4 － 4　HIV検査　プロフィシエンシー研修概要

National Reference Center for HIV Testing
Research Institute for Tropical Medicine
Alabang, Muntinlupa, Metro Manila, Philippines 1770
Tel. Nos. (632) 842-28-28 • 842-20-79 • 842-21-94 • Fax No. 842-22-45

TRAINING COURSE ON HIV TESTING PROFICIENCY

GENERAL OBJECTIVE : To upgrade the knowledge and skills of laboratory personnel in the performance of HIV testing for reliable and accurate HIV test results.

SPECIFIC OBJECTIVES : At the end of the training course, the participants will be able to:

1. Discuss the nature of HIV infection with regards to the following aspects:
   1.1 The nature of the virus
   1.2 Pathogenesis
   1.3 Epidemiology
   1.4 The Clinical picture
   1.5 Counselling
   1.6 Reporting of results
2. Discuss the principles of the laboratory methods for the diagnosis of HIV infection.
3. Demonstrate adequate knowledge and skills in performing and evaluating screening tests for HIV.
4. Demonstrate adequate knowledge in the principles and method of confirmatory or supplemental tests for HIV.
5. Manage minor trouble shooting in HIV testing.
6. Establish and implement laboratory safety and precautions.
7. Discuss and practice the social, ethical and medico-legal aspect of HIV testing.

CONTENTS:

A. Orientation:
   1. Registration
   2. Schedules
   3. Purpose of the training course

B. Pathogenesis, Epidemiology and Clinical Picture of HIV Infection

C. Laboratory Methods for Diagnosis of HIV:
   1. Principle
   2. Technical procedures:
      2.1 Screening tests (EIA, Simple and Rapid Test)
      2.2 Supplemental tests (WB, IF, Lineimmunoassay)
   3. Reporting of Results

D. Laboratory Safety and Precautions

E. Counselling

F. Social, Ethical and Medico-Legal Aspect

G. Troubleshooting

H. Technical Standards/Quality Control in HIV Testing.

Anex 1

TRAINING COURSE ON HIV TESTING PROFICIENCY

November 8 - 12, 1993

COURSE SCHEDULE

Day 1, Nov. 8, 1993, Monday

8:00 - 8:30	Registration	
8:30 - 9:15	Opening Ceremonies Opening Remarks	O.T. Monzon, M.D. Consultant on AIDS AIDS Research Group
	Review of objectives and schedule	F.J.E. Paladin, M.S.
9:15 - 9:45	Evaluation: Pre Training Course	
9:45 -10:00	Coffee Break	
10:00 -10:45	Pathogenesis and epidemiology of HIV infection/AIDS	O.T. Monzon, M.D.
10:45 -11:45	Principles and Methods: HIV Antibody Screening Tests	F.J.E. Paladin, M.S.
11:45 -12:00	Laboratory Safety & Precautions in HIV Testing	F.J.E. Paladin, M.S.
12:00 - 1:00	Lunch Break	
1:00 - 5:00	Lab. 1 Equipment handling Troubleshooting Particle Agglutination (PA) Test	

Day 2, Nov. 9, 1993, Tuesday

8:00 - 9:00	Principles and Methods: HIV Supplemental Tests Reporting of Results	F.J.E. Paladin M.S.
9:00 - 9:15	Coffee Break	
9:15 -12:00	Lab.2 Continue PA Enzymeimmunoassay (EIA)	
12:00 - 1:00	Lunch Break	
1:00 - 5:00	Lab.3 EIA	

Day 3, Nov. 10, 1993, Wednesday

8:00 -12:00	Lab. 4 EIA	
12:00 - 1:00	Lunch Break	
1:00 - 3:00	Lab. 5 Continue EIA	
3:00 - 3:15	Coffee Break	
3:15 - 4:00	Clinical Aspect of HIV infection/AIDS	R.T. Santana-Arciaga, M.D.
4:00 - 4:30	Counselling	R.T. Santana-Arciaga, M.D.

Day 4, Nov. 11, 1993, Thursday

8:00 - 8:30	Short Quiz	
8:30 - 9:00	Social, Ethical & Medico-legal Issues in AIDS	O.T. Monzon, M.D.
9:00 -12:00	Lab. 6 Practical Exam	
12:00 - 1:00	Lunch Break	
1:00 - 3:30	Lab. 7 Continue Practical Exam	
3:30 - 5:00	Lab. 8 Demonstration: Rapid Test/ Western Blot/Lineimmunoassay	

Day 5, Nov. 12, 1993, Friday

8:00 - 8:30	Post Workshop Evaluation	
8:30 -12:00	Lab. 9 Continue Western Blot/ Lineimmunoassay Demo:Immunofluorescence Test	
12:00 - 1:00	Lunch Break	
1:00 - 2:00	Rules and Regulations for Accreditation in HIV Testing Technical Standards for HIV Testing	B. Erese, M.D. Chief, DLRD-BRL
2:00 - 3:00	Role Playing	
3:00 - 3:30	Discussion	
3:30 - 5:00	Closing Ceremonies, Closing Remarks	N. Serra Chairman, Technology Transfer and Training Committee

Department of Health
National Reference Center for HIV Testing
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TRAINING COURSE ON HIV TESTING PROFICIENCY

November 8 - 12, 1993

LECTURERS

1. Rosemarie T. Santana-Arciaga, M.D.	Head, RITM AIDS Research Group
2. Ofelia T. Monzon, M.D.	Consultant, RITM AIDS Research Group
3. Fem Julia E. Paladin, M.S.	Head, Virology Section

TRAINORS

1. Fem Julia E. Paladin	Head, Virology Section, RITM
2. Josephine G. Laygo	Science Research Specialist I HIV/Virology Section, RITM
3. Raquel G. Gabat	Science Research Specialist I HIV/Virology Section, RITM
4. Jingky P. Lozano	Research Analyst HIV/ Virology Section, RITM
5. Elmo G. Laranang	Research Assistant HIV/Virology Section, RITM

TRAINING COURSE ON HIV TESTING PROFICIENCY

LIST OF PARTICIPANTS

NOVEMBER 8-12, 1993

	Name	Laboratory/Clinic
1.	Normita V. Antonio	Makati Doctors Clinical Laboratory 2180 Pasong Tamo, Makati 87-13-77
2.	Cristina T. Bartolome	Benguet Clinical Lab. & Blood Bank 42 Military Cut-off Road, Baguio City 442-20-27; 442-20-16; 442-22-15
3.	Lilia C. Bermejo	Ospital Ng Maynila Quirino Ave., Manila 50-60-69
4.	Naomi Dumdum-Cortes	H.W. Miller Sanitarium and Hospital 400 Tres de Abril St., Cebu City 7-58-33
5.	Clarizza H. Cruz	Nuesa's Medical Dental Clinic Rm. 311 Suite 5 Don Santiago Bldg., Taft Avenue, Manila 536-09-01; 59-60-21 loc. 23
6.	Ma. Cristina H. Cruz	St. Martin Polyclinic 1344 Grd. Flr., Don Santiago Bldg., Taft Avenue, Manila 58-52-79; 536-0902
7.	Gina T. Cuchapin	Mother Seaton Blood Bank 1577 Tayabas St., Sta. Cruz, Manila 20-95-38
8.	Marvin de Guia	St. Lukes Medical Center Cathedral Heights, 279 E. Rodriguez Ave., 1102, Q.C. 722-09-01 to 20; 722-48-11 to 24; 78-09-70 to 89
9.	Josefina A. Discutido	Semirara Coal Corporation Hospital Semirara Island, Caluya, Antique 31-8001 to 10

10.	Maria Cecilia C. Lagmay	Intercon Diagnostic Laboratory, Inc BPI Bldg., Plaza L. Ruiz, Binondo, Manila 47-72-56; 47-72-57
11.	Serafina N. Legaspi	Jaranilla Clinical Laboratory 67 Huervana St., La Paz, Iloilo Cit 7-4632
12.	Rosemarie C. Lopez	CDM Specialists, Inc. 18 East Ave., Cor., V. Luna, Diliman, Quezon City 92-17-48
13.	Rosalinda M. Naringahon	Lucas and Associates Medical Clinic Unlad House Bldg., Leon Guinto, Malate, Manila 58-74-20
14.	Cherry H. Nocete	St. Elizabeth Hospital Clinic Lab. National Highway, Gen. Santos City 3162
15.	Natividad S. Pajo	Mercy Community Clinic Kamague, Iligan City 2-07-84; 2-17-84
16.	Marissa P. Perea	St. Dominic Medical Center Talaba, Bacoor, Cavite 435-25-19
17.	Recy P. Santos	The Family Clinic, Inc. 1474 Maria Clara, Sampaloc, Manila 731-29-01 to 13

Annex L

Department of Health
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February 18, 1994

Dear

The National Reference Center for HIV Testing in collaboration with the New Tropical Medicine Foundation, Inc., is pleased to announce the following training schedules on Human Immunodeficiency Virus (HIV) Testing Proficiency for Medical Technologists for the year 1994 to be held at the Training Center of the Research Institute for Tropical Medicine, Alabang, Muntinlupa, Metro Manila.

In view of the increasing number of interested participants, four (4) workshops are scheduled this year. Participation will be on a first come first serve basis with careful consideration of the interest of individual laboratories as well as that of the National HIV/AIDS Prevention and Control Program . A training fee of P5,500.00 shall be collected to subsidize at least half of the cost of testing kits and supplies to be used for the hands on training.

Attached is a brief description of the course, operating details and registration form. Please confirm your participation by indicating your preferred schedule and submitting the requirements on or before the set deadline. The training schedules and deadline for the submission of requirements are as follows :

Date	Deadline
1. May 16-20 , 1994	March 18, 1994
2. May 23-27, 1994	March 30, 1994
3. September 5-9, 1994	July 31, 1994
4. November 7-11, 1994	September 23, 1994

We look forward to your prompt response.

Very truly yours,

Fem Julia E. Paladin
Course Director

Noted :

Mari Rose Aplasca, M.D.
OIC, AIDS Research Group

National Reference Center for HIV Testing
Research Institute for Tropical Medicine

TRAINING COURSE ON HIV TESTING PROFICIENCY

RN _____

REGISTRATION FORM

Name _____ Age _____ Sex _____

Name of Laboratory/Blood Bank _____

Address _____ Tel. No. _____

License No. _____ Classification : _____

HIV Accreditation No. (if applicable) _____

Name of Pathologist _____ M.D.

Purpose of HIV Testing _____

Nature of patients/specimens in whom HIV testing will be performed: Write approximate Number/month.

		No.			No.
☐	Blood Donors/Units	_____	☐	STD patients	_____
☐	Overseas Worker	_____	☐	Others (specify, _____)	

HIV testing kit in-use/to be used: (State Manufacturer)

ELISA

_____
_____
_____

AGGLUTINATION TEST

_____

RAPID TEST

_____

Preferred Schedule: _____

Note : A COMPLETELY FILLED-UP Form is required for appropriate screening of participants.

----- DO NOT FILL BELOW THIS LINE - FOR RITM USE ONLY ------

DOCUMENTS SUBMITTED :		Date Received
☐	1. Valid PRC License/ID (xerox copy).	_____
☐	2. Certificate of Employment (State Duration)	_____
☐	3. Letter of Endorsement from Pathologist/ Medical Director	_____
☐	4. Valid License to operate a Clinical laboratory and/or Blood Bank (xerox copy)	_____
☐	5. Training Fee (check # _____) (OR # _____)	_____
☐	6. Request for accommodation (Y/N).	

Received by : _____ Acknowledgement : _____

Tentative Schedule: _____ Status : _____

METHODOLOGY:

A. Lecture/Discussions

B. Workshop Hands-On

C. Laboratory Practices/Demonstration

D. Case Discussion/Role Playing

E. Theoretical/Practical Examination

OPERATING DETAILS:

Participants - Medical Technologists of Clinical Laboratories and Blood Banks

No. of Participants - 16

Venue - RITM, Training Center

Date/Deadline -

Date	Deadline for submission
May 16-20, 1994	March 18, 1994
May 23-27, 1994	March 30, 1994
September 5-9, 1994	July 31, 1994
November 7-11, 1994	September 23, 1994

Training Fee - ₱5,500.00 in cash, check or money order made payable to the New Tropical Medicine Foundation, Inc. inclusive of training materials, snacks and other incidental expenses.

Housing - Dormitory facilities are available for a limited number of participants on a first come-first serve basis. Request should be made on the form provided.

Requirements - To be submitted together with the Registration Form:
1) Valid PRC license/I.D. (xerox copy)
2) Certificate of Employment
3) Letter of Endorsement from Pathologist or Medical Director
4) License to operate a Clinical Laboratory and/or Blood Bank (xerox copy)
- Training Fee of P5,500.00 to be remitted upon notice of training schedule.
- Laboratory gown

Evaluation - 1) Pre-training course evaluation
2) Short Quizzes/Unknown panel
3) Post-training course evaluation

A Certificate of Proficiency on HIV Testing will be given at the end of the Workshop to successful participants.

