning and efficient treatment programs. Data on costs of AIDS programs needs to be collected routinely.

AIDSTECH is developing a program of applied and basic research. The components of this program are outlined below:

- The operations research component focuses on answering key intervention program questions such as the short- and long-term impact of paying peer educators and providing free condoms versus charging for condoms, evaluating different condom distribution strategies and evaluating the impact of intervention programs.

- The epidemiology research component focuses on evaluating the efficacy of spermicides and STD control in preventing HIV transmission.

- The Post-Doctoral Research Fellows Program will provide post-doctoral training for United States researchers in developing countries while enhancing developing countries' skills and expertise in the field of behavioral research. Fellows will work with local country counterparts to develop and implement research projects.

- AIDSTECH, in collaboration with A.I.D. and several National Institutes of Health (NIH), has established a program to fund behavioral research centers to: (1) reduce gaps in understanding the extent and nature of high-risk behaviors, (2) determine the most appropriate strategies to modify such behaviors, (3) identify barriers and enhancers to behavior change, and (4) determine how to sustain behavior changes. In the first year of the program, up to eight pilot projects will be funded. With additional support provided by NIH, successful pilot projects will be extended in a second phase to implement large scale behavioral research projects. A secondary goal of this program is to enhance developing countries behavioral research capacity, as well as to increase U.S.-based behavioral research capacity focused in this area.

To help policy-makers, technical personnel, and service providers better understand the long-term implications of the AIDS epidemic, AIDSTECH is supporting the development of a microcomputer-based simulation model that assesses the impact of the epidemic and projects the effectiveness of potential interventions.

In keeping with its mandate to inform USAID Missions, National AIDS Committees and technical experts about recent developments in AIDS, AIDSTECH mails over 1,000 information packages worldwide on a bimonthly basis.

AIDSTECH supports participation from developing countries to the annual International Conference on AIDS and selected regional AIDS conferences.

Training is one of the approaches AIDSTECH uses to strengthen local programs in AIDS prevention. AIDSTECH has adopted a "Train the Trainers" approach, training those in supervisory positions to initiate in-service training of those they supervise. Training is competency-based, assisting trainers to acquire, enhance, or maintain skills. Training activities encompass biotechnical training, management training, and information, education, and communications training.

AIDSTECH is operating a Small Grants Program to enable private voluntary organizations (PVOs) working in developing countries to apply for project funding. As resources permit, the small grants are funded to a maximum of $50,000 each after approval by the relevant USAID Mission, the host country National AIDS Committee, and review by AIDSTECH, AIDSCOM, and A.I.D./Washington. Nine small grants projects are ongoing.

AIDSTECH is expanding its staff in response to new program needs. Currently, recruitment is underway for five senior positions: a Deputy Director, a Behavioral Science Specialist, an IEC Associate, a Condom Logistics Specialist and a Modeling Specialist.

A mid-term evaluation of the AIDSTECH program was conducted in September and October 1989, and included visits by the evaluation team to AIDSTECH programs in the Philippines, Kenya, and the Dominican Republic. Recommendations from the evaluation team were received in February 1990. AIDSTECH is responding to the recommendations by attempting to narrow its scope of work, hiring personnel with key management and behavioral research expertise and placing additional country Resident Coordinators.

I. INTRODUCTION

The AIDSTECH Project, funded through Cooperative Agreement AID/DPE-5972-A-00-7057-00 with Family Health International (FHI), has been in existence for two and a half years.

This report summarizes activities and accomplishments for the past six months of the project and gives targets for program activities for the next six months. The needs, evolving strategies, and implementation of programs for the major geographic regions are described.

The AIDS pandemic is an international health problem of extraordinary scope and unprecedented urgency. AIDS presents a profound threat to the health of adults and children and to the socio-economic development of developing countries.

A. BACKGROUND

FHI is a non-profit organization dedicated to improving reproductive health, contraceptive safety and health service delivery. FHI's work in AIDS follows from its many years of international experience in clinical research, reproductive and sexually transmitted diseases, epidemiology, and social research applied to family planning service delivery.

The U.S. Agency for International Development (A.I.D.) awarded the Cooperative Agreement AID/DPE-5972-A-00-7057-00 to FHI on September 16, 1987, as a five-year, $28 million program.

The AIDSTECH Project staff consists of an integrated and internationally mobile team with multidisciplinary technical and managerial skills. The Project has an office in Washington, D.C. and a core of technical and program staff located at FHI's North Carolina headquarters. In addition, in-country resident coordinators are providing program support in seven countries. AIDSTECH was designed by A.I.D. to provide technical assistance services to developing countries in AIDS control and prevention in conjunction with AIDSCOM, the Public Communications Project implemented by the Academy for Educational Development (AED).

The AIDSTECH Project provides technical assistance and funding to develop appropriate intervention programs upon countries' requests. The coordination of AIDSTECH's responses is achieved through inter-organizational cooperation with A.I.D. and its overseas Missions, with the World Health Organization's (WHO) Global Programme on AIDS (GPA) and the Pan American Health Organization (PAHO), with host country governments and their National AIDS Committees and Ministries of Health, with local non-governmental organizations, with other international public organizations, private foundations and with AED's AIDSCOM Project. FHI's other AIDS and sexually transmitted disease (STD) research activities, barrier methods development and research, and information dissemination programs complement AIDSTECH activities.

B. GOALS AND OBJECTIVES

AIDSTECH's mandate is to support developing countries in the prevention and control of AIDS through technical assistance and program support in such areas as program design/administration, epidemiology, HIV screening, health care financing, applied research, training, provision of equipment and commodities, and information dissemination.

AIDSTECH's approach to implementing its mandate is based on a philosophy and program to build and strengthen in-country capacities and skills to enable country programs to undertake the activities needed to prevent and control and spread of AIDS. This approach is based on the development of long-term relationships with in-country programs, with an emphasis on local development and implementation of prevention activities.

Activities are supported in the following areas:

- Prevention of HIV infection through sexual transmission.
- Prevention of HIV transmission through IV drug use.
- Prevention of HIV transmission through blood transfusions.
- Development of targeted information, education and communication progress.
- Development and application of surveillance systems to evaluate AIDSTECH programs.
- Research including project evaluation, operations research, epidemiological research, the Post-Doctoral Research Fellows Program, and the Behavioral Research Support Program.
- Development of health care financing strategies through recurrent and comparative cost analyses.
- AIDS epidemiological modeling.
- Information dissemination.
- Conferences.
- Training.
- Small Grants Program for PVOs.

AIDSTECH does not provide therapy or treatment for AIDS. In summary, AIDSTECH is part of a global strategy to combine financial and human resources, scientific and technical skills, and experience in program management and coordination to strengthen national institutional capabilities to confront the AIDS crisis.

C. PROGRAM AND INTERVENTION STRATEGIES

FHI's guiding policy is a commitment to prevention. In countries in the early stages of the epidemic, programs must be as rapid and cost-effective as possible through targeted interventions that can be expanded quickly as national resources become available, and that can be replicated in other countries. In countries where prevalence of HIV infection is rising in the general population, broader strategies must be developed in conjunction with targeted interventions.

Sexual contact is the primary way that the HIV infection is transmitted, and the most efficient way to reduce the spread of HIV infection is for those at greatest risk to modify their sexual behavior. Thus, as a first priority, AIDSTECH supports interventions directed toward groups practicing high-risk behaviors in an effort to slow the spread of the disease by sexual transmission.

Another significant means of transmission of HIV is through transfusion of blood contaminated with the virus. Thus, the second priority for AIDSTECH is assisting countries to ensure that blood transfusion systems are free from HIV infection.

An integral part of accomplishing and evaluating the impact of these two major priorities is the development of surveillance systems to track the spread of the infection. The resources available through AIDSTECH and other donors are limited, and many developing countries with the most serious HIV infection rates are those least able to confront the problems because of poor infrastructure and inadequate budgets. The design of intervention programs that are cost-effective and sustainable is mandatory, and AIDSTECH emphasizes these aspects in planning and providing assistance to developing country programs.

The demand for AIDSTECH assistance appears likely to exceed the resources available through the program. As a result, AIDSTECH activities must be focused, not only on the major modes of transmission, but also geographically.

AIDSTECH's program strategy attempts to:

- match country-specific programs to levels of HIV prevalence and the absorptive capacity of countries' health infrastructures;
- utilize and strengthen existing health infrastructures through technical assistance and training of trainers where appropriate;
- improve local skills to monitor and control the spread of HIV;
- encourage regional collaboration; and
- promote long-term program sustainability.

AIDSTECH's strategy in allocating its resources is to focus interventions in those countries where:

- the prevalence and incidence of HIV infection is highest, as well as in countries that still have a low prevalence, but have the risk factors that would facilitate rapid spread of the disease;
- the political, social and infrastructure context of the country presents a readiness to receive technical assistance to establish sustainable intervention programs; and
- bilateral or other donor funds are available to provide major support for programs.

AIDSTECH has identified 14 countries where it is supporting extensive programs: Burkina Faso, Cameroon, Ghana, Kenya, Zaire, Zimbabwe, Dominica, Antigua, St. Lucia, the Dominican Republic, Haiti, Mexico, the Philippines, and Thailand.

D. PROGRESS TOWARD PROJECT OBJECTIVES

A major goal of this Cooperative Agreement is to "build an international capability to control and prevent HIV infection, to include further strengthening of FHI's AIDS programs and institutional capacity .... and the development and strengthening of programs and institutions in target countries ...."

To this end, the AIDSTECH team has grown over the past two and a half years to a multidisciplinary professional group of 40 individuals who bring their technical skill in areas including epidemiology, operations research, training, information and education, program planning and management, health care financing, and laboratory work to respond to needs of USAID Missions and in-country programs.

AIDSTECH'S major objectives are to reduce the spread of HIV through sexual and blood transmission. AIDSTECH'S progress toward these objectives is outlined below.

<u>Prevention of HIV Through Sexual Transmission.</u> More than 50% of AIDSTECH'S efforts are focused on the prevention of the sexual transmission of HIV. Accomplishments in this area include:

- <u>Influencing Policy.</u> AIDSTECH has educated policy-makers who were initially reluctant to approve intervention programs targeted toward high-risk groups. Policy changes have been accomplished through collaborative planning technical assistance, sponsorship to conferences and AIDS simulation modeling. AIDSTECH also provides input to USAID Missions in helping to determine country priorities and program needs.
- <u>Capacity Building.</u> AIDSTECH has focused on capacity building and institutional strengthening in its sexual transmission interventions, providing technical assistance in the area of IEC, condom distribution and STD diagnosis and treatment. In addition, AIDSTECH has upgraded STD clinics and provided needed equipment and supplies for selected programs.

- Program Implementation. AIDSTECH has assisted with the design, implementation and support of 45 sexual transmission interventions and activities since 1987. Another 18 are planned to begin within the next few months.

- Applied Research. AIDSTECH is evaluating intervention project impact and conducting epidemiologic research, behavioral research and operational research projects to attempt to answer questions that will improve ongoing programs.

- Health Care Finance. AIDSTECH is emphasizing intervention programs that are cost-effective and sustainable. Recurrent costs for intervention programs are being determined.

Prevention of HIV Through Blood Transmission. About one-fifth of AIDSTECH'S efforts are focused on the prevention of blood transmissions of HIV. Accomplishments in this area include:

- Capacity Building. AIDSTECH has focused on capacity building and institutional strengthening by providing technical assistance to assess and plan HIV screening programs and assisting in the development and maintenance of national quality assurance programs for HIV testing.

- Strengthening Blood Screening Programs. AIDSTECH has conducted 11 train-the-trainer workshops to train laboratory technicians in appropriate HIV testing techniques, laboratory safety, quality control and laboratory management.

- Applied Research. AIDSTECH has supported applied research to identify and validate appropriate technology for HIV testing and to evaluate serum pooling as a cost-efficient alternative to single sample testing in countries with a low HIV prevalence.

- Health Care Financing. AIDSTECH has been developing a cost model which provides countries with a tool to use for planning for blood transfusion services. In addition, AIDSTECH is helping countries to develop cost recovery programs for blood transfusion services, including HIV testing.

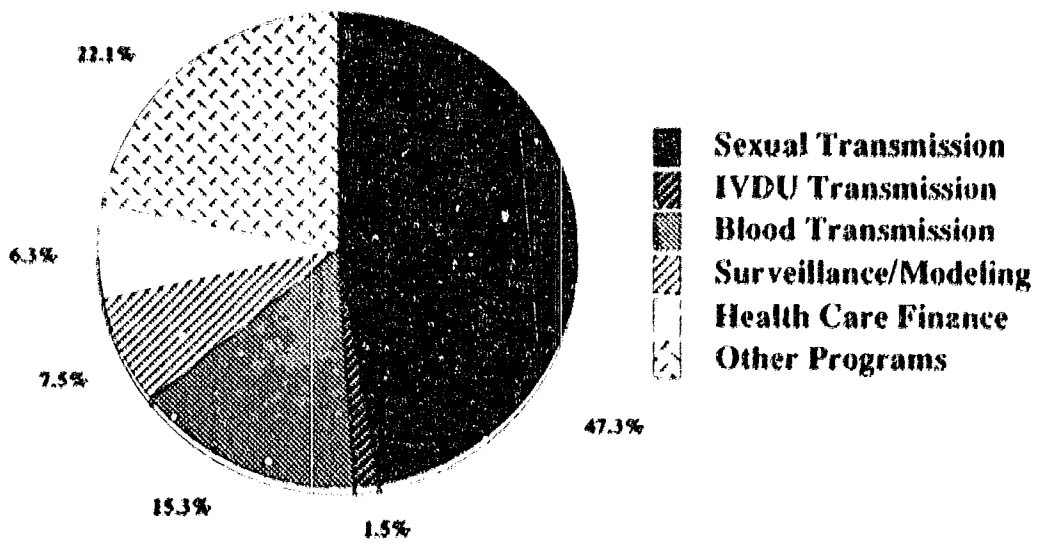
II. AIDSTECH ACTIVITIES

During the past six months, AIDSTECH has focused on implementation of projects and refocused and refined its program priorities. The following sections describe general strategies and summarize project progress.

A. TECHNICAL ASSISTANCE AND INTERVENTION PROGRAMS

Overall obligations by program area for the current year are shown in the chart below.

AIDSTECH Obligations by Program Area



Obligations for sexual transmission prevention projects now account for almost 50% of program area obligations. Blood transmission projects account for 15% of program area obligations, with health care finance and surveillance/modeling at 6% and 7%, respectively. The "other programs" category includes general program support for large scale country programs, and training programs for health care providers in disease control procedures.

1. PREVENTION OF SEXUAL TRANSMISSION OF HIV

General Strategy

Since sexual contact is the primary way that HIV infection is transmitted, AIDSTECH's first priority is to slow and prevent the sexual transmission of HIV infection. The strategy for accomplishing this includes:

- Targeted interventions, and
- STD control.

Targeted Interventions. Available seroprevalence data and epidemiological models of the spread of HIV infection show that the primary route of transmission in most parts of the world is by sexual contact. The risk of infection increases with the number of sexual partners, history of sexually transmitted disease, and prevalence of infection in the community. During the critical early stages of the epidemic, individuals with multiple sexual partners become infected, subsequently infect others in the community and contribute to a rapid increase in the prevalence of infection.

Neither a cure for AIDS nor a vaccine to prevent HIV infection is likely to be available anytime soon. The AIDSTECH strategy is to assist countries to develop targeted intervention programs designed to reduce the sexual transmission of HIV among groups at greatest risk of infection.

These programs are developed in cooperation with National AIDS Committees, Ministries of Health, and implementing organizations. Programs typically include:

- education to inform target groups about AIDS, how it is transmitted, and how to reduce risk of infection;
- condom education, promotion and distribution to ensure that condoms are used correctly and are readily available to target groups at an affordable price;
- training in health education, condom use, and program management;
- referral to STD control services; and
- program evaluation to improve services, assess impact, and plan for sustainable programs and expansion.

AIDSTECH has developed three major models for reaching high-risk behavior groups:

One approach to high-risk behavior interventions is to select and train groups of individuals with multiple sexual partners to teach their peers about AIDS and ways to prevent the spread of HIV infection.

Another approach is to reach high-risk behavior groups through places where they work or socialize. AIDSTECH is providing support for training employers, taxi drivers, bar owners and managers to provide necessary AIDS education and distribute condoms to their employees and customers.

A third approach to high-risk behavior interventions is to provide education and distribute condoms through STD clinics, health centers, or family planning clinics located in areas convenient to high-risk behavior groups.

STD Control. There is strong evidence that sexually transmitted diseases (STDs), especially those causing genital ulceration, are an independent risk factor in the transmission of HIV infection. Since the prevalence of STDs remains high in many developing countries, the prevention and control of STDs may slow HIV transmission in these countries.

AIDSTECH provides technical assistance and training, and supports research aimed at the development of cost-effective methods of STD surveillance and control. AIDSTECH collaborates closely with the WHO/GPA and coordinates all its activities with National AIDS Control Programs and other appropriate organizations. Programs include:

- technical assistance to national or regional STD centers and laboratories in the development or revision of STD treatment guidelines;
- development and validation of cost-effective methods of STD surveillance for the purpose of intervention program evaluation;
- training of STD staff in the use of treatment algorithms, in STD prevention counseling and condom promotion;
- integrating STD prevention and control programs into broader health care programs to improve sustainability; and
- epidemiological research to measure the efficacy of barrier method contraceptives in the transmission of STDs and HIV and to measure the impact of genital ulcer disease control on HIV transmission.

Project Progress

AIDSTECH is sponsoring 41 ongoing projects and activities in the sexual transmission area in 21 countries: Burkina Faso, Cameroon, Ghana, Kenya, Mali, Nigeria, Tanzania, Zaire, Zimbabwe, Mexico, Ecuador, Dominican Republic, Haiti, Dominica, St. Lucia, Antigua, St. Vincent, Grenada, Thailand, Sri Lanka and the Philippines.

Eighteen additional projects are awaiting approvals or are under development in 13 countries: Burundi, Kenya, Niger, Tanzania, Zimbabwe, Bolivia, Costa Rica, Trinidad, Barbados, El Salvador, Haiti, Mexico, and Morocco. (See Table 2, page 2).

Lessons Learned

Since 1987, AIDSTECH has worked with 63 sexual transmission projects in thirty countries. The following lessons have been learned:

- Intervention programs should be built into existing institutional structures as much as possible; peer education programs are probably more difficult to sustain than STD clinic programs.
- Expansion beyond the targeted high-risk behavior group to reach partners of high-risk behavior groups is needed.
- Condoms must be available and accessible; it is important to: (1) expand to non-traditional condom outlets (bars, clubs) that are open when customers need condoms and (2) make use of existing social marketing programs to target high-risk areas and outlets.
- The target group leaders should be involved in project development early; project development and implementation is labor intensive and time consuming.
- Members of the target groups vary in terms of willingness to accept messages; even when the message is accepted, members of target group behave differently with regular partners than they do with casual partners.

2. PREVENTION OF HIV TRANSMISSION THROUGH IV DRUG USE

General Strategy

In Thailand, and perhaps other areas of Asia, one of the major routes of transmission of HIV is through the use of contaminated needles by intravenous drug users (IVDUs). The basic messages to drug users are: 1) stop using drugs; 2) if you cannot stop, do not share needles; and 3) if you share needles, then disinfect needles and syringes. The prevention of sexual transmission from IVDUs to their partners also is emphasized, although drug users appear to be less sexually active than the general population.

Project Progress

AIDSTECH is supporting two ongoing projects in Thailand to determine the most effective ways of encouraging risk reduction behavior among IVDUs. Both projects have used a variety of training devices, educational aids and outreach approaches. An evaluation component is assessing the relative effectiveness of different categories of outreach workers in interventions with IVDUs.

Lessons Learned

- Personal contact needs to be maintained with the target population in order to reinforce and sustain risk-reducing behavior change.

- Peer educators are the most effective outreach workers, because they gain the trust of the target population. Drop- out rates are high, however, and the cost of re-training must be balanced against effectiveness of this approach.

- Coordination is needed between community leaders and local police in order for local authorities to understand the consequences of the disease and prevent disciplinary action against outreach workers or peer educators working with IVDUs.

- Strict program monitoring and supervision are needed on an ongoing basis.

3. PREVENTION OF HIV TRANSMISSION THROUGH BLOOD TRANSFUSIONS

General Strategy

The second priority of AIDSTECH is to prevent the transmission of HIV through transfused blood. Accounting for up to ten percent of AIDS cases worldwide, this is the most efficient mode of transmission. The frequency of HIV infection through blood transfusions depends on the prevalence of HIV in the population, the number of transfusions performed, and measures existing for excluding the transfusion of contaminated blood. The strategy for ensuring a safe blood supply includes:

- strengthening blood screening programs;

- improving blood transfusion practices; and

- encouraging free and voluntary blood donations by persons not at risk of HIV infection.

Strengthening Blood Screening Programs. Screening of blood for transfusion is usually the first concrete action a government takes in AIDS control. This is largely due to the fact that proven technologies exist, immediate action is possible on the basis of results, and the assays are not of insurmountable complexity.

AIDSTECH provides technical assistance and training, and supports applied research aimed at improving cost-efficient methods for HIV screening. Programs typically include:

- providing technical assistance to assess and plan HIV screening programs. Emphasis is placed on developing HIV testing networks which can easily support quality assurance and continuing education programs;

- assisting in the development and maintenance of national quality assurance programs for HIV testing, thus assuring accurate test results as well as serving as an important evaluation tool following training and initiation of new techniques;

- training of laboratory technicians in HIV testing techniques, laboratory safety, quality control and laboratory management. A "train the trainers" approach has been adopted to strengthen the capacity for continuing educational programs;

- applied research projects to identify and validate appropriate technology for HIV testing, such as evaluation of simple, rapid tests for HIV and evaluation of alternative and practical testing strategies;

- evaluating techniques such as serum pooling as a cost- efficient alternative to single sample testing in countries with a low prevalence for HIV and a large volume of testing; and

- distributing technical information on HIV testing and blood transfusion practices to laboratory and blood bank managers as part of AIDSTECH's Information Dissemination program.

Improving Blood Transfusion Practices. Measures in addition to screening tests are needed to assure efficient, effective and sustainable programs for preventing HIV transmission through blood. A first concern must be the reduction of the number of blood transfusions performed unnecessarily or inappropriately. If this can be achieved, the demand for blood will dramatically decrease, thus lightening the burden placed on the screening program, as well as reducing the risk of transmission of infectious agents.

AIDSTECH assists countries to evaluate their blood transfusion policies. Typically countries are provided assistance to:

- describe the current transfusion practices within the country;

- define the risks of blood transfusion;

- define the indications for transfusion of blood and blood products;

- identify the alternatives to blood transfusion and promote their use; and

- develop and distribute guidelines for blood transfusion.

Risk-Free Blood Donations. Efforts must be made to identify risk behaviors in blood donors and to discourage those practicing these behaviors from donating blood. Free and voluntary blood donation should be encouraged and commercial sources of blood should be eliminated or reduced in a manner so as not to create critical shortages of blood. Blood donor recruitment programs should be strengthened to meet the increased demand for safe blood.

Programs typically include:

- development of surveys that offer the opportunity to examine risk factors in donor population;

- development of guidelines for donor deferral; and

- development of strategies to increase voluntary blood donations and decrease dependence on commercial systems.

Project Progress

AIDSTECH is sponsoring 16 ongoing blood transmission activities and projects in ten countries: Cameroon, Kenya, Zaire, Dominican Republic, Trinidad, Ecuador, El Salvador, Peru, Bolivia, and the Philippines. An additional project is planned for Kenya.

A workshop was recently held in Cameroon with the major objective being to establish guidelines for appropriate and safe blood transfusions. Physicians and blood bank managers from the major provinces participated in discussions which focused on identifying current transfusion practices, defining the indications for blood products, identifying the alternatives to blood transfusion and defining the risks of transfusion. Guidelines for transfusion were developed specifically for Cameroon. The guidelines have been distributed throughout the country and an evaluation survey will be administered in four hospitals after the guidelines have been implemented. During the next six months, AIDSTECH will propose conducting similar workshops in Kenya and the Philippines as well as other countries.

A pilot project has been initiated for information dissemination targeted toward blood bank and laboratory managers. Two packages have been distributed on Rapid and Simple Tests for HIV and on Risk Reduction of HIV Transmission by Blood Transfusion. A questionnaire was distributed with packets of information and at two of the regional AIDS Conferences to determine if there is a need for such a program and to find out what topics are of interest. This pilot project will be evaluated before expansion during the next six months.

Technical assistance has been provided to Cameroon for establishing a national quality assurance program for HIV testing and funds have been allocated for maintaining this program for one year. Plans are being formulated for providing assistance to Kenya to establish a national quality assurance program for HIV testing during the next six months.

AIDSTECH is examining the pooling of sera for HIV testing as a cost-saving measure. The objectives of this study are to confirm that sensitivity and specificity of the test are not compromised when pooling is used, and to look at the possible cost savings. This study has been initiated in the Eastern Caribbean, Dominican Republic, Ecuador and the Philippines. Preliminary results should be available by October 1990.

During the next six months, AIDSTECH will focus on developing programs to strengthen quality assurance for HIV testing and to improve blood transfusion practices. AIDSTECH will continue to work closely with WHO and PAHO in developing and implementing programs in these areas, particularly at the national level.

Lessons Learned

Since 1987, AIDSTECH has completed 11 activities and projects in nine countries: Burkina Faso, Burundi, Ghana, Kenya, Malawi, Senegal, Zimbabwe, Ecuador, and Peru. Activities included provision of HIV screening equipment and supplies, training of laboratory technicians in HIV tests, providing laboratory technical assistance, and evaluating rapid tests.

The following lessons have been learned:

- The HIVCHEK test is sensitive for detecting antibody to HIV-1 and is appropriate for use in district hospitals as a cost-efficient alternative to conventional HIV testing.
- Two rapid, simple tests used in sequence is a valid, cost-effective option to the ELISA-Western blot sequence.
- Training is required for the Rapid Tests.
- Tests which include HIV-2 should be evaluated.
- Sending supplies from the United States requires good in-country coordination, record keeping and communications.
- Countries must plan early to establish systems for supply procurement.
- Workshops have shown the appropriateness of the competency-based approach to training.

4. INFORMATION, EDUCATION, AND COMMUNICATIONS

General Strategy

AIDSTECH is currently working with host countries and local organizations on interventions designed to reduce the spread of HIV. AIDSTECH assists in the development of effective target information, education, and communications (IEC) programming to promote the sustained behavior change necessary to reduce HIV transmission among high-risk behavior groups. The IEC-related technical assistance for these interventions is provided as part of AIDSTECH's commitment to comprehensive assistance in AIDS prevention. In addition, all countries have IEC components in their Medium Term Plans, and many have requested technical assistance in the implementation of these programs. To further AIDSTECH's goals, the AIDSTECH strategy includes:

- providing skills training in IEC design, implementation and evaluation for AIDSTECH intervention projects;
- assisting with the development of IEC materials for AIDSTECH intervention projects; and
- developing innovative, effective IEC models that can be adapted for regional/local programming.

Providing Skills Training. AIDSTECH focuses on improving country/region capacity in IEC programming through skills training in IEC design, implementation, and evaluation, design of appropriate evaluation strategies, identification of appropriate agencies and country/region resources, and improving implementation and management of social marketing, health promotion, peer education, condom promotion, prevention counseling, and blood donor campaigns for AIDSTECH intervention projects.

Long-term sustainability of IEC programming will be promoted through the establishment of systems to implement effective AIDS education and communication programs and to provide counseling assistance within the scope of AIDSTECH projects. AIDSTECH will identify appropriate host institutions and agencies within a country to implement these programs.

Development of AIDSTECH Intervention IEC Materials. AIDSTECH works closely with in-country educators and communication specialists to develop culturally-appropriate educational materials and communication campaigns, including: brochures, posters, point-of-purchase materials, training manuals, and media messages.

Developing IEC models. Making use of available research regarding educational methodology and behavior change, along with extensive field testing, AIDSTECH is working to develop education and communication models that can be adapted and applied throughout the developing world. This work has focused on model training programs that can be easily replicated and educational material "templates" for adaptation to local messages and styles.

Project Progress

IEC assistance has been provided to projects in seven countries in the past six months: Ghana, Cameroon, Dominican Republic, Haiti, St. Lucia, Antigua, and Dominica.

AIDSTECH has provided technical assistance to develop and implement of an AIDS education program for the Ghana Armed Forces as part of AIDSTECH's assistance to the Ghana AIDS Control Program. This IEC work involved assistance in the design and pretesting of the evaluation instrument to be used for the program, as well as ongoing assistance in the development of the educational program itself.

The IEC components of programs in the Eastern Caribbean are underway. Educational materials for use in STD clinics in St. Lucia and Antigua are being developed. Educational programs for high-risk behavior groups in St. Lucia, Dominica and Antigua are under development. AIDSTECH is working with the Caribbean Family Planning Affiliation (CFPA) to develop a regional condom promotion strategy to run concurrently with a training program for health workers and placement of focused point of purchase materials for use in community retail outlets.