LECTURERS/TRAINORS: RITM AIDS Research Group

Anex 3

THIRD COUNTRY TRAINING PROGRAMME
1993
WORKSHOP MODULE ON HIV TESTING
WEEK 1

DATE	9:00-9:30	9:30-10:00	10:15-11:00	11:00-12:00	1:30 - 4:30	
Mon Day 1 Sept. 20	Registration & Opening Ceremonies		Acquiantance & Administrative matters		Introduction and Course Orientation Dr. Quiambao	Presentation of Country Report Dr. Quiambao/ Staff
Tues Day 2 Sept. 21	Lecture 1 Epidemiology of HIV Infection Dr. Monzon		Lecture 2 Biology of HIV Dr. Kurimura	Continuation: Presentation of Country Report		
Wed Day 3 Sept. 22	Lecture 3 HIV Screening Tests: Principles and Methods Ms. Paladin		Lecture 4 Laboratory Safety & Pre-cautions in HIV Testing Ms. Paladin	Lecture 5 Clinical picture & management of HIV infection Dr. Santana	Laboratory 1 Simple and Rapid HIV screening Tests	
Thur Day 4 Sept. 23	Lecture 6 HIV Supplemental Tests: Principles and Methods Dr. Kurimura		Laboratory 2 HIV Screening Test: Enzymeimmunoassay (plate and bead format)			
Fri Day 5 Sept. 24	Lecture 7 Cost-effective approaches to HIV testing Dr. Monzon	Lecture 8 Reporting, counselling and other issues Dr. Santana	Laboratory 3 HIV Supplemental Tests: Western Blot and Lineimmunoassay			

10:00 - 10:15 COFFEE BREAK 12:00 - 1:30 LUNCH BREAK 3:00 -3:15 COFFEE BREAK

Anex 1.

TA 554 2/

THIRD COUNTRY TRAINING PROGRAMME
1993
WORKSHOP MODULE ON ARI VIROLOGY
WEEK 2

DATE	9:00 - 9:30	9:30 - 10:00	10:15 - 11:00	11:00 - 12:00	1:30 - 4:30	
Mon Day 1 Sept. 27	Lecture 9 HIV isolation & PCR: Principles and application the diagnosis of HIV Dr. Kurimura		Laboratory 4 HIV Supplemental Test (Continued): Immunofluorescence test			Discussion & post-workshop evaluation
Tues Day 2 Sept. 28	Introduction to Acute Respiratory Infections Dr. Gatchalian	Basic Virology Dr. Suzuki	Collection, handling, transport and processing of specimens Ms. Merin	Laboratory diagnosis of ARI by cell culture Ms. Paladin	1. Demonstration of cell lines & cell passage 2. Process./inoculation of specimens	Coat strips for EIA antigen & antibody detection
Wed Day 3 Sept. 29	Lecture 5 Respiratory Viruses (Ortho/paramyxo viruses, Adeno) Dr. Suzuki		Lecture 6 Other viral etiologies of ARI (CMV, Entero, etc.) Dr. Suzuki	Laboratory 3 Demonstration of Cytopathic effects	Laboratory 4 1. Observation of inoculated culture 2. Hemadsorption Test	Continuation of Lab. 2 Post-coating of EIA strips
Thur Day 4 Sept. 30	Lecture 7 Rapid Virus Diagnosis: Antigen detection methods Ms. Paladin		Laboratory 5 Processing of Immunofluorescence staining of specimens for: 1. Rapid Virus Diagnosis 2. Identification of isolates			
Fri Day 5 Oct. 1	Lecture 8 Serodiagnosis of Viral Infections Ms. Paladin		Lecture 9 EIA serology Ms. Merin	Laboratory 6 Continuation of Immunofluorescence staining		

10:00 - 10:15 COFFEE BREAK 12:00 - 1:30 LUNCH BREAK 3:00 -3:15 COFFEE BREAK

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THIRD COUNTRY TRAINING PROGRAMME
1993
WORKSHOP MODULE ON ARI VIROLOGY
WEEK 3

DATE	9:00 - 9:30	9:30 - 10:00	10:15 - 11:00	11:00 - 12:00	1:30 - 5:00
Mon Day 6 Oct. 4	Lecture 10 Chlamydia Dr. Suzuki		Laboratory 8 EIA antigen detection		
Tues Day 7 Oct. 5	Laboratory 9 EIA antibody test				Laboratory 10 Processing and inoculation of specimens for Chlamydia
Wed Day 8 Oct. 6	Lecture 11 Application of PCR and DNA hybridization in the diagnosis of ARI Ms. Merin		Laboratory 11 Measles Antibody Testing		Laboratory 12 Chlamydia Direct Tests: Simple Rapid Test Immunofluorescence Test
Thur Day 9 Oct. 7	Laboratory 13 Identification of Chlamydia isolates: Immunofluorescence staining Iodine staining				Discussion and Post-workshop evaluation
Fri Day 10 Oct. 8	F R E E				

10:00 - 10:15 COFFEE BREAK 12:00 - 1:30 LUNCH BREAK 3:00 - 3:15 COFFEE BREAK

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THIRD COUNTRY TRAINING PROGRAMME
1993
WORKSHOP MODULE ON ARI BACTERIOLOGY
WEEK 4

	9:00 - 10:00	10:15 : 11:00	11:00 - 12:00	1:30 - 3:00	3:00 - 5:00
Mon Day 1 Oct. 11	Lecture 1 Specimen Collection and Processing Ms. Bsparar	Lecture 2 S. pneumoniae and other Streptococcus Dr. Capeding	Lecture 3 H. influenzae and B. catarrhalis Dr. Catchalian	Laboratory 1 Processing of Specimen # 1 NPA a) Suitability of specimen for culture b) Culture inoculation	Laboratory 2 Inoculation of blood samples # 2, 3 & 4
Tues Day 2 Oct. 12	Lecture 4 Staphylococcus aureus and Coagulase neg. staph Ms. Reclusado	Lecture 5 Antibiotic Susceptibility Test Ms. Sombrero	Laboratory 3 Work up of Specimen # 1, 2, 3 and 4		
Wed Day 3 Oct. 13	Laboratory 4 Identification of Specimen 2, 3, & 4	Laboratory 5 Antibiotic Susceptibility Test a) Disc diffusion b) Agar dilution method			
Thurs Day 4 Oct. 14	Laboratory 6 Reading of Antibiotic Sensitivity Test	Laboratory 7 a) Serotyping of S. pneumoniae b) Serotyping of H. influenzae			Laboratory 8 Inoculation of Specimen No. 5, 6 & 7
Fri Day 5 Oct. 15	Lecture 6 Mycoplasma and Legionella Japanese Consultant	Lecture 7 C. diphtheria Dr. Macalalad	Lecture 8 B. pertussis Ms. Navarro	Laboratory 9 Work up of Specimen No. 5	

10:00 - 10:15 COFFEE BREAK 12:00 - 1:30 LUNCH BREAK 3:00 - 3:15 COFFEE BREAK

THIRD COUNTRY TRAINING PROGRAMME
1993
WORKSHOP MODULE ON ARI BACTERIOLOGY
WEEK 5

DATE	9:00 - 10:00	10:15 : 11:00	11:00 - 12:00	1:30 - 3:00	3:00 - 5:00
Mon Day 6 Oct. 18	Lecture 9 Rapid techniques for the laboratory Dx of ARI Japanese Consultant	Laboratory 10 Work up and identification of Specimen 6, 7 and 8			
Tues Day 7 Oct. 19	Lecture 11 Pneumocystis carinii Dr. R. Aplasca	Laboratory 11 CIE		Laboratory 12 Urine latex agglutination test	
Wed Day 8 Oct. 20	Laboratory 13 Antibody detection of S. pneumoniae, Hi and B. catarrhalis by EIA				Laboratory 14 Diagnosis of P. carinii
Thurs Day 9 Oct. 21	General Discussion	Course Evaluation		Free	Closing Ceremonies
Fri Day 10 Oct. 22	D E P A R T U R E				

10:00 - 10:15 COFFEE BREAK 12:00 - 1:30 LUNCH BREAK 3:00 - 3:15 COFFEE BREAK

TA 554

5．血液銀行システム評価レポート

PROJECT TO EVALUATE THE SAFETY OF THE PHILIPPINE BLOOD BANKING SYSTEM (28 September 1993 - 15 January 1994)

Final Report

New Tropical Medicine Foundation
With the assistance of
the US Agency for International Development

PROJECT TO EVALUATE THE SAFETY OF THE PHILIPPINE BLOOD BANKING SYSTEM

(28 September 1993 - 15 January 1994)

Final Report

Study Team Members:
Asuncion A. Paraan, MD, FPSP
(Team Leader)
Elvira SN. Dayrit, MD, MSc MCH
Josefina N. Natividad, ScD
Honorata G. Baylon, MD, FPCP, FPSHBT

This publication was made possible through support provided by the Office of Population, Health and Nutrition, U.S. Agency for International Development/ Manila under the terms of Grant No. 492-0000-G-SS-3114-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the U.S. Agency for International Development.

FOREWORD

Transmission of HIV through blood transfusion has relatively been much, much lower than through the other routes. However, the scandals in Europe, especially France and Germany, underscore the political significance of this mode of transmission.

This study was conducted in order to gather more solid information on the practices and activities in blood banking and blood transfusion in the Philippines, and carefully assess whether there is real cause for concern about the country's blood supply.

The study was conducted in 4 months and intensive work was given to the design and methodology. The findings of the study are clear and should not only trigger concern but alarm: the country's blood transfusion system is unsafe, inadequate and wasteful.

As the head of this project's study team, I wish to extend this call to everyone: let us work together to improve the safety of our country's blood supply. There is no time to engage in turf protection or business concerns. This is one activity where individuals and small groups can do very little. We need each other. Any one of us, or any member of our family, may need blood in the future. In such an emergency, who knows what can happen?

To really seal this commitment, go and donate blood also. Only then will you feel the humanity of man and the real kinship of being a Filipino. The spirit of the blood compact is not over. It will go on as long as there is a single person teethering on the brink of death needing the precious blood of life.

Asuncion A. Paraan, MD, FPSP
Project Team Leader

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

ACRONYMS

AABB	- American Association of Blood Banks
AIDS	- Acquired Immune Deficiency Syndrome
BRL	- Bureau of Research and Laboratories
CAR	- Cordillera Administrative Region
DOH	- Department of Health
FETP	- Field Epidemiology Training Program
FEU-NRMF	- Far Eastern University Nicanor Reyes Memorial Foundation
FSB	- Free-standing blood bank
GH	- Government Hospital blood bank
HIV	- Human immunodeficiency virus
IEC	- Information, education and communication
JFMH	- Jose Fabella Memorial Hospital
LQAS	- Lot Quality Assurance Sampling
NCR	- National Capital Region
NKI	- National Kidney Institute
NTMF	- New Tropical Medicine Foundation
PAMET	- Philippine Association of Medical Technologists
PBCC	- Philippine Blood Coordinating Council
PH	- Private hospital blood bank
PNRC	- Philippine National Red Cross
PSHBT	- Philippine Society of Hematology and Blood Transfusion
RBC	- red blood cell
RITM	- Research Institute for Tropical Medicine
TWG	- technical working group
USAID	- United States Agency for International Development
WHO	- World Health Organization

EXECUTIVE SUMMARY

The study was done to assess the safety of the blood banking system in the Philippines. It had the following specific objectives: (1) to document current practices of blood banks in relation to donor-related activities, blood collection, screening and processing, and blood distribution and use; (2) to make an inventory of blood banking facilities and compare these with government and World Health Organization (WHO) standards; and (3) to identify unsafe practices and reasons for their perpetuation. To achieve the objectives, the following were done:

1. **Field survey of blood banks in different parts of the country:** This consisted of: (a) interview of heads/ operators/ or owners of banks, the medical/ paramedical staff and donors; (b) observation of blood banking practices; and (c) review of available records for September 1993. A total of 136 blood banks were visited - which is 55% of all registered blood banks (269) but is 98% of the target sample, covering 82% of the Philippine National Red Cross (PNRC) blood centers; 88% of free-standing/ commercial blood banks; and 38% of hospital blood banks. Aside from blood banks, 11 free-standing outlets and 6 hospital-based outlets were also visited (63% of outlets).

2. **Laboratory retesting of blood samples:** Using the Lot Quality Assurance Sampling (LQAS) methodology, 426 blood samples were retested for syphilis, malaria, hepatitis B and HIV.

Before the field survey, an overview document was prepared to provide the national perspective on the developments and issues and the different sectors actively involved in the blood banking system. The overview was prepared after a review of existing documents such as previous legislations, memorandum circulars and department/bureau orders and statistical reports; and interview of key informants.

Two consultative workshops were called, the first one to discuss the study plans and protocols; the second to discuss the preliminary findings and issues for action. The preliminary findings were also presented on separate occasions to the Management Committee of the Department of Health (DOH); to selected Governors of the PNRC; and to Senator Freddie N. Webb Chairman of the Senate Committee on Health, and his technical staff and one staff of Sen. Orlando Mercado.

The major findings of the Overview include the following: as much as 33% of the country's annual projected need is not met by current blood sources; about 64% of the country's blood supply comes from free-standing/ commercial blood banks, which, in turn, obtains blood by paying donors; paid donors are three times more likely to test positive for any of the four blood transmissible diseases routinely screened for as mandated by law, namely, malaria, syphilis, hepatitis B and HIV. The Overview document also noted gaps in national program planning and management and monitoring of blood banks. Specifically, the study noted that only indicative plans exist, underscoring an urgent need to clarify targets in terms of the specific number of blood units to be generated or the number of

Types of blood donors

Table 6 shows the types of blood donors in each category of blood bank. Almost all of the blood donors in commercial blood banks (99.6%) and most of those in private hospitals (77.0%) are paid donors, that is, the donors receive remuneration for donating blood; while the PNRC donors are mostly voluntary. About 25% of blood donors in government hospitals are also paid for their blood donation.

Table 6: Types of Donors by Category of Blood Bank
Blood Bank Annual Report, BRL 1992

Type of Blood Bank	Paid Donor	Voluntary Donor	Total
Free-standing	258,377 (99.6%)	1,059 (0.4%)	259,436
PNRC	175 (0.2%)	104,826 (99.8%)	105,001
Government Hosp	13,948 (25.2%)	41,427 (74.8%)	55,375
Private Hosp	22,927 (77.0%)	6,844 (23.0%)	29,792

Establishment and Creation of Blood Banks

Table 7 shows the number of registered banks from 1986 to 1992. This table shows that there was no additional registered free-standing blood bank since 1986 while there is about 23-25% increase in the number of hospital-based and PNRC-run blood banks.

Table 7: Number of Registered Blood Banks
Blood Bank Annual Reports, BRL 1986 and 1992

Type of Blood Bank	1986	1992	Percentage Increase
Free-standing or commercial	24	24	0
Hospital-based	128	155 (Govt = 72 Priv = 83)	23%
PNRC	36	45	25%
Total	188	224	19%

In 1970, BRL records list 73 registered blood banks. This reflects a 157% increase from 1970 to 1986, which means that most of the existing blood banks were registered between 1970 - 1986, coinciding with the creation of the Licensure Section in 1971 and the more agressive enforcement of the law during those years.

Geographical Distribution of Registered Blood Banks

Table 8 shows the distribution of registered/licensed blood banks in different regions. This data shows that 18.7% of the total number of blood banks are located in the National Capital Region (NCR): 48% of the free-standing banks, 16% of government hospital banks, and 20% of private hospital banks.

Table 8: Regional Distribution of Registered Blood Banks by General Category, Blood Bank Annual Report, BRL 1992

Region	Free-Standing	Govt hosp based	Priv hosp based	PNRC	Total
CAR	2	6	3	3	14
I	0	7	7	2	16
II	0	10	4	1	15
III	1	7	9	6	23
IV	1	13	10	2	26
V	0	7	6	3	16
VI	4	11	8	5	28
VII	2	3	11	2	18
VIII	0	5	3	2	10
IX	0	2	3	3	8
X	0	6	4	7	17
XI	1	3	5	5	14
XII	2	3	7	2	14
NCR	12	16	19	2	50
TOTAL	25	99	99	45	269

Inter-island distribution shows that there is a concentration of blood banks in Luzon (160 banks or 60%). There are only about 56 banks (21%) in the Visayas and another 53 (20%) in Mindanao.

Blood Screening

Of 600,377 donors examined, only 365,764 (61%) were bled. Of those rejected, 41,208 (17.6%) were rejected because of positivity in the laboratory tests, table 9.

Table 9: Donors Rejected Due to Positive Laboratory Tests
Blood Bank Annual Report, BRL 1992

Infection	Number positive	Percentage
Syphilis	6,657	16.2%
Malaria	432	1.1%
Hepatitis B	34,100	82.8%
HIV	19	0.05%
Total	41,208	

This puts the donor rejection rate due to positive laboratory tests at 6.3%. Many are rejected due to hepatitis B.

Of the 19 HIV positive donors, 17 (89.5%) were detected in NCR and 14 (73.7%) were detected in free-standing blood banks. This underscores the higher tendency for high risk donors to go to the commercial blood banks. All cases have been reported to the National AIDS Registry.

Of 449,583 units of blood collected and tested, 10,995 (2.4%) were found positive in the laboratory tests, table 10.

Table 10: Collected Blood Found Positive in Laboratory Tests
Blood Bank Annual Report, BRL 1992

Infection	Number positive	Percentage
Syphilis	1,883	17.1%
Malaria	260	2.4%
Hepatitis B	8,847	80.5%
HIV	5	0.04%
Total	10,995	

Use of Blood

Of 449,583 units of blood collected, 200,239 (44.5%) were transfused as whole blood, 79,328 (17.6%) as packed red blood cells, 12,528 (2.8%) as plasma, 26,612 (5.9%) as platelet concentrate, and 8,143 (1.8%) as cryoprecipitate.

A total of 14,550 units (3.2%) were not transfused due to the following reasons, table 11.

Table 11: Reasons for Not Transfusing Blood
Blood Bank Annual Report, BRL 1992

Reason for Not Transfusing Blood	Quantity Not Transfused	Percentage
Expired	9,038	62.1%
Contaminated or spoiled	375	2.6%
Positive laboratory test	3,512	24.1%
Others/ unknown	1,625	11.2%
Total	14,550	

Blood which has been found positive for hepatitis B, especially those from PNRC, are sent to the Research Institute for Tropical Medicine for research purposes.

Cost of Blood

As per BRL Order No. 9 s. 1991, the maximum rates for blood are as follows, table 12.

Table 12: Maximum Rates for Blood
BRL Order No. 9 s. 1991

Blood/ Blood Products		Cost per unit
Whole blood	-	₱400.00
Packed RBC	-	₱450.00
Fresh frozen plasma	-	₱300.00
Plasma (liquid or frozen)	-	₱250.00
Platelet-rich plasma	-	₱400.00
Platelet concentrate	-	₱500.00
Cryoprecipitate	-	₱600.00
Washed RBC	-	₱600.00
Leucocyte-poor RBC	-	₱600.00
Rh negative blood	-	₱ 50.00 additional

The above-stated rates include charges for ABO grouping, testing for hemoglobin content, and screening for malaria, syphilis, hepatitis B and HIV antibody.

Blood banks and hospitals are allowed to charge fees for actual costs of expenses for recruiting donors, collection, processing, storing and transportation of blood with reasonable allowance for spoilage and professional services rendered. Other charges may be collected upon approval of application for such from the BRL. This Order has resulted in a wide variation of costs among blood banks, table 13.

Table 13: Cost of Whole Blood, Packed RBC and Plasma Different Blood Banks in Metro Manila, 1993

Blood Bank	Cost per Unit (in pesos) Whole Blood	Packed RBC	Plasma
Avenue Blood Bank	400	450	-
Blue Cross Blood Bank	400	450	-
Doctor's Blood Center	400	450	-
Dr. German Castillo BB	400	450	-
FEU-NRMF Blood Bank	400	450	-
Hermoso Diagnostic Ctr/BB	400	450	-
Holy Redeemer Blood Bank	400	450	555
Mother Seaton Blood Bank	400	450	300
Our Lady of Fatima BB	400	450	550
People's Blood Bank	400	450	-
Philippine Blood Bank	400	450	-
Re-cor Blood Bank	400	450	-
Capitol Medical Center	760	760	-
Cardinal Santos Med. Ctr	350	500	369
Chinese General Hospital	400	450	-
De los Santos Med. Ctr	1,001	1,200	-
Makati Medical Center	1,620	1,670	1,705
Manila Doctors' Hospital	1,200	1,200	1,200
Manila Sanitarium and Hosp	400	425	-
Medical Center Manila	400	470	-
Metropolitan Hospital	830	850	-
Our Lady of Lourdes Hospital	1,100	1,200	-
San Juan de Dios Hospital	1,170	1,195	-
Santo Tomas University Hosp	600	650	-
St. Lukes Medical Center	1,400	1,400	-
The Medical City Gen. Hosp	720	865	-
The Polymedic Gen. Hosp	620	565	-
UERM Medical Center	911	911	-
AFP Medical Center	160	-	-
Bureau of Correction	FREE		
East Avenue Medical Center	160	160	-
Fort Bonifacio Gen Hosp	420	470	
Jose Fabella Memorial Hosp	FREE		
Jose R. Reyes Mem. Med. Ctr		400	
Lung Center of the Phil	730	730	740
National Kidney Institute	850	850	-
Ospital ng Maynila	400	450	
Philippine Children's Med Ctr	650	650	-
PGH Blood Transfusion Service	485	485	
Philippine Heart Center	1,055	1,095	-
Philippine Orthopedic Center	400	450	-
Quirino Memorial Med Ctr	400	450	
Veterans' Medical Center	FREE		

* In private hospitals, costs do not include retesting

PNRC banks collect a handling fee of ₱ 100-175 per unit of whole blood and ₱ 150-300 per unit of blood components.

Main Actors in the Local Blood Banking and Blood Transfusion Scene

In the Philippines, blood banking and blood transfusion services are arranged in four different ways: Red Cross-run blood centers, government-run blood services, private hospital blood banks, and commercial blood enterprises.

The Philippine National Red Cross (PNRC)

Since the launching of the National Blood Program under the PNRC in 1948, it has continued to open chapters in different parts of the country. To date, it has 46 blood centers nationwide: 1 national blood center, 3 regional blood centers, and 42 chapter blood centers.

Aside from the blood centers, PNRC has blood stations which just issue blood, and blood extension services which collect, store and issue blood but do not process them and instead send them to the nearest blood center. PNRC has around 24 extension services and 15 blood stations.

The Blood Program is just one of six service programs of the PNRC. The other services are: Disaster Preparedness and Relief Service, Safety Services, Nursing Service, Red Cross Youth and Social Services.

PNRC obtains most of its blood by doing mass bleeding campaigns throughout the year. These campaigns are often sponsored by military, civic or religious organizations. The PNRC mass bleeding activities occur throughout the year, with peaks during the Blood Donors' Week in July. A person who donates blood becomes a registered blood donor and is given a certificate of donation.

A person who has donated one gallon of blood automatically becomes a member of the "Blood Galloner's Club". Most of the members of this club are military men since the army considers blood donation a major annual project. President Fidel V. Ramos, the honorary president of PNRC, is a blood galloner.

The following steps are followed in the distribution of PNRC blood since 1968:

The Red Cross furnishes all hospitals with "Request for Blood" forms, which is accomplished by the attending physician and signed by the Director of the hospital. The duly-accomplished form is brought by the patient's relative to the PNRC blood bank. The patient's relative is asked to bring along one donor for every 250-300 ml blood issued to replace the blood issued for the patient.

According to the 1992 BRL Registry, only 8 PNRC blood centers have been officially registered nationwide: 1 national blood center, 2 regional blood centers and 5 chapter blood centers. There are 32 applications for license renewal and one new application, all awaiting inspection by BRL staff. However, 4 chapter blood banks cannot be licensed yet because of inability to meet some requirements, mostly in physical facilities.

For 1992, the Blood Bank Annual Report of BRL shows that the following accomplishments have been reported by PNRC, table 14.

Table 14: PNRC 1992 Accomplishments
Blood Bank Annual Report, BRL 1992

Total number of donors examined:	114,885		
Donors rejected:	61,743	(53.7%)	
Number of units collected:			
Mostly 250 ml/ unit:	120,625	(2.3/donor)	
(If converted to 450 ml standard units:	67,013)		
Type of donors:			
Paid:	15,799	(13.1%)	
Voluntary:	104,826	(86.9%)	
Number of units transfused:			
Whole blood:	29,316		
Packed RBC:	254		
Plasma:	6		
Platelet concentrate:	830		
Number of units not transfused:	1,543	(1.3%)	
Expired:	689	(44.6%)	
Contaminated/ spoiled:	123	(8.0%)	
Positive laboratory test:	626	(40.6%)	
Unknown:	105	(6.8%)	
Number of donors with infection:	2,680	(2.5%)	
Syphilis:	146	(5.4%)	
Malaria:	84	(3.1%)	
Hepatitis B:	2,629	(98.1%)	
HIV:	1	(0.04%)	
Number of blood units tested:	90,204	(41 blood centers)	
Syphilis:	428	(0.5%)	
Malaria:	107	(0.1%)	
Hepatitis B:	4,569	(5.1%)	
HIV:	0		

PNRC supplies about 1/4 of the blood supply in the country, or about 100,000 units annually. PNRC's monthly blood supply shows this to be stable at about 7,000 - 9,000 units per month.

The National Blood Center, located in Manila, shows that about 44.2% of requests for blood were unserved in 1992. The highest percentage of unserved requests were those for platelet concentrates. Replacement of blood was completed only in 28.4% of cases.