AIDSTECH is developing a model training program for staff of STD clinics in the Eastern Caribbean to increase their abilities in educating and counseling patients. The pilot program takes place in St. Lucia, with repeat programs for other countries in the region.

AIDSTECH coordinated a country-wide IEC planning meeting to develop programs and strategies for AIDS prevention in Haiti.

5. DEVELOPMENT OF SURVEILLANCE SYSTEMS

General Strategy

To plan for the impact of AIDS and to design programs to prevent the further spread of HIV, information is needed on the number of persons infected with HIV, the HIV incidence rate and the impact of intervention programs on the evolution of the AIDS epidemic. The strategy for accomplishing this includes:

- HIV and STD surveillance; and
- targeted surveillance.

HIV and STD Surveillance. AIDSTECH has assisted in the study of sentinel groups who are at increased risk of exposure to HIV, such as STD clinic attendees, persons with multiple sexual partners, and military personnel or frequent travelers such as seamen or truck drivers. Testing of several hundred blood samples from identified risk groups has provided valuable information on the pattern and distribution of HIV infection. The groups are being retested at regular intervals to document the spread of the epidemic.

Since WHO has now developed standard training materials for HIV sentinel surveillance, there is only a limited need for AIDSTECH technical assistance in this area. STD sentinel surveillance in the context of national health statistics is also an area of WHO interest; AIDSTECH will not duplicate these efforts.

AIDSTECH will continue to support surveillance where projects have already been initiated and will respond to special requests for technical assistance.

Targeted Surveillance. Targeted STD surveillance will be a priority area for AIDSTECH as part of the evaluation of its intervention projects. It will help verify reported behavior changes and can serve as a proxy for changes in HIV incidence, since few if any projects will be able to demonstrate a direct effect on HIV transmission.

AIDSTECH is evaluating the usefulness of self-reported STD histories by men. Since STDs are more symptomatic in men than in women, reported symptoms of urethral discharge and genital ulcers may provide reliable estimates of the incidence of STDs. If shown to be a successful methodology, such surveys may provide a valid, rapid and inexpensive means of monitoring STD infection levels, and of assessing the effectiveness of interventions designed to reduce high-risk behavior.

Project Progress

AIDSTECH is sponsoring three projects in Burkina Faso, Burundi and Cameroon, and providing technical assistance in Malawi, the Eastern Caribbean, the Dominican Republic and Ecuador. Technical assistance to Bolivia will be initiated in the next six months.

In the Eastern Caribbean region, AIDSTECH is providing technical assistance to support the Caribbean Epidemiology Centre (CAREC) AIDS surveillance activities. In November 1989, CAREC and AIDSTECH held a workshop on AIDS, HIV and STD Surveillance in the Caribbean. Twenty five participants from 17 countries took part. All of the participants (100%) agreed that the workshop was "highly relevant to the situation in which I work," and 92% agreed that the workshop "has been a great help to me in selecting appropriate methods for surveillance."

A unique feature of this workshop was its emphasis on the necessity of STD surveillance along with HIV and AIDS surveillance activities.

In Cameroon, AIDSTECH is funding the national sentinel surveillance program, which is being implemented by the Organization pour la Lutte Contre les Grands Endemies en Afrique Central (OCEAC), a Central African regional public health organization, in collaboration with the National AIDS Control Program. The Cameroon sentinel surveillance system is functioning well. First year results show HIV prevalence of 1.0% in pregnant women, 2.1% in STD patients and 2.4% in TB patients.

Although still relatively moderate compared to other African countries, HIV seroprevalence in Cameroon is increasing. It is extremely important to follow levels during 1990 in order to watch for possible rapid increases.

In Burkina Faso, AIDSTECH is providing assistance in the development and validation of cost-effective methods of STD surveillance, including the surveillance of male sexual behavior and STD history. The project has three components: screening pregnant women, monitoring prevalence and antibiotic sensitivities of STDs, and surveys of male sexual behavior and STD history.

Lessons Learned

Since 1987, AIDSTECH has provided technical assistance to 11 countries in the area of HIV surveillance. The following lessons have been learned:

- HIV sentinel surveillance data are most useful as a indicator of the general scope of the epidemic, and as a source of data for modeling the epidemic and projecting the future number of AIDS cases.

- HIV sentinel surveillance data are not very useful as an evaluation tool for intervention programs.

- Improving clinic-based and community-based STD surveillance methods is probably the best method for evaluating the impact of particular intervention programs.

- Setting up sentinel surveillance sites requires more time and effort than anticipated, and unexpected sources of bias will always appear.

6. RESEARCH

General Strategy

AIDSTECH's mandate is to provide technical assistance for the implementation of interventions to control the HIV pandemic while strengthening the institutions and infrastructures available for this activity. Given this framework, most research activities performed by AIDSTECH are generally of an applied nature and the results of the research must be directly applicable to the needs of the program or project. In addition, AIDSTECH is supporting two programs that address basic behavioral research needs.

The strategy for accomplishing this includes:

- Project evaluation.

- Operations research.

- Epidemiological research.

- Post-Doctoral Behavioral Research Fellows Program.

- Behavioral Research Support Program.

Project Evaluation. The evaluation of project impact and the determination of the most effective project components are essential to replicating, sustaining and expanding intervention programs. AIDSTECH combines a wide variety of measures, both objective and self-reported by target populations, to assess the success of its various interventions. The objective measures can range from improvement in knowledge of AIDS and how it is transmitted, to prevalence and incidence rates of HIV and other STDs. Self-reported measures of behavior include, but are not limited to, frequency of condom use and contact with commercial sex workers, numbers of different sexual partners in a specified time frame and history of STDs.

Essential to the valid measure of project or program impact is monitoring and documenting the process of an intervention. AIDSTECH is currently developing and implementing a standardized quantitative report of project activities in its intervention projects. This report allows for the monitoring of project outputs such as the quantity of condoms and/or educational materials distributed, the number of persons contacted/educated and the number of examinations/tests performed each month. These reports will aid the managers of the intervention projects in the field as well as provide AIDSTECH with specific measures of project outputs for use in process and impact evaluations and cost-effectiveness assessments.

Operations Research. As AIDSTECH's initial series of pilot interventions mature and lessons are learned, a more formal assessment of effectiveness and impact is being initiated in the form of specific Operations Research projects. It is apparent that a wide variety of intervention modalities can have some impact on the target population with respect to HIV-related behaviors, but their relative impact and sustainability are difficult to assess when the populations studied are scattered over a variety of cultures and situations.

Some of the specific questions to be addressed include: the relative effectiveness of community outreach activities versus clinic-based educational efforts; peer health education approaches versus more traditional health outreach workers; free condom distribution versus social marketing of condoms; traditional social marketing outlets versus outlets based on risk behavior - bars, hotels, etc.; and finally, incorporating AIDS prevention messages and activities into primary health care and family planning infrastructures versus more vertical project implementation.

Epidemiologic Research. AIDSTECH's activities in the area of applied epidemiologic research have centered around the association of other STDs with the transmission of HIV and the evaluation of barrier methods in the prevention of HIV transmission. The provision of technical assistance to establish and use data from surveillance systems for both HIV and STDs has been a major activity in this area. These systems will not only provide long-term information regarding trends in these diseases, but can also serve as evaluation tools for intervention projects.

Laboratory and epidemiologic data indicate that barrier contraceptives lower the risk of contracting STDs. However, conclusive data supporting the assertion that barrier methods can be effective in preventing sexual transmission of HIV are missing. AIDSTECH is working with another division of Family Health International to conduct a prospective two-year study of the association between barrier contraceptive use and HIV infection.

Other areas for future epidemiologic research by AIDSTECH might include the interaction of genital ulcer disease (GUD) and HIV transmission and the epidemiology of HIV spread in intravenous drug abusers.

Post-Doctoral Behavioral Research Fellows Program. AIDSTECH is initiating an AIDS technical assistance Post-Doctoral Behavioral Research Fellows Program. The purposes of the program are to:

- provide post-graduate training for U.S. citizens in behavior research in developing countries; and
- strengthen researchers in developing countries in the skills and expertise in the field of behavior research.

The need for behavior research in AIDS is growing. Information on sexual behavior patterns and how they can be changed, and on effective ways to decrease sexual transmission of HIV is essential for planning large scale programs to stop AIDS. Through the Fellows Program, AIDSTECH responds to the need to train professionals in behavioral research to mount effective programs aimed at changing and sustaining behavior changes. This fellowship will provide an opportunity for the selected participants and their in-country counterparts to gain valuable field experience and to start their international health careers.

Each Fellow will undertake a research practicum under the close supervision of a preceptor: an FHI professional staff member and/or a technical advisor from a U.S. academic institution. Fellows will work closely with their preceptors to develop, implement and publish the results of their research projects.

Fellowship recruitment brochures were sent in Fall, 1989 to U.S. Professional Schools, Departments of Sociology and Psychology at selected universities and selected schools of Public Health. Due to the limited response, the deadline for application submission was extended to April 15, 1990. The Fellowship position was advertised in the February 15 issue of Science, and the March issues of The Nation's Health and the AARG (AIDS and Anthropology Research Group) newsletter.

Behavioral Research Support Program. AIDSTECH is coordinating a program which will fund behavior research centers to develop and carry out basic research in understanding the extent and nature of high-risk behaviors, determining how to modify such behaviors, identifying barriers and enhancers to behavior change and determining how to sustain behavior changes.

A.I.D., the National Center for Nursing Research (NCNR), the National Institute of Child Health and Human Development (NICHD), and the National Institute of Aging (NIA), in consultation with the National Institutes of Health Office of AIDS Research (OAR) and the Fogarty International Center (FIC) are providing support for this program.

The projects will consist of activities to take place in two phases: Phase I will consist of a preliminary feasibility study for the larger body of work to be undertaken in Phase II. It is expected that Phase I funding will be for up to 12 months, and Phase II funding will be for up to three additional years. Each Phase will have well defined goals, objectives, and outputs. Awardees will establish a working relationship with a developing country counterpart during Phase I and will also establish

the technical and scientific feasibility of successful completion of the entire project. All Phase I projects will be managed and monitored by FHI. Successful Phase I projects may be extended with direct support from participating NIH institutes, or by A.I.D. through AIDSTECH.

Information gained will be widely shared and used to strengthen AIDS intervention programs, particularly those aimed at reducing the sexual transmission of HIV in developing countries. Such programs include counseling, adoption and sustainment of risk-reducing behaviors, reinforcement of such behaviors, promotion of condom use, and mass media communication.

Information will be shared through annual workshops and a Newsletter/Research Note Series. Four workshops will be held during the funding period. The first will be held during Phase I, and will be followed by three annual workshops during Phase II. The purpose of the meetings will be to exchange ideas and information on each project's progress and to provide an opportunity for problem-solving and results-oriented discussions with the grantees and funding agency program staff. The workshops will be held in conjunction with the annual International Conference on AIDS.

A semi-annual Newsletter/Research Note Series will be produced to keep the grantees and program staff up to date on the progress made in behavioral and related research. Information on what participating agencies are doing in behavioral research, as well as new advances in the field, will be included.

7. HEALTH CARE FINANCE ASSISTANCE

General Strategy

Many countries are implementing programs to prevent HIV infection and to treat AIDS patients. Such programs require resources that are in short supply. Financial planning to ensure that such activities can be supported over the long term is essential. Decision-makers need to determine the most cost-effective means of providing services to prevent HIV and care for persons with AIDS.

AIDSTECH offers assistance in the development of financial planning to ensure that resources are available to implement, replicate and sustain programs. AIDSTECH provides technical assistance to countries in selecting the most cost-effective prevention and treatment strategies.

Project objectives are to:

- promote sustainable interventions through development and implementation of improved methods for financial planning and analyses;
- develop the ability of local programs to compare the cost-effectiveness of two or more intervention programs, and to assess the cost-effectiveness of different components within an AIDS control intervention program; and
- measure the economic impact of AIDS.

Sustainability. As with other public health programs, costs of AIDS prevention programs can be categorized into start-up costs and operating/recurrent costs. While external donor support is generally available for the former, considerable planning and creativity will be required to develop sources of revenue to maintain and expand ongoing operations.

Sustainability strategies should focus not only on user fees or other direct revenue measures, but must also promote the strengthening of administrative infrastructures able to manage these programs on a long-term basis. These required skills include financial planning, marketing, accounting, and program management.

Considerable planning and creativity will be required to develop prevention interventions which will continue after AIDSTECH support is discontinued. The AIDSTECH finance program has developed several strategies and projects aimed at improving potential for sustaining interventions. In general, these include improved analyses and planning so that projects are not overly ambitious in terms of required recurrent costs to maintain interventions. Costing models are being developed so that host countries can forecast recurrent costs for alternative intervention scenarios. Discreet technical assistance in

analyzing costs and developing plans for meeting recurrent costs supplement our work in developing methods for improved financial planning of AIDSTECH programs.

Cost-Effectiveness. The magnitude of resources needed to address the AIDS crisis, and the competing demands for available resources requires that prevention and treatment programs be as cost-effective as possible. Policy-makers need quantitative indicators of cost-effectiveness on which to base their resource allocation decisions in order to be more successful in structuring these programs. Intervention approaches to decrease high-risk sexual behavior is another area where a better understanding of cost-effectiveness can improve utilization of scarce resources. And finally, it is essential to gain a better understanding of the relative impact of programs to prevent the spread of AIDS; e.g., of expenditures for HIV blood screening and testing, sexual transmission interventions, communications, or training.

Economic Impact of AIDS. Despite a growing concern over the economic burden the AIDS epidemic is imposing on many countries, specific data on the costs of AIDS are scarce. Only a few international studies have estimated the direct and indirect costs of AIDS. These studies have had major limitations such as incomplete data and inconsistent methodologies. The resulting weak data base on the direct and indirect economic burden of AIDS has slowed the development of adequate plans to combat an economic problem that is far more serious than the available statistics suggest.

The direct costs of AIDS are the costs of treating and caring for those who suffer from AIDS and the costs of preventive programs. The indirect costs of AIDS to a country's economy are measured in terms of factors that cause a drag on the economic growth. These include the loss of productive workers, potential loss of tourism revenue, increased cost of attracting foreign nationals to work in key strategic industries, and diversion of resources from productive investments to pay for the direct cost of AIDS. Some countries are spending a significant part of their scarce resources on hospital treatment for persons with AIDS. The current and future cost of this care is not known. AIDSTECH has provided assistance in measuring the costs of preventing and treating AIDS. Studies are underway or completed to quantify the direct treatment costs of AIDS and to compare the cost- effectiveness of alternative approaches to treatment.

Project Progress

AIDSTECH is sponsoring four health care finance projects in three countries: the Dominican Republic, Mexico and the Philippines. An additional five projects are planned for Ghana, Malawi, the Dominican Republic, Barbados and Trinidad.

A cost-monitoring system is being developed for AIDSTECH intervention projects. This system will allow tracking of total costs (including start-up and recurrent costs) of all intervention projects. AIDSTECH is providing technical assistance to GPA/WHO to develop a similar cost-monitoring system for all national AIDS programs.

AIDSTECH has been developing a cost model which will provide developing countries with a user friendly, simple computerized tool to use for planning for blood transfusion services. It will assist countries in: measuring met and unmet demand for blood services; measuring existing resources and resource shortfall for meeting the demand; projecting demand and the need for resources; and, planning for the costs of alternative scenarios for improving or expanding blood transfusion services. The model will provide a country mapping of the existing resources for supplying and processing HIV free blood. It will allow host country users to select to up to five alternative strategies for optimizing blood transfusion services and provide cost and impact implications for each strategy. This model is currently under development using data from the Dominican Republic project and will be validated in the Philippines. It should be ready for use in other countries by October 1990.

AIDSTECH is performing three recurrent cost analyses on current sexual transmission interventions in Africa and Latin America. The AIDSTECH finance team is developing a computer cost model for sexual transmission interventions. This model will be used in exploring optional approaches for interventions and estimating the cost for each option. Guidelines for carrying out routine analysis of costs will be developed using standard methods for developing a global profile of costs by intervention type and
component.

In Trinidad, a project is being conducted with the National Blood Transfusion Service for developing a cost recovery program for blood transfusion services including HIV screening. This project will assist the government in establishing appropriate prices for HIV screening of blood and a plan for immediate charges for private hospitals. In addition, AIDSTECH will provide assistance to the Government of Trinidad to establish a management information system for tracking blood transfusion services and related costs.

A plan for private sector investment in AIDS control is under development in the Dominican Republic. The goal of this project is to develop a plan for mobilizing private sector resources which could potentially contribute directly or indirectly to AIDS control in the Dominican Republic.

Lessons Learned

Since 1987, AIDSTECH has worked on health care financing activities in eight countries. The following lessons have been learned:

- The need is great for developing and institutionalizing routine cost data collection and analysis for AIDS programs. Few data are available on the costs of prevention interventions. Discreet analyses will not, in the long run, be sufficient for effective program planning and management.

- There has been little attention paid to the economic/cost impact of AIDS. A significant portion of the cost is for treating persons with AIDS. Findings from the AIDSTECH study in Mexico indicate opportunities to curtail these costs through improved planning and efficient treatment programs. Efficiency savings could be transferred to prevention programs as a strategy to control future treatment costs.

B. OTHER ACTIVITIES

1. AIDS AWARENESS AND MATHEMATICAL MODELING

There is an urgent need for more accurate forecasts of the future course of the epidemic. AIDSTECH is supporting the development of a microcomputer-based simulation model that assesses the impact of the epidemic and projects the effectiveness of potential interventions. The target audience for this model will be policy-makers, technical personnel, and service providers.

A number of models already exist or are being developed. Most models project future trends in the annual number of AIDS deaths, the number of AIDS cases, and the prevalence and incidence of HIV infections in populations in the developing world with given epidemiological, behavioral and demographic characteristics. They all have different attributes, however, and many are complementary to one another.

AIDSTECH has worked with two types of models: simple projection models and complex simulation models.

A Simple Projection Model. Based on an approach suggested by WHO/GPA, AIDSTECH has prepared a spreadsheet projection model. This model projects the number of adult and childhood AIDS cases based on HIV seroprevalence and demographic data. It can be used to forecast the number of cases through the year 2,000 in a particular geographic area (e.g. a city or country) or a particular population group (e.g. homosexuals, intravenous drug users, etc.). It can simultaneously calculate and graph the number of expected cases for two different scenarios. An IBM-PC, Lotus spreadsheet is used. This model (size: 80 k) fits on a single floppy disk and is available with documentation on request from AIDSTECH.

A Complex Simulation Model. The simulation model AIDSTECH has been supporting was initially developed by The Population Council and has since been taken over by the Interagency Working Group on AIDS Modeling (IWG) which includes the Los Alamos National Laboratory, the University of Illinois, the U.S. Air Force Academy, the U. S. Bureau of the Census, The Futures Group and AIDSTECH.

The model actually recreates the epidemic inside the computer, using a very complex computer program to mimic the social and sexual relationships among different population groups. To use this complex model requires very specific input data concerning sexual habits and social relationships of various population groups in the country or region being modeled. It also requires substantial hands-on training in the use of the model.

To make this model accessible to the average user, a presentation shell (including graphic output) is being developed by The Futures Group under contract to AIDSTECH. The presentation shell, called the AIDS Impact Model (AIM), is designed to increase awareness among developing country officials of the future pattern of HIV infection and AIDS and to help them understand the effectiveness and costs of alternative interventions.

The Futures Group and AIDSTECH are collaborating closely in the field testing phase of the model in Haiti and Uganda. The first field visits have been made to both Haiti and Uganda, in September, 1989 and in February, 1990, respectively. A second modeling visit is planned for Uganda in April or May, 1990.

After trials in Haiti and Uganda, USAID missions will be offered the opportunity to request that a modeling team apply and customize the model for their country. Country specific applications require working with local counterparts to specify model inputs, develop descriptions of feasible interventions, conduct workshops, and make presentations to increase the understanding of the model's results.

2. INFORMATION DISSEMINATION

The AIDSTECH Information Dissemination Program was designed to inform USAID Missions, National AIDS Committees (NACs), government agencies, private voluntary organizations (PVOs) and technical and health experts in the developing world working in the field of AIDS of the latest developments in AIDS research.

The AIDSTECH AIDS database has added 1,000 documents since the last reporting period and currently has over 4,000 documents including journal articles, books, reports, pamphlets, presentations, guidelines, trip reports, and training materials cataloged by subject, author and title. Articles are chosen for the database from a selected list of general medical, public health and AIDS related journals, regular searches of MEDLINE and other databases, specialized indices, material requested or provided by the AIDSTECH staff and documents generated by WHO/GPA, A.I.D., AIDSTECH and other programs. The material covers AIDS-related aspects of public health, epidemiology, health policy and planning, program development and evaluation, diagnostic tests, blood supply testing and management, high-risk behavior groups, health education and training. Between 150 and 200 documents are added each month.

Documents for the bi-monthly mailings are selected on the basis of technical accuracy, regional appropriateness, topical relevance, and suitability for an audience of varied levels of expertise. AIDSTECH currently mails 975 information packages in English to USAID Missions, A.I.D. AIDS Country Coordinators, National AIDS Committees, private and non-governmental organizations and individuals in developing countries. This is an increase of 125 additional packets since the last reporting period. In addition to the bimonthly English mailing, AIDSTECH compiles and reviews relevant articles and materials in French for a quarterly French mailing. Presently, 275 packets are sent to individuals and institutions in French speaking countries in Africa and the Caribbean.

During this reporting period, AIDSTECH has mailed three English and two French Information packages to individuals and institutions in the developing world. (See Appendix 3).

In addition, USAID Missions and selected individuals working directly with the AIDSTECH program receive a subscription to Current AIDS Literature and the AIDS Newsletter.

AIDSTECH also funded a project in collaboration with the Joint Center for African Studies, University of California Berkeley and Stanford University and the Center for AIDS Prevention Studies, University of California, San Francisco to compile an annotated bibliography on Sexually Transmitted Diseases in Africa: Sexuality and Health in Sub-Saharan Africa: An Annotated Bibliography. One hundred copies of this publication are currently being mailed to selected Missions and individuals in Africa.

Recognizing the need for up-to-date technical information on the rapidly changing field of HIV diagnostics and safe blood supplies, AIDSTECH has developed an information dissemination program targeted for laboratory and blood specialists, which is detailed elsewhere in this report.

Two special mailings are planned for the Spring: WHO AIDS Series no. 5: Guide to Planning Health Promotion for AIDS Prevention and Control and a CDC publication: Sexually Transmitted Diseases: Treatment Guidelines.

3. CONFERENCES

AIDSTECH supports attendance of international technical specialists and policy-makers working in the area of AIDS at international and regional AIDS conferences as a way to bring together experts in highly specialized fields to exchange information. In addition, AIDSTECH sponsors developing country colleagues presenting the results of AIDSTECH supported research.

AIDSTECH provided a grant of US $30,000 to the Organizing Committee of the Fourth International Conference on AIDS and Associated Cancers in Africa, held in Marseilles, October 18-20, 1989. These funds supported participation of African researchers, clinicians and public health officials working in the field of HIV/AIDS. In addition, AIDSTECH sponsored four colleagues from Senegal, Mali and Kenya currently working with AIDSTECH funded projects in their respective countries to attend the conference. AIDSTECH also maintained an information booth at the same meeting.

Two researchers from Thailand and the Dominican Republic participated as invited speakers in a Round Table on Sex Workers organized by WHO at the Second International Symposium on AIDS Information and Education held in Yaounde, Cameroon, October 22-26, 1989 under AIDSTECH sponsorship.

A Peruvian AIDS researcher attended the Implications of AIDS for Mothers and Children, in Paris, France, November 27-30, 1989.

In addition, a grant of US $9,000 was provided to the organizers of the World Consultation on Education for AIDS Prevention to support three teachers from Peru, Kenya and The Philippines to attend the meeting scheduled in Paris, April 2-7, 1990. The conference is jointly organized by UNESCO, WHO, Teaching Organizations and the International Labor Organization to provide technical debriefings on AIDS, related to human rights in employment issues, and education programs concerning global and national strategies for AIDS prevention and control.

As in previous years, AIDSTECH will provide funds and/or logistic support for representatives from approximately 36 countries to participate in the VI International Conference on AIDS to be held in San Francisco, June 20-24, 1990.

4. TRAINING

The technical training provided by AIDSTECH is directed at two principal audiences: laboratory supervisors and supervisory health care providers. Since it would not be feasible for AIDSTECH to provide individual training for each member of the target audiences, a "Train the Trainers" approach has been adopted. Training is thus provided to those in supervisory positions who will subsequently initiate and conduct in-service training of those they supervise.

The principal focus of AIDSTECH training is to assist trainees to acquire, enhance or maintain skills, rather than to concentrate on knowledge transfer. Thus, training is competency-based and evaluation of training will ultimately be made on the basis of trainee's subsequent performance, as assessed by means of measurable or observable criteria.

AIDSTECH provides training assistance in the following areas:

- Training of laboratory supervisors as trainers.
- Training in indications for blood transfusion and alternatives to blood transfusion.
- Training in precautions, sterilization and disinfection for health care workers.
- Training in epidemiologic methodologies.
- Training of project managers.

During the past six months, a workshop was conducted in Burundi for 20 laboratory supervisors, on the techniques of collecting capillary blood samples on filter paper, elusion of dried blood samples, and performance of the Genetic Systems and Dupont EIA with eluted specimens.

This workshop confirmed once again the appropriateness of the competency-based approach to training. It also demonstrated that significant gains in skills and knowledge can be obtained with minimal outlay, provided that initial planning and coordination are accomplished well before the workshop date.

In the next six months, two workshops are planned, a training workshop for laboratory supervisors in conduct of selected ELISA and rapid tests in El Salvador, and a training workshop for laboratory supervisors on quality assurance in HIV testing in Kenya.

AIDSTECH-supported training activities conducted by PVOs are in progress in the Eastern Caribbean (Project HOPE), Sri Lanka (Sri Lanka Family Planning Association), Africa (Adventist Development and Relief Agency), and Brazil (IMPACT).

Many PVOs seem to have little experience in rigorous project design and management. The project development process is an educational experience for them, in that it obliges them to define precisely the outcomes they expect from a given project, examine the resources required to achieve those outcomes, and devise strategies for accomplishing them.

5. SMALL GRANTS PROGRAM

The AIDSTECH Small Grants Program was developed to encourage private voluntary organizations (PVOs) to become involved in AIDS prevention activities. PVOs, with their extensive experience in health service delivery, and their demonstrated propensity for capacity-building at the community level, are often well-placed to carry out appropriate and sustainable HIV/AIDS programs. The Small Grants Program provides seed money (up to $50,000 per year for up to two years) to support the expansion of community-based programs to include HIV/AIDS prevention services.

The Small Grants Program Review Committee meets quarterly to make funding recommendations on concept proposals that have prior support of the relevant National AIDS Committee and USAID Mission.

The sixth review was held on February 27, 1990. Of the nine proposals reviewed, one received favorable recommendation, four were recommended for modification and resubmission, and four were rejected. The PVO grant proposal that was approved in the last reporting period was one resubmitted by Mexicanos Contra el SIDA, a Mexican PVO. Project details are provided in the Regional Programs section.

Since the beginning of the program, a total of 19 proposals have been favorably reviewed, nine of which have been initiated, six others are currently in development. Four have been dropped because of lack of local Mission support or at the request of the PVO.

III. REGIONAL PROGRAMS

The pattern and extent of the AIDS epidemic vary by region, as do the strategies and possibilities for intervention. Within the AIDSTECH program, priority is given to the Africa region, followed by Latin America and the Caribbean, and the Asia/Near East regions.

Regional and country strategies were based initially on the AIDSTECH needs assessment/program planning visits, as well as on priorities established by USAID Missions and the review of National AIDS Plans. As programs in many countries have evolved, so has a collaborative strategy development process.

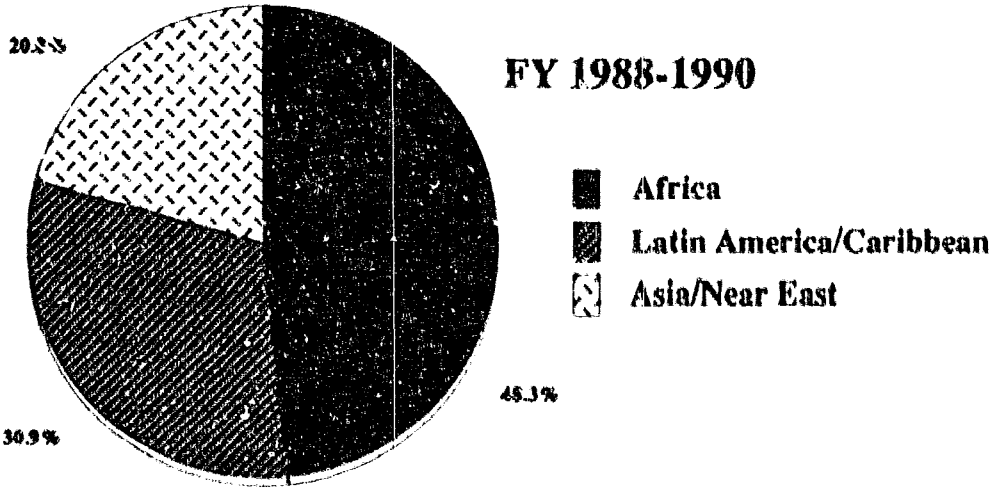
The decision to work in various countries is based on the following criteria: prevalence of HIV and/or STD infection, potential for rapid spread of HIV infection, ability of existing health infrastructures or local organizations to implement sustainable programs, high potential for program impact, AIDSTECH contacts in country, willingness of National AIDS Committees to work with AIDSTECH, USAID Mission support for AIDSTECH activities, and the availability of add-on or core funding.