In 1992, only 10 PNRC blood centers were able to perform HIV screening tests, thus only 34.1% of its blood supply was tested for HIV. To date, at least 20 more centers have medical technologists already trained on HIV testing. However, there is a rapid turnover of trained medical technologists.

Four blood centers (1 national and 3 regional blood centers) can process blood components.

The national, regional and chapter blood centers are asked to report their services monthly to the Director of the National Blood Program but not all centers do so regularly. Each chapter is relatively independent, but are also supervised by the Regional Chapter heads.

In 1991, PNRC had access to a budget of ₱ 74 million, of which around ₱ 10 million (13.7%) were spent on the Blood Program.

Free-standing or Commercial Blood Banks

As mentioned earlier, many of the blood banks were registered between 1970 - 1986. This does not mean, however, that they only started operations when they were registered. No one can be really certain that there are no illegal blood banks anymore. Each registered bank is allowed to have at least 4 "outlets", i.e., the equivalent of the PNRC blood stations.

Commercial blood banks pay donors for giving blood at varying rates between 50 - 150 pesos. Because of this arrangement, many of the donors who come are poor, often students who need cash immediately. And since they need money, these donors are not usually honest about their medical or social history. The claim that paid donors usually have a higher risk of having blood-transmissible infections is confirmed by the data in table 15.

Table 15: Percentage of Donors Found Positive With Either Syphilis, Malaria, Hepatitis B or HIV, by Category of Blood Bank, Blood Bank Annual Report, BRL 1992

Type of Blood Bank	Total Donors Examined	Donors Found Positive*	Percentage
Free-standing	393,928	33,172	8.4%
Government Hosp.	80,415	3,399	4.2%
Private Hosp.	60,178	1,777	2.9%
PNRC	114,885	2,860	2.5%
Total	649,406	41,208	6.3%

* For any of the following: syphilis, malaria, hepatitis B, HIV

Donors coming to free-standing blood banks are about 3 times more likely to have any of the four tested infections than the donors coming to PNRC.

Breaking this data down into diseases per type of bank, we see the following, table 16.

Table 16: Donors Found Positive by Type of Bank and Type of Infection, Blood Bank Annual Report, BRL 1992

Type of Bank	Number and Percentage Positive by Type of Disease			
	DONORS EXAMINED	SYPHILIS	MALARIA	HEPATITIS B	HIV
Free-standing	393,928	6,062 (1.5%)	47 (0.01%)	27,049 (6.9%)	14 (0.004%)
Gov Hosp	80,415	233 (0.03%)	126 (0.2%)	3,038 (4%)	2 (0.002%)
Priv Hosp	60,178	216 (0.4%)	175 (0.3%)	1,384 (2.3%)	2 (0.003%)
PNRC	114,885	146 (0.1%)	84 (0.07%)	2,629 (2.3%)	1 (0.0009%)
TOTAL	649,406	6,657 (1%)	432 (0.07%)	34,100 (5.2%)	19 (0.003%)

In all types of banks, the highest positive reaction is for hepatitis B; followed by syphilis. The low malaria detection can be due to either a low overall malaria prevalence since the donors are usually city-based; or the poor sensitivity of the direct malarial smear technique; or omission of the malarial smear screening as was admitted by PNRC staff.

Considering that the tests done now are only for those diseases we know about - AIDS being an unknown and thus not tested until recently - and even assuming that these tests are done religiously, blood from healthy voluntary donors who give true medical and social histories are about three times much safer than blood from paid donors.

A regular-sized commercial blood bank sees around 70 prospective donors daily. There are no problems in finding donors, many come to the bank on their own. Officially, operators claim that about half of the donors are rejected because of medical reasons such as low hemoglobin levels, poor nutritional condition, or of having just been recently bled. Officially also, the commercial blood banks claim they test each prospective donor with all the required screening tests before and everytime they are bled. In Metro Manila, at least, all the commercial blood banks claim they routinely do HIV testing since 1991.

Blood from commercial banks are usually distributed to government or private hospitals when blood is requested. Many have on-going business arrangements. Many hospitals have their favorite blood bank which can deliver blood within minutes. Such convenience from Free-standing banks makes PNRC procedures - which asks for blood replacement and for handling costs anyway - quite tedious and, for patients in dire need, quite slow.

In 1991, the commercial banks in Manila pooled together blood for HIV testing, tested about 36,000 units and discovered 6 cases of HIV, all males, which were reported to the AIDS surveillance unit. Of these, only one was followed up, a homosexual, and followed-up only once.

Metro Manila-based commercial blood banks have organized themselves as the Philippine Association of Blood Banks. This group tries to discuss common issues and problems and come up with voluntary agreements. Issues include ethical or equitable marketing practices or business arrangements with hospitals, for instance, the practice of paying "commissions" to hospital medical technologists for blood orders; and standardization of testing methods, among others.

The Association has also sponsored training by BRL of their medical technologists on HIV testing to facilitate the otherwise slow process. It centralized HIV testing initially to meet the testing requirements while the medical technologists of other banks still have to be trained. Members of the Association can also tap the facilities of the other members such the ELISA testing for hepatitis B in some banks; or reagents when supplies run low.

When the Association started in 1989, it had 9 members out of 12 NCR-based commercial banks. Membership has dwindled down to 7 since some of the banks refuse to make or follow agreements.

Owners and proprietors of commercial banks know they supply the bulk of the country's blood supply. They do not see any reason for phasing out their establishments especially since there are so far no alternative sources of adequate blood supply.

Hospital-based Blood Banks

Hospital needs for blood can be met in four different ways: (a) Red Cross blood can be requested; (b) a blood donor can be brought by the patient, usually a relative; (c) blood can be bought by the hospital from a free-standing blood bank; (d) blood may be solicited from voluntary blood donors. What actually happens in about 80% of the time is that blood is bought from commercial sources.

Some hospitals re-test the blood, some do not. Many do not have projects to solicit voluntary donations, but the several who do, usually are able to get blood from their own staff or from students in their attached schools of medicine, nursing, midwifery or others.

It has been noted by BRL supervisors that government-run blood banks frequently run out of reagents. When they do, they ask the patients to waive the blood tests and declare that blood is urgently needed.

Doctors: the Users of Blood

According to the 1992 BRL Annual Report, whole blood is transfused in about 45% of the cases. This may be an underestimate. Many Filipino doctors are not yet fully trained to on the specific indications for blood component transfusion. They are not aware of the lack of blood supply and do not feel the need to adjust their practices and use of blood and blood products. It also does not matter so much to them where the blood comes from.

The General Public

There are many cultural barriers that discourage voluntary blood donation. Except among selected sectors such as the military, voluntary blood donation is not very popular among most Filipinos. Even relatives of patients find various excuses not to donate blood. Some patients would rather buy blood from a stranger than be indebted for life to a relative. Misconceptions and fear abound. There is even a religious sect which forbids blood transfusion among its members regardless of the patient's condition.

Management of Blood Banking and Blood Transfusion Services
NBSP

Since 1948, the PNRC has been operating a Blood Program through its blood centers, extension services and chapters, many times in cooperation with other civic or religious organizations. Commercial and hospital-based blood banks were established independently in response to the demand that could not be adequately met by PNRC. Aside from distributing blood to hospitals through the patient's relatives, there is really little interaction or shared activity or plans between PNRC and the hospitals. PNRC has nothing whatsoever to do with commercial blood banks.

The DOH for its part played mainly the role of the regulator, defining standards and guidelines for all blood banks and licensing them. It did little in terms of planning or organizing the different groups involved in blood banking and blood transfusion.

Regulation and licensing usually proceed as follows:

1. An application for license is submitted by the blood bank owner to BRL. If no application is sent, BRL will not know about the existence of the blood bank unless they receive reports of such.

2. The BRL staff will then conduct an inspection visit.

3. If the visit is satisfactory, the license can be issued already. If the visit shows defficiencies, mostly on physical facilities, the bank is given time to remedy the situation. If at the second visit the deficiencies are still there, BRL issues a warning. If on the third visit the deficiencies have remained unattended to, the bank's operation is then suspended.

BRL also sends blood to the blood banks for reading by their medical technologists in order to test their laboratory technical skill. Those who fail the test are retrained.

The National Blood Service Program of 1989

The DOH began to be involved in planning and organizing blood bank services only in 1989, upon the approval of the National Blood Service Program only.

The NBSP's overall goal is adequacy, accessibility, affordability and equitable distribution of safe blood and blood products. The following are the stated specific objectives of the NBSP:

1. To increase the number of blood donation through the promotion of voluntary blood donation;

2. To provide facilities for the recruitment, screening and collection of blood from the regional to the district level;

3. To upgrade laboratory facilities at national and regional levels for the processing, distribution and transfusion of blood;

4. To promote the maximum utilization of limited blood resources;

5. To encourage research in various aspects of blood donation, processing and utilization.

The adoption of a National Blood Service Program in 1992 was a major step towards the right direction, but there is still a big gap between what is on paper and what is actually happening. For instance, the NBSP states that "commercial blood bank outlets shall be phased out". This is far from reality. There are also no clear steps to be taken how to reach this objective. People who were supposed to be major actors in the NBSP feel they did not have enough participation in the development of this program. This results in lack of awareness or acceptance of their supposed role in the program.

DISCUSSION

Based on the foregoing data, the following areas present complicated problems that will need further study and documentation:

1. Program planning, policy development and coordination
2. Legal provisions and how these are actually followed
3. Lack of blood supply
4. Facility management and Upgrade
5. Training and development of blood bank staff
6. Supervision and quality control

This overview has revealed much of the existing situation, and has raised even more questions in the process. There is need to fully understand the interactions and implications of alternative actions so that practical and acceptable solutions can be arrived at once and for all.

ANNEX 1
LIST OF MATERIALS REVIEWED

RA 95	22 Mar 1947	An Act to Incorporate the PNRC
RA 1517	16 June 1956	An Act Regulating the Collection, Processing and Sale of Human Blood, and the Establishment and Operation of Blood Banks and Blood Processing Laboratories
AO 156	23 Sept 1971	Revised Rules and Regulations Governing the Collection, Processing and Sale of Human Blood and the Establishment and Operation of Blood Banks and Blood Processing Laboratories, as amended by Administrative Order No. 144-32 series of 1973 (amendments AO 144-32)
DC 99	18 Aug 1987	Declaring Basic Policies on Blood and Describing Measures in Support of Such
AO 57	3 Jan 1989	Revised Rules and Regulations Governing the Collection, Processing and Provision of Human Blood and the Establishment and Operation of Blood Banks
BO 5	15 Jan 1990	Technical Standards Governing the Collection, Processing and Operation of Blood Banks in the Philippines
BO 6	16 Jan 1990	Administrative Standard Operating Procedures for Application and Licensure of Clinical Laboratories and Blood Banks
BO 7	16 Jan 1990	Procedures and Guidelines for the Regional Clinical Laboratory and Blood Bank Inspection Team of the Regional
BC 1	1 July 1990	Disposal of Hepatitis B Surface Antigen (HBsAg) and Human Immunodeficiency Virus (HIV) Antibody Positive Units of Blood
BC 2	1 July 1990	Screening of All Blood Units for Hepatitis B Surface Antigen (HBsAg), Human Immunodeficiency Virus (HIV) Antibody, Malaria and Syphilis
BO 9	15 May 1991	Maximum Rates to be Charged for Blood for Transfusion and Its Products
BC 1	19 June 1991	Exemption from the Requirement of Screening of Units of Blood for Hepatitis B Surface Antigen (HBsAG) and Human Immunodeficiency Virus (HIV) Antibody by Blood Banks Prior to Issuance to Hospitals
BC 2	21 Nov 1991	Reporting of (+) HIV Confirmed Blood Donors
AO 118-A	1992	The National Blood Services Program
AO 122	25 May 1992	Hepatitis B Surface Antigen (HBsAg) and Human Immunodeficiency Virus Antibody (HIV Ab) Positive Units of Blood: DOH Policy, Procedures to be Followed and Sanctions for Violations

Speech by Dr. Virginia Basaca-Sevilla during the Ninth Liborio Gomez Memorial Lecture, 27 February 1987, 36th annual convention of the Philippine Society of Pathologists, Lung Center of the Philippines

Management of Blood Transfusion Services, WHO Geneva, 1990

Technical Manual, American Association of Blood Bank, 1990

Guidelines for the Organization of Blood Transfusion Services, WHO Geneva, 1992

Guidelines for Quality Assurance for Blood Transfusion Services, 1993

ANNEX 2

LIST OF KEY PERSONS INTERVIEWED

PNRC
- Dr. Rogelio R. Velicaria, Director, National Blood Program
- Dr. Cecilia Fernandez, coordinator for special projects on AIDS and Street Children