In each region, AIDSTECH has identified priority countries where major program efforts are underway. Fourteen countries have been designated as priority, six in Africa, six in Latin American and the Caribbean, and two in Asia and Near East.

Other countries continue to receive AIDSTECH support on a more limited basis. AIDSTECH responds to country and Mission needs as resources permit.

The chart below shows AIDSTECH field-related expenditures by region. About 48% of field-related program resources have been spent in Africa, 31% in Latin America/Caribbean and 21% in Asia/Near East.

AIDSTECH Expenditures By Region



The following sections describe the patterns of the epidemic in each of the major regions, outline the general strategies for AIDSTECH, and describe ongoing and planned activities.

A. AFRICA

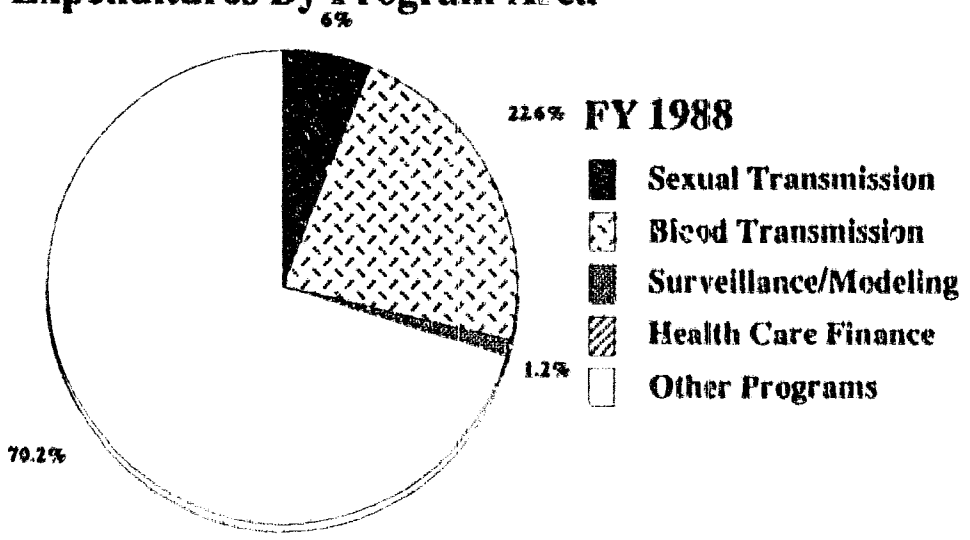
Africa continues to be the continent most affected by the AIDS epidemic. The prevalence of HIV infection in Africa is higher than in other parts of the world, and Africa is less able to handle the demands placed on its limited health resources.

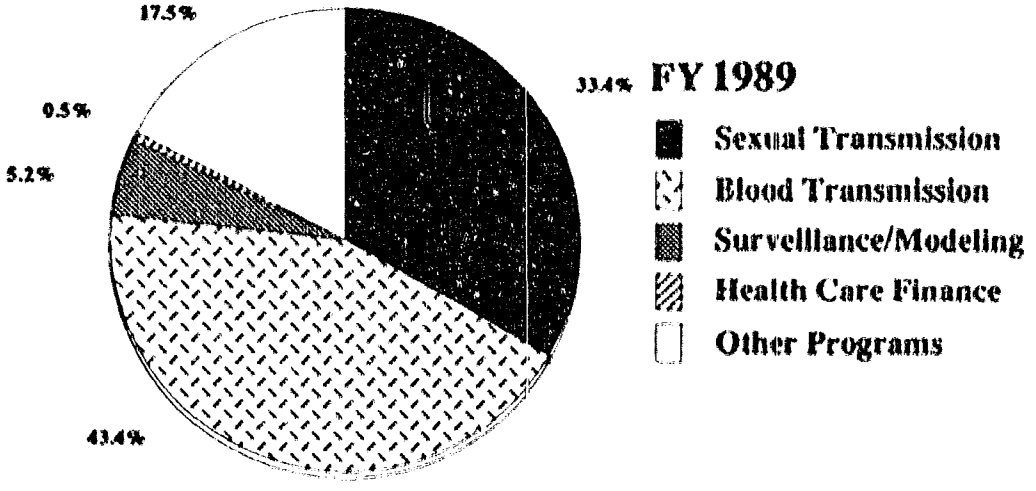
Forty-seven of Africa's 52 nations have officially reported a combined total of over 40,000 AIDS cases as of February 1990, but this number represents between one tenth to one fifth of the actual number of cases believed to exist. WHO/GPA estimates that 2.5 million Africans are presently infected with HIV and predicts that the continent will have the largest increase in absolute numbers of HIV infection through the next 20 years. At present, the epidemic shows considerable variation by country, but the observed pattern of spread of HIV between regions and among countries in a region suggests that almost all sub-Saharan African countries will be seriously affected sooner or later.

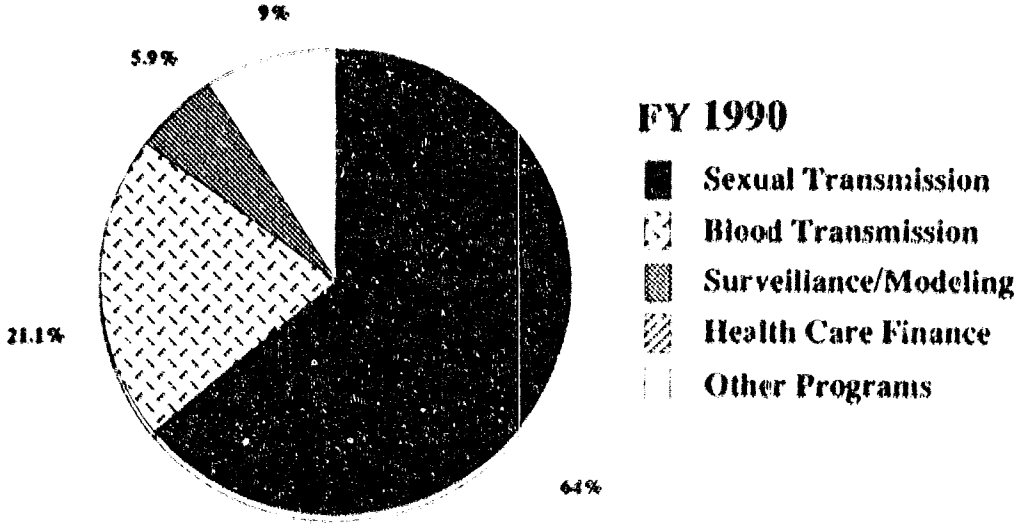
The epidemic in Africa has the following characteristics:

- Transmission is predominantly by heterosexual contact, with rates of infection roughly equal for women and men.
- The very high STD rates present in most African countries are undoubtedly accelerating the heterosexual spread of HIV infection compared to other parts of the world.
- The epidemic's greatest impact has been on urban areas, particularly in Central and East Africa. Some urban centers have recorded rates of infection as high as 30% among 20 to 49 year olds and rates over 80% in certain high-risk groups within the population.
- Both intra- and international migration have played a key role in the epidemic. Male migrants from rural areas move to the rapidly growing urban areas to find work, periodically returning to their home villages to visit wives and other family members, thus facilitating the spread of the virus.

AIDSTECH Africa Program Expenditures By Program Area







- Almost all African cities attract relatively large numbers of women who exchange sex for money or other economic favors in order to survive. This situation makes for increases in already high STD rates in general and HIV infection in particular, and will hasten the spread of HIV in many African countries.

- As more women of child-bearing age become infected, perinatal transmission plays an increasingly important role in the epidemiology of HIV and is already undermining recent gains in child survival.

- HIV transmission also occurs through unscreened blood transfusions, but most countries have established blood screening programs, at least in major urban areas, that are reducing this mode of transmission.

Circumcision and other scarification practices have been identified as potential methods of HIV transmission, but their role is presently believed to be minimal. Intravenous drug use is not a significant mode of transmission in Africa.

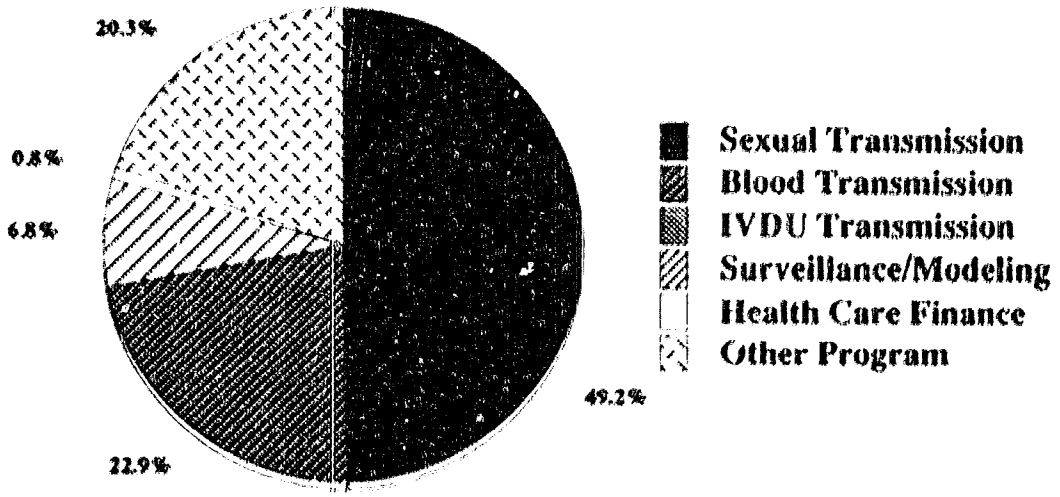
In the foreseeable future, the major concern for AIDSTECH in Africa will be to implement and expand effective, sustainable programs to decrease sexual transmission, with efforts directed toward altering the behaviors of individuals with multiple partners and their partners.

Planning for program sustainability is an integral part of AIDSTECH activities in Africa. AIDSTECH is sponsoring programs to prevent HIV infection in 13 countries in sub-Saharan Africa; six of these countries have major program efforts (Burkina Faso, Cameroon, Ghana, Kenya, Zaire, and Zimbabwe). In each country, AIDSTECH works within existing health infrastructures in accordance with the desires of the National AIDS Committee (NAC), USAID Mission priorities, and WHO global strategies as reflected in countries' Medium Term Plans. In general, working with a country's NAC, regardless of its level of development, has facilitated AIDSTECH technical assistance by providing an identifiable focus for decision-making and coordinating activities.

The chart below shows AIDSTECH obligations for Africa by program area. The "other programs" category includes needs assessments, project development, general program support, conference attendance support, and training programs in disease control procedures for health care workers. Obligations include 50% for sexual transmission programs and 22% for blood transmission programs.

The charts on the previous page show field-related program expenditures for Africa by program area. Other programs, mainly conference attendance, needs assessments and project development efforts, accounted for 70% of the 1988 program expenditures; this decreased to about 18% in 1989 and 9% in 1990. Blood transmission expenditures were high in 1989 (43%), decreasing to 21% in 1990. Sexual transmission expenditures, 6% in 1988, increased to 33% in 1989, and 64% by 1990, showing the effect of increased project implementation in this program area.

AIDSTECH Obligations By Program Area
Africa



Appendix 2 shows completed, ongoing, and planned activities by country for the region. Activities in the 13 countries where AIDSTECH works are described in more detail below.

AFRICA INTER-REGIONAL

AIDS Education. A project approved for funding under the AIDSTECH Small Grants Program has been initiated with the Adventist Development and Relief Agency (ADRA). ADRA is organizing and administering a series of ten workshops at selected locations in Africa. The workshops are designed to influence the behavior of hospital staff, personnel of local PVOs, government health workers, and community members, so that they adopt measures for the prevention of the spread of HIV in the context of their work, or in their private lives. At least 400 people will be trained in knowledge and skills related to AIDS prevention.

Accomplishments in last six months:

- *Workshops have been held in Uganda, Burundi, Zambia and Rwanda.*

Plans for next six months:

- *Hold workshops in Nigeria and Tanzania.*

Policy Development. AIDSTECH has received funding from the REDSO/WA AIDS unit to prepare a regional strategy for integrating AIDS prevention activities into Child Survival projects in West Africa. The tasks requested include an analysis conducted in two countries in the region with ongoing Child Survival Projects and the preparation of a report summarizing observations and outlining recommendations for policies and procedures. Recommendations will include ways of affecting behavior changes to reduce risk and towards promoting safe laboratory and immunization practices.

In conjunction with the REDSO office in Abidjan, AIDSTECH has selected Ghana and Senegal for site visits because both countries have a high rate of HIV infection and very active Child Survival projects. AIDSTECH has assembled two teams of three consultants to conduct the country analysis. The site visits will last ten days in each country and they will be preceded and followed by a visit to the Cote D'Ivoire to be briefed by, and to debrief the REDSO/WA office.

Accomplishments in last six months:

- *Background materials and a list of issues were assembled and prepared to be studied during site visits.*

Plans for next six months:

- *Conduct field visits to Ghana and Senegal in May 1990.*
- *Prepare final report in June 1990.*

BURKINA FASO

Burkina Faso is an AIDSTECH priority country. AIDSTECH is working in Burkina Faso to reduce sexual transmission of HIV among groups at increased risk of infection, to assist the country's National AIDS Committee in the development of a national condom social marketing program; to develop a cost-effective community-based STD surveillance and control program; and to provide supplies, technical assistance, and training to reduce HIV transmission through blood transfusion.

Intervention with High-Risk Groups. A pilot intervention with two high-risk behavior groups was initiated with the Ministry of Health and Social Welfare in November 1988. Phase I of the project, consisting of a KAP survey, an intervention and an

impact evaluation in two groups at high-risk in Ouagadougou — women with multiple partners and male STD patients is nearing completion and, following a satisfactory evaluation, will be expanded to other areas of the country.

Accomplishments in last six months:

- *A case-control study of male participants was initiated.*
- *A research protocol was developed to determine project effectiveness among women participants.*

Plans for next six months:

- *Complete first phase evaluation.*
- *Expand project to other sectors of Ouagadougou and to Bobo Dioulasso (Burkina Faso's second largest city).*

Condom Distribution Program. A pilot condom distribution program was initiated in which condoms are being distributed to small stores, service stations, bars, and nightclubs.

Accomplishments in last six months:

- *Twenty-eight outlets sold approximately 20,000 condoms per month.*
- *Ten focus groups were held to obtain information about AIDS knowledge, attitudes about condoms, brand names, and packaging.*
- *A consumer baseline survey was conducted.*
- *Plans were developed for a three-year national social marketing program.*

Plans for next six months:

- *Start the national condom social marketing project.*

STD Surveillance and Control Program. AIDSTECH is providing technical assistance in the development of a community-based STD surveillance and control program integrated into the primary health care system in Bobo Dioulasso. The program, implemented through the Centre Muraz also is testing surveillance of male STD history, sexual behavior and condom use as a cost-effective method of monitoring the effectiveness of intervention programs.

Accomplishments in last six months:

- *Project was initiated in October 1989.*
- *A pilot phase of the STD and HIV surveillance program was completed in March 1989.*

Plans for next six months:

- *Hold focus groups with workers and military men to evaluate the study questionnaire in April 1990.*
- *Pretest the study questionnaire on 100 workers and military personnel in April or May 1990.*
- *Begin baseline cross-sectional survey of male sexual behavior and STD history in May 1990.*
- *Begin monitoring of the etiologies and antibiotic sensitivities of STDs in May or June 1990.*

Blood Screening Program. Technical assistance has been provided to Burkina Faso to plan and support a program to reduce HIV transmission through blood transfusions.

Accomplishments in last six months:

- *Supply of HIV testing reagents was completed.*
- *Training was completed at district level hospitals.*

Lessons Learned:

- *The HIVCHEK test is sensitive for detecting antibody to HIV-1. The new version of HIVCHEK which detects HIV-1 and HIV-2 should be used in Burkina Faso.*
- *Although the USAID Mission in Ouagadougou has been extremely helpful in facilitating receipt of testing reagents, there have been continuing problems with delivery of test kits, including lost shipments and shipments destroyed because of lack of refrigeration. This program would not have been successful without the Mission's excellent record-keeping and communications.*

BURUNDI

Projects in Burundi include development of surveillance activities among sentinel cohort groups, and two interventions with high-risk groups.

Sentinel Surveillance. In collaboration with the epidemiologic Coordinator of the National AIDS Control Program, a project has been designed to monitor the incidence of HIV in three separate populations (military, students and workers in large companies) and to prevent HIV infection among these groups by peer education and condom distribution. A cost recovery analysis will be conducted to determine strategies for sustainability.

Recruitment of the first cohort (workers) was delayed pending training course in filter paper HIV testing.

Accomplishments in last six months:

- *In January 1990, AIDSTECH conducted a workshop to train 20 laboratory technicians in collaboration and testing of blood using the filter paper technique. Training was provided in proper collection and storage of specimens, laboratory safety, and modifications to the ELISA and Western blot procedures to be used with filter paper specimens.*
- *Supplies were provided for collection of blood.*

Plans for next six months:

- *Begin educational activities and condom distribution among workers at three companies in Bujumbura. Collect and analyze blood samples and questionnaire data from this first cohort.*
- *Begin working on logistics for second cohort.*

Interventions with High-Risk Groups. AIDSTECH also offered technical assistance in the development of two intervention projects involving high-risk groups. The first project involves peer education targeted at women with multiple partners and their partners in two neighborhoods in Bujumbura. The second project consists of an educational campaign using a theatrical piece and the establishment of a counseling system for seropositive persons in a rural area of the country. Projects have been delayed, pending approval by the National AIDS Control Programs.

Plans for next six months:

- *AIDSTECH will work to gain necessary approvals.*

CAMEROON

Cameroon is an AIDSTECH priority country. AIDSTECH and the National AIDS Control Service (NACS) have implemented activities in HIV surveillance, HIV testing and training, prevention of sexual transmission, blood transfusion practices, counseling, and AIDS related research.

Sentinel Surveillance. AIDSTECH is providing technical assistance and support for a sentinel surveillance and AIDS reporting program that is being implemented by the NACS.

Accomplishments in last six months:

- *The results of the first twelve months of surveillance show that:*
  - *HIV prevalence among pregnant women in 1989 was 1.0%, compared to 0% in a sample of 200 women of reproductive age in Yaounde in 1987.*
  - *HIV prevalence among STD patients in 1989 was 2.1%, compared to 0.7% among a similar sample of STD patients studied in early 1988.*
  - *HIV prevalence among TB patients was 2.4%; there are no previous survey data available for comparison.*

Plans for next six months:

- *Initiate HIV sentinel surveillance activities in Garoua in the North and in Bertoua in the East. These are the last two of six sites where surveillance activities are to be initiated.*

- *Undertake two surveys, one in Douala and one in Yaounde, to measure the QuiSTD Index (Quick, Interview-based STD Index) to evaluate baseline STD incidence among men and estimate the amount of STDs prevented by condom use.*

HIV Testing, Training and Quality Assurance. AIDSTECH is providing supplies, technical assistance and training to reduce the transmission of HIV by blood transfusions.

Accomplishments in last six months:

- *Provision of supplies continued; 7,000 HIVCHEK and 3,000 Serodia tests were provided in the first year.*

- *Twenty trainers who received initial training from AIDSTECH in the HIVCHEK technique have trained an additional 26 laboratory technicians at the district hospital level.*

- *A national quality assurance program has been planned and approved for initiation at the district level.*

Plans for next six months:

- *The laboratory inspection program will be developed and implemented.*

- *The national proficiency testing program will be developed.*

- *Guidelines for laboratory quality control will be developed.*

- *The provision of HIVCHEK test kits and ongoing evaluation will continue.*

Program for the Prevention of Sexual Transmission of HIV. The goal of the intervention program is to reduce the sexual transmission of HIV infection among groups at increased risk of infection (women with multiple partners, their partners, and STD patients) through education, condom promotion and distribution, and treatment for STDs.

Accomplishments in last six months:

- *Anthropological study of 150 women with multiple partners, 100 of their partners, and 50 female patients in STD clinics was completed; preliminary findings indicate that most were ignorant of STD prevention and several contested the existence of AIDS.*
- *KAP surveys of women with multiple partners, men in bars, and STD patients were completed; data are being analysed.*
- *Additional peer educators were recruited in Yaounde.*
- *AIDS Prevention educational activities were initiated in Douala.*
- *A condom social marketing project, which has sold more than 1,000,000 condoms in the last six months, was initiated.*
- *A dramatic troupe of women with multiple partners who perform AIDS prevention skits around the country was formed.*

Plans for next six months:

- *Conduct AIDS Education workshops for hotel/bar owners, hairdressers, truck drivers.*
- *Recruit additional peer educators in Yaounde and Douala;*
- *Expand AIDS educational activities to Maroua, the provincial capital of to the Extreme North Province.*

Improving Blood Transfusion Practices. In conjunction with the National AIDS Control Service, AIDSTECH worked to improve blood transfusion practices in Cameroon.

Accomplishments in last six months:

- *Blood transfusion practices were surveyed in provincial hospitals.*
- *A workshop was conducted for 40 participants.*
- *Guidelines for blood transfusion in Cameroon were developed*
- *Guidelines were distributed throughout Cameroon.*
- *A technical report on this workshop was prepared and distributed.*
- *Recommendations for improving the blood transfusion system in Cameroon were developed.*

Plans for next six months:

- *Evaluate the effect of the guidelines for blood transfusion in four hospitals.*

Development of a Counseling Program. Following a specific request from the NACS, AIDSTECH provided technical assistance to the National AIDS Control Service in the development of an HIV/AIDS counseling program in Yaounde, for eventual expansion throughout the country.

Accomplishments in last six months:

- *Existing counseling services and available resources were assessed.*
- *Workplan for a model counseling system in Yaounde was developed.*

Plans for next six months:

- *Establish model counseling system in Yaounde.*

Feasibility Study of a Rapid Test for HIV. International Health Services, a U.S. based private voluntary organization funded under the AIDSTECH Small Grants Program, is conducting early field trials of a new rapid and simple test for HIV. The test employs a unique packaging system and may be produced at a very low cost. Early trials indicated that the technique is feasible but further studies will be conducted during the next six months to determine the sensitivity and specificity in a high-risk population in Cameroon.

Accomplishments in last six months:

- *Project time was extended and additional funds to complete testing were approved.*
- *Problems were corrected in an earlier version of the test.*

Plans for the next six months:

- *Fabricate and field test new devices.*

Efficacy of Barrier Contraceptives. The NACS and AIDSTECH/Family Health International are conducting a prospective study of the association between barrier contraceptive use (condom use and condom use coupled with spermicide use) and HIV infection in approximately 300 women practicing high-risk behavior.

Accomplishment in last six months:

- *Study forms were printed and shipped, and a system to monitor follow-up of participants was developed.*
- *An agreement was achieved with the Centre Pasteur (Yaounde) to perform STD diagnostic tests.*
- *Project was initiated in December 1989.*
- *Initial batch of study forms were received and loaded.*
- *Local (NC) purchase of spermicides was initiated in wake of chronic shortage in Yaounde.*

Plans for next six months:

- *Continue enrollment until 300 women admitted.*
- *Continue intensive follow-up of the cohort.*
- *Monitor project in summer 1990.*
- *Resolve remuneration of the Centre Pasteur.*

GHANA

Ghana is an AIDSTECH priority country. AIDSTECH has worked with the National AIDS Control Program in the Ministry of Health to develop a comprehensive AIDS program for Ghana. Components of the program are described in the following paragraphs.

Assistance to Ghana Armed Forces (GAF). AIDSTECH is assisting the GAF to develop and implement an AIDS education and condom promotion program and an epidemiologic surveillance system for HIV-1 and HIV-2.

Accomplishments in last six months:

- *AIDSTECH and representatives from the GAF and the Health Education Unit of the MOH worked together in December 1989 to develop a KAP questionnaire to evaluate the impact of the educational program. In January and February 1990, the GAF pretested the KAP with groups of both officers and enlisted soldiers and has submitted their recommendations for changes to AIDSTECH.*

- *Staff from the Health Education Unit were idendified to implement and coordinate the educational program.*

- *Equipment and supplies for HIV testing were purchased and delivered.*

- *An HIV testing laboratory was established and two laboratory technicians were trained in the ELISA technique.*

Plans for next six months:

- *Interviewers will be trained by staff from the GAF and the Health Education Unit.*

- *Implement the KAP from May 1 to June 15, 1990 with a group of 800 soldiers.*

- *The GAF will work with DANAFCO, the sub-contractor for SOMARC in Ghana, and USAID in putting its condom distribution system in place concurrent with the start-up of the educational program.*

- *Begin HIV and STD surveillance in May 1990.*

- *Develop a system to monitor the recurrent costs of the program to enable the GAF to plan for program sustainability after AIDSTECH support is withdrawn.*

- *Finalize a protocol for strengthening the GAF's STD services in May and begin renovation and outfitting of the clinic in June.*

Intervention with Women with Multiple Sexual Partners. AIDSTECH will assist the Ministry of Health (MOH) to expand the scope of the AMFAR-funded pilot AIDS education and condom distribution program to prevent sexual transmission initiated by FHI in June 1987.

Accomplishments in last six months:

- *Discussions were continued with the MOH and the Manager of the AIDS Control Program concerning initiation of the expanded project.*

Plans for next six months:

- *Initiate the expanded project by September.*

Epidemiological Surveillance of HIV Infection. AIDSTECH had planned to assist the National AIDS Control Program to establish a national sentinel surveillance program. WHO is now taking the lead in this area and AIDSTECH will avoid duplication of effort.

Rapid Test Evaluation. Ghana is one of four countries which participated in the evaluation of rapid assays for blood screening. The study was initiated with the MOH in January 1989 and testing was completed in June 1989. Seven laboratories tested 1,878 specimens from blood donors, persons practicing high-risk behavior and persons having symptoms of AIDS. The HIVCHEK test was evaluated as a screening test for HIV and demonstrated a sensitivity and specificity equal to or better than the ELISA test for detecting antibody to HIV-1. The SERODIA and RETROCELL sensitivity of these two agglutination tests for HIV-1 was 98% and 97% respectively whereas the specificity was 77% and 75%. These tests were not adequate for detecting HIV-2 which is present in Ghana, but is less prevalent than HIV-1 in all groups tested. It was determined that

rapid, simple tests can be used effectively in small rural laboratories and perform equally as well as the currently used ELISA method which requires sophisticated training and equipment.

Accomplishments in last six months:

- *Data analysis was completed.*
- *Technical report was produced.*
- *Data were presented at the AIDS and Associated Cancers in Africa meeting.*

Lessons Learned:

- *Rapid, simple tests for HIV are appropriate for use in field laboratories in Ghana.*
- *Training is required for the simple, rapid tests.*
- *Other tests which include HIV-2 should be evaluated for use in Ghana.*

KENYA

Kenya is an AIDSTECH priority country. AIDSTECH has developed a major program in Kenya which has the following components:

AIDS Education and Condom Distribution in Mombasa. The AIDS education and condom distribution program for high-risk behavior groups in Mombasa will be conducted through the Ministry of Health and the Municipality of Mombasa. The project will target AIDS education and condom distribution to high-risk behavior men and women through health centers, STD clinics, bars and nightclubs, and work sites. Project implementation has been held up by difficulties posed by the Kenya Ministry of Health in channeling project funds.

Accomplishments in last six months:

- *The project was approved by the appropriate subcommittee of the National AIDS Committee, AID/Washington and USAID/Nairobi.*

Plans for next six months:

- *Establish funding mechanisms for the project.*
- *Initiate the project by September 1990.*

AIDS Education and Condom Distribution for Truck Drivers. The AIDS education and condom distribution program for long distance truckers is being implemented by the African Medical and Research Foundation (AMREF). It provides AIDS and STD education and condoms to truckers and their sexual partners at four truck stops along the Trans-African Highway as well as a depot in Mombasa. The program is closely linked to a sister project for truckers operating in Tanzania and implemented by the AMREF office there in conjunction with the Tanzania Mainland AIDS Control Program.

Accomplishments in the last six months:

- *Project was initiated in January 1990.*
- *A health behavior officer was identified to lead the Kenya project.*
- *A KAP questionnaire was developed, pretested, and revised; interviewers were trained.*

Plans for next six months:

- *Collect and analyze baseline data.*

- *Begin educational activities and condom distribution along the truck route.*

Training Program for Community Based Distributors: Community Education and Counseling for HIV/STDs. Crescent Medical Aid (CMA) is a private voluntary organization which delivers medical care and preventive services through its eight clinics to poor communities in and round Nairobi. AIDSTECH is providing technical and financial assistance to CMA to develop and implement a community education and counseling training program for the 16 Community Based Distributors (CBDs) working out of the clinics.

Accomplishments in last six months:

- *A training program was designed and the first workshop for CBDs was held from January 29 to February 2, 1990.*

- *CBDs began using new skills in their community work; number of clients reached and condoms distributed have increased; at least half of the clinics show a five-fold increase in number of condoms distributed by CBDs.*

- *Community presentations wre held, including condom demonstrations, AIDS dramas and songs.*

Plans for next six months:

- *CBDs will participate in weekly counseling services, held by the KNOWAIDS group, for people with AIDS and HIV infection.*

- *A second workshop for CBDs will be held in May.*

AIDS Prevention Workshops for Family Planning Providers. In this program, AIDSTECH is providing technical assistance and financial support to the Family Health Division of the Ministry of Health in collaboration with the AIDS Program Secretariat for 3 five-day workshops on AIDS prevention for family planning workers in Nairobi, Mombasa, and Kisumu. The goal of the workshops is to train family planning service providers in all relevant aspects of AIDS prevention, with an emphasis on their role in counseling clients with regard to AID/HIV. One workshop has been held in Nairobi.

Accomplishments in last six months:

- *Discussions were held between the AIDSTECH Resident Coordinator and staff of the Kenya AIDS Control Programme to plan the next two workshops.*

Plans for next six months:

- *A two-day Facilitators' Workshop to review and revise the training plan and prepare the facilitators will precede the implementation of the next two workshops, scheduled for 1990.*

KAP Survey of Adolescents Concerning AIDS and STDs. AIDSTECH continues to provide technical assistance to the National AIDS Control Program and the University of Nairobi to develop a strategy for a secondary school-based AIDS prevention intervention. AIDSTECH is assisting in the development and implementation of a national survey of secondary students and the design and testing of a pilot intervention based on the findings of the KAP survey.

Accomplishments in last six months:

- *Project strategy was discussed with principal investigators.*

- *Technical assistance was provided in questionnaire design and plans for pretest.*

Plans for next six months:

- *Revise the project design based on information obtained in April during a visit to Kenya.*
- *Obtain the necessary approvals.*
- *Hold a planning meeting to detail the workplan.*
- *Identify program staff.*

Blood Screening Program. The blood screening program includes needs assessment, training of laboratory technicians in HIV testing and development and maintenance of a National Quality Assurance Program for HIV testing. The project will address the sustainability of HIV screening of donated blood through recurrent cost analysis and the development of a financial plan.

Plans for next six months:

- *AIDSTECH will conduct a training workshop for laboratory supervisors in quality assurance in HIV testing.*

Rapid Test Evaluation. Kenya participated in the multi-center evaluation of rapid tests for HIV. Seven laboratories in Kenya participated in the field evaluation of rapid tests for HIV as well as an evaluation of an alternative testing strategy. One thousand, eight hundred and seventy-five specimens were tested in a multi-layered testing strategy using the HIVCHEK test as a screening test with an agglutination test as a confirmatory or supplemental test. This strategy was compared to the conventional strategy of screening with ELISA and confirming with Western blot. This study has shown that the sensitivity of the alternative testing strategy is 96% and the specificity is 99.3% when compared to Western blot testing. The agglutination tests are much less expensive than the Western blot, so a cost-savings of 80% was demonstrated using the alternative strategy as opposed to the ELISA-Western blot sequence.

Accomplishments in last six months:

- *Data analysis was completed.*
- *Technical reports were produced.*
- *Data was presented at the AIDS and Associated Cancers in Africa meeting.*

Lessons Learned:

- *Rapid, simple tests for HIV are appropriate for use in field laboratories in Kenya.*
- *Training is required for the simple, rapid tests.*
- *Two rapid, simple tests used in sequence are a valid and cost-effective option to be considered.*

Blood Bank Data Management. A project to develop and maintain a blood bank data management system has been initiated with the National Public Health Laboratories in Nairobi.

Accomplishments in last six months:

- *Computer and software were installed and tested.*
- *Staff training in computer use and data entry was initiated.*

- *Questionnaire was developed and pretested.*

- *Collection of data was initiated.*

- *A retrospective review of transfusions was completed.*

Plans for next six months:

- *Fully implement system.*

- *Begin training in data analysis.*

Resident Coordinator. Dr. Barry Levy completed his contract as AIDSTECH Resident Coordinator in Kenya in September 1989. Ms. Lois Lux was appointed AIDSTECH Resident Coordinator for Kenya in December 1989. Ms. Lux has assumed responsibility for coordinating AIDSTECH supported projects in Kenya and is also providing limited assistance to other projects in the East and Southern Africa Region.

MALAWI

The Malawi National AIDS Control Program (NACP) has requested AIDSTECH technical assistance in the areas of epidemiology and health care financing.

Technical Assistance in Epidemiology. AIDSTECH provided assistance to the Malawi NACP to create two databases for compilation and reporting of suspected AIDS cases and data from HIV testing of blood/donors.

Accomplishments in last six months:

- *AIDSTECH began training for designated NACP (MOH) personnel in the data management and reporting system.*

- *AIDSTECH worked with the NACP to project the future number of AIDS cases based on the above surveillance data.*

Plans for next six months:

- *Provide additional technical assistance to set up and analyze HIV sentinel surveillance data, and project future AIDS cases based on seroprevalence data.*

- *Explore the use of STD surveillance data and/or QuISTD Index to help evaluate specific prevention programs.*

Study on the Economic Impact of AIDS. AIDSTECH provided technical assistance to the Malawi National AIDS Control Program to design a study for measuring the economic impact of AIDS in Malawi.

Accomplishments in last six months:

- *Assistance was provided in developing a general methodological approach for performing a study on the economic impact of AIDS.*

- *A project proposal and workplan for the study were developed.*

Plans for next six months:

- *Initiate study and continue technical assistance under a USAID Mission Add-on to AIDSTECH.*

MALI

Expanded Intervention with High-Risk Groups. FHI, with funding from the USA for Africa Foundation, has carried out a pilot project in Bamako to educate and provide condoms to high-risk behavior groups through peer education. A program to expand the pilot project to other sections of Bamako and to three additional cities was initiated in January 1990.

Accomplishments in last six months:

- *Approval was obtained from the Ministry of Public Health and Social Affairs.*
- *Workplans for project activities were prepared*

Plans for next six months:

- *Prepare educational materials for targeted high-risk groups.*
- *Establish condom distribution system in Bamako.*
- *Train 10 peer educators.*
- *Initiate KAP surveys and physical exams for a sample of project participants.*

NIGER

Intervention with High-Risk Groups. AIDSTECH is offering technical assistance to the Ministry of Public Health to develop a project to reduce the sexual transmission of HIV among women with multiple partners, their partners, STD patients, and truck drivers in the capital city, Niamey. The project will:

- educate 600 women with multiple partners, 1,000 STD patients, and 600 truck drivers about how to avoid the sexual transmission of AIDS;
- establish a condom distribution system in selected bars and hotel;
- develop standard treatment protocols of STDs; and
- provide AIDS prevention counseling training to health care providers.

Project activities are expected to begin in July 1990.

NIGERIA

Intervention with High-Risk Groups. An intervention with women at high-risk of HIV infection and their partners has been initiated in Calabar and surrounding urban areas. The intervention includes education and condom distribution to high-risk behavior groups and STD diagnosis, control and prevention.

Accomplishments in last six months:

- *Regular meetings were held with hotel managers and chairladies regarding program development and implementation.*
- *AIDS/HIV education and condom promotion outreach to members of high-risk groups were implemented in 24 sites (hotels and bars) in two towns in Cross River State.*

- *Regular distribution of condoms continued to target group members using female and male peer educators and hotel managers.*

- *A special clinic to provide STD services to members of the target population was established under the auspices of the Ministry of Health.*

- *Dr. Eka Williams presented a paper on this project at the Agency for International Development AIDS Program Mini-Conference in February 1990.*

Plans for next six months:

- *Continue educational activities and condom distribution in Calabar.*

- *Expand project activities to an additional city in the Cross River State.*

- *Finalize implementation plans for a reliable system for a condom supply with the Cross River State Family Planning Program.*

SENEGAL

AIDSTECH has provided technical assistance to the National AIDS Committee to procure necessary blood screening supplies for two laboratories to do HIV testing. Senegal is one of four countries evaluating rapid assays for blood screening.

Rapid Test Evaluation. Six laboratories in Senegal participated in the multi-center evaluation of rapid tests for HIV with Kenya, Ghana and Zaire. Two thousand and sixty-seven specimens were tested on three assays for HIV and results form the trial indicated that all three tests were sensitive and specific for detecting antibody HIV-1 but were not sensitive enough to detect antibody HIV-2, which is the prevalent virus in Senegal. It was found that HIV-2 was more prevalent than HIV-1 in all groups examined in this study. The HIVCHEK test detected only 18% of the "HIV-2 only" specimens whereas SERO-DIA detected 71% and RETROCELL 82% of the "HIV-2 only" specimens. Since this study was completed the HIVCHEK and the RETROCELL tests have been modified to detect antibodies to both viruses.

In the final report of this study, it has been recommended that new tests designed to detect antibody to HIV-1 and HIV-2 be evaluated in similar studies and that alternative testing strategies for detecting both viruses be evaluated.

Accomplishments in last six months:

- *Data analysis was completed.*

- *Technical report was procuded.*

- *Data were presented at the AIDS and Associated Cancers in Africa meeting.*

Lessons Learned:

- *Rapid, simple tests for HIV are appropriate for use in field laboratories in Senegal. However, tests which detect antibodies to both HIV-1 and HIV-2 are more appropriate for Senegal.*

- *Training is required for the simple, rapid tests.*

- *Two rapid, simple tests used in sequence are a valid and cost-effective option to be considered. Strategies utilizing tests for HIV-1 and HIV-2 should be evaluated in Senegal.*

TANZANIA

Components of the Tanzanian AIDS program include:

AIDS Education and Condom Distribution for Truck Drivers. Consultation with the Director of the National AIDS Control Programme following the AIDS conference in Arusha lead to the development of a project to control HIV transmission among a group of long distance truck drivers who engage in high-risk behavior by having multiple sexual partners. The project was initiated with the African Medical and Research Foundation (AMREF) in September 1988. Project activities focus on truck stops on the Dar-es-Salaam - Mbeya Road which links Tanzania and Zambia, and include emphasis on the control and prevention of STDs in addition to HIV. The project is being linked with a similar AIDSTECH-supported AMREF project in Kenya.

Accomplishments in last six months:

- *Two health behavior officers were recruited and oriented to the project.*
- *An informal survey was carried out among trucking companies in Dar-es-Salaam and truck stops along a major trans-African truck route.*
- *A KAP questionnaire was developed and interviewers were selected.*
- *Assessed STD prevention and control services available to truckers and their sexual partners.*

Plans for next six months:

- *Train interviewers and implement the KAP survey and focus groups in April 1990.*
- *Begin educational activities and condom distribution systems along the truck route and in selected trading companies*
- *Develop and initiate an STD prevention control program for the target groups by September.*

Strengthening STD Services for High-Risk Groups. AIDSTECH will support efforts in Tanzania to strengthen STD services for individuals practicing high-risk behaviors. These activities will complement the AIDSTECH-supported AMREF/ Tanzania AIDS Education and Condom Promotion Project for Truck Drivers. Assistance will be given to improve STD services provided in occupational health and company clinics which service truck drivers and their assistants. This project will be piloted in a small number of selected clinics and evaluated for expansion.

Accomplishments in last six months:

- *An assessment was made of STD services available to truckers and their assistants.*
- *Discussions were held with relevant organizations concerning plans for integration of the proposed program into other AIDS and STD control programs and activities. Representatives from the NACP, Muhimbili Medical Center, other donor organizations, PVOs, staff of government and private health facilities, and the USAID/Dar es Salaam Mission were consulted.*

Plans for next six months:

- *Development and approval of project.*

Resident Coordinator. A part-time position for an AIDSTECH Resident Coordinator in Tanzania has been established. Ms. Anne Outwater has been recruited for this position and a contract is being negotiated to begin in May 1990. Ms. Outwater will coordinate all AIDSTECH activities in Tanzania. She will work with Ms. Lois Lux, AIDSTECH Resident Coordinator in Kenya, to develop AIDSTECH's regional program in East Africa.

UGANDA

AIDS Modeling Project. AIDSTECH and The Futures Group are field-testing the AIDS simulation model in Uganda.

Accomplishments in last six months:

- *Field visit to Uganda in February 1990 to establish working relationship with appropriate collaborators.*

Plans for next six months:

- *Collect data needed for the model.*

AIDS/STD Study Support. AIDSTECH also has provided funds for the Makerere University/UCSF Collaborative study: Heterosexual Transmission of AIDS in Uganda. Assistance was given to strengthen the STD services at the Makerere University Clinic, thereby attracting patients to participate in the research project and providing the local population with badly needed diagnostic and therapeutic STD services.

ZAIRE

Zaire is an AIDSTECH priority country. In conjunction with Zaire's Central Coordinating Office, AIDSTECH is collaborating with two organizations working in Zaire to strengthen their capacity to confront the AIDS epidemic by modifying, where appropriate, and expanding existing programs. Two projects have been developed: (1) a rapid test evaluation for blood screening; and (2) assistance in expansion of the social marketing project.

Rapid Test Evaluation. Projet Sante Rural (SANRU) is evaluating rapid assays for HIV in rural hospitals in Zaire.

Accomplishments in last six months:

- *Field testing was completed.*
- *A train-the-trainers workshop for HIV pre- and post-test counseling was conducted for 19 participants.*
- *A training manual was developed to provide counseling in rural hospitals.*

Plans for next six months:

- *Complete data analysis.*
- *Continue to supply HIVCHEK tests as an interim measure.*
- *Present findings at the International AIDS Conference in June 1990.*
- *Write and distribute technical report.*

Condom Social Marketing. Population Services International (PSI), an organization running a condom and spermicide social marketing program in Kinshasa (in the context of family planning and STD control) and AIDSTECH have implemented a condom social marketing program targeting persons practicing high-risk behaviors in three cities (Matadi, Boma, and Goma) in the west and northeast regions of Zaire.

Accomplishments in last six months:

- *More than 780,000 condoms were sold in target areas.*
- *More than 40 barhotels and 90 pharmacies were recruited to participate in the project.*

- *Promotional activities were undertaken in pharmacies, markets, and nightclubs.*

- *A baseline KAP study of men was conducted in the port city of Matadi.*

Plans for next six months:

- *Continue sales and promotions in target areas.*

- *Recruit condom promoters from an indigenous women's professional organization.*

- *Conduct STD study to determine project effectiveness.*

- *Expand project to river transport, trucking, and mining areas of Zaire.*

ZIMBABWE

Zimbabwe is an AIDSTECH priority country. Components of the program include:

AIDS KAP Module. AIDSTECH developed an AIDS module to collect information on AIDS knowledge, attitudes, and practices. The Institute for Resource Development, Inc. included the module on AIDS knowledge and attitudes in their contraceptive prevalence survey in Zimbabwe. The survey asked whether the women had heard about AIDS, what they knew about the routes of transmission, and any measures that respondents had taken to avoid contracting AIDS.

Accomplishments in last six months:

- *Preliminary results were presented at the Fourth International Conference on AIDS and Associated Cancers in Africa in October 1989.*

Lessons Learned:

- *The Demographic and Health Surveys results suggest that AIDS education campaigns in Zimbabwe have been effective in increasing awareness of the disease and of the role of heterosexual sex in its transmission.*

- *Fears of exposure through casual contact are common, and few women in Zimbabwe are taking preventive action to avoid AIDS.*

- *Findings suggest that continued education and motivation efforts are needed to emphasize that AIDS is a preventable disease and to stress actions women can take to prevent AIDS transmission.*

- *The education efforts clearly need to target the widespread misconceptions that AIDS can be contracted through casual contact.*

- *Women appear to be unlikely to take actions to prevent AIDS if they believe the disease can be transmitted through casual contact and is, thus, not preventable.*

- *The attitude that people with AIDS should be quarantined not only reflects the fears of casual contact, but may also keep people who know or suspect that they may have AIDS from taking preventive measures out of fear of ostracism.*

Blood Screening Program. AIDSTECH has provided technical assistance to equip and supply five regional hospitals with blood screening facilities; some equipment also was provided to the Blood Transfusion Service.

Accomplishments in last six months:

- *Additional supplies were provided for five regional hospitals.*

Lessons Learned:

- *Communication from field is critical to facilitate a smooth delivery of supplies from the U.S.*

Intervention with High-Risk Groups in Bulawayo. A program to reach high-risk groups was initiated by the City Health Department of Bulawayo with the assistance of a psychologist from the University of Zimbabwe and AIDSTECH in September 1989. The program focuses on women with multiple partners, their partners and STD patients in Bulawayo.

Accomplishments in last six months:

- *Baseline KAP data on women with multiple partners and their clients was gathered and analyzed.*

- *Organizational meetings were held with seventy hotel and bar staff personnel.*

- *Community outreach meetings were held with women with multiple partners and their clients in bars, hotels, and women's residences. These meeting continue, averaging three per week, with video showings, lectures, condom demonstrations and distribution and discussion. An estimated 5,000 contacts have been made.*

- *Thirty-eight peer health educators were identified (28 females and 10 males). Regular weekly meetings are held for further AIDS education and training, condom distribution, and planning for program implementation. Peer educators are creating AIDS prevention dramas, songs, and poems.*

- *Regular meetings were continued in bars, hotels and residences for target group members and conducted weekly peer health educator meetings.*

- *Mr. David Wilson, of the University of Zimbabwe, presented project results to date at the A.I.D. Mini-Conference in February 1990.*

Plans for next six months:

- *Continue regular bar and residence-based meetings and condom distribution.*

- *Provide further training for peer health educators.*

- *Provide city health workers refresher training in prevention and management of STDs and counseling.*

- *Focus intervention activities on STD clinics.*

Genital Ulcer Disease Control. A Genital Ulcer Disease (GUD) Control project was being developed with the Harare City Health Department, the Zimbabwe National AIDS Control Programme, and the Medical School of the University of Zimbabwe. Project logistics could not be resolved; the project will be moved to another country.

B. LATIN AMERICA AND THE CARIBBEAN

At present, HIV infection rates in many Latin American countries are still relatively low. However, Mexico and Brazil have already experienced serious outbreaks of infection, especially in urban areas among people practicing high-risk behavior. All countries in Latin America have detected and reported AIDS cases. Although HIV was introduced in different countries at different times, the overall effect is one of a growing epidemic.

HIV infection struck early and hard in the Caribbean. The first case of AIDS in the Caribbean was reported in Jamaica in 1982. Several countries in the region (Trinidad and Tobago, Barbados, Bermuda, Guadalupe, Bahamas and Haiti) have experienced some of the world's highest infection rates. Unfortunately, an already serious situation is threatening to get worse as a predominantly youthful population enters its most sexually active years during the next decade.

The epidemic in Latin America and the Caribbean has the following characteristics:

- The virus is transmitted primarily by sexual contact.

- Recent epidemiological evidence from many countries shows a decrease in the male to female ratio of AIDS cases, thus indicating increasing heterosexual spread of the virus.

- The safety of the blood supply varies greatly throughout the region. While some countries offer integrated blood transfusion services, others lack basic infrastructures for storing and screening transfused blood.

- Intravenous drug use is not as yet a major mode of transmission, but there are pockets where this activity is practiced.

Because sexual transmission accounts for the vast majority of AIDS cases, it receives a proportional amount of emphasis in AIDSTECH's regional program. AIDSTECH recognizes the pivotal role men play as decision-makers, specifically in regards to numbers and types of sexual partners and use of condoms and seeks to involve males in intervention programs designed to reduce high-risk behavior.

Because the safety of the blood supply varies throughout the region, AIDSTECH's strategy for preventing transmission of HIV through blood is country-specific and is based on existing laboratory infrastructure, staff capabilities, HIV prevalence rates, and reliance on commercial blood donors.

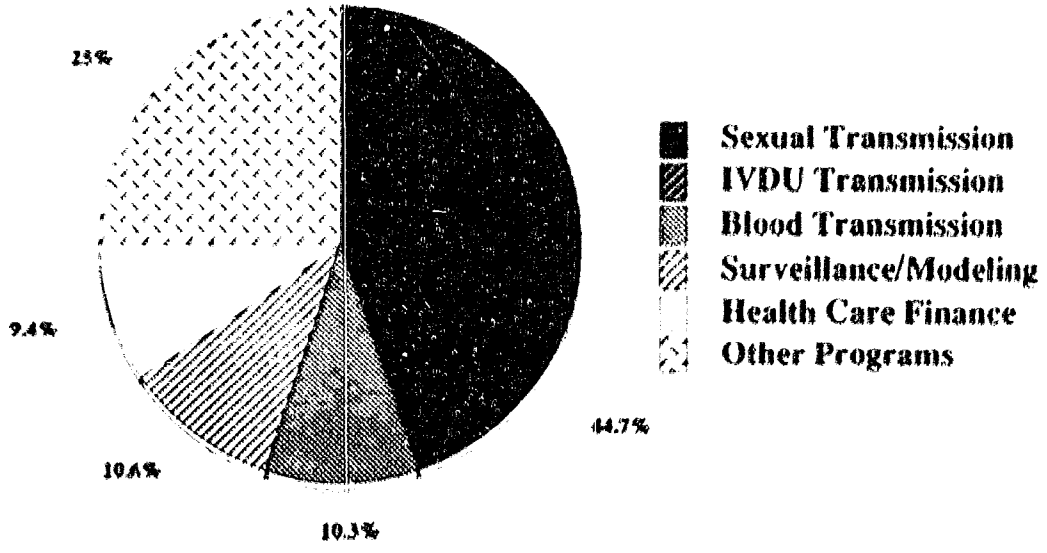
AIDSTECH is sponsoring programs to prevent HIV infection in 12 countries in the region; six of these countries have major program efforts (Haiti, Dominican Republic, Antigua, Dominica, St. Lucia, and Mexico); AIDSTECH's program in Latin America and the Caribbean reflects the country-specific priorities defined by PAHO, WHO/GPA, National AIDS Committees, and USAID Missions; the epidemiology of HIV infection and AIDS in the region; the ability to identify and work with recognized high-risk groups; and the existence of viable infrastructures which can support program planning, implementation, and evaluation.

The chart below shows AIDSTECH obligations by program area for the Latin America/Caribbean region. Obligations include 45% for sexual transmission, 10% for blood transmission, 9% for health care finance, and 11% for surveillance. The "other programs" category includes needs assessments, project development, general program support, conference attendance support, and training programs for health care workers in disease control procedures.

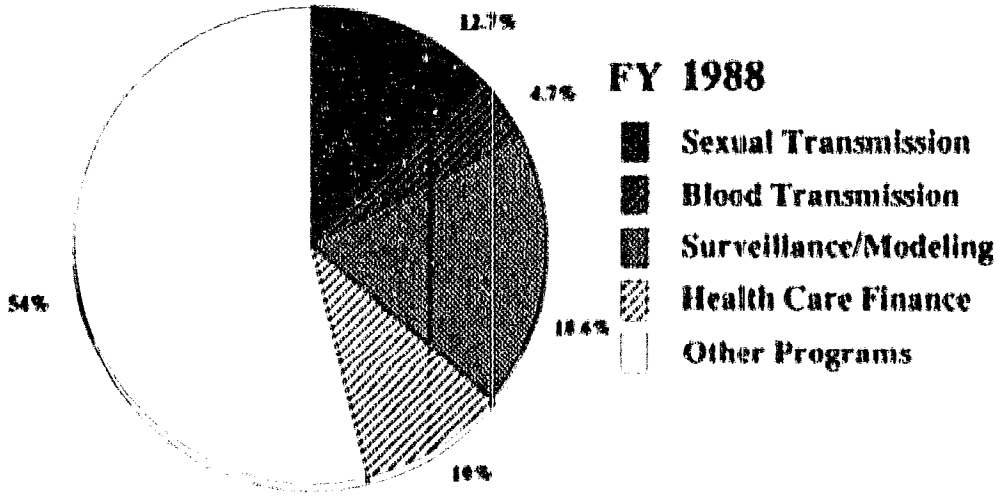
The chart on next page shows Latin America/Caribbean program expenditures by program area. Other programs, mainly needs assessments, project development, and conference attendance, accounted for 54% of the 1988 program expenditures. This decreased to 33% in 1989 and 28% in 1990. Sexual transmission expenditures rose from 13% in 1988 to 39% for 1989 and 1990.

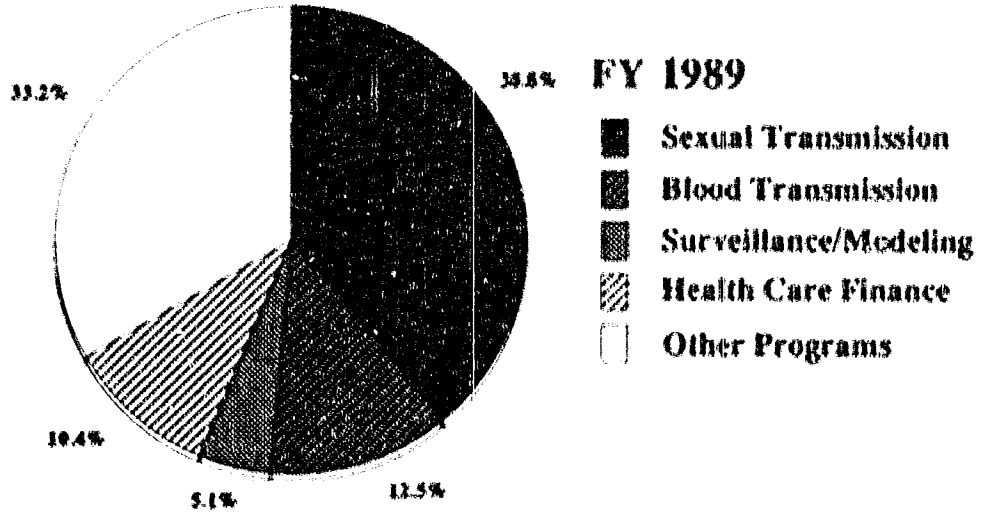
Blood transmission expenditures have increased over time and surveillance/modeling expenditures have decreased. Health care finance expenditures have remained constant.

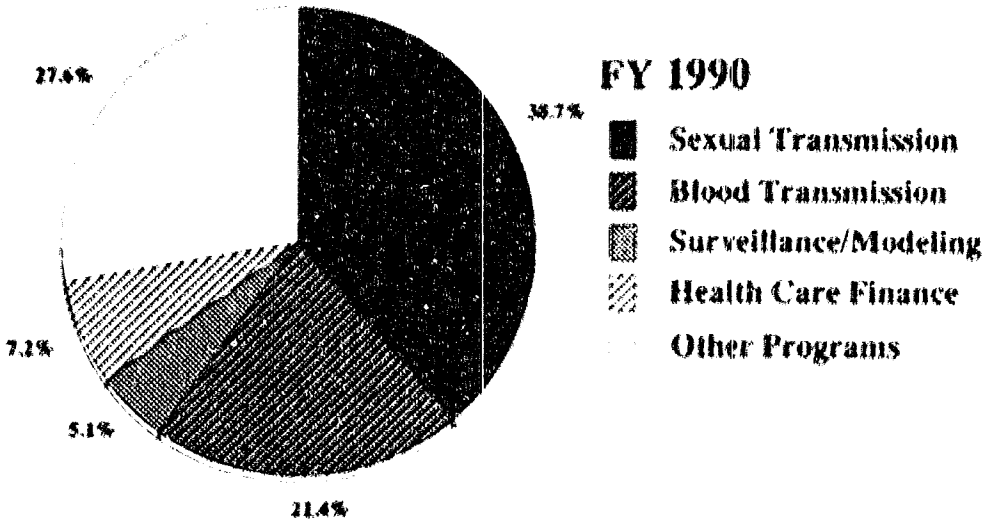
AIDSTECH Obligations By Program Area
Latin America/Caribbean



AIDSTECH Latin America/Caribbean Program
Expenditures By Program Area







Appendix 2 shows completed, ongoing and planned activities by country for the region. All activities are coordinated with PAHO. Activities in the countries where AIDSTECH is working are described in more detailed below.

LATIN AMERICA AND THE CARIBBEAN INTER-REGIONAL

Health Care Finance Project. AIDSTECH is conducting a feasibility study for a training program for Latin America and the Caribbean on the cost of AIDS. The project will:

- develop a methodology and tools for analyzing the financial costs of AIDS and its economic impact;
- develop a curriculum for training host country financial officers/administrative officers to project the costs of AIDS;
- review and report on what training is currently available in this area;
- obtain and report on cost studies/economic analyses that are available in AIDS; and
- attempt to execute, or at least plan, a training program in this area.