PBCC
- Dr. Carmen Narciso, past President

PABB
- Mrs. Ellen Garcia, secretary

Galloner's Club
- Mr. Manuel Chua, past President

Manila Central University (MCU) Hospital
- Dr. Antonia Basa, Pathologist

Jose R. Reyes Memorial Hospital
- Dr. Acela Tanchongco, Pathologist

MASTERLIST OF BLOOD BANKS VISITED

Annex F-2

REGION	CATEGORY	BLOOD BANK
1	GH	Ilocos Regional Hospital
1	GH	Gov. Teofilo Sison Prov Hosp
1	GH	Ilocos Norte Prov Hosp
1	GH	San Carlos District Hospital
1	PNRC	Laoag Ilocos Norte BC
1	PNRC	Pangasinan(Dagupan) BC
1	PH	St. James Hosp
1	PH	Bethany Hosp (La Union)
2	GH	Cagayan Valley Regional Hospital
2	GH	Aparri District Hospital
2	PH	Cagayan Valley San. & Hosp
2	PNRC	Nueva Vizcaya (Bayombong) BC
2	GH	Nueva Vizcaya Prov Hosp
2	PNRC	Cagayan Valley BC
3	GH	JB Lingad Regional Hospital
3	PNRC	Bataan BC
3	PNRC	Olongapo City BC
3	PNRC	Bulacan (Malolos) BC
3	PNRC	Nueva Ecija(Cabanatuan) BC
3	PH	Angeles University Foundation MC
3	GH	PJ Garcia Hospital
3	PNRC	Tarlac BC
3	GH	Tarlac Prov Hosp
3	PNRC	Pampanga(Sn Fernando) BC
3	PH	VL Makabali Mem. Hosp
3	PH	Good Samaritan Hosp
3	PH	Central Luzon Doctors' Hosp
3	GH	San Jose General Hospital
3	PH	Talon General Hospital
3	GH	Bulacan Provincial Hospital
4	FSB	University Physician's BB
4	PNRC	Laguna BC
4	GH	Batangas Regional Hospital
4	PH	Morong Doctors' Hosp
4	GH	Lipa District Hosp
4	PH	San Pablo Doctors' Hosp
4	GH	Don Manuel Lopez Mem. Dist. Hosp
4	PH	Mt. Carmel Hosp
4	GH	Laguna Prov Hosp
5	GH	Camarines Norte Prov Hosp
5	GH	Bicol Regional Hospital
5	PNRC	Legaspi City BC
5	GH	Irosin District Hospital
5	PNRC	Daet (Cam. Norte) BC
5	PH	Lourdes Hosp
5	PH	Immaculate Conception Hosp
5	PH	Ago General Hosp
5	PH	Sto. Nino (Daet)
6	PNRC	W. Visayas Reg.(Iloilo) BC
6	FSB	St. Elizabeth BB
6	GH	Corazon Montelibano Mem Hospital
6	PNRC	Capiz BC
6	FSB	Jaro BB
6	FSB	Villanueva BB
6	GH	Misamis Occ. Provincial Hosp
6	PH	Bacolod Sanitarium & Hosp
6	GH	Western Visayas Medical Center
6	PNRC	Kalibo BC
6	GH	Roxas Mem. Prov Hosp
6	PNRC	Negros Occidental(Bacolod) BC
7	FSB	Hospitals BB
7	GH	Gov. Celestino Gallares Hospital
7	FSB	Lifeline BB
7	PNRC	Negros Oriental(Dumaguete) BC
7	PH	Perpetual Succor Hosp
7	PH	Silliman University Med. Ctr
7	GH	Gov. Torribio Mem. Hosp
7	GH	V. Sotto Mem. Med. Ctr
7	PNRC	E. Visayas Reg. (CebuCity) BC
8	PH	Bethany Hosp (Tacloban)
8	GH	Eastern Visayas Regional and MC
8	PH	Divine Word Hosp
8	PNRC	Tacloban City(Leyte) BC
9	PNRC	Zamboanga City BC
9	PNRC	Pagadian City BC
9	PH	Infante Hosp
9	GH	Zamboanga City Medical Ctr
9	PH	Zamboanga AE Community Med Ctr
9	FSB	Pagadian City Diagnostics & BB
10	PNRC	Mind. Reg. (Cag. de Oro) Bld Ctr
10	FSB	Fil-Saver BB
10	PNRC	Ozamis BC
10	PH	Philips Memorial Hospital
10	PNRC	Gingoog BC
10	PNRC	Butuan City BC
10	GH	Surigao del Norte Prov Hospital
10	GH	Gingoog District Hospital
10	GH	Northern Mindanao Trg Hosp
10	PNRC	Mis. Occ. (Oroquieta) BC
11	PNRC	Davao City BC
11	FSB	City BB
11	PNRC	Tagum BC
11	PNRC	Digos BC
11	PNRC	General Santos BC
11	PH	Howard Hubbard Mem. Hosp
11	GH	Davao Medical Center

MASTERLIST OF BLOOD BANKS VISITED

REGION	CATEGORY	BLOOD BANK
11	GH	Davao del Sur Prov Hosp
11	GH	Davao Regional Hospital
12	GH	Cotabato Regional Hospital
12	FSB	F. Abellanosa BB
12	GH	Kidapawan Prov Hosp
12	PNRC	Cotabato City BC
12	GH	Lanao del Norte Prov Hosp
12	PNRC	Iligan City BC
12	FSB	Family Medical Clinic BB
12	PH	Kabacan Doctors' Hosp
12	PH	St. Joseph Hosp
CAR	GH	Baguio General Hospital
CAR	GH	Bontoc General Hospital
CAR	GH	Abra Provincial Hospital
CAR	PH	Soares Family Clinic
CAR	PNRC	Abra BC
CAR	PH	Sto. Nino (Philex) Hosp
CAR	PNRC	Baguio City BC
CAR	FSB	Benguet Blood Bank
CAR	FSB	St. Loule Univ. BB
NCR	FSB	Mother Seaton BB
NCR	FSB	Our Lady of Fatima BB
NCR	FSB	Doctors' BB
NCR	FSB	Peoples' BB
NCR	FSB	Hermoso BB
NCR	FSB	Holy Redeemer BB
NCR	FSB	Avenue BB
NCR	GH	National Kidney Institute
NCR	PNRC	National Blood Center (Manila)
NCR	PNRC	Quezon City BC
NCR	FSB	Blue Cross BB
NCR	GH	Philippine Children's Medical Center
NCR	FSB	Re-cor BB
NCR	GH	Quezon City General Hospital
NCR	PH	University of Sto. Tomas Hosp
NCR	PH	FEU Hospital
NCR	GH	Dr. Jose Fabella Memorial Hosp
NCR	FSB	German Castillo BB
NCR	PH	San Juan De Dios Hosp
NCR	PH	De Los Santos Hospital

HOSPITAL-BASED OUTLETS

1	PH-O	Pangasinan Medical Ctr
1	PH-O	Urdaneta Sacred Heart Hosp
3	PH-O	Ramos Gen Hosp
4	PH-O	Cavite Medical ctr
4	PH-O	Our Savior Hosp
CAR	PH-O	Bangued Christian Hospital

FREE-STANDING OUTLETS

LC Diagnostics
Dan's Studio
Farmacia Navarro
Avenue BB (Sorsogon)
Peoples' BB (Daraga)
Farmacia San Jose
Catanlag Pharmacy
Peoples' BB (Batangas)
JRD Drugmart
Perpetual Help Pharmacy
Avenue BB (Lipa City)

OTHERS: visited but data not analyzed

1	GH	Mariano Marcos Hosp
1	GH	Dna. Gregoria Mem. Hosp
1	GH	Gabriela Silang Gen. Hosp
1	PH	Bacarra Medical Center
1	PH	Lorma Medical Center
1	PH	Virgen Milagrosa Medical
1	PH	Lahoz Hospital
1	PH	Luzon Med Center Specialist Group
3	GH	Pres. Magsaysay Mem Hosp
3	GH	San Marcelino District Hosp
3	PH	St. Jude Family Hospital

PNRC BLOOD CENTERS NOT VISITED

1. Rizal, Pasig Blood Center
2. Palawan, Puerto Princesa Blood Center
3. Surigao del Norte, Surigao City Blood Center
4. Benguet, La Trinidad Blood Center
5. Dipolog, Zamboanga del Norte Blood Center
6. Catarman, Northern Samar Blood Center
7. Mati, Davao Oriental Blood Center
8. Prosperidad, Agusan del Sur Blood Center
9. Masbate, Masbate Blood Center

FREE-STANDING BANKS NOT VISITED

Region 1	Dagupan City Blood Bank
Region 3	Olongapo City Lions Blood Bank
Region 6	The Doctors' Blood Bank
Region 12	Iligan City Doctors' Blood Bank
NCR	Philippine Blood Bank

FREE-STANDING OUTLETS NOT VISITED

Region	Outlet	Mother Blood Bank
2	a) Farmacia Carsal, Tuguegarao, Cagayan	Doctors' Blood Ctr Manila
	b) Bernardo's Pharmacy, Bayombong, Nueva Vizcaya	Hermoso Blood Bank Manila
3	c) Rural Drugstore, Sn Fernando Pampanga	Avenue Blood Bank Manila
	d) Remsor Drug, Sn Fernando, Pampanga	Our Lady of Fatima Blood Bank, Manila
7	e) Hospital BB outlet, Tagbilaran	Hospital Blood Bank Cebu City
8	f) R & J Pharmacy, Ormoc City	Hospital Blood Bank Cebu City
10	g) Hospital BB outlet, Surigao City	Hospital Blood Bank Cebu City
12	h) Hospital BB outlet, Iligan City	Hospital Blood Bank Cebu City

ACKNOWLEDGEMENTS

The study team wishes to acknowledge the following for their invaluable contributions to the project:

Undersecretary of Health Jaime Galvez-Tan, for his enthusiastic support for the project and his encouraging advice to the team members;

Asst. Sec. of Health Manuel M. Dayrit, for his guidance and comments on the project design especially the sampling methodology and his comments and reactions to the progress and findings of the study;

Director Marietta Carpio-Baccay, BRL, for her generous support to the project, contributing not only her time but also those of her staff and the records and facilities of the BRL;

Director Remigio M. Olveda, NTMF, for his timely intervention during the times when his assistance and advice were very much needed;

Dr. Flora A. de la Pena, for her assistance in the survey in Region VIII; and Dr. Leoncio Ong, for his assistance in the survey in South Cotabato;

Dr. Florante P. Magboo, FETP, DOH, for assisting in the training of the encoders and for helping prepare the slides for the presentations;

Ms. Laurita R. Mendoza, FETP, DOH, for her assistance in preparing the maps;

Mr. Mike Gomez, Public Information and Health Education Service, DOH, for converting pictures into slides;

The team also wishes to thank the following resource persons:
Ms. Marilyn R. Atienza, PAMET
Mr. Manuel C. Chua, Blood Galloners' Club
Dr. Cecilia J. Francisco, PNRC
Ms. Teresita J. Hernando, RMT, JRRMH
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Dr. Celso S. Ramos, Regional Laboratory No. IV
Dr. Eileen Riego-Javier, The Polymedic General Hospital
Dr. Rogelio R. Velicaria, PNRC

The study team also expresses appreciation to the New Tropical Medicine Foundation and the United States Agency for International Development, in particular:

Dr. Emmanuel Voulgaropolos, USAID
Dr. Rosendo R. Capul, USAID
Ms. Patricia A. Moser, USAID
Dr. Carmina A. Aquino, USAID
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U.S. AGENCY FOR
INTERNATIONAL
DEVELOPMENT

PHILIPPINES

Selected Reports on the HIV/AIDS Situation in the Philippines

SELECTED REPORTS ON THE HIV/AIDS SITUATION IN THE PHILIPPINES

* Itinerary

1. Current Update on HIV/AIDS Cases

2. AIDS in the Philippines

3. The Epidemiology of HIV Infection in the Metro Manila Area - A NAMRU Study

4. USAID Assistance to the Philippines AIDS Prevention and Control Program (1988-1997)

5. AIDS Surveillance and Education Project

6. Consultant Report on HIV/AIDS Surveillance Strategies and Estimation and Projection of HIV/AIDS in the Philippines

7. The NGO Network Stand on the AIDS Problem in the Philippines

8. NGOs and Community Issues

9. STD Strategic Plan for the Philippines - AIDSCAP Project

10. Exerpts from the Overview of the Philippines Blood Banking and Blood Transfusion Services.

JAPAN HIV/AIDS VISIT
Dr. Akira OYA
(Leader)

US Agency for International Development/Manila
1680 Ramon Magsaysay Center, Roxas Boulevard
March 18, 1994
9:00 A.M.

PROGRAM OF ACTIVITIES

9:00 - 9:30 **Meeting with the Director**
THOMAS W. STUKEL
Office of the Director, 15th Floor

9:30 - 12:00 **AIDS Briefing**
OLA Conference Room, 15th Floor

1. Dr. Emmanuel Voulgaropoulos
   USAID Assistance to the Philippines' AIDS Prevention and Control Program

2. Ms. Patricia A. Moser
   AIDS Surveillance and Education Project

3. Dr. Corazon R. Manaloto
   Studies on HIV/AIDS in the Philippines

4. Dr. Asuncion A. Paraan
   Project to evaluate the safety of the Philippine blood banking system

5. Mrs. Leona D' Agnes
   The Non-Governmental Organizations' (NGOs) approach to the AIDS problem in the Philippines

12:00 Noon **LUNCH BREAK**

2:00 P.M. **Visit NGO centers in Manila**
1.Kabalikat drop-in center
2.Remedios AIDS information center

FIELD EPIDEMIOLOGY
TRAINING PROGRAM

Reported HIV/AIDS Cases Update
January 1 - 31, 1994

As of December 1993, 2 more persons were diagnosed to have HIV/AIDS for a total of 100 HIV/AIDS reported cases for the month. This gives a cumulative total of 469 HIV/AIDS cases identified from 1984 up to the end of 1993.

For the month of January 1994, 6 new HIV/AIDS (AIDS = 1; HIV = 5) cases were reported. This gives a cumulative total of 475 cases identified (Tab.1). Of the 6 new cases 4 (67%) were females, 2 (33%) were males. Median age was 25 year (range: 4 mos. - 39 years). Reported mode of transmission were: 2 (33%) perinatal, 2 (33%) heterosexual, and 2 (33%) were unknown (Table 3).

Approved by:

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Assistant Secretary

Approved for release:

DENNIS MADDOCDOC M.D., M.P.H.
Program Manager, AIDS Unit

DEPARTMENT OF HEALTH, San Lazaro Compound, Sta. Cruz, Manila

Table 1 Reported HIV Seropositives by Year of Diagnosis, AIDS/HIV Registry 1984 - January 1994

Year	Asymptomatic HIV	AIDS			Unclassified*	TOTAL
		Alive	Dead	Total		
1984	0	0	2	2	0	2
1985	6	0	4	4	0	10
1986	21	1	7	8	0	29
1987	26	4	8	12	0	38
1988	21	4	10	14	0	35
1989	32	2	5	7	0	39
1990	52	2	14	16	0	68
1991	66	4	9	13	0	79
1992	52	8	9	17	0	69
1993	61	23	8	31	8	100
1994	5	0	1	1	0	6
Total	342	48	77	125	8	475

* Reported cases that are seropositives but we cannot say if they are aymptomatic or symptomatic

Table 2 HIV Seropositives by Gender for Agegroup AIDS/HIV Registry, 1984 - January 1994

Agegroup (years)	Female	Male	Unknown	TOTAL
0 - 14	4	7	0	11
15 - 29	154	67	0	221
30 - 44	40	115	0	155
45 >	6	25	0	31
Unknown	22	31	4	57
Total	226	245	4	475

Table 3 Reported Modes of Transmission of HIV/AIDS Cases
AIDS/HIV Registry, 1984 - January 1994

Modes of Transmission	January 1 - 31, 1994 (n = 6)			Cumulative: 1984 - Jan. 1994			TOTAL
	HIV	AIDS	Unknown	HIV	AIDS	Unknown	
Sexual							
Heterosexual	2	0	0	184	60	2	246
Homo/Bisexual	0	0	0	33	52	0	85
Blood/blood products	0	0	0	2	3	0	5
Needles & syringes	0	0	0	2	1	0	3
Mother to Infant	1	1	0	4	4	0	8
Unknown	2	0	0	117	5	6	128
	5	1	0	342	125	8	475

Prepared by:

Timoteo J. Badoy, Jr. M.D.
AIDS Registrar

Edna M. Lopez R.N.
Sentinel Nurse

Table 1. National HIV Testing Results
Philippines, 1985 - 1992

GROUP	NO. TESTED	NO. POSITIVE	RATE/100,000 Test
Men who have Sex with Men	2973	66	2220
Injecting Drug Users	124	2	1613
Military	471	1	212
Female Commercial Sex Worke	176015	123	70
Overseas Contract Workers	520662	44	8
Blood Donors*			
Paid	295427	17	6
Voluntary	154156	2	1
Blood for Transfusion	73506	0	0
Male Commercial Sex Workers	122	0	0
Male STD Patients	267	0	0
Others	38537	112	291
TOTAL	1223334	367**	30

* Bureau of Research and Laboratories, DOH: Compilation of blood bank reports nationwide. Figures refer to testing of blood donors prior to blood donation.

** AIDS Registry data but total excludes HIV positives reported in 1993.

Table 2. HIV Rates and Multiple Partners of Thai and Filipino Sex Workers

Thai Group*	Sex Partners	June, 1989	June, 1991
"Indirect" FCSW	A few partners weekly	0%	5%
Brothel FCSW	3-4 partners daily	3.5%	15%
Filipino Group		1989-1992	October, 1993
**Registered FCSW	3-4 partners weekly	0.05 - 0.09%	0.6%
Freelance FCSW	3-14 partners weekly	0%	0%

* Weninger BG, et al. The epidemiology of AIDS and HIV infection in Thailand. AIDS 1991;(suppl 2):S71-S85

** Number of sex partners most closely resembles Thai "indirect" FCSW

Fig. 1 ANNUAL REPORTS OF HIV INFECTION AND AIDS CASES IN THE PHILIPPINES
1984 - NOVEMBER 1993

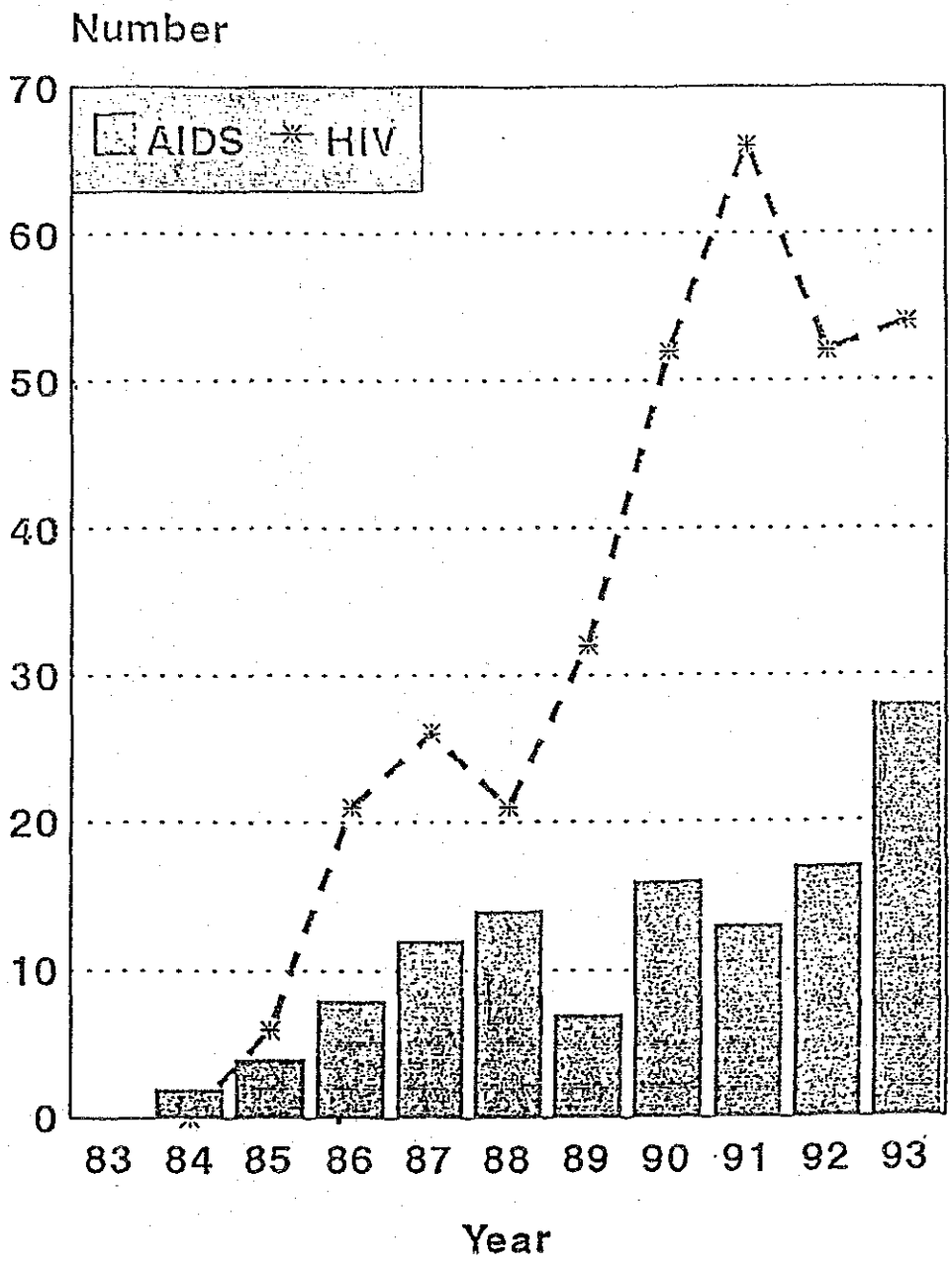


Fig. 2 National HIV Surveillance Sites

First Round, 1993

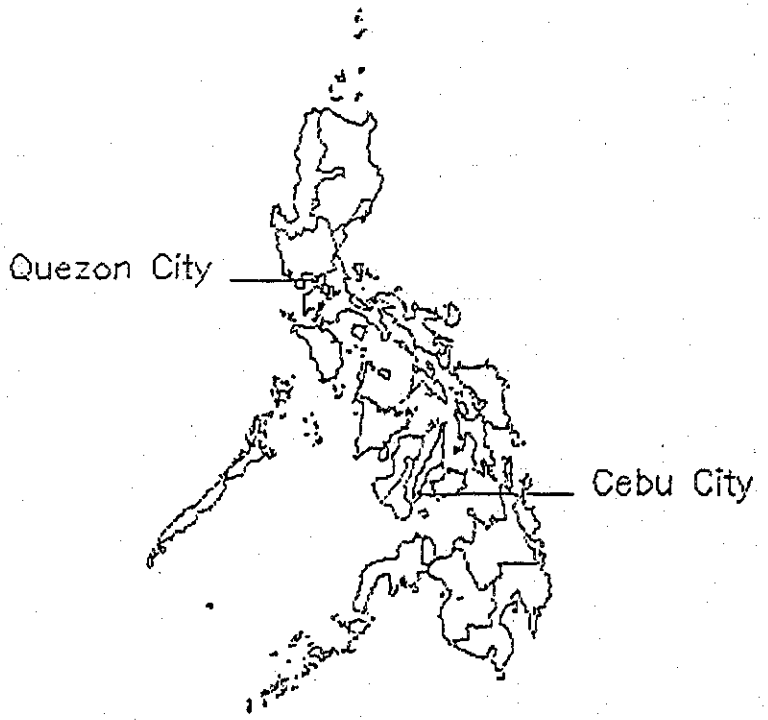
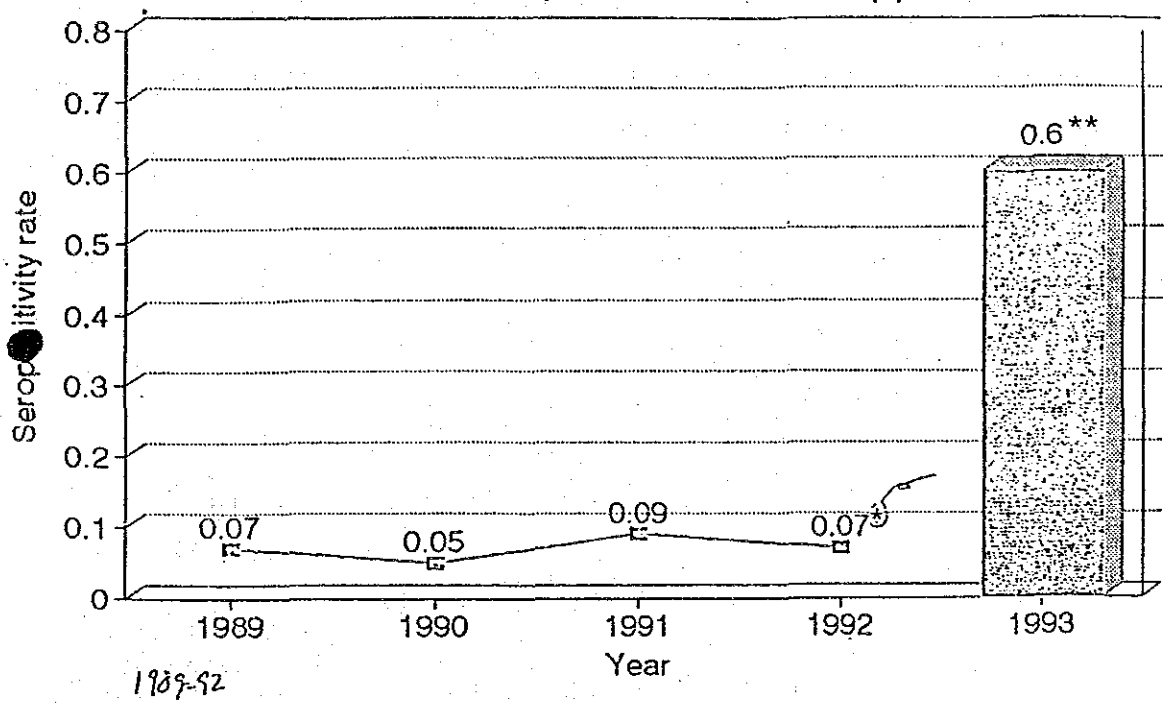


Fig. 3 HIV Seropositivity Rates

FCSWs, 1989 - 1993. Philippines



1989-92

*AIDS Registry, no. of screening tests as denominator

**HIV Surveillance Sites (1st round: Quezon City and Cebu City)

1993

AIDS in the Philippines

I. Introduction
- general information on Philippines (World Bank)
  - population size
  - % in urban areas
  - infant mortality rate
  - medical care as % of gross domestic product
  - others

II. History of HIV infection
- first case of HIV/AIDS - 1985
- association of HIV with US military servicemen; rates among bar girls around the area of the US bases
- heterosexual nature of local transmission
- initial cases of AIDS: acquired their infection abroad

III. Current burden of infection

- sources of information
  - Registry
  - surveillance on sentinel groups
  - research projects:
    - NAMRU screening
    - RITM
    - FETP (IV drug users in Cebu)
    - CPH (KABP)
    - UP-PGH
    - Blood overview
- what do sources of information say
  - Pattern III transmission
  - still low prevalence situation but situation is potentially explosive:
    - recent sentinel surveillance data show a 7-9 fold rise in infection among sex workers
    - IDU problem has been identified
  - studies on risk factors show that: number of sexual partners of masseuses are 2-3x more than bar girls; suggests that masseuses in sauna baths and massage parlors are a far higher risk than their counterparts in the bars; in comparison to Thailand: Filipino sex worker sexual behaviour and rates of infection closely resemble those of "indirect" FCSWs in Thailand who have a few partners weekly.