Plans for next six months:

- *Initiate project.*

BOLIVIA

AIDSTECH is offering technical assistance to Bolivia in three program areas:

National Surveillance of AIDS, HIV and STDs. AIDSTECH will provide technical assistance to the Ministry of Health in the design of a national surveillance strategy, in the training of health professionals at 3 one-day workshops on AIDS, HIV and STD surveillance, and in the planning and implementation of HIV or STD surveillance studies.

Laboratory Technical Assistance. AIDSTECH is providing technical assistance to the Ministry of Health for cost-effective ways to organize and manage HIV blood bank/laboratory testing centers, for development of a national strategy for HIV testing and for training of health care personnel to perform ELISA and rapid tests.

Accomplishments in last six months:

- *Technical consultation was provided to the Ministry of Health through USAID/La Paz for procurement of HIV diagnostics.*
- *Plans were developed for an HIV diagnostics workshop.*

Plans for next six months:

- *Develop training materials for HIV diagnostics workshop.*
- *Implement HIV diagnostics workshops in La Paz and Santa Cruz.*
- *Evaluate and conduct follow-up activities after the workshop.*

Upgrading STD Clinics. AIDSTECH will provide technical assistance to the Ministry of Health in improving the effectiveness of STD clinic services in Bolivia, including determining equipment needs, updating STD diagnosis and treatment

protocol, and conducting 3 two-day workshops for health professionals on STD prevention and control. HIV and STD surveillance systems will be established in La Paz, Cochabamba, and Santa Cruz.

Plans for next six months:

- *Conduct visit in June to estimate the magnitude of the STD problem and assess STD training needs in La Paz, Cochabamba and Santa Cruz.*
- *Conduct one-day workshops on HIV/STD surveillance in La Paz, Cochabamba and Santa Cruz in July.*
- *Conduct a follow-up visit in August or September to revise the national STD treatment guidelines and conduct 3 two-day workshops on STD prevention and control in La Paz, Cochabamba and Santa Cruz, in collaboration with local experts.*

BRAZIL

AIDSTECH is offering technical assistance for training programs to four non-governmental organizations:

IMPACT Training Project. A two-tiered training project with the Implementing Agency for Cooperation and Training (IMPACT) is being funded through the AIDSTECH PVO Small Grants Program. The project includes training selected medical, nursing and social work students in AIDS education and condom use, and training selected peer educators by these students.

Accomplishment in last six months:

- *Preparation of training curriculum was initiated.*

Plans for next six months:

- *Select and train 40 students as trainers.*
- *Identify peer educators for women with multiple partners.*

BEMFAM Training Project. The Sociedade Civil Bem-Estar Familiar No Brasil (BEMFAM) is the largest family planning organization in Brazil. BEMFAM is active in AIDS education, working with entities such as prisons, trade unions, military, police, gay groups, women with multiple sexual partners, state health departments and mine workers. The need for improving the knowledge and skills of doctors and nurses working as AIDS educators with target groups has been identified.

AIDSTECH will work with BEMFAM to organize and conduct workshops for health professionals that include training in program management and AIDS education skills.

Accomplishments in last six months:

- *Project was reviewed, finalized and submitted for approval.*

Plans for next six months:

- *First workshop was scheduled for May 1990.*

ABEPF Training Project. The Associação Brasileira de Entidades de Planejamento Familiar (ABEPF) has taken the lead in AIDS education in Brazil through the production of educational materials for use by health professionals. Much of the Brazilian population is illiterate or semiliterate and printed messages fail to reach these groups. ABEPF plans to design and disseminate booklets containing largely non-verbal messages about AIDS prevention.

The AIDSTECH-sponsored project will provide training to the staff of ABEPF in the design, field testing, production, and use of this type of material.

Accomplishments in last six months:

- *Project description was developed and reviewed in the field.*

Plans for next six months:

- *Expect project approval by May 1990.*
- *Develop prototype educational materials based on qualitative data obtained from the target audience.*

CCII Training Project. The Centro de Controle e Investigação Immunológica (CCII) provides persons suffering from AIDS with humane treatment and support, and disseminates information about prevention of HIV infection and AIDS, particularly to persons whose behavior places them at high risk of infection, but also to the population at large. In order to strengthen its management, research and marketing capacity, CCII will participate in a series of training workshops organized for its administrators, secretarial and technical staff.

Accomplishments in last six months:

- *Project was designed and reviewed in the field.*

Plans for next six months:

- *Obtain project approvals.*
- *Develop workshop manual.*

COSTA RICA

AIDS Education for Adolescents. A proposal from the Costa Rican Demographic Association has been approved for funding under the PVO Small Grants Program. The objective of the project is to test educational strategies to prevent HIV infection in young people in Costa Rica.

Accomplishments in last six months:

- *Project was initiated in March 1990.*

Plans for next six months:

- *Collect and analyze quantitative and qualitative data.*
- *Select and train adolescent peer health facilitators.*

DOMINICAN REPUBLIC

The Dominican Republic is an AIDSTECH priority country. AIDSTECH has developed a four-year plan to assist the Dominican Republic with a comprehensive AIDS strategy. Program components include interventions with high-risk behavior groups in Santo Domingo and Puerto Plata, assistance with HIV sentinel surveillance, evaluation of screening of pooled sera, development of a financial strategy for blood screening and general program support.

Intervention with High-Risk Behavior Groups. The intervention projects target women with multiple sexual partners through a peer education and condom distribution program. Improved STD diagnosis and treatment services are a part of the intervention.

Accomplishments in last six months:

- *Seven focus groups were held.*
- *A KAP survey was finalized, pretested and administered to 300 women in Santo Domingo and 200 in Puerto Plata; surveys were administered by 20 trained women from the target group.*
- *A paper was presented by Bayardo Gomez of PROCETS at the A.I.D. Mini-Conference.*

Plans for next six months:

- *Analyze KAP data.*
- *Use results to design appropriate educational program and materials.*
- *Recruit and train 100 health messengers to provide condoms and deliver appropriate AIDS messages to their peers.*

Sentinel Surveillance. In close collaboration with PAHO, AIDSTECH is providing technical assistance and funding to the Dominican Republic to establish a sentinel surveillance system for HIV infection.

Accomplishments in last six months:

- *AIDSTECH participated in a meeting of Dominican Republic epidemiologists held in December 1989 to develop a national plan for sentinel surveillance; the plan defined the target groups, determined sample sizes and established testing logistics.*

Plans for next six months:

- *In collaboration with PAHO, finalize the protocol and initiate AIDSTECH support to the HIV sentinel surveillance system.*

Screening of Pooled Sera. A project designed to evaluate HIV antibody screening of pooled sera for potential use in field laboratories is being conducted in close collaboration with the National AIDS Committee and the Ministry of Health (MOH).

Accomplishments in last six months:

- *Study was initiated in February 1990.*
- *Computer software and hardware were provided to handle data entry and analysis for the project.*

Plans for next six months:

- *Complete preliminary analysis of data and results.*
- *Provide additional laboratory technical assistance as required.*
- *Present paper at the next International AIDS Conference in San Francisco.*

Laboratory Technical Assistance. AIDSTECH is providing technical assistance in close collaboration with the National AIDS Committee and the Dominican Republic's MOH to strengthen the capability of the National System of Laboratories to perform HIV screening and testing.

Accomplishments in last six months:

- *A comparative assessment was carried out of laboratories that are main candidates as National Reference Laboratories for HIV screening.*
- *Procurement of selected laboratory supplies and equipment was facilitated.*

Plans for next six months:

- *Assist in training and upgrading skills of laboratory technicians.*
- *Provide additional laboratory technical assistance as required.*

Health Care Finance Modeling. AIDSTECH is developing a generic model to assist blood transfusion programs with financial planning. The model is being tested in the Dominican Republic.

Accomplishment in last six months:

- *SAIC, PROCETS, and AIDSTECH staff worked to design inputs for the model.*
- *A general form of the model and the appropriate software, along with a draft version of the model, were agreed upon.*

Plans for next six months:

- *Finalize the computerized model and test with the collected data.*

Financial Strategy for Blood Screening. A project with PROCETS to assist the Dominican Republic in developing a strategic and financial plan for 100% HIV blood donor screening and improvement of its blood transfusion system was initiated in February 1990.

Accomplishments in last six months:

- *Project was endorsed by a committee comprised of decision-makers representing the various conflicting components of the national blood transfusion network in the Dominican Republic.*
- *A workplan with specific deliverables was agreed upon and project staff commitments were confirmed.*
- *Survey instrument was developed.*
- *Work on the blood transfusion service costing model was initiated.*
- *Plan of analysis was completed.*

Plans for next six months:

- *Complete data collection and begin data analysis.*
- *Finalize the generic computerized model and test with the collected data.*

Private Sector Involvement in AIDS Control. This project will identify private companies and non-profit organizations which could potentially contribute to control of the spread of HIV.

Accomplishments in last six months:

- *A planning meeting was held with private sector groups and PROCETS.*

Plans for next six months:

- *Obtain necessary project approvals.*

Training of Health Care Providers. AIDSTECH is providing assistance to give health care providers an understanding of the etiology and epidemiology of AIDS. Training will focus on HIV transmission, infection control procedures and psycho-social needs.

Program Support. AIDSTECH is providing technical assistance to the Dominican Republic AIDS program in several areas including condom logistics, supplies and equipment, and support of conference participation.

Accomplishments in last six months:

- *Rental space was supported to store condoms used for AIDS programs.*

- *A Resident Coordinator was recruited to provide coordination of AIDSTECH programs in the Dominican Republic.*

Plans for next six months:

- *Purchase two vehicles, one for condom logistics and the second for monitoring of the blood banking system.*

EASTERN CARIBBEAN

The Eastern Caribbean Region contains three AIDSTECH priority countries: Antigua, Dominica and St. Lucia. The Eastern Caribbean covers the countries of Antigua & Barbuda, Dominica, Grenada, Monserrat, St. Kitts-Nevis, Saint Lucia, St. Vincent & the Grenadines, Barbados, and Trinidad & Tobago. A critical element in the AIDSTECH strategy for the Caribbean is the involvement of the Caribbean Epidemiology Centre (CAREC), a PAHO/WHO technical resource center for the Caribbean.

Projects in the Eastern Caribbean include interventions with high-risk behavior groups, a study evaluating the applicability of blood pooling for the Eastern Caribbean, a cost-recovery project for the blood screening program, a hostel feasibility study, and an AIDS Education Program with Project HOPE. In addition, AIDSTECH is providing technical assistance in surveillance and KABP surveys, workshops, condom promotion, upgrading STD clinics, and developing small grants projects for STDs/AIDS.

Intervention with High-risk Behavior Groups. AIDSTECH is conducting AIDS education and condom distribution programs targeted at high-risk groups in Trinidad and Tobago (STD patients, women with multiple sexual partners), St. Lucia (migrant workers, STD patients, prisoners, women with multiple sexual partners), Antigua (STD patients, migrant entertainers) and Dominica (hucksters, migrant workers). A similar project planned for Barbados (STD patients, persons with multiple sexual partners) has been postponed because of delays in securing approval from the Ministry of Health (MOH).

Accomplishments in last six months:

- *KAP questionnaires were developed for migrant workers, STD patients, prisoners, women with multiple sexual partners, youth and hucksters.*

- *KAP questionnaires were pretested among migrant workers and STD patients in St. Lucia.*

- *Workshops were held with 23 prison officials in St. Lucia to discuss AIDS and the need for a prisoner education program.*

- *Focus groups and a first round of KAP surveys with migrant entertainers were conducted at three social centers in Antigua; peer educators are being identified, and an education program has been initiated.*

- *Educational materials and training programs are under development for the target groups.*

Plans for next six months:

- *Complete pretests of KAP questionnaires for target groups, finalize questionnaires, and collect baseline data.*
- *Pretest, finalize and print educational materials for STD patients, migrant workers and prisoners.*
- *Train appropriate health care professionals and peer educators to provide AIDS information.*

Screening of Pooled Sera. A project designed to evaluate HIV antibody screening of pooled sera for potential use in field laboratories has been initiated in Trinidad with CAREC.

Accomplishments in last six months:

- *Steps for project initiation were developed and finalized.*

Plans for next six months:

- *Finalize specifications of study protocol.*
- *Collect and analyze data in-country.*
- *Monitor and conduct follow-up activities.*

Cost-Recovery for Blood Screening. AIDSTECH will provide assistance to the National Blood Transfusion Services of Trinidad to assess demand for transfusion services, determine recurrent costs and explore options for cost recovery, including a user fee for services.

Accomplishments in last six months:

- *Project was approved by MOH in Trinidad.*

Plans for next six months:

- *Initiate project in May 1990.*

Hostel Feasibility Study. A health care financing project in Barbados will help the MOH plan for the long-term care of AIDS patients.

Accomplishments in last six months:

- *Approval was obtained from the Ministry of Health.*

Plans for next six months:

- *Initiate project.*

AIDS Education. As part of the PVO Small Grants Program, AIDSTECH is funding Project HOPE to provide AIDS education to target groups in the Eastern Caribbean, through workshops and teleconferences. The project includes integrating AIDS as a topic in health sciences curricula in educational institutions; training at least 700 health care providers in effective use of communication skills in AIDS counseling, and training at least 200 AIDS counselors, selected from among teachers, clergy, school counselors and social workers.

Accomplishments in last six months:

- *Conducted two workshops, one in Barbados and the other in Grenada; produced and distributed useful information on counseling.*

General Population KABP Surveys. AIDSTECH is providing technical assistance to Antigua, Dominica and St. Lucia in the general population KABP surveys including:

- assisting with pretesting and finalizing questionnaire;
- assisting with training of interviewers on questionnaire;
- setting up data processing system;
- monitoring data collection and data processing; and
- assisting with analysis of data and preparation of final reports.

The survey is being used to collect baseline and yearly data.

Accomplishments in last six months:

- *AIDSTECH, AIDSCOM and CAREC collaborated in developing a standardized KABP survey for the Eastern Caribbean.*
- *Guidelines for the questionnaire were presented to country representatives at an AIDSTECH/AIDSCOM/CAREC workshop in December 1989.*
- *Questionnaires for Antigua and St. Lucia were pretested and finalized.*

Plans for next six months:

- *Pretest and finalize questionnaire for Dominica and print final questionnaires.*
- *Work with MOH staff in Dominica to prepare for field work.*
- *Work with research firm in Trinidad to prepare for field work in which 600 questionnaires will be administered in Antigua and St. Lucia.*
- *Work with research firm to process data.*

Upgrading STD Services. AIDSTECH is providing technical assistance to improve country capability to diagnose and treat STDs and educate STD patients about AIDS.

Accomplishments in last six months:

- *A needs assessment visit was made to Antigua and St. Lucia in November 1989.*
- *Equipment was provided to the STD clinics in Antigua and St. Lucia*
- *CAREC was provided with initial input in the development of an STD clinic manual, diagnostic and treatment protocols, simple algorithms for treatment with and without lab, and an STD clinic chart.*

Plans for next six months:

- *Send two nurses from Antigua and St. Lucia for training in the clinical management of STDs.*

- *Assist with training of public health clinic staff, private physicians and pharmacists in STD diagnosis and treatment and use of simple treatment algorithms.*

- *Assist with training of public health staff, private physicians, and pharmacists in STD/HIV counseling.*

- *Help establish laboratory quality control procedures.*

STD/AIDS Small Grants Program. The CAREC/AIDSTECH STD Small Grants Program provides physicians and other health care workers involved in STD/AIDS control programs with resources that they can use to carry out small research projects.

AIDSTECH is assisting countries to collect data on chlamydia and gonorrhea sensitivity through a multi-country small grants research project. Investigators from St. Lucia, Antigua, Dominica, St. Vincent, and Grenada are participating in this project. Results will be used in development of treatment protocols.

Accomplishments in last six months:

- *A study protocol, which was approved by investigators, was developed.*

- *Study supplies were sent to each site.*

Plans for next six months:

- *Complete project at each site.*

- *Provide assistance with data analysis.*

Workshop on HIV and STD Surveillance. AIDSTECH assisted with a CAREC-sponsored workshop in HIV/STD surveillance held in Trinidad in November, 1989. Thirty-five participants from 17 countries took part. The workshop emphasized that STD surveillance is complementary with HIV and AIDS surveillance activities. Workshop recommendations included:

- Confidentiality in testing must be maintained if testing is linked to patient names; counseling services should be in place.

- Unlinked, anonymous testing can be useful for sentinel surveillance surveys, particularly in low prevalence countries.

- STD surveillance should focus on urethral discharge (gonorrhea and chlamydia) and genital ulcer disease (syphilis, herpes, and chancroid).

Condom Assessment and Promotion. AIDSTECH is providing technical assistance in the Eastern Caribbean to estimate condom needs and expand condom availability and accessibility by:

- developing point-of-purchase materials that promote condoms through a life style approach, including condom display cases and stickers that create a recognizable symbol indicating "condoms sold here";

- working with the Caribbean Family Planning Affiliation to develop of a generic condom poster with a Caribbean theme; and by

- working with Family Planning Associations to identify non-traditional outlets for condom distribution.

Accomplishments in last six months:

- *An assessment of Eastern Caribbean condom logistics, distribution and promotion was provided in October 1989 in order to estimate condom requirements of HIV/AIDS prevention programs. Condom distribution is expected to increase by 50% over the next three years, primarily as a result of AIDS awareness; distribution figures are kept for each country.*

- *Prototypes of point-of-purchase materials were designed.*

Plans for next six months:

- *Pretest point-of-purchase materials in April 1990.*
- *Design a generic condom poster to be produced by the Caribbean Family Planning Affiliation.*
- *Provide marketing assistance to the Family Planning Association in Dominica.*

ECUADOR

AIDSTECH has provided Ecuador with technical assistance in setting-up sentinel surveillance of high-risk behavior groups and training health care providers.

Observation Tour of Laboratory Managers and Epidemiologists to Mexico. This project represented a joint effort by AIDSTECH, CONASIDA-Mexico, and the Ministry of Health (MOH) of Ecuador. AIDSTECH facilitated an observation tour of two laboratory specialists and two epidemiologists to visit CONASIDA-Mexico and become familiar with their programs and facilities for AIDS prevention and control. Participants were trained in laboratory reference systems, safe blood banking, information systems, and epidemiological methods for implementation of preventive programs against HIV.

Accomplishments in last six months:

- *Assistance was provided to plan and coordinate the observation tour.*

Plans for next six months:

- *Summarize findings from visit and evaluate the impact.*

Laboratory Technical Assistance. AIDSTECH is providing technical assistance to the Ecuadorian MOH to establish and strengthen its national system of laboratories for AIDS prevention and control. A workshop on HIV diagnostics was important in setting up confirmatory testing at the National Reference Laboratory of Guayaquil.

Accomplishments in last six months:

- *Assistance was provided to develop a laboratory operations manual and specified functions for various levels of laboratories in the system.*
- *A workshop on HIV diagnostics was conducted to provide workbench technical assistance on confirmatory testing to the National Reference Laboratory of Guayaquil.*

Plans for next six months:

- *Provide additional technical assessment, as needed, and follow-up activities.*

Blood Serum Pooling. The Red Cross of Ecuador has been using serum pooling in HIV testing as a method of decreasing testing costs. AIDSTECH is providing assistance to validate the technique being used.

Accomplishments in last six months:

- *Logistics were finalized, in-country procurement issues were facilitated, and procedures for the study were reviewed. The study was initiated in January 1990.*

- *Assistance was provided in the preparation of two scientific abstracts to be presented at the International AIDS Meeting in San Francisco, June 1990.*

- *Laboratory and workload forms for the study were developed and designed.*

Plans for next six months:

- *Complete data entry and analysis for serum pooling study.*

- *Assist in the preparation of materials for presentation of findings at scientific meetings.*

EL SALVADOR

AIDSTECH plans to assist in training laboratory technicians in HIV tests. Technical assistance will be given in the design of an STD treatment clinic serving high-risk behavior individuals.

Laboratory Technical Assistance. AIDSTECH is providing technical assistance in close collaboration with the MOH to strengthen its laboratory services and capabilities for HIV screening and testing. Assistance will be provided for procurement of HIV diagnostics and a workshop to train participants in screening and supplemental tests for HIV, quality assurance procedures, and testing techniques. The workshop is scheduled for September 1990.

Accomplishments in last six months:

- *Technical consultation was provided to procure HIV diagnostics for the MOH through USAID/San Salvador.*

- *Plans were initiated to carry out an HIV diagnostics workshop.*

Plans for next six months:

- *Assist the MOH in procurement of selected laboratory supplies and equipment.*

- *Develop training materials for HIV diagnostics workshop.*

- *Implement HIV diagnostics workshops in San Salvador.*

- *Evaluate and conduct follow-up activities after the workshop.*

- *Provide technical assistance as required.*

Upgrading STD Services. AIDSTECH is providing support through its PVO Small Grants program to the Profamilia Family Planning Clinic to initiate an STD service program. The service program will provide STD diagnosis and treatment and HIV and STD education and condom distribution to high-risk groups. AIDSTECH is also supporting the training of clinic personnel in STD diagnosis and treatment procedures and STD/HIV educational and outreach skills.

Plans for next six months:

- *Initiate project in June 1990.*

- *Assess training needs of staff.*

GUATEMALA

STD Technical Assistance. AIDSTECH is providing technical assistance to APROFAM to improve clinical management of STDs.

Plans for next six months:

- *Assess the current STD management practices and STD training needs.*
- *Assist in the development of a continuing education program for health care providers and in the planning of an STD clinic (staffing, laboratory, patient education material and contact tracing).*

HAITI

Haiti is an AIDSTECH priority country. Projects in Haiti include two projects with the AIDSTECH Small Grants Program that are interventions with high-risk groups, a condom storage program, establishment of an STD clinic, a sentinel surveillance and counseling project, an AIDS model application, and technical assistance.

Interventions with High-Risk Behavior Groups. AIDSTECH is conducting an AIDS education project with the Implementing Agency for Cooperation and Training (IMPACT). IMPACT has two subcontractors, IBESR (Haitian National Institute for Social Welfare and Research) and CHASS (Comite Haitien de Service Social), to implement the project. The purpose of the project is educate high-risk women and their sexual partners to make them aware of their risk of the AIDS virus and to start using condoms systematically.

Accomplishments in last six months:

- *Training of peer educators was conducted.*
- *Outreach activities were initiated in two cities. People reached include: 2,600 high-risk women, 20,000 men who are their sexual partners, and 25,000 people in the general population.*
- *IEC materials were developed and distributed. Peer educators distributed 20,000 booklets on AIDS and condom use.*
- *Three-hundred thousand condoms were distributed through peer educators, which has created a growing demand for condoms.*

Plans for next six months:

- *Expand services to two new cities, Gonaives and Cap Haitien.*
- *Train more peer educators to conduct outreach in new cities.*
- *Distribute more booklets and condoms.*

The Centers of Development and Health (CDS) is conducting another intervention with high-risk groups. The goal of this project is to reduce the spread of AIDS in the district of Gonaives by using 46 community health workers and 6 AIDS outreach workers. Health workers will visit homes regularly and will counsel clients awaiting services at the health center. Those individuals assessed at high risk will be referred to the AIDS outreach workers for more attention.

Accomplishments in last six months:

- *All 46 community health workers were trained in AIDS education.*
- *Six AIDS outreach workers were trained.*

- *A survey was initiated to assess baseline knowledge, attitudes and practices in Gonaives.*

Plans for next six months:

- *Initiate outreach activities with community health workers.*
- *Have community health workers refer high-risk individuals to AIDS outreach workers.*
- *Distribute condoms.*
- *Analyze data from baseline survey.*

STD Services. An STD clinic is being established in Gonaives to slow the spread of HIV. The clinic will do HIV testing and counseling, STD detection and diagnosis, provide curative treatments of concurrent opportunistic infections symptoms and distribute condoms. Patients will pay a subsidized fee which will include costs of any medications.

Accomplishments in last six months:

- *Proposal was finalized and approved.*
- *Project was initiated.*

Plans for next six months:

- *Conduct needs assessments of STD diagnostic facilities.*
- *Renovate and outfit STD clinic.*
- *Train five staff members at STD clinic in Cite Soliel.*
- *Set up HIV testing and counseling programs.*
- *Set up STD diagnostic and treatment protocols.*
- *Coordinate HIV and STD education.*
- *Coordinate condom promotion and distribution programs.*

Sentinel Surveillance and Counseling. A proposal is being developed with Cornell-GHESKIO to determine the seroprevalence of HIV infection and AIDS in high and low-risk populations in Port-au-Prince, Deschapelles and Leogane. Approximately 12,000 people will be tested and counseled on AIDS. It is anticipated that 4,500 people will be HIV positive and will be in need of extensive counseling. Condoms will be distributed.

Plans for next six months:

- *Finalize proposal and initiate project activities.*

AIDS Modeling. AIDSTECH and The Futures Group are field-testing the AIDS simulation model in Haiti.

Accomplishments in the last six months:

- *A field visit was made to Haiti in October 1989 to establish working relationship with appropriate collaborators.*

Plans for next six months:

- *Collect data needed for the model.*

Condom Distribution. Promotion and distribution of condoms is the most important means of protection against sexually transmitted diseases and AIDS. In order to distribute condoms effectively, AIDSTECH is developing a lease agreement for proper storage of 4,000,000 a year. Condoms will be distributed to several participating agencies. Condoms will be stored in a central warehouse and at secondary and tertiary storage locations. Training for staff will include: proper inventory management, standardized supply procedures, prevent loss of condoms and ensure good inventory conservation.

Plans for next six months:

- *Finalize lease agreement and initiate project activities.*
- *Conduct training for condom warehouse staff.*

Technical Assistance. AIDSTECH Resident Coordinator, Dr. Eddy Genece, provides technical assistance to various groups involved in AIDS in Haiti. Dr. Genece actively coordinates with other agencies including weekly meetings with members of PAHO.

Accomplishments in last six months:

- *A meeting was initiated and coordinated with all agencies involved in Information, Education and Communications.*
- *Activities were coordinated for the AIDSCOM project focusing on AIDS in the workplace.*

Plans for next six months:

- *Coordinate inter-agency IEC meetings.*
- *Coordinate activities for AIDSCOM project with GLAS.*

MEXICO

Mexico is an AIDSTECH priority country. AIDSTECH has developed an intervention to reduce HIV infection among individuals who engage in high-risk behavior, a project examining the direct treatment costs of AIDS in Mexico, and a project to involve pharmacies in AIDS education.

Intervention with High-Risk Behavior Group. An AIDS education and condom distribution intervention project was initiated with the Federation of Mexican Private Associations (FEMAP) in October 1988.

Accomplishments in last six months:

- *Training was offered to 56 volunteer health promoters who are active in the community distributing condoms and giving educational talks.*
- *More than 50 establishments where men and women work were recruited to participate in the program.*
- *More than 40,000 condoms were distributed.*
- *A follow-up KAP survey was administered.*
- *A paper was presented at A.I.D. Mini-Conference.*

Plans for next six months:

- *Complete data analysis.*

- *Continue program activities.*

- *Plan for program expansion and replication in other cities in Northern Mexico.*

Direct and Indirect Treatment Costs. AIDSTECH is collaborating in a study with the Mexican Ministry of Health (MOH) to examine the direct treatment costs of AIDS in four hospitals and outpatient clinics. This study recently has been expanded to include three additional hospitals. A detailed analysis of the direct treatment costs of persons with AIDS receiving treatment in hospitals and outpatient clinics, and of the costs of control interventions is being made.

Accomplishments in last six months:

- *Seven additional hospitals were added to the study.*

- *Data on the cost of treating persons with AIDS in Mexico was cleaned and verified.*

- *Technical assistance was provided to improve programming and data entry skills.*

- *A descriptive statistical analysis of the retrospective data set was completed.*

- *A paper which identified the direct costs of treating persons with AIDS in Mexico was presented by Roberto Tapia of CONASIDA at the A.I.D. Mini-Conference.*

Plans for next six months:

- *Complete analysis including verification of the descriptive statistical analysis and modeling of the current and future costs of treating and preventing AIDS.*

Role of Pharmacies in AIDS Education. A proposal from the Mexican Research Institute on Family and Population (IMIFAP) was approved for funding under the AIDSTECH Small Grants Program. The project will assess the feasibility of using pharmacies in STD and AIDS prevention. Current knowledge of pharmacy workers regarding STDs, AIDS and the role of condoms in their prevention will be determined in order to develop and implement an educational-motivational program for pharmacy workers. CONASIDA and SOMARC will collaborate in the project.

Plans for next six months:

- *Initiate project in May 1990.*

- *Collect and analyze data from pharmacy workers and condom sales personnel.*

- *Plan educational-motivational strategy.*

PERU

Laboratory Technical Assistance. AIDSTECH is providing ongoing technical assistance in HIV screening and testing.