(show table with references)

IV. Projections based on Epimodel
- assume infections became widespread in 1987
- estimate low of 15,000 current infections and a high of 35,000 infections
- estimation of cumulative number of AIDS cases in the year 2000 is 20,000

V. Government Strategy and Policy

- Phases of the government response
  1987 -1988 - preliminary awareness raising
  1988 -1992 - first medium term plan/ 'AIDSCOM, AIDSTECH projects/ establishment of the AIDS unit
  1993 - PNAC/ stronger consciousness for a society-wide approach

- How are we responding to the outbreak
  - Government program: awareness raising
    - World AIDS Day

- Strengthening the public health infrastructure to address the epidemic
  - laboratory facilities
  - National Reference Center (RITM)
  - STD control programs (still very weak)
  - Philippine National AIDS Council
  - Blood Transfusion Services

- Implications for devolution of the health services to local government units
  - surveillance - move into surveillance of risky behaviour

AIDS in the Philippines

I. Introduction

To understand the spread of HIV infection within the Filipino context, consider the following:

- the Philippines has a population of 61 millions, 43% of which live in urban areas [1];
- in the sexually-active age group 15-39, there are 25.6 millions, constituting 42% of the total population;
- the country is predominantly Roman Catholic (80%). Officially the leaders of the Catholic Church have spoken against the use of artificial contraceptives. The prevalence of contraceptive use among women 15-49 years is 44% [1];
- Gross national product per capita is US$730 [1]. A recently launched government program called 'Philippines 2000' aims to raise GNP per capita to US$1,000 by the end of the decade;
- Filipino overseas contract workers contribute nearly 8% of the country's foreign exchange earnings. There are officially close to half a million overseas contract workers but the actual counts may be double this [2];
- infant mortality rate is 41 per thousand live births as compared to 58.0 fifteen to twenty years ago [1];
- investments in health care amount to only 2.1% of Gross Domestic Product [1] and this level of investment will most likely persist in the forseeable future;
- the budget of the Department of Health for 1994 is 4 billion Philippine pesos (US$143 millions). Previous annual budgets for AIDS Prevention and Control Program have been in the neighborhood of 10 million pesos (US$0.36 million), mostly spent on information and education programs;
- in 1990, the Philippine Senate voted for the removal of the US military bases. Phase-out was completed by 1992. Bar girls who worked in the vicinity of these two military bases were among the first Filipinos found positive for HIV infection by the US Naval Medical Research Unit II (NAMRU II);
- in 1992, the Department of Health documented a malaria outbreak transmitted through injecting needles in the city of Cebu. Before then, injecting drug abuse was thought not to be a problem in the country.

II. Descriptive Epidemiology

First AIDS cases and local HIV infections

In 1984, a Caucasian male homosexual was treated in a private hospital for a rare form of pneumonia. He died before a definitive diagnosis was made. Examination of his blood in 1985 established the diagnosis of AIDS. Also in 1985, a Filipino homosexual who had lived in the US for many years came home and died of AIDS. These two were the first among many foreign-acquired infections reported to the AIDS registry in the mid-80s.

The first locally-acquired HIV infections were documented in 1985 among prostitutes working in Angeles and Olongapo, 2 cities near the US military bases [3]. In 1987, the emerging picture of HIV transmission in the Philippines fit Pattern III classification of the Global Program on AIDS (GPA): HIV infection was introduced since the mid-1980s, few AIDS cases to date, HIV infection among female sex workers who had sexual contact mostly with foreigners.

By 1990, the first AIDS cases descended from locally-acquired HIV infection began to appear. On the average, it took 3 years from HIV infection to terminal AIDS.

Sources of Data: AIDS Registry, research projects, active sentinel surveillance.

There are a variety of data sources to track the spread of HIV infection in the Philippines. These sources are of uneven quality. The AIDS registry, based in the Department of Health in Manila, collects notifications of HIV infections and AIDS cases from public and private clinics and hospitals. (Figure 1: AIDS REGISTRY 1984 to November 1993). As a passive system, the Registry has been vulnerable to the vagaries of case reporting. Also without clearly defined reference populations, it could not provide reliable rates of infection among groups and populations of interest. Nonetheless, it has provided an ever-present reminder to media and the public of the steadily rising counts of HIV infections and AIDS cases. As of the end of 1993, a cumulative number of 459 HIV infections have been reported, of which 121 (26%) are full-blown AIDS (AIDS Registry, Department of Health, November 1993).

Research projects and rapid surveys conducted by different groups have also provided valuable data on the spread of infection [4]. When the results of these various projects and surveys are combined (Table 1: National HIV Testing Results), they suggest low infection rates in the various sub-populations represented.

HIV sentinel surveillance.

In 1993, the Department of Health began systematic surveillance of selected sentinel groups in key cities of the country. Surveillance strategy was designed to detect 'HIV hot spots' where the rate of infection is 0.5% or more by sampling at most 300 subjects. The first round of surveillance covered two large metropolitan areas: Cebu in Central Visayas and Quezon City in the MetroManila area. (Figure 2: Map of surveillance sites.) Subsequent rounds will be conducted at six-monthly intervals. Old sites will be revisited and new sites will be added as needed to provide information required to target and evaluate the HIV control program.

The first round of surveillance covered the following sentinel groups: female commercial sex workers, male sex workers, male STD patients, men who have sex with men, and injecting drug users. At

each site, the target was 300 subjects per group except for male sex workers and injecting drug users where it was 100. Results of surveillance among the female sex workers in the Quezon City site showed a rate of 0.6% which is seven to nine times higher than the rates of infection in the previous five years. (Figure 3: HIV seroposivity rates, FCSWs, 1989-1993). These surveillance data closely approximated a survey done simultaneously in Pasay City (a locality also within MetroManila) where NAMRU II screened 1483 sex workers in July 1993 and found 8 HIV infections (0.5%) (Perrault, NAMRU, Personal communication).

No HIV infection was found among the other sentinel groups and no seropositives were found in the Cebu site.

The epidemic in female commercial sex workers (FCWS).

Public health authorities expected to find higher rates of infection among female sex workers than surveillance revealed. This expectation was fueled by reports of high rates of infection among sex workers in Thailand where HIV infection first appeared in 1985 [5]. A close look at the data may explain the low rates of infection so far. One, compared to their Thai counterparts, Filipino female sex workers have fewer sex partners. The Filipino FCSW most closely resembles the Thai 'indirect' FCSW in the number of sex partners weekly (Table 2). Thai 'indirect' sex workers work in massage parlors, bars, night clubs, discos and coffee shops which cater to middle and upper income clientele [5]. The force of multiple sex partners for driving infection levels high quickly thus appears considerably less among Filipino FCSWs than their Thai counterparts.

Second, in Thailand, rapid transmission of HIV among injecting drug users amplified HIV infection which then rapidly spread among female sex workers. Injecting drug use is uncommon in the Philippines, which may account for the relatively slow spread of HIV. However, the recent discovery of injecting drug abuse in Cebu [6], makes the threat of HIV transmission through needle-sharing imminent. Surveillance in Cebu showed that 22% of FCSWs had a history of injecting drug abuse. Third, the large proportion of infection among Filipino FCSWs appears associated with sex with foreigners. On balance, despite the sex trade around the US military bases before they were closed, the infections from foreigners did not explode in large numbers as in Thailand. Part of the reason for this is that around the military bases, both the FCSWs and their customers were all screened yearly and seropositives were removed from the population. However, infections associated with foreigners steadily occur. Seven of the 8 (88%) infections in Pasay were found in bars which catered mostly to foreigners (Perrault, NAMRU, personal communication, 1993). To be safe, it is wise to assume that silent infections occur whether transmitted by foreigners or local clientele. Sex workers must learn to protect themselves against HIV.

When asked about condom use, 5% to 60% of FCSWs in the

surveillance sites said they 'always' used a condom while as high as 58% said they 'never' used a condom. These figures indicate that more needs to be done in this area. It must be noted also that there are freelance FCSWs who are known to have many more sex partners than their 'registered' counterparts (Table 2). Surveillance efforts are being designed to reach these freelancers better.

The epidemic in overseas contract workers

It is deceiving to think that overseas contract workers might not be a problem if the figures in Table 1 are to be believed. However, the bulk of tests was done on OCWs who were leaving the country for the first time. The large number of negative tests dilute the positivity. Analysis of the AIDS Registry data (1984-1993) shows that 41% (139/336) of HIV/AIDS occurred abroad. Of infections acquired abroad, 32% occurred in OCWs. Though the numbers are small and conceding the bias in Registry data, the figures suggest that OCWs who come home are potential vectors of infection to their spouses and sexual partners. Behavioural surveys among OCWs have confirmed high risk behaviour among them. In a 1989 survey, 98% of 1000 Filipino merchant seamen interviewed indulged in multiple sexual activity while abroad. Number of partners averaged 3 a year with one person reporting as many as 40 [7].

The epidemic in men who have sex with men (MSM)

Of 66 HIV infections among MSMs recorded in the AIDS Registry, 35 (53%) occurred abroad. While it has been known for years that many MSMs who lived abroad would eventually come home to be with their families in the Philippines, we cannot rely on the Registry for accurate counts. So far there have been attempts to do HIV surveillance among MSMs but the numbers that have been reached for testing have been few. Part of the reason may be that the social support for MSMs is not well developed in the Philippines so that there is reluctance to come forward.

Risk factors in the general population

The risk factors for the spread of HIV in the general population definitely exist. A survey of 1617 individuals showed that 12% of males between 20 to 24 years had commercial sex during the last 12 months. Eight percent (8%) of sexually active men in the same age group had had an STD compared to 4% among females in the same age group (Tiglao, College of Public Health, 1992).

Projections of future HIV infections and AIDS

In 1987, the AIDS Committee of the Department of Health projected that the Philippines would be seeing 150 AIDS cases in 1992. This was estimated by multiplying by 10 the then known number of HIV infections in the Registy (46 HIV infections) and assuming

that one-third would develop AIDS by 1992 (8). A high-case scenario doubled this number.

The 1987 projections are not far off from ,the present AIDS counts of 115 (AIDS Registry, October 1993). However, there seems a compulsion among AIDS watchers .to give large projections. At present, the low estimate for HIV infections in the Philippines is 15,000. However, figures as high as 50,000 have been quoted in the media. Surveillance and research data show however that the Philippines remains a low prevalence country and the window of opportunity exists for keeping the problem manageable. This thought is encouraging given that the public health services with its limited budgets will find it extremely difficult to absorb the extra financial burden of health care for people with AIDS.

III. Government Strategy and Policy

Since 1987 when the government first began seriously organizing a response to the HIV epidemic, the control program has largely been the responsibility of the Department of Health. The DOH relied on two major strategies: one, advocacy and awareness-raising; two capability building and health infrastructure development.

When the program was in its infancy, the DOH relied heavily on media to raise the awareness of HIV in the population. This approach met with moderate success: early DOH-commissioned surveys showed that awareness of HIV/AIDS in the general population reached 90% in MetroManila. However, in other parts of the country the awareness was much lower. Furthermore, surveys also showed that while people had heard of AIDS, they had many misconceptions and wrong ideas about the disease and how it was spread. For example they thought one could catch AIDS through mosquitos, glasses and eating utensils, and swimming pools. Thus, the very first media campaign launched by the DOH was designed to address these misconceptions.