Accomplishments in last six months:

- *Technical advice was provided to the Ministry of Health (MOH) on algorithms for HIV screening and testing.*

- *The MOH and USAID/Lima were assisted in the development of several proposals for laboratory testing and counseling service, including a study to evaluate HIV screening in blood banks.*

Plans for next six months:

- *Continue to assist in the development and evaluation of blood donor deferral methods for HIV screening in blood banks.*

C. ASIA/NEAR EAST

The reported prevalence of HIV infection for the region is still relatively low, but the infection is spreading very rapidly in some of the high-risk behavior groups.

Many countries have all the major risk groups found in Western society, and are thus vulnerable to the rapid spread of the virus. Once HIV enters into the major risk groups, it has the potential to spread into both urban and rural populations, as infected men and women carry the virus back to their families, villages and neighborhoods.

AIDS case rates for the Philippines and Thailand are among the highest in the region, with both countries reporting 0.2 AIDS cases per million population. In Thailand, recent newspaper articles have stated that WHO estimates that the number of HIV infected persons may be as high as 50,000. Preliminary results of studies have shown increased spread of HIV among women with multiple sexual partners in five major provinces. The Philippines ranks 14th among Asian countries reporting AIDS cases; 148 HIV cases have been reported, over half of whom are hospitality workers.

The epidemic in Asia/Near East has the following characteristics:

- Numerous countries in the region have substantial numbers of commercial sex workers and extremely mobile populations (overseas laborers, merchant marine, fishermen and businessmen) which constitute a potential means for HIV to spread.

- The Philippines and Thailand have extensive commercial sex industries patronized by large numbers of national and international clients. Both countries report the number of women involved in "entertainment" services to be over 100,000 per country.

- The prevalence of IV drug use represents another important risk factor for HIV transmission in the Asia/Near East region, at least in Thailand, where there are an estimated 100,000 IV drug users (IVDUs). In a study of IVDUs conducted in Bangkok in 1989, 40-60% of the individuals sampled were reported to be HIV positive.

- The Philippines and Thailand both have strong public and private professional infrastructures that can be incorporated into programs to combat HIV infection.

- Both the Philippines and Thailand have effective condom distribution systems, making these products easily accessible to the general population.

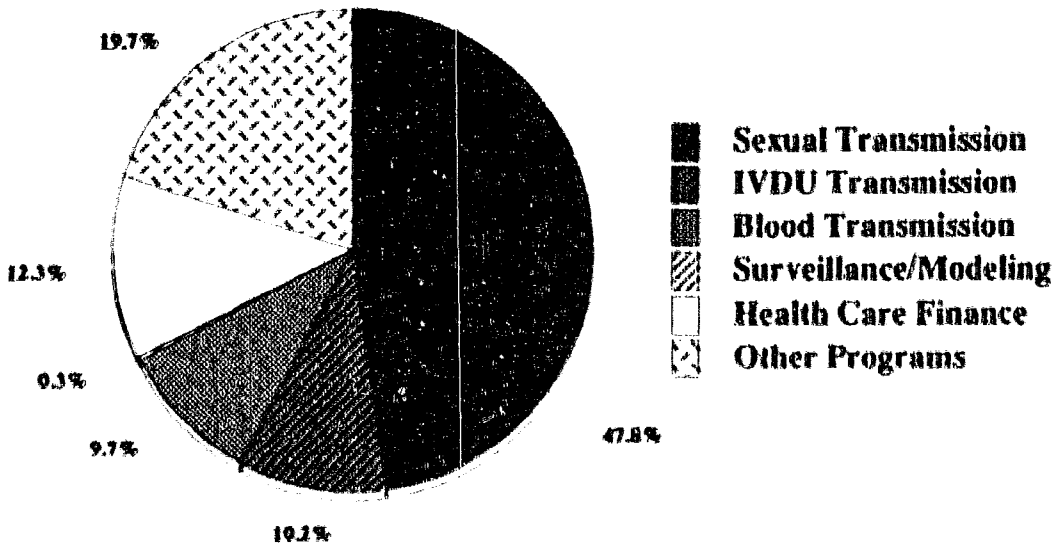
The major focus of AIDSTECH efforts in Asia is on preventing the spread of HIV infection through sexual transmission and through use of contaminated needles by IVDUs.

Recognizing that some targeted high-risk behavior groups may not be approachable by established public health channels, AIDSTECH has developed innovative intervention strategies utilizing alternative outreach groups such as taxi drivers, grassroots organizations and bar owners/managers to reach out to persons practicing high-risk behaviors such as persons with multiple sexual partners and IVDUs and their sexual partners.

In the past six months, AIDSTECH has continued to develop projects in three Asian countries. The basic approach of AIDSTECH in the region is to work with the USAID Missions and the National AIDS Committees, when requested, in cooperation with WHO/GPA.

The chart on next page shows AIDSTECH obligations by program area for the Asia/Near East region. Obligations include 48% for sexual transmission, 10% each for IVDU transmission and blood transmission, and 12% for health care finance. The "other programs" category includes needs assessments, project development, general program support, and conference attendance support.

AIDSTECH Obligations By Program Area
Asia/Near East



The charts on page 66 show Asia/Near East program expenditures by program area. Other programs, mainly needs assessments, project development and conference attendance, accounted for 88% of the 1988 program expenditures. This decreased to 25% in 1989, and 8% in 1990. Sexual transmission expenditures rose from 9% to 37% to 57% over the same period.

Appendix 2 shows completed, ongoing and planned activities by country for the region. Activities in the four Asia/Near East countries where AIDSTECH is working are described in more detail below.

MOROCCO

AIDSTECH and AIDSCOM will make a second needs assessment visit to Morocco in the next six months.

Education Program. AIDSTECH is funding under the PVO Small Grants Program an education program for women at high risk of HIV infection with the AIDS Association of Morocco. The project will survey the women on their knowledge, attitudes and sexual practices and use this information to design and implement an AIDS education program that focuses on specific preventive measures.

PHILIPPINES

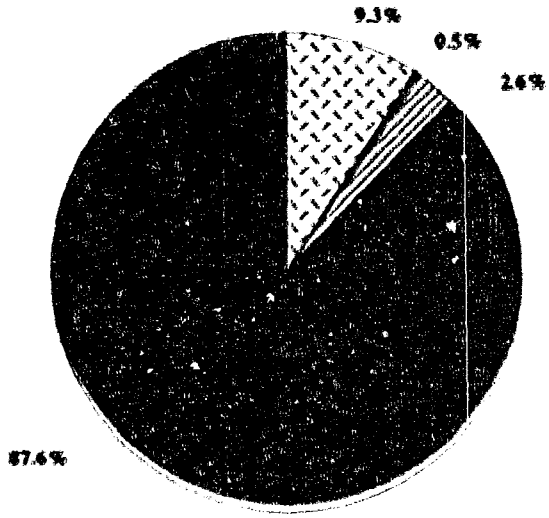
The Philippines is an AIDSTECH priority country. AIDSTECH has worked with the USAID Mission, the National AIDS Committee, and AIDSCOM to develop a comprehensive AIDS program for the Philippines. Components of the AIDSTECH program are described below.

Interventions with High-Risk Behavior Groups. Two intervention programs have been developed for the Philippines. An intervention project in Manila that includes condom distribution and educational messages for individuals who practice high-risk behavior was initiated in January 1989 with the New Tropical Medicine Foundation.

Accomplishments in last six months:

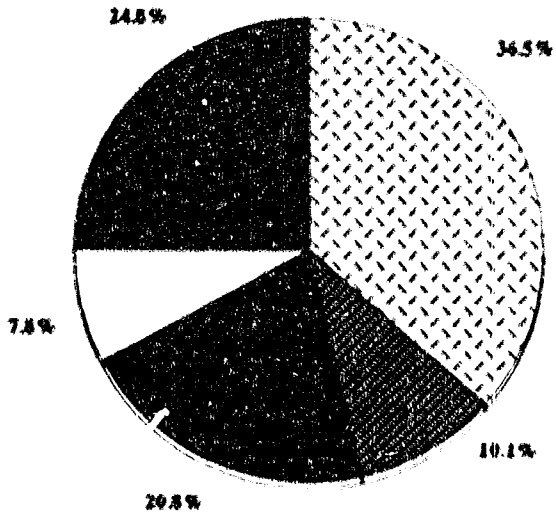
- *The following educational materials were developed: two question/answer brochures dealing with AIDS and safe sex, three comic books all dealing with an AIDS/STD theme, and AIDS educational posters.*

AIDSTECH Asia/Near East Program Expenditures By Program Area



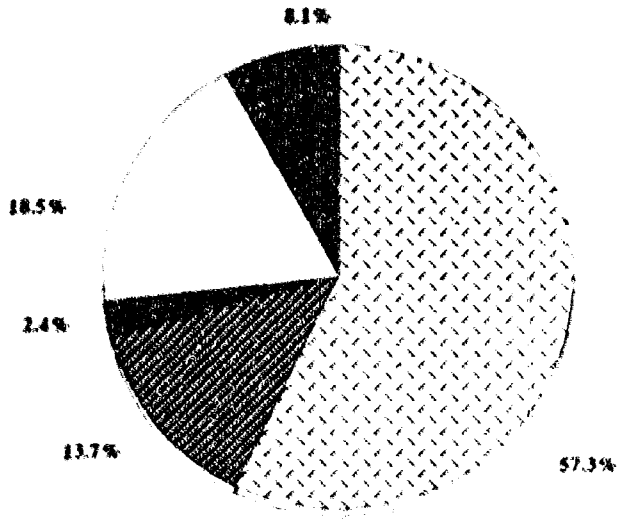
FY 1988

- Sexual Transmission
- IVDU Transmission
- Blood Transmission
- Surveillance/Modeling
- Health Care Finance
- Other Programs



FY 1989

- Sexual Transmission
- IVDU Transmission
- Blood Transmission
- Surveillance/Modeling
- Health Care Finance
- Other Programs



FY 1990

- Sexual Transmission
- IVDU Transmission
- Blood Transmission
- Surveillance/Modeling
- Health Care Finance
- Other Programs

- *Educational posters were aired on television and placed along the rapid transit system route.*

- *Educational/counseling teams operated at both the Manila STD Clinic and, at the invitation of owners, at certain bars/ discos or massage parlors.*

- *Collection of baseline data information on STD occurrence within a targeted population to include HIV infection was continued.*

Plans for next six months:

- *Complete evaluation of educational materials.*

- *Analyze baseline data of STD occurrence, including HIV infection, on current population.*

- *Maintain educational/counseling teams at both the Manila Social Hygiene Clinic and the targeted entertainment district.*

- *Develop plans to extend education outreach and counseling for all of Metro Manila.*

- *Discuss findings of operational research at the International AIDS Conference in San Francisco.*

A second AIDS education and condom distribution intervention project was initiated in October 1989 in Olongapo/Angeles City with the health departments and city councils of those cities.

Accomplishments in last six months:

- *Baseline questionnaires and daily diaries to be used by target population were developed, pretested and initiated.*

- *AIDS educational materials were developed and pretested.*

- *An AIDS Task Force comprised of city health officials, officials from the Mayor's office, the city press, the US Navy, bar owners and managers, the gay coalition, and health educators was formed.*

- *Counselors and educators in outreach work at both the Social Hygiene Clinic and in the bars and massage parlors were trained.*

Plans for next six months:

- *Continue outreach among target population.*

- *Continue meetings of the AIDS Task Force to develop and adjust strategies.*

- *Continue training of counselors and educators.*

- *Develop plans for the pilot study for use of peer educators.*

- *Hold workshop to discuss lessons learned in both the Olongapo/Angeles city and Metro Manila intervention project.*

- *Analyze data gathered by the baseline questionnaire and daily diaries.*

- *Develop plans for expansion of program beyond pilot stage to include all those at risk in Olongapo and Angeles City.*

- *Develop plans for expanding HIV screening and counseling among private clinics and practitioners.*

Both projects have given valuable insights and lessons learned in setting up programs to reach target groups within the entertainment industry in the Philippines. The mobility of the target population, misconception concerning HIV infection among bar employees and the need for personal contact with bar owners, employees and local police have altered interven-

tion approaches. Personal contact with the target population has helped in the development of educational materials. These projects will be finalized as of June 30, 1990 but discussions will be held with key organizations in order to determine how to move these operations research projects into an extended, sustainable programmatic phase.

Condom Market Analysis. In the past six months, Asia Research Organization, Inc. (ARO), an independent marketing and opinion research agency in the Philippines, has been conducting a market analysis on condoms in three urban centers in the Philippines: Metro Manila, Greater Cebu City and urban Davo City. ARO was selected from a group of six marketing agencies who submitted proposals in response to a Request for Proposal (RFP). AIDSTECH/AIDSCOM both provided inputs to the RFP and evaluated each proposal before making the selection of the ARO group.

Accomplishments in last six months:

- *Data on the condom market was collected, including product awareness, patterns of condom use and purchase, and existing and potential trade outlets.*
- *Interviews were conducted with government leaders, international organizations and religious leaders on the use of condoms on preventing the spread of HIV.*
- *Literature on articles concerning condom distribution was reviewed.*

Plans for next six months:

- *Complete final report and give copies to USAID, Philippines Department of Health, and AIDSCOM.*
- *Develop plans for strengthening condom distribution, especially in the private sector, from recommendations made in the report.*

Upgrading Social Hygiene Clinics. AIDSTECH is supporting a project to upgrade nine selected social hygiene clinics by providing necessary equipment and supplies, and to establish four regional STD training programs in coordination with related agencies to meet training needs of social hygiene clinic personnel.

Accomplishments in last six months:

- *Assistance was provided to develop a curriculum for STD training.*
- *The third training course was held in March and April 1990; approximately 280 participants were trained at multiple sites over a single week period.*
- *Purchase of supplies/equipment needed for training was completed.*

Plans for next six months:

- *Develop and print a manual for procedures for STD including HIV infection to be utilized by all public social hygiene clinics in the Philippines.*
- *With AIDSTECH technical assistance for training and other donor support for equipment, upgrade 10 more social hygiene clinics to improve STD screening capabilities.*

Upgrading Regional Blood Centers. AIDSTECH is providing technical assistance to the Division of Standards and Regulations, Ministry of Health, to assess their overall plan to upgrade their 18 regional blood screening laboratories. Funds have been provided for equipment and training. The project will greatly increase the Bureau of Research and Laboratories' (BRL) ability to screen the blood supply for HIV infection, and complements equipment that is being directed to BRL through WHO/GPA.

Accomplishments in last six months:

- *Supplies were provided to support HIV testing at 18 regional blood centers.*
- *Fifty-seven laboratory technologists were trained in HIV testing techniques.*

Plans for next six months:

- *Upgrade one additional regional blood center in Quezon City.*

Screening of Pooled Sera. An evaluation of serum pooling for HIV is being conducted through the Research Institute of Tropical Medicine (RITM), and will determine whether pooling sera and testing batches of pooled specimens could be a cost-effective measure in areas of low HIV prevalence. Pooling would lessen the strain on limited laboratory resources in the Philippines.

Accomplishments in last six months:

- *Preliminary testing was completed.*
- *Protocol was developed.*
- *Testing of pooled and single samples was initiated.*

Plans for next six months:

- *Analyze data.*
- *Present findings at the International AIDS Conference in June 1990.*
- *Produce technical report.*

Health Care Financing. AIDSTECH has initiated a finance project with RITM that will measure the current and projected demand for HIV blood screening and the resources available for meeting the demand; and develop a plan for the Ministry of Health, AIDSTECH and other donor organizations to reduce resource shortfall.

Accomplishments in last six months:

- *Project was initiated in January 1990.*
- *Preliminary data collection was initiated.*
- *Epidemiology technical assistance was provided.*
- *Study design was finalized, including survey instruments and plans for data collection, processing and analysis.*

Plans for next six months:

- *Complete all data collection and analysis.*
- *Use blood transfusion service planning model in developing a strategy for improving the blood screening system.*

AIDS Information and Monitoring Systems. AIDSTECH plans to assist the National AIDS Control Program to develop and implement a computer-based AIDS information and reporting system. AIDSTECH will provide technical assistance, equipment and training.

Program Support. AIDSTECH provides general program support to the Philippines National AIDS Control Program (NACP).

Accomplishments in last six months:

- *A Filipino Project Technical Coordinator, Dr. Carlos Calica, was recruited to assist the NACP in monitoring and coordinating the AIDSTECH program in the Philippines. Dr. Calica's office is within the NACP offices and AIDSTECH has provided him with secretarial and equipment support.*

- *The upgrading of technical library resources on AIDS information was supported.*

Plans for next six months:

- *Continue support for the AIDSTECH Project Technical Coordinator.*

- *Assist at least two Philippine health care professionals involved in the AIDS Control Program to attend the International AIDS Conference in San Francisco.*

SRI LANKA

AIDS Education Project. AIDSTECH is funding an AIDS Education Project with the Family Planning Association of Sri Lanka under the PVO Small Grants Program. The project provides AIDS education to four specific target groups (teachers, tourist industry employees, youth leaders and voluntary health workers) and assists members of these groups to acquire teaching and communication skills that will enable them to deliver essential information about AIDS to the populations they serve.

Accomplishments in last six months:

- *Workshops for teachers, counselors, and medical officers were held in Colombo, for a total of 62 participants.*

- *AIDS Education workshops were held in 10 other districts of Sri Lanka for a total of over 900 participants.*

THAILAND

Thailand is an AIDSTECH priority country. A number of program support and intervention activities have been discussed with the Ministry of Health in Thailand. In February 1990, an eight-member Thai Delegation headed by H.E. Sutasn Ngenmune, Deputy Minister of Public Health, visited Family Health International headquarters to discuss continued AIDS program support, including AIDSTECH programs. Currently three interventions are operating in Thailand, two with IV drug users and one with persons with multiple sexual partners.

IV Drug Users. The first project with IV drug users (IVDUs) was initiated with the Program for Appropriate Technology in Health (PATH) and the Bangkok Metropolitan Administration (BMA). The purpose of the project is to develop, evaluate and disseminate a mix of effective, acceptable technologies and education interventions that may help to slow the rate of HIV transmission among IVDUs in Bangkok. Education and condom distribution interventions are being conducted at three of 17 BMA detoxification clinics.

Accomplishments in last six months:

- *A project video being shown in BMA drug treatment centers dramatizing the dangers of AIDS and needle sharing was evaluated.*

- *Video equipment was purchased and placed in the drug treatment centers.*

- *A paper was presented by Tony Bennett at the A.I.D. Mini-Conference.*

- *Outreach personnel were selected and trained.*
- *Group dynamics training was provided to volunteers.*
- *Outreach work by trained volunteers was evaluated.*
- *Informational posters and comic books were developed.*

Plans for next six months:

- *Complete project by May 1990.*
- *Continue project in three existing clinics and expand to two additional clinics with other source of funds.*

The second IVDU project, with the Duang Prateep Foundation, is being funded through AIDSTECH's Small Grants Program. The target population for this intervention are 800 IVDUs residing in the Klong Toey slum area of Bangkok. The Duang Prateep Foundation (DPF) is a grassroots development organization that has worked in this slum area for 17 years. The project utilizes trained volunteers and ex-IVDUs to conduct an in-depth education program that will work to eliminate IV drug use, change needle sharing practices when drug use cannot be eliminated, and educate this population on safe sex practices.

Accomplishments in last six months:

- *Volunteer outreach staff were trained.*
- *HIV education activities were conducted for in-house staff.*
- *HIV educational seminars were conducted with 11 IVDUs and their families.*
- *Target area was mapped for concentrations of IVDUs.*
- *AIDS education was provided to local police.*
- *AIDS education was provided to parent groups.*

Plans for next six months:

- *Continue and expand outreach education activities with IVDUs, police and their families.*
- *Evaluate activities and materials developed during the first six months of the project.*

Interventions with High-Risk Behavior Groups. A Taxi-Based AIDS Education and Condom Distribution Project with the Population and Community Development Association (PDA) is being funded under AIDSTECH's Small Grants Program. The project will target 800 Bangkok taxi drivers for training as condom social marketing agents. Drivers will undergo training on basic AIDS informational messages in an attempt to interface with both persons with multiple sexual partners and their clients. Part of this experimental project will be to test different schemes for the distribution of condoms and AIDS informational materials through these taxi cab operators.

Accomplishments in last six months:

- *Four hundred Bangkok taxi drivers were identified and trained.*
- *AIDS education materials were developed and pretested.*

- *Two separate AIDS intervention techniques were initiated.*
- *Two separate condom distribution systems were initiated.*

Plans for next six months:

- *Train the remaining 400 Bangkok taxi drivers.*
- *Conduct retraining updates of original 400 trained taxi drivers.*
- *Conduct spot checks of trained cab drivers as a quality control measure.*
- *Evaluate the two separate AIDS intervention techniques.*
- *Evaluate the two separate condom distribution systems.*
- *Evaluate overall impact of the program and make recommendations on future expansion.*

Program Support. Although the focus of AIDSTECH activities in Thailand is on intervention projects among high-risk groups, the program will continue to seek alternative ways to support the National AIDS Program. One such mechanism may be to provide training and auxiliary support for the development of a planned National AIDS Committee Information Center, currently receiving direct support under the Medium Term Plan by the WHO/GPA. AIDSTECH efforts will be coordinated with WHO.

The National AIDS Committee has also requested AIDSTECH support in training of staff in AIDS awareness and prevention. AIDSTECH will attempt to support some component of the training activity.

AIDSTECH has recruited Dr. Tony Bennett to serve as Resident Coordinator for Thailand. Dr. Bennett will assist in monitoring and coordinating the AIDSTECH program in Thailand.

IV. MANAGEMENT

The management structure of the AIDSTECH program and its organizational relationship within FHI provides the basis for responding quickly to technical program needs coordinated by a team of highly qualified specialists who form the core staff of AIDSTECH. AIDSTECH has an important, two-way relationship with the rest of FHI. On the one hand, the AIDSTECH team draws upon FHI's institutional resources in administration, field development and training, program evaluation, reproductive epidemiology and sexually transmitted diseases, library, data processing, information dissemination program and international network. On the other hand, FHI is adding additional resources and human skills to the battle against AIDS. It continues to fulfill its commitment in its original proposal, using non-A.I.D. corporate resources to partially support the Project Director and to strengthen AIDSTECH with input from the Vice President of Programs.

Using corporate resources, FHI is exploring the possibility of interventions to slow HIV transmission among high-risk groups in countries where A.I.D. does not normally work. Using the A.I.D. Cooperative Agreement in Contraceptive Research, FHI is evaluating the shelf life of latex condoms and is developing a non-latex condom to be stronger and less prone to environmental deterioration. Important research studies are also underway with support from NIH and A.I.D.'s Office of Population and WHO/HRP for work in contraception and HIV transmission.

A. PERSONNEL AND ORGANIZATIONAL STRUCTURE

AIDSTECH staffing needs have grown since the project began. The heavy workload resulting from the volume of projects currently in development and implementation, and the increasing number of add-ons from bilateral agreements has necessi-

tated expanding the staff. As program development and implementation have proceeded, needs for staff with additional skills and expertise have been identified.

An Information, Education and Communications (IEC) Specialist, an Operations Research Specialist and a Research Associate in Health Care Financing, have joined AIDSTECH staff in the past six months. AIDSTECH currently has five vacant senior level positions; a Deputy Director, a Behavioral Science Specialist, an IEC Associate, a Condom Logistics Specialist, and a Modeling Specialist.

AIDSTECH's current and expected staffing structures, which go into effect in April 1990, are shown in the organizational charts on pages 74-79.

Country Resident Coordinators are being used in selected countries where the scope of program activities justifies the placement of such a coordinator. FHI/AIDSTECH is contracting with Resident Coordinators in Kenya, Ghana, Haiti, Cameroon, Tanzania, the Philippines, Thailand and the Dominican Republic.

B. PROGRAM MANAGEMENT

The FHI Washington Office continues to be responsible for cable traffic between AIDSTECH and the USAID Missions and for coordinating AIDSTECH activities with A.I.D./Washington and AIDSCOM. An Administrative Assistant will be hired to assist the Program/Liaison Officer in coordination of activities.

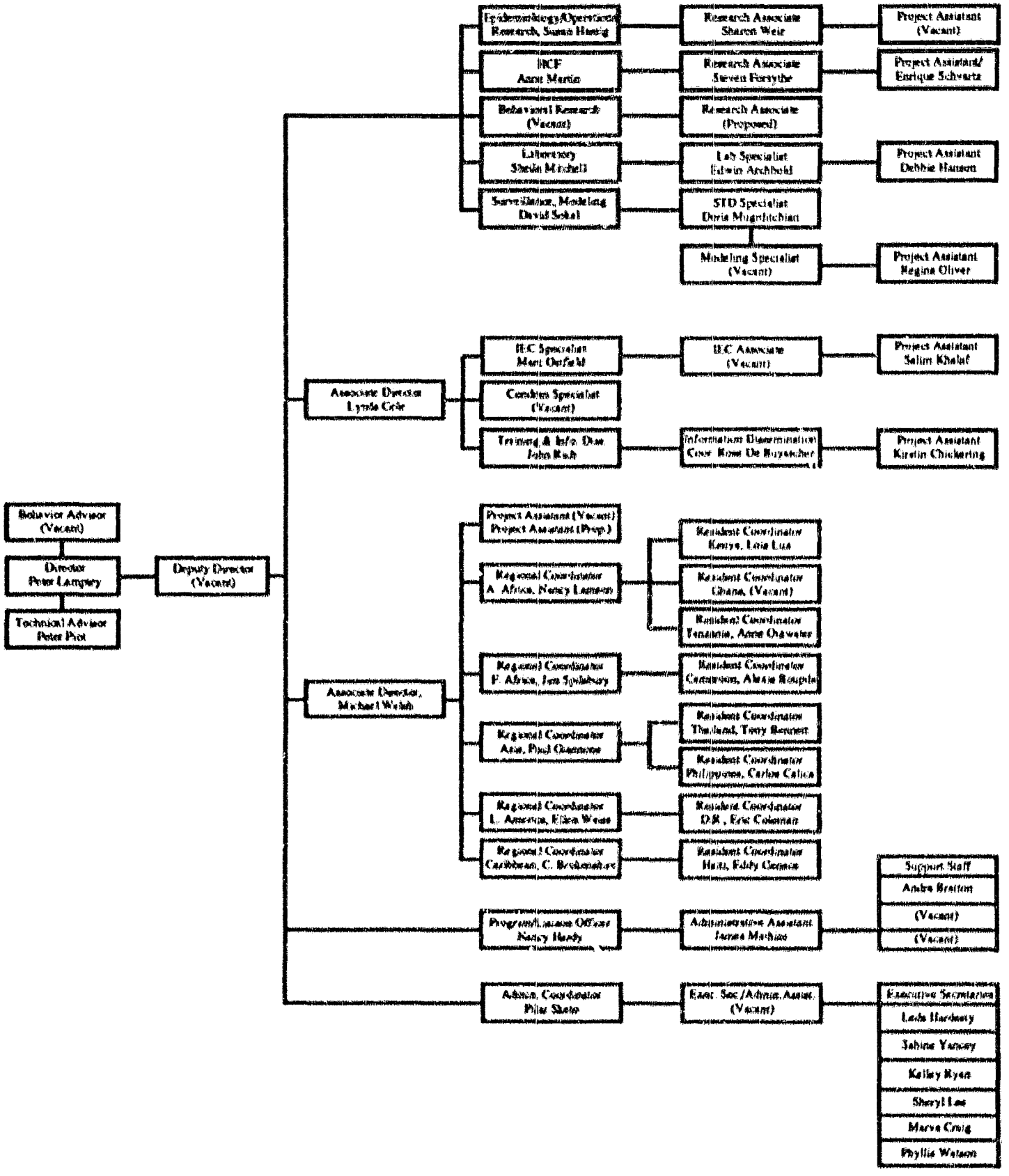
The AIDSTECH program operates in close coordination with the Cognizant Technical Officer (CTO) in A.I.D.'s Office of Health. During this reporting period, monthly meetings were held in Washington with the CTO and other Office of Health staff, the AIDSTECH Director and other members of the AIDSTECH staff.

Coordination between AIDSTECH and AIDSCOM has been facilitated by the establishment of a joint Technical Advisory Group (TAG). The fourth meeting of the TAG was held in Washington in February 1990. The meeting was preceded by a two-day Mini-Conference to present lessons learned from the A.I.D. AIDS programs and by two days of Task Force Meetings on: 1) Primary Prevention of STDs Through Behavior Change, 2) Secondary Prevention of STDs Through Behavior Change, and 3) STD Diagnostics in Resource-Poor Settings. Task Force recommendations were presented to TAG members. The TAG recommended that both AIDSTECH and AIDSCOM become more involved with STD prevention and control. Specifically the TAG recommended that:

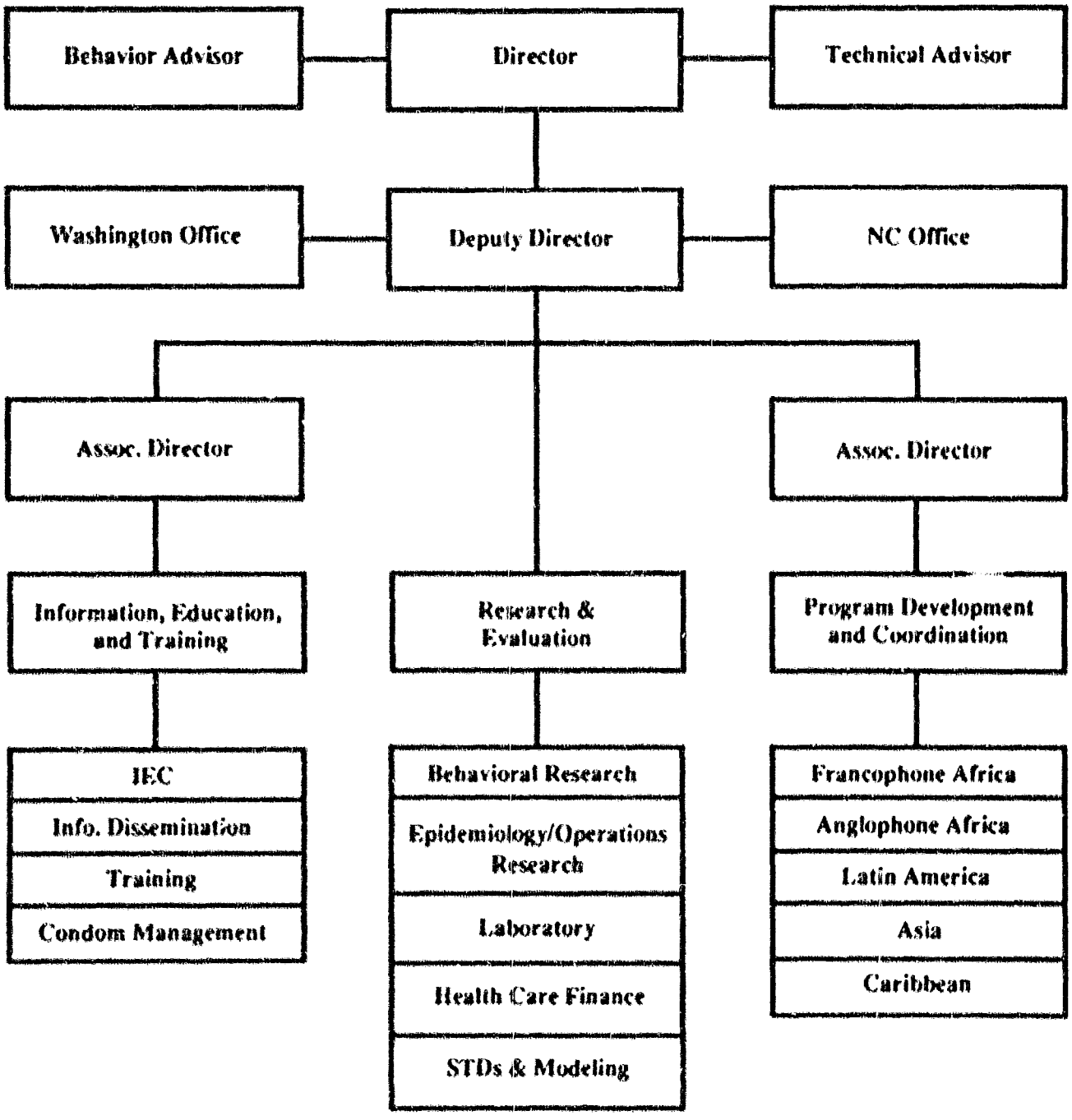
- AIDSTECH and AIDSCOM staff should receive STD training.
- Existing access points (STD clinics, public health clinics, private physicians and pharmacies) should be used to target persons being treated for STDs.
- Training of clinic staff should be emphasized, particularly in counseling for HIV and behavior change.
- Patient waiting time in clinics could be used to show AIDS/STD messages.
- The A.I.D. program should play a facilitating role in the development of new diagnostics through setting up an inter-agency working group to coordinate efforts.

At the previous TAG meeting, the poor image of condoms was discussed as a major barrier to widespread use. AIDSTECH is developing condom promotion materials that promote condom use in a positive way, emphasizing caring. The promotion is not tied to family planning or AIDS. Condom distribution figures and materials recognition will be used to measure materials effectiveness.

AIDSTECH Organizational Chart

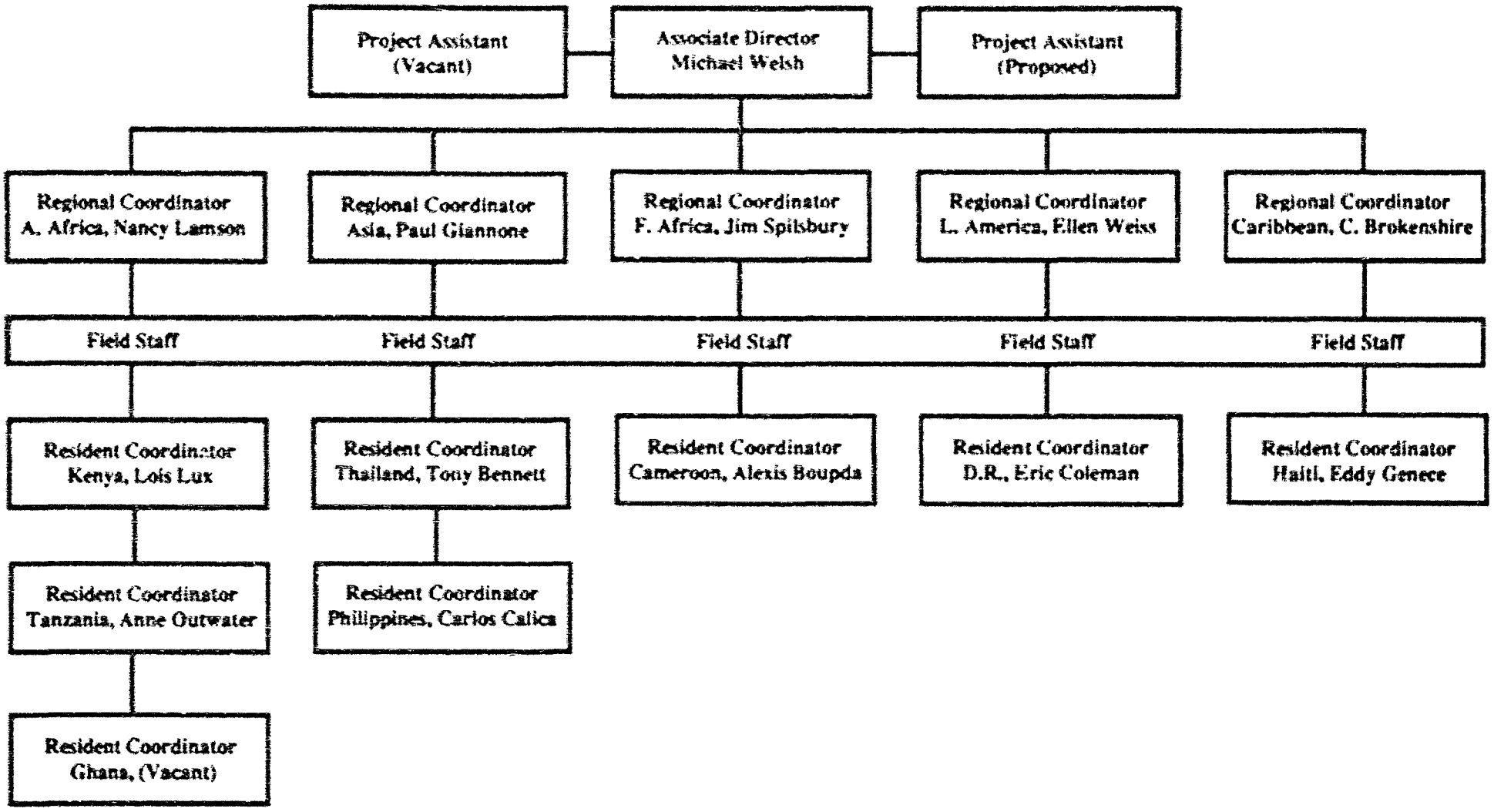


AIDSTECH Organizational Chart



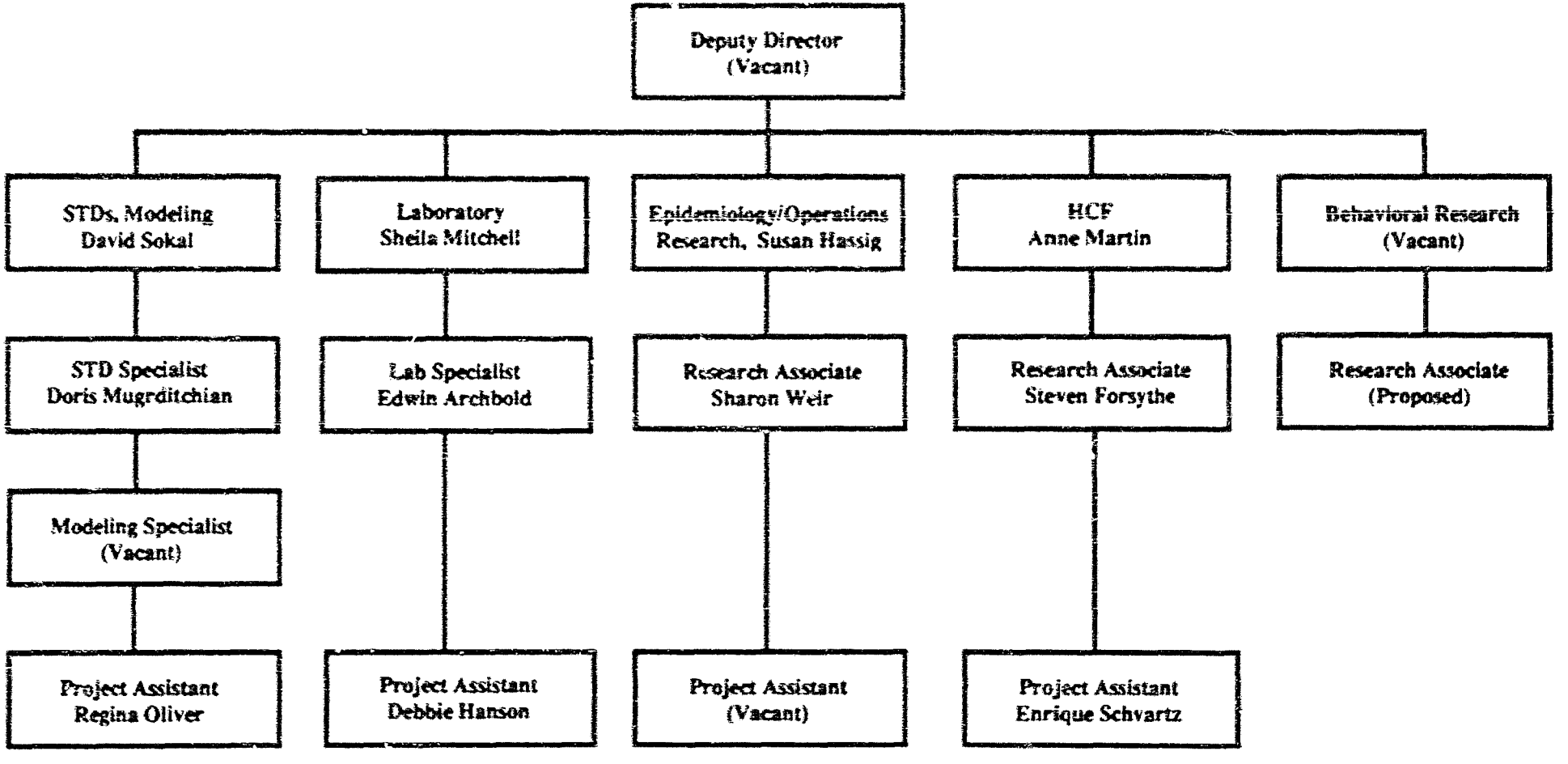
AIDSTECH Organizational Chart

Program Development and Coordination Unit



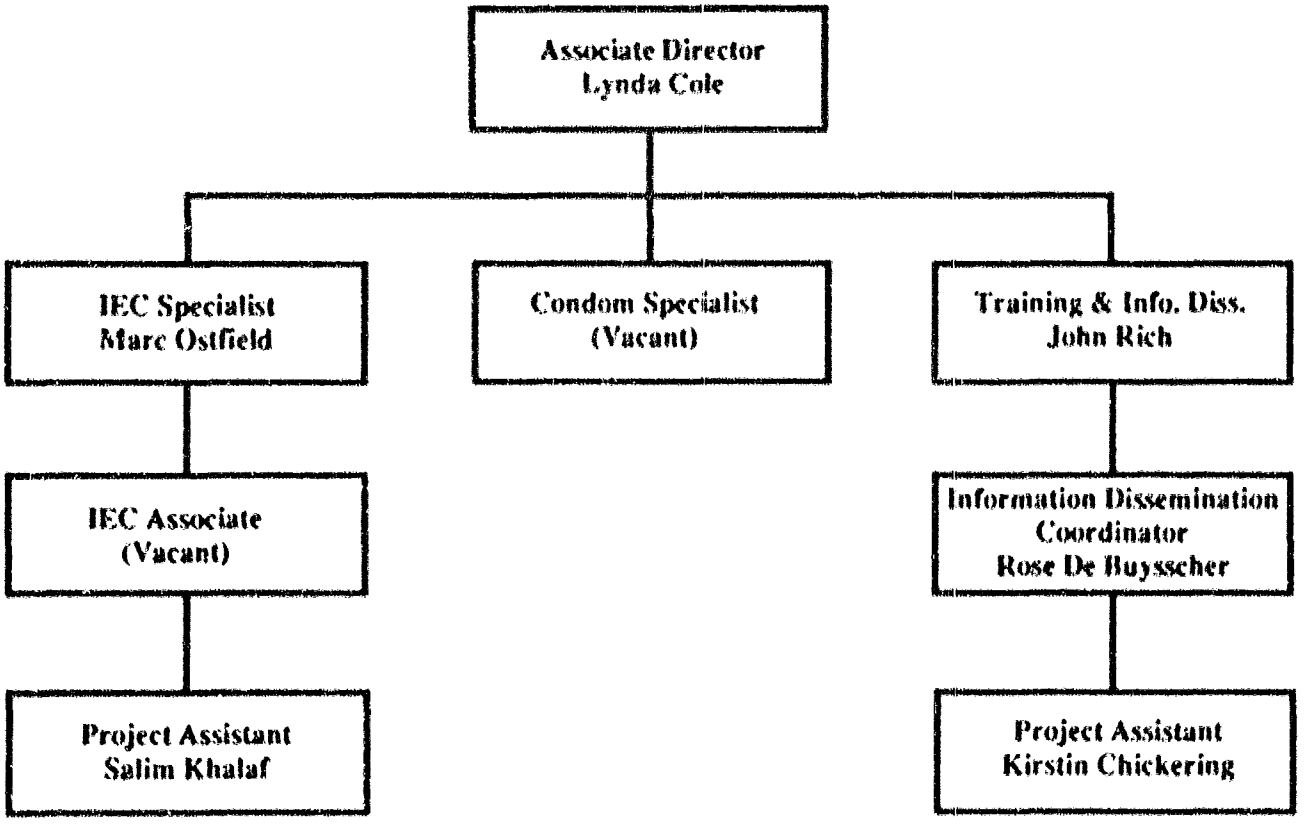
AIDSTECH Organizational Chart

Research and Evaluation Unit



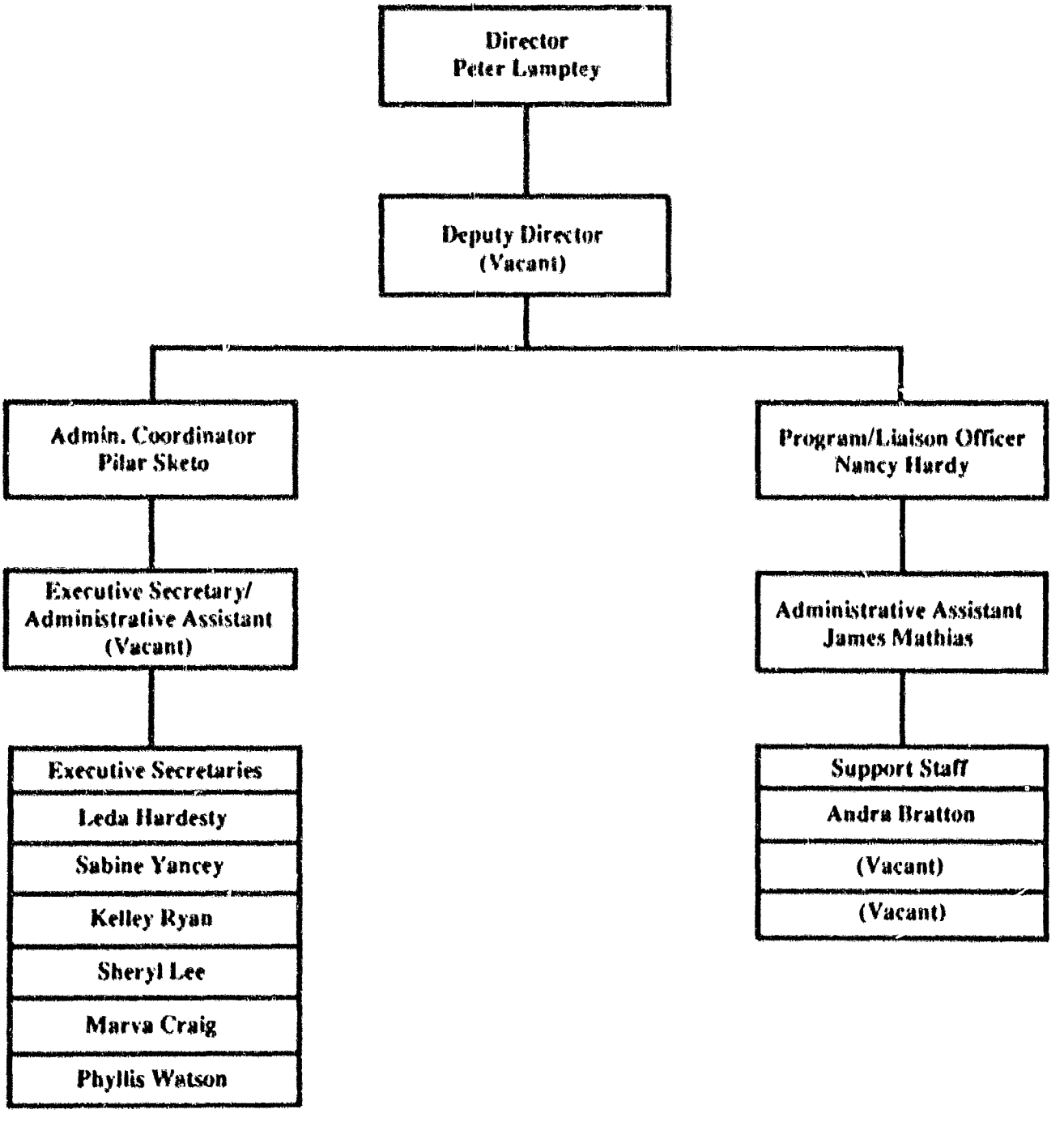
AIDSTECH Organizational Chart

Information, Education & Training Unit



AIDSTECH Organizational Chart

Administration



C. A.I.D. EVALUATION REPORT

The results of the first interim evalution of A.I.D's AIDS Technical Support Project were received in the last six months. The evaluation was an opportunity to assess the workings of the AIDSTECH program.

The Evaluation Team recommended that:

- AIDSTECH's work scope be narrowed.
- AIDSTECH/AIDSCOM's behavior research programs be coordinated.
- AIDSTECH recruit a Deputy Director and place more country Resident Coordinators.
- AIDSTECH's behavior change/research projects should have greater control from U.S. side, including direct implementation of projects.

AIDSTECH has responded to the report recommendations in the following ways:

- Seven Resident Coordinators have been placed in countries where AIDSTECH has major programs.
- A Deputy Director is being recruited to assume some of the program management and supervisory burden from the Director.
- Expertise in behavioral and operations research is being added to AIDSTECH core staff. The Operations Research Specialist and the IEC Specialist have already joined the staff; AIDSTECH is currently recruiting a Behavioral Science Specialist, and additional IEC expertise.
- AIDSTECH plans to continue cooperation and coordination with AIDSCOM and WHO/GPA on its research agenda.
- AIDSTECH staff have reviewed current projects, set priorities and decided on the future direction of the program in an effort to focus the AIDSTECH scope of work; in-depth program countries have been identified.
- AIDSTECH philosophy and approach is to develop local expertise and to build local capacity; AIDSTECH plans to continue providing technical assistance as needed to achieve this objective. The direct implementation by AIDSTECH staff of research projects to develop and test methodologies and obtain answers to some of the behavioral or epidemiological research issues, as suggested by the evaluation team, is inconsistent with AIDSTECH's current mandate and underlying philosophy. However, where special opportunities exist, AIDSTECH staff will work more closely with developing country colleagues to develop, implement, interpret and disseminate results of research.

D. TECHNICAL ASSISTANCE

In the past six months, AIDSTECH has provided 66 weeks of technical assistance to 25 countries. Table 3 on next page gives a breakdown of number of trips by program area and region.

Table 3
AIDSTECH Technical Assistance by Program Area and Region

Program Area	Africa Region Trips	Africa Region Weeks	LAC Region Trips	LAC Region Weeks	ANE Region Trips	ANE Region Weeks	Total Trips	Total Weeks
Sexual Transmission	16	22	28	20	2	2	46	44
IVDU Transmission	0	0	0	0	3	5	3	5
Blood Transmission	5	7	4	3	0	0	9	10
Surveillance	1	2	2	2	0	0	3	4
Health Care Financing	0	0	3	3	0	0	3	3
Total	22	31	37	38	5	7	64	66

E. ISSUES AND PROBLEMS

Project Delays. While FHI/AIDSTECH and A.I.D. agree that interventions with high-risk behavior groups are the most critical to slowing the spread of the AIDS epidemic, these interventions are also controversial and, therefore, often difficult to get approved by National AIDS Committees and other government entities that must serve as the local sponsors and implementing agencies. This has slowed somewhat our progress in getting interventions started in some countries. In the past six months, AIDSTECH has worked unsuccessfully to obtain approvals for interventions in Barbados, Kenya and Burundi. Approvals were obtained for a long-delayed intervention project in Trinidad. AIDSTECH continues to work on informing, educating, and motivating National AIDS Committees about the need for programs with high-risk behavior groups.

Delays are not limited to sexual transmission projects. Two health care finance projects in the Eastern Caribbean were approved this year after a year of delay.

Logistics Issues. Supplying the field with HIV tests and making sure condoms are available for programs has taken considerable effort by AIDSTECH staff. Although USAID Missions have been extremely helpful in facilitating receipt of testing reagents, there have been continuing problems with delivery of test kits, including lost shipments and shipments destroyed because of lack of refrigeration. AIDSTECH is becoming less involved with procurement as WHO takes the lead in this area. Problems with condom supply for AIDSTECH intervention programs in Nigeria and the Dominican Republic were discussed at the A.I.D. AIDS Mini-Conference, held in February 1990. AIDSTECH is currently recruiting a Condom Logistics Specialist to work with projects to design and implement condom distribution plans for all intervention programs.

Program Sustainability. As successful programs come to the end of their initial funding, there is a need for expansion and replication. The Zaire Social Marketing Project and the Philippines programs are two examples of the need for program continuation and expansion. Both have been funded by add-ons to the AIDSTECH Cooperative Agreement. Uncertainty of follow-on Mission funding is making planning for program expansion difficult, at particularly critical stages where successful programs have been established. Funding cessation or disruption can be expected to have negative consequences for the programs and call into question the initial deployment of resources for establishing major programs.

V. FUTURE PLANS

The major focus of AIDSTECH activities in the coming months will be to initiate the Post-Doctoral Behavioral Research Fellows Program and the Behavioral Research Centers Program. Specifically, AIDSTECH will have:

- filled the Behavioral Scientist Specialist position;
- selected two Fellows for placement overseas; and
- selected 8-10 pilot projects to fund under the Behavior Research Centers Program.

AIDSTECH will continue to focus its efforts on interventions targeted at high-risk groups for the prevention of sexual transmission of HIV and to work toward ensuring a safer blood supply. AIDSTECH will continue to assist in improving the diagnosis, treatment and control of STDs. Specifically, AIDSTECH will have:

- provided training of health care professionals in treatment of STDs and counseling of STD patients in the Eastern Caribbean, Haiti and the Philippines;
- expanded sexual transmission projects in Burkina Faso and Nigeria; and
- established laboratory quality control programs in Cameroon and Kenya.

AIDSTECH will continue the evaluation of the AIM model in Uganda and Haiti, and plans for its application in other countries.

In the future, AIDSTECH will considerably reduce its support to the International AIDS Conference and will provide more support to developing country participants to attend selective regional AIDS meetings.

AIDSTECH will continue to evaluate intervention activities and make modifications, as appropriate. Successful projects will be expanded.

AIDSTECH will continue to collaborate closely with WHO and be responsive to USAID Missions as resources permit.

Appendix 1

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Africa			
Sex	1,260,465	1,431,540	2,692,005
Blood	319,740	932,719	1,252,459
Surveillance	225,831	143,380	369,211
HCF	45,521	0	45,521
Other	465,190	646,751	1,111,941
Total	2,316,747	3,154,390	5,471,137
Latin America/Caribbean (LAC)			
Sex	879,257	1,420,462	2,299,719
Blood	151,617	378,865	530,482
Surveillance	149,322	399,261	548,583
HCF	228,756	255,737	484,493
Other	453,100	839,640	1,292,740
Total	1,862,052	3,293,965	5,156,017
Asia/Near East (ANE)			
Sex	342,049	573,064	915,113
IVDU	193,015	0	193,015
Blood	0	186,320	186,320
Surveillance	6,000	0	6,000
HCF	113,000	121,100	234,100
Other	252,013	125,851	377,864
Total	906,077	1,006,335	1,912,412
Program Areas			
Sex	2,481,771	3,425,066	5,906,837
IVDU	193,015	0	193,015
Blood	471,357	1,497,904	1,969,261
Surveillance	381,153	542,641	923,794
HCF	387,277	376,837	764,114
Other	1,170,303	1,612,242	2,782,545
Regions			
Africa	2,316,747	3,154,390	5,471,137
LAC	1,862,052	3,293,965	5,156,017
ANE	906,077	1,006,335	1,912,412
TOTAL	**$5,084,876**	**$7,454,690**	**$12,539,566**

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

AFRICA REGION	CORE	ADD-ON	TOTAL
Botswana			
Other	9,178	6,539	15,717
Total	9,178	6,539	15,717
Burkina Faso			
Sex	157,679	111,650	269,329
Blood	80,114	78,670	158,784
Surveillance	8,000	0	8,000
Other	19,091	16,719	35,810
Total	264,884	207,039	471,923
Burundi			
Sex	0	24,934	24,934
Surveillance	98,281	50,905	149,186
Other	14,266	67,677	81,943
Total	112,547	143,516	256,063
Cameroon			
Sex	114,060	390,277	504,337
Blood	115,757	151,655	267,412
Surveillance	0	92,475	92,475
HCF	4,821	0	4,821
Other	52,213	21,729	73,942
Total	286,851	656,136	942,987
Cape Verde			
Other	4,261	0	4,261
Total	4,261	0	4,261
Central African Republic			
Other	0	6,781	6,781
Total	0	6,781	6,781
Chad			
Other	1,096	0	1,096
Total	1,096	0	1,096
Congo			
Other	0	6,386	6,386
Total	0	6,386	6,386

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Cote D'Ivoire			
Other	13,461	21,745	35,206
Total	13,461	21,745	35,206
Gambia			
Other	5,301	0	5,301
Total	5,301	0	5,301
Ghana			
Sex	274,461	204,089	478,550
Blood	0	117,683	117,683
HCF	29,700	0	29,700
Other	33,136	10,061	43,197
Total	337,297	331,833	669,130
Guinea			
Other	5,415	0	5,415
Total	5,415	0	5,415
Guinea-Bissau			
Other	3,698	10,809	14,507
Total	3,698	10,809	14,507
Kenya			
Sex	307,033	103,435	410,468
Blood	103,654	185,628	289,282
Other	87,391	101,095	188,486
Total	498,078	390,158	888,236
Lesotho			
Other	5,455	6,876	12,331
Total	5,455	6,876	12,331
Malawi			
Blood	0	10,275	10,275
Surveillance	11,000	0	11,000
HCF	11,000	0	11,000
Other	10,905	13,012	23,917
Total	32,905	23,287	56,192
Mali			
Sex	36,485	100,000	136,485
Total	36,485	100,000	136,485
Mozambique			
Other	7,407	559	7,966
Total	7,407	559	7,966

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Niger			
Sex	0	80,000	80,000
Other	4,631	6,103	10,734
Total	4,631	86,103	90,734
Nigeria			
Sex	79,900	0	79,900
Other	5,099	19,822	24,921
Total	84,999	19,822	104,821
Rwanda			
Other	0	9,502	9,502
Total	0	9,502	9,502
Senegal			
Blood	1,990	139,668	141,658
Other	5,035	51,303	56,338
Total	7,025	190,971	197,996
Somalia			
Other	0	5,785	5,785
Total	0	5,785	5,785
Sudan			
Other	5,046	6,070	11,116
Total	5,046	6,070	11,116
Swaziland			
Other	17,340	6,550	23,890
Total	17,340	6,550	23,890
Tanzania			
Sex	99,622	172,000	271,622
Surveillance	20,550	0	20,550
Other	5,710	52,111	57,821
Total	125,882	224,111	349,993
Togo			
Other	4,586	6,240	10,826
Total	4,586	6,240	10,826
Uganda			
Sex	58,750	0	58,750
Surveillance	88,000	0	88,000
Other	11,226	21,553	32,779
Total	157,976	21,553	179,529

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Zaire			
Sex	132,475	0	132,475
Blood	0	99,325	99,325
Other	41,853	45,134	86,987
Total	174,328	144,459	318,787
Zambia			
Other	6,665	18,941	25,606
Total	6,665	18,941	25,606
Zimbabwe			
Sex	0	245,155	245,155
Blood	18,225	149,815	168,040
Other	11,225	7,649	18,874
Total	29,450	402,619	432,069
Regional			
Other	74,500	100,000	174,500
Total	74,500	100,000	174,500
Africa Region			
Sex	1,260,465	1,431,540	2,692,005
Blood	319,740	932,719	1,252,459
Surveillance	225,831	143,380	369,211
HCF	45,521	0	45,521
Other	465,190	646,751	1,111,941
TOTAL AFRICA REGION	**$2,316,747**	**$3,154,390**	**$5,471,137**

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

LATIN AMERICA/CARIBBEAN REGION	CORE	ADD-ON	TOTAL
Belize			
Other	7,621	0	7,621
Total	7,621	0	7,621
Bolivia			
Sex	0	31,031	31,031
Blood	8,634	31,923	40,557
Surveillance	0	20,046	20,046
Other	17,152	7,684	24,836
Total	25,786	90,684	116,470
Brazil			
Sex/Training	60,618	0	60,618
Other	25,473	254,731	280,204
Total	86,091	254,731	340,822
Chile			
Other	6,323	0	6,323
Total	6,323	0	6,323
Colombia			
Other	14,622	0	14,622
Total	14,622	0	14,622
Costa Rica			
Sex	52,663	0	52,663
Other	8,270	0	8,270
Total	60,933	0	60,933
Dominican Republic			
Sex	0	586,359	586,359
Blood	22,929	159,750	182,679
Surveillance	0	116,037	116,037
HCF	92,256	107,336	199,592
Other	130,373	130,227	260,600
Total	245,558	1,099,709	1,345,267
Eastern Caribbean			
Sex	155,490	554,523	710,013
Blood	17,005	45,240	62,245
Surveillance	0	11,039	11,039
HCF	0	128,401	128,401
Other	81,535	50,761	132,296
Total	254,030	789,964	1,043,994

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Ecuador			
Sex	57,759	9,660	67,419
Blood	66,248	73,201	139,449
Surveillance	15,070	7,139	22,209
Other	39,838	15,897	55,735
Total	178,915	105,897	284,812
El Salvador			
Sex	74,212	62,450	136,662
Blood	10,960	35,550	46,510
Surveillance	9,212	0	9,212
Other	13,380	0	13,380
Total	107,764	98,000	205,764
Guatemala			
Sex	13,000	0	13,000
Blood	6,850	0	6,850
Surveillance	6,850	0	6,850
Other	13,363	0	13,363
Total	40,063	0	40,063
Haiti			
Sex	193,713	163,340	357,053
Surveillance	56,200	245,000	301,200
Other	14,200	360,750	374,950
Total	264,113	769,090	1,033,203
Honduras			
Other	10,493	0	10,493
Total	10,493	0	10,493
Jamaica			
Sex	21,375	0	21,375
Other	11,371	15,890	27,261
Total	32,746	15,890	48,636
Mexico			
Sex	250,427	0	250,427
Surveillance	61,990	0	61,990
HCF	136,500	0	136,500
Other	32,267	0	32,267
Total	481,184	0	481,184
Peru			
Sex	0	13,099	13,099
Blood	18,991	33,201	52,192
Other	26,819	3,700	30,519
Total	45,810	50,000	95,810

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Regional			
HCF	0	20,000	20,000
Total	0	20,000	20,000
LAC Region			
Sex	879,257	1,420,462	2,299,719
Blood	151,617	378,865	530,482
Surveillance	149,322	399,261	548,583
HCF	228,756	255,737	484,493
Other	453,100	839,640	1,292,740
TOTAL LAC REGION	**$1,862,052**	**$3,293,965**	**$5,156,017**

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

ASIA/NEAR EAST REGION	CORE	ADD-ON	TOTAL
Bangladesh			
Other	10,806	0	10,806
Total	10,806	0	10,806
Egypt			
Other	7,756	0	7,756
Total	7,756	0	7,756
India			
Other	15,466	0	15,466
Total	15,466	0	15,466
Indonesia			
Other	26,372	0	26,372
Total	26,372	0	26,372
Jordan			
Other	9,505	0	9,505
Total	9,505	0	9,505
Morocco			
Sex	56,180	0	56,180
Surveillance	6,000	0	6,000
Other	16,567	0	16,567
Total	78,747	0	78,747
Oman			
Other	4,055	0	4,055
Total	4,055	0	4,055
Pakistan			
Other	8,819	0	8,819
Total	8,819	0	8,819
Phillipines			
Sex	168,834	573,064	741,898
Blood	0	186,320	186,320
HCF	102,000	121,100	223,100
Other	51,961	125,851	177,812
Total	322,795	1,006,335	1,329,130
South Pacific			
HCF	11,000	0	11,000
Other	34,648	0	34,648
Total	45,648	0	45,648

PROGRAM OBLIGATIONS
BY PROGRAM AREA AND REGION

	CORE	ADD-ON	TOTAL
Sri Lanka			
Sex	29,025	0	29,205
Other	11,314	0	11,314
Total	40,339	0	40,339
Thailand			
Sex	88,010	0	88,010
IVDU	193,015	0	193,015
Other	44,889	0	44,889
Total	325,914	0	325,914
Tunisia			
Other	9,855	0	9,855
Total	9,855	0	9,855
ANE Region			
Sex	342,049	573,064	915,113
IVDU	193,015	0	193,015
Blood	0	186,320	186,320
Surveillance	6,000	0	6,000
HCF	113,000	121,100	234,100
Other	252,013	125,851	377,864
TOTAL ANE REGION	**$906,077**	**$1,006,335**	**$1,912,412**

Appendix 2

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Africa					
Regional	ADRA: AIDS Prevention Workshops	06/89	74500	0	Ongoing
	Policy Development	01/90	0	100000	Ongoing
Botswana	National Plan Review	02/88	1096	0	Complete
	Population Association of America Participation	04/88	2740	0	Complete
	International AIDS Conference Participation	06/88	5342	6539	Complete
Burkina Faso	Needs Assessment/ Project Development	02/88	14377	9502	Complete
	Equipment Supplies Procurement/ Training	06/88	80114	78670	Complete
	International AIDS Conference Participation	06/88	4714	7217	Complete
	Intervention with High Risk Groups	11/88	605	61650	Ongoing
	Pilot AIDS Social Marketing Program	04/89	23649	50000	Ongoing
	Technical Assistance in Surveillance	06/88	8000	0	Complete
	STD Surveillance and Control	10/89	133425	0	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Burundi	Needs Assessment	02/88	9502	9502	Complete
	International AIDS Conference Participation	06/88	4764	6014	Complete
	Intervention with High Risk Groups	05/90	0	24934	Planned
	Cohort Surveillance	05/89	98281	50905	Ongoing
	Health Provider Training	10/88	0	52161	Complete
Cameroon	National Plan Review	02/88	1096	0	Complete
	Project Development	03/88	4795	0	Complete
	International AIDS Conference Participation	06/88	4873	17570	Complete
	Tanzania Conference Participation	09/88	4110	0	Complete
	Resident Coordinator	06/89	31461	4159	Ongoing
	Program Support	01/89	5878	0	Ongoing
	Technical Assistance in Finance	04/89	4821	0	Complete
	Intervention with High Risk Groups	05/89	75775	277262	Ongoing
	Sentinel Surveillance	05/89	0	92475	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Cameroon	Reducing Blood Transfusions	10/89	0	23975	Ongoing
	Development of a Counseling Program	10/89	0	13015	Ongoing
	HIV Testing and Training	05/89	20000	127680	Ongoing
	Efficacy of Barrier Methods	04/89	38285	100000	Ongoing
	International Health Services: AIDS Diagnostic Test	03/89	95757	0	Ongoing
Cape Verde	International AIDS Conference Participation	06/89	4261	0	Complete
Central African Republic	International AIDS Conference Participation	06/88	0	6781	Complete
Chad	National Plan Review	02/88	1096	0	Complete
Congo	International AIDS Conference Participation	06/88	0	6386	Complete
Cote D'Ivoire	Needs Assessment/ Project Development	12/87	8905	9502	Complete
	International AIDS Conference Participation	06/88	4556	12243	Complete
Gambia	International AIDS Conference Participation	06/89	5301	0	Complete
Ghana	Needs Assessment/ Project Development	04/88	11215	9502	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Ghana	International AIDS Conference Participation	06/88	4622	559	Complete
	Resident Coordinator	09/89	11340	0	Ongoing
	Program Support	01/89	5959	0	Ongoing
	Expanded Intervention with High Risk Groups	06/89	94313	58937	Ongoing
	Intervention with Military	10/89	180148	145152	Ongoing
	Cost Effectiveness of Ghana Intervention	10/89	29700	0	Planned
	Rapid Test Evaluation	01/89	0	117683	Complete
Guinea	International AIDS Conference Participation	06/89	5415	0	Complete
Guinea-Bissau	International AIDS Conference Participation	06/88	3698	10809	Complete
Kenya	Needs Assessment/ Project Development	01/88	10484	8608	Complete
	Anthropologic Perspectives Meeting Participation	01/88	5480	0	Complete
	International AIDS Conference Participation	06/88	8483	10287	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Kenya	Intervention with High Risk Groups in Mombasa	05/90	89320	36305	Planned
	Intervention with Truck Drivers	01/90	70020	67130	Ongoing
	Workshop for Family Planning Workers	03/89	42525	0	Ongoing
	KAP Survey of Adolescents	06/90	68500	0	Planned
	Crescent Medical Aid Educational Counseling Training Program	01/90	24861	0	Ongoing
	Condom Assessment	08/89	11807	0	Complete
	Rapid Test Evaluation	10/88	0	117683	Complete
	Technical Assistance: Quality Control and Training	06/90	0	67945	Planned
	Blood Bank Data Management	11/89	69204	0	Ongoing
	Evaluation of HIV-1 Dipstick Assay	05/90	34450	0	Planned
	Program Support	01/89	2944	0	Ongoing
	East Africa Program Coordinator	09/88	60000	82200	Ongoing
Lesotho	International AIDS Conference Participation	06/88	5455	6876	Complete
Malawi	Training Lab Techs in HIV Testing	11/87	0	10275	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Malawi	International AIDS Conference Participation	06/88	5195	13012	Complete
	Needs Assessment	01/89	5710	0	Complete
	Finance Technical Assistance	09/89	11000	0	Ongoing
	Technical Assistance in Epidemiology	09/89	11000	0	Ongoing
Mali	Expanded Intervention with High-Risk Groups	08/89	35485	100000	Ongoing
Mozambique	National Plan Review	02/88	1096	0	Complete
	International AIDS Conference Participation	06/88	6311	559	Complete
Niger	International AIDS Conference Participation	06/88	4631	6103	Complete
	Needs Assessment	02/90		0	Complete
	Intervention with High-Risk Groups	07/90	0	80000	Planned
Nigeria	Needs Assessment	10/87	0	5480	Complete
	Workshop Technical Assistance	02/88	0	7508	Complete
	International AIDS Conference Participation	06/88	5099	6834	Complete
	Expanded Intervention with High Risk Groups	08/89	79900	0	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Rwanda	Needs Assessment	02/88	0	9502	Complete
Senegal	Retrovirus Conference	12/87	0	30332	Complete
	Needs Assessment/ Project Development	12/87	252	9502	Complete
	International AIDS Conference Participation	06/88	4783	11469	Complete
	Equipment/ Supplies Procurement	06/88	1990	21985	Complete
	Rapid Test Evaluation	10/88	0	117683	Complete
Somalia	International AIDS Conference Participation	06/88	0	5785	Complete
Sudan	International AIDS Conference Participation	06/88	5046	6070	Complete
Swaziland	National Plan Review	03/88	1096	0	Complete
	International AIDS Conference Participation	06/88	5453	6550	Complete
	Needs Assessment	06/89	10791	0	Complete
Tanzania	Needs Assessment	02/88	5710	9502	Complete
	International AIDS Conference Participation	06/88	0	13609	Complete
	Intervention with Long Distance Drivers	10/88	99622	87000	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Tanzania	Strengthening STD Services for High-Risk Groups	06/90	0	85000	Planned
	Program Coordinator	05/90	0	29000	Planned
Togo	International AIDS Conference Participation	06/88	4586	6240	Complete
Uganda	Needs Assessment	01/88	0	9502	Complete
	Anthropologic Perspectives Meeting Participation	01/88	6344	0	Complete
	International AIDS Conference Participation	06/88	4882	12051	Complete
	AIDS Modeling Project	04/90	88000	0	Planned
	AIDS/STD Study Support	09/89	58750	0	Complete
Zaire	National Plan Review	01/88	1096	0	Complete
	Needs Assessment/ Project Development	02/88	35512	6000	Complete
	International AIDS Conference Participation	06/88	5245	29790	Complete
	Expansion of Social Marketing Project	03/89	132475	0	Ongoing
	Rapid Test Evaluation	04/89	0	99325	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Zambia	National Plan Review	02/88	1096	0	Complete
	International AIDS Conference Participation	06/88	5569	18941	Complete
Zimbabwe	International AIDS Conference Participation	06/88	4717	7649	Complete
	Tanzania AIDS Conference Participation	09/88	2055	0	Complete
	Needs Assessment	07/88	4453	0	Complete
	KAP Module	07/88	0	23290	Complete
	Intervention with High Risk Groups	09/89	0	171865	Ongoing
	Equip/Supply Five Hospitals	11/88	0	118168	Complete
	Intervention with Labor on Commercial Farms	08/90	0	50000	Planned
	Training in Disease Control Procedures and Laboratory Tests	03/89	0	31647	Complete
	Supply Blood Transfusion Service	03/89	18225	0	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Latin America/ The Caribbean					
Belize	International AIDS Conference Participation	06/88	7621	0	Complete
Bolivia	Needs Assessment	04/88	7535	7684	Complete
	Laboratory Technical Assistance	04/88	1501	0	Complete
	National Plan Review	04/88	1096	0	Complete
	International AIDS Conference Participation	06/88	8521	0	Complete
	Technical Assistance in Surveillance	06/90	0	20046	Planned
	Technical Assistance in STD Control	06/90	0	31031	Planned
	Technical Assistance in Blood/Laboratory	0[illegible]/90	7133	31923	Ongoing
Brazil	International AIDS Conference Participation	06/88	17473	11194	Complete
	Needs Assessment	12/88	8000	8000	Complete
	General Training	12/88	0	29655	Ongoing
	IMPACT Peer Educator Training	03/90	60618	0	Ongoing
	CCII Institutional Development	05/90	0	64850	Planned
	ABEPF Training	05/90	0	63688	Planned
	BEMFAM Training	04/90	0	77344	Planned

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Chile	International AIDS Conference Participation	06/88	6323	0	Complete
Colombia	International AIDS Conference Participation	06/88	14622	0	Complete
Costa Rica	International AIDS Conference Participation	06/88	8270	0	Complete
	Education Program for Adolescents	04/90	52663	0	Planned
Dominican Republic	Needs Assessment/ Project Development	01/88	17394	2400	Ongoing
	Global Impact of AIDS Conference Participation	01/88	0	6144	Complete
	International AIDS Conference Participation	06/88	7763	0	Complete
	National Plan Review	09/88	1096	0	Complete
	Program Support	06/88	104120	0	Ongoing
	Puerto Plata: Intervention with High-Risk Groups	03/89	0	86696	Ongoing
	Santo Domingo: Intervention with High-Risk Groups	02/89	0	164745	Ongoing
	Expanded Intervention	05/91	0	236500	Planned

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Dominican Republic	Sentinel Surveillance Technical Assistance	10/88	0	116037	Ongoing
	Blood Screening Resource Needs Assessment	02/90	5340	62336	Ongoing
	Health Care Finance Modelling	11/89	86916	0	Ongoing
	Private Sector Initiation	06/90	0	45000	Planned
	Training Health Care Providers	05/90	0	41683	Planned
	Blood Pooling	02/90	22929	40000	Ongoing
	Laboratory Technical Assistance	01/90	0	119750	Ongoing
	Provision of Other Equipment and Supplies	01/90	0	15000	Planned
	Rental of Condom Storage	11/88	0	98418	Ongoing
	Resident Coordinator	02/90	0	65000	Ongoing
Eastern Caribbean	Needs Assessment/ Project Development	01/88	25590	0	Complete
	International AIDS Conference Participation	06/88	8092	0	Complete
	Program Support	01/89	25353	0	Ongoing
	Technical Assistance	01/89	22500	50761	Ongoing
	Condom Promotion	10/90	0	40000	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Eastern Caribbean	Cost Recovery for Blood Screening Program: Trinidad	05/90	0	70925	Planned
	General Population KABP Surveys	08/89	0	60000	Ongoing
	HIV/STD Surveillance Workshops	11/89	0	11039	Complete
	STD Services Upgrading	10/89	0	20000	Ongoing
	Intervention with High-Risk Groups: Trinidad	01/90	51433	62930	Planned
	Evaluation of Screening Pooled Blood: Trinidad	02/90	17005	45240	Ongoing
	Cost-Effective Treatment: Barbados	11/89	0	57476	Planned
	Interventions with High-Risk Groups: St. Lucia	10/89	0	75600	Ongoing
	Intervention with High Risk Groups: Antigua	10/89	25757	51193	Ongoing
	Intervention with High Risk Groups: Barbados	01/90	0	85050	Planned
	Sexual Intervention: Dominica	01/90	0	45000	Ongoing
	PROJECT HOPE: AIDS Education Program	12/88	78300	0	Ongoing
	STD/AIDS Small Grants Program	11/89	0	114750	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Ecuador	Needs Assessment	01/88	7535	0	Complete
	International AIDS Conference Participation	06/88	559	5897	Complete
	Program Support	09/88	5400	0	Ongoing
	Sentinel Surveillance Technical Assistance	04/88	15070	7139	Ongoing
	Mexico Observation Visits	02/90	10000	10000	Ongoing
	Intervention with High-Risk Groups	01/90	57759	9660	Ongoing
	Laboratory Technicians Assistance	01/89	0	43201	Ongoing
	Training Health Care Providers	03/89	26344	10000	Complete
	Evaluation of Screening Pooled Blood	10/89	56248	20000	Ongoing
El Salvador	Needs Assessment	04/88	4110	0	Complete
	Program Development	09/88	3000	0	Ongoing
	International AIDS Conference Participation	06/88	6270	0	Complete
	Laboratory Technical Assistance and Training	07/88	10960	35550	Ongoing
	Sentinel Surveillance Technical Assistance	07/88	9212	0	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
El Salvador	Intervention Technical Assistance	07/88	3500	0	Complete
	Epidemiology/ Interventions with STD Clinic Patients	10/89	0	62450	Planned
	Establishment of STD Clinic	06/90	70712	0	Planned
Guatemala	Needs Assessment	04/88	4110	0	Complete
	International AIDS Conference Participation	06/88	9253	0	Complete
	Laboratory Technical Assistance	04/88	6850	0	Complete
	Sentinel Surveillance Technical Assistance	07/88	6850	0	Complete
	Intervention Technical Assistance	08/88	3000	0	Complete
	STD Technical Assistance	05/90	10000	0	Planned
Haiti	International AIDS Conference Participation	06/88	11994	0	Complete
	Needs Assessment	11/88	14200	0	Ongoing
	Technical Assistance	10/89	0	205000	Ongoing

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Haiti	Resident Country Coordinator	10/89	0	155750	Ongoing
	IMPACT: Intervention with High-Risk Groups	05/89	83295	153340	Ongoing
	CDS: Intervention with High-Risk Groups	06/89	61188	0	Ongoing
	AIDS Modeling Project	10/89	56200	40000	Ongoing
	STD Clinic AIDS Education	01/90	49230	0	Planned
	Sentinel Surveillance and Counseling	08/90	0	205000	Planned
	Condom Storage	04/90	0	10000	Planned
Honduras	Needs Assessment	01/89	7682	0	Complete
	International AIDS Conference	06/89	2811	0	Complete
Jamaica	Needs Assessment/ Project Development	01/88	3387	15890	Complete
	International AIDS Conference Participation	06/88	7984	0	Complete
	STD Equipment	11/88	21375	0	Complete
Mexico	Needs Assessment/ Project Development	01/88	10535	0	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Mexico	International AIDS Conference Participation	06/88	21732	0	Complete
	Intervention with High Risk Groups	11/88	114165	0	Ongoing
	Development of Disease Surveillance Survey	06/88	61990	0	Complete
	Direct Treatment and Prevention Costs	07/88	136500	0	Ongoing
	Pharmacies and AIDS Prevention	05/90	68200	0	Planned
	Radio Soap Opera	08/90	68062	0	Planned
Peru	Needs Assessment/ Project Development	04/88	17370	1700	Complete
	Laboratory Technical Assistance	04/88	11096	4000	Ongoing
	International AIDS Conference Participation	06/88	9449	0	Complete
	Paris Conference Participation	12/89	0	2000	Complete
	Intervention with High-Risk Group	10/89	0	9855	Complete
	Blood/Finance Technical Assistance	01/89	7895	29201	Complete
	Technical Assistance for Sexual Transmission	12/88	0	3244	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Asia/ Near East					
Bangladesh	International AIDS Conference Participation	06/88	10806	0	Complete
Egypt	International AIDS Conference Participation	06/88	7756	0	Complete
India	International AIDS Conference Participation	06/88	9340	0	Complete
	Needs Assessment	01/89	6126	0	Complete
Indonesia	Needs Assessment	02/88	13700	0	Complete
	International AIDS Conference Participation	06/88	12672	0	Complete
Jordan	International AIDS Conference Participation	06/88	9505	0	Complete
Morocco	International AIDS Conference Participation	06/88	8867	0	Complete
	Needs Assessment	07/88	7700	0	Complete
	Technical Assistance in Surveillance	07/88	6000	0	Complete
	KAP Study and Education of Women	01/90	56180	0	Planned
Oman	International AIDS Conference Participation	06/89	4055	0	Complete
Pakistan	Needs Assessment	01/89	8819	0	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Philippines	Needs Assessment/ Project Development	02/88	41100	0	Complete
	International AIDS Conference Participation	06/88	5861	5851	Complete
	Program Support	07/88	5000	120000	Ongoing
	Intervention with High-Risk Groups in Manila	01/89	0	250495	Ongoing
	Intervention in Olongapo/ Angeles City	11/89	168834	87335	Ongoing
	STD Clinics Upgrade	05/89	0	193390	Ongoing
	Condom Distribution Technical Assitance	09/89	0	41844	Ongoing
	Pooled Blood Screening	08/89	0	61650	Ongoing
	Blood Screening: Needs Assessment & Surveillance	01/90	102000	121100	Ongoing
	Protection of Blood Supply	07/89	0	124670	Ongoing
South Pacific	International AIDS Conference Participation	06/88	17067	0	Complete
	Needs Assessment	10/88	17581	0	Complete
	Finance Technical Assistance	04/90	11000	0	Planned

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
Sri Lanka	National Plan Review	02/88	1096	0	Complete
	International AIDS Conference Participation	06/88	10218	0	Complete
	FPA: AIDS Education Program	05/89	29025	0	Ongoing
Thailand	Needs Assessment/ Program Development	02/88	35471	0	Complete
	International AIDS Conference Participation	06/88	9418	2504	Complete
	Intervention with High Risk Groups	06/88	17810	0	Complete
	BMA: Intervention with Drug Abusers	01/89	122815	0	Ongoing
	Duang Prateep Foundation: Intervention with Drug Abusers	08/89	70200	0	Ongoing
	PCD: Taxi-Based Intervention	08/89	70200	0	Ongoing
Tunisia	International AIDS Conference Participation	06/88	7526	0	Complete
	Needs Assessment	07/88	2329	0	Complete
Yemen	International AIDS Conference Participation	06/89	5582	0	Complete

AIDSTECH ACTIVITIES
BY TYPE OF PROJECT AND COUNTRY

REGION/ COUNTRY	PROJECT	INITIATION DATE	CORE FUNDING	ADD-ON FUNDING	STATUS
North America					
USA	Population Council: Modeling Project	05/88	133712	100000	Complete
USA	Futures Group: Modeling	10/88	54800	0	Ongoing
USA	STD Annotated Bibliography	07/88	19790	0	Complete

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Appendix 4

SUMMARY OF TRAINING WORKSHOPS FOR HEALTH CARE PROFESSIONALS

October 1989 - March 1990

COUNTRY	DATE	TOPICS	TRAINERS	PARTICIPANTS
Burundi	Nov 89	ELISA test Western blot test	Rich Francis	21 Laboratory Technicians
Ecuador	Jan 90	Training on HIV confirmatory testing procedures	Boshell Archbold	9 Laboratory Managers & Technicians

Appendix 5

APPENDIX 5

AID/DPE-5972-A-00-7057-00

Expenditures By Type

1 October 1989 - 31 March 1990

Salaries and Fringe Benefits	$639,023
Service Centers	13,955
Consultant and Professional Fees	47,777
Contracted Labor	84,822
Travel - Domestic	55,163
Travel - Foreign	225,314
Supplies - Office	10,819
Supplies - Medical	79,559
Office Rent, Telephone, Postage	20,983
Printing and Publications	22,476
Office Equipment, Medical Equipment, Equipment Rental, Maintenance, Depreciation	26,134
Freight	12,943
Subagreements	600,085
Dues and Registration Fees	40,505
Other Purchased Services	15,416
Other Expenses, Keypunching and Bank Services Charge	17,267
General and Administrative Costs	525,271
TOTAL:	**$2,437,512**

AIDSTECH EXPENDITURES BY ACTIVITY AND COUNTRY
1 October 1989 - 31 March 1990

ACTIVITY/COUNTRY	CORE EXPENSES	ADD-ON EXPENSES	TOTAL
CORE SUPPORT:			
Management/Support Services	234,641		234,641
AIDS Report	2,102		2,102
Washington Office	78,528		78,528
Conferences	61,646		61,646
International AIDS Conference	57,330		57,330
Mini/STD Conferences	128,943		128,943
Graphics	12,345		12,345
Other	33,971		33,971
	609,506		609,506
PROGRAM DEVELOPMENT:			
Sexual Transmission	46,934		46,934
Blood	63,911		63,911
Surveillance	33,350		33,350
HCF	24,640		24,640
Operations Research	2,282		2,282
Information Dissemination	64,537		64,537
Research Fellows	2,974		2,974
	238,628		238,628
ASIA/NEAR EAST EXPENDITURES:			
Philippines	0	235,673	235,673
Sri Lanka	8,372	0	8,372
Thailand	73,765	0	73,765
	82,137	235,673	317,810
AFRICA EXPENDITURES:			
Regional	509	1,084	1,593
Burkina Faso	96,597	23,603	120,200
Burundi	7,476	44,937	52,413
Cameroon	20,869	90,750	111,619
Ghana	55,211	7,288	62,499
Kenya	71,362	51,813	123,175
Mali	0	14,786	14,786
Nigeria	11,887	0	11,887
Senegal	0	3,043	3,043
Tanzania	11,481	1,296	12,777
Zaire	37,352	8,773	46,125
Zimbabwe	143	23,264	23,407
	312,887	270,637	583,524

ACTIVITY/COUNTRY	CORE EXPENSES	ADD-ON EXPENSES	TOTAL
LATIN AMERICA/ CARIBBEAN EXPENDITURES:			
Bolivia	0	75	75
Brazil	14,478	24,275	38,753
Costa Rica	14,086	0	14,086
Dominican Republic	25,067	116,162	141,229
Eastern Caribbean	32,701	189,217	221,918
Ecuador	56,794	32,237	89,031
El Salvador	0	3,399	3,399
Haiti	40,197	77,389	117,586
Mexico	23,253	0	23,253
Peru	6,882	17,100	23,982
	213,458	459,854	673,312
International Modelling Projects	14,732	0	14,732
TOTAL	**$1,471,348**	**$966,164**	**$2,437,512**