Media continues to be a valuable partner in the fight against HIV. More and more, it has published human interest stories of people who have suffered from the disease. These stories have given AIDS a human face and made preventive messages more compelling.

Early on, the DOH made a conscious effort to develop and work with the non-governmental sector. In partnership with a few pioneer NGOs, the DOH helped organize the first AIDS NGO network which now functions independent of the DOH. The DOH has channeled international donor money to these NGOs through various mechanisms and has included NGO inputs into strategic plans and programs.

Recently, the DOH has advocated strongly for broader participation among government agencies and the private sector in the fight against AIDS. The recently organized Philippine National

AIDS Council which has multisectoral representation will be a vehicle for this broader response.

The second strategy of capability- and health infrastructure building has had mixed results. While surveillance and testing programs have made fair advances, the areas of STD control, treatment and care of persons with HIV and AIDS, and security of blood transfusion services have made less gains. Many of the problems in these areas are structural: they have to do with how services have been previously organized, funded and operated. Thus capability-building in these areas face systemic obstacles. In STD control for example, the DOH program has been chronically weak with poorly trained personnel, inadequate laboratories, inadequate funds, and poor standards. In blood banking operations, sources for blood transfusion services are 70% commercial and testing of commercial donors has not been rigorous because of high costs. In the area of treatment and care, many hospitals included DOH hospitals, need to upgrade the practice of infection control.

The recent devolution of health services to local government units will further compound these difficulties. By virtue of recently approved legislation, cities, provinces and municipalities have the mandate to prioritize, fund, and operate health care services. The implications for HIV/AIDS control are far-ranging and successful national program must rely heavily on what local governments support.

And finally, there is the issue of empowering people infected or not, to deal with the consequences of infection. Being compassionate is a learned behaviour which has to be nurtured and made the societal norm. Only now are Filipinos learning about the consequences of HIV; only now comes the true test of their collective response.

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3. Hayes CG, Manaloto, CR, Basaca-Sevilla V, et al : Epidemiology of HIV infection among Prostitutes in the Philippines, J. AIDS 1990, vol.3 no.9:913-920.

4. These groups have included among others: the Research Institute for Tropical Medicine of the Department of Health (DOH) which have followed prostitutes who attend STD clinics in several localities in MetroManila; NAMRU or the US Naval Medical Research Unit which

has completed prospective studies among prostitutes working around the area near the US military bases; the Field Epidemiology Training Program of the DOH which has done rapid surveys of infection among overseas workers and injecting drug users; the Bureau of Research and Laboratories of the DOH which has monitored infection in the blood transfusion services and the University of the Philippines which has looked at sexual practices among groups of prostitutes.)

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U.S. NAVAL MEDICAL RESEARCH UNIT NO. 2
DETACHMENT
MANILA, REPUBLIC OF THE PHILIPPINES

The Epidemiology of HIV Infection in the Metro Manila Area

Initial Findings in Metro Manila Commercial Sex Workers (CSWs)

City	Number Tested	Number Positive	Rate (Per 1,000
Pasay	1,483	8	5.4
Paranaque	679	0	0
Makati	3,146	0	0

Characteristics of Pasay Registered CSWs

	HIV Negatives	HIV Positives
*Mean age at time of test	23.17	22.75
*Mean age at first intercourse	18.21	19.25
-Took money for that sex	12%	25%
*Never had sex	6.4%	-
*Mean age first accepted money for sex	21.18	21.62
*Now accept money for sex	63%	100%

Risk Factors During Previous 12 Months

	HIV Negatives	HIV Positives
*Mean number of times had sex per week	2.396	1.5
*Mean number of different sexual partners per week	1.934	1.25

Sexual Practices of Pasay Registered CSWs

*Percent reporting type of sex performed

	Frequently Neg/Pos	Occasionally Neg/Pos	Rarely Neg/Pos	Never Neg/Pos
-Penis-Vaginal	79.6/100	8.0/0	5.0/0	2.4/0
-Penis-Oral	1.5/0	8.3/25	5.4/0	79.3/75
-Penis-Rectal	0/0	0.13/0	0.16/0	94.3/100
-Oral-Vaginal	4.1/0	25.7/62.5	8.3/0	56.9/37.5

*Use of Condoms (%)

	HIV Negatives	HIV Positives
- Always	24.0	37.5
- Frequently	19.9	37.5
- Occasionally	14.7	25
- Rarely	4.7	0
- Never	30.8	0

Most Frequent Sex Partners of Pasay Registered CSWs

	HIV Negatives (%)	HIV Positives (%)
*During Past 12 Months		
-Race: Caucasian	22.2	87.5
Asian	67.6	37.5
Black	0.67	0
Middle Eastern	0.81	0
-Nationality:		
Filipino	42.1	0
Japanese	29.2	25
American	15.1	0
Australian	7.7	37.5
European	1.7	37.5
*Prior to 1 year ago		
-Race: Caucasian	20.1	50
Asian	49.6	12.5
Black	0.14	0
Middle Eastern	0.28	0
-Nationality:		
American	67.9	25
Filipino	34.9	0
Japanese	12.9	12.5
Australian	1.3	12.5
European	0.56	25

History of STD or IV Drug Use in Pasay CSWs

	HIV Negative (%)	HIV Positive (%)
*Ever had an STD		
- Gonorrhea	8.72	25
- Syphilis	1.01	0
- Genital Warts	0.40	0
- Genital Ulcers	11.13	50
- Vaginal Discharge w/ Itching Pain	7.11	50
*Ever Use IV Drug	0.07	0

Migrations and Travel of Pasay Registered CSWs

*Last City where HIV positives reported working prior to Pasay

- Manila 6
- Boracay 1
- None 1

	HIV Negatives (%)	HIV Positives (%)
*Reported Travel outside RP	16.33	0
- Reported having sex abroad	45.267	0
- Reported taking money for sex abroad	24.279	0

Migrations and Travel of Pasay Registered CSWs

*Last City where HIV positives reported working prior to Pasay

- Manila 6
- Boracay 1
- None 1

	HIV Negatives (%)	HIV Positives (%)
*Reported Travel outside RP	16.33	0
- Reported having sex abroad	45.267	0
- Reported taking money for sex abroad	24.279	0

USAID Assistance to the Philippines AIDS Prevention and Control Program (1988-1997)

1. Between 1988 and 1992 USAID has provided $3.6 million of direct assistance to the Philippines AIDS Prevention and Control Program. This assistance was used to fund AIDS information, education and communication campaigns in Metro Manila, Cebu, Olongapo and Angeles; training in AIDS counseling; maintaining an AIDS hotline; upgrading social hygiene clinics and regional blood centers; development of partnerships with NGOs; and the conduct of a market feasibility study for condoms.

2. Recognizing the need for rapid action to avert a full-blown HIV epidemic, USAID authorized in late 1992 the AIDS Surveillance and Education Project (ASEP), with a funding of $6.5 million and a project life that extends to 1997. This project is the source of the $2.1 million grant to WHO to provide the required technical and logistic assistance so that the DOH can expand the national HIV-AIDS sentinel surveillance program to up to 30 sites. This expansion is necessary to track more closely the rate and pattern of spread of HIV infection.

ASEP is also the source of funding for the $4.5 million Cooperative Agrreement with the Program for Appropriate Technology in Health (PATH). PATH will co-manage, together with a local NGO, the implementation of an intensified and coordinated information, education and communication program for HIV/AIDS prevention and control.

3. Aside from ASEP, other forms of USAID assistance to the national program include:

a) A $250,000 technical assistance to the DOH to develop a comprehensive program for the control of sexually transmitted diseases (STDs). This program is extremely important because the current surveillance data suggest that the pattern of HIV transmission in the Philippines is primarily sexual, and because of the established interrelationship between STDs and HIV infection.

b) A $55,000 grant to the New Tropical Medicine Foundation to assess the blood banking system in the Philippines today. This study will look at the quality of the blood supply available for transfusion, identify the constraints to the observance of proper blood banking practices, and develop recommendations to insure the quality of the country's blood supply.

c) Assistance to the DOH to develop the National HIV/AIDS Strategy. Together with AIDAB and WHO, USAID is assisting the DOH develop the country's strategy for containing the HIV epidemic. The national strategy document will firmly articulate the goals of our prevention and control efforts, the strategies and approaches for achieving them, the roles of central and local governments and non-governmental institutions, and the mechanisms for ~~for~~ addressing the medical, public health ~~health~~, social, economic, legal, ethical and other implications of HIV infection.

AIDS Surveillance and Education Project

Implementing/Executing Agencies:

Department of Health (DOH)
World Health Organization
Program for Appropriate Technology in Health (PATH)
Health NGOs

Purpose:

To establish mechanisms that have been institutionalized in the public and private sectors which:

1. monitor the prevalence and transmission of HIV infection

2. encourage behaviors which reduce HIV transmission

Location: Nationwide

Components:

1. **Surveillance.** Project funds will establish an HIV sentinel surveillance system at strategically located geographic sites throughout the country. The surveillance system will initially monitor HIV seroprevalence among four high-risk groups: overseas contract workers, male homosexuals, commercial sex workers, and patients at STD clinics. The primary purpose of the surveillance program is to generate accurate and reliable data for the public and galvanize public support for its control.

2. **Education.** Project funds will be provided to a local NGO to support mass media and community-based education, communication and public relations programs aimed at groups at risk and the general population, and in locations indicated by the sentinel surveillance system. These programs will encourage behavior that reduce the risk of HIV transmission. A network of NGOs will be developed and enlisted to play a significant role in the education/communication program.

Project Duration: 1992 to 1997

Project Cost: United States - $6,500,000.00
Government of the Philippines - $2,300,000.00

AIDS SURVEILLANCE AND EDUCATION PROJECT
AIDS EDUCATION AND PREVENTION GRANT

I. PROJECT PURPOSE, DESCRIPTION AND SCOPE OF WORK

The United States Agency for International Development acting through the United States Agency for International Development/Manila (USAID/Manila) has agreed to grant funds for the implementation of a cooperative agreement to assist the Department of Health (DOH), Government of the Philippines to conduct AIDS education and communication interventions and to institutionally develop one or more local health NGO(s) which will function as partner ("partner NGO(s)") to the DOH National AIDS Prevention and Control Program (NAPCP). The partner NGO(s) will serve as a base of technical assistance to strengthen other local NGOs implementing AIDS communication and prevention activities under the NAPCP. Under the Cooperative Agreement, the Education Component of the bilateral AIDS Surveillance and Education Project (ASEP) will be implemented as a subproject.

1. Activity Purpose

The purposes of this sub-project are:

a. To assist the NAPCP to establish an AIDS Education Committee and to develop, monitor, and evaluate a National AIDS Information, Education, and Communications Strategy ("the Strategy").

b. To enhance the capacity of one or more local NGO(s) to serve as a partner to the NAPCP in implementing the Strategy. The partner NGO(s) will be responsible for organizing and working with the local private sector to enhance its capacity to implement IEC activities.

c. To implement priority private sector IEC activities through NGOs and other private sector organizations.

reflecting a serious gap between known effective preventive behaviors and actual behavior.

2.2 GOP Program for AIDS Prevention and Control

2.2.1 The National AIDS Prevention and Control Program

The GOP inaugurated national efforts to combat AIDS in 1987 through the Department of Health (DOH) which has received significant support from WHO/GPA. A Medium Term Plan for the Prevention and Control of AIDS in the Philippines was promulgated in 1988, having the following objectives:

a. prevention of sexual transmission;

b. prevention of transmission through blood transfusion;

c. prevention of transmission through injection and other blood-piercing instruments;

d. prevention of perinatal transmission; and

e. reduction of the impact of HIV infection on individuals, groups, and society.

A National AIDS Prevention and Control Program (NAPCP) was established in August 1988 to implement the Medium Term Plan (MTP) under the auspices of the DOH's Undersecretary for Public Health Services. A National AIDS Program Management Committee chaired by a full-time Program Manager was created to coordinate implementation of the program. The Program Manager is assisted by an AIDS Unit in the DOH responsible for routine coordination of the NAPCP. However, the AIDS Unit has lacked organizational status within the DOH and is staffed by contract personnel.

The primary accomplishments of the NAPCP since 1988 are:

1. Blood Supply Screening: expertise and supplies for HIV laboratory testing have been devolved to 19 government regional laboratories and four Social Hygiene Clinics (SHC) serving as regional referral centers. Approximately 40% of the blood supply is screened for HIV prior to use.

2. Screening for HIV among high-risk groups: HIV testing has been instituted for high-risk groups seeking services at SHC. Over 200,000 screening

Labor and Employment (DOLE) are also proposing to initiate AIDS prevention IEC activities.

2.3 Private Sector

As of October 1992, nineteen non-governmental organizations (NGOs) have been actively involved in the National AIDS Prevention and Control Program (NAPCP) AIDS Information, Education and Communication (IEC) Program nationwide. Most of the interventions focus on individuals at risk (commercial sex workers, overseas contract workers, men who have sex with men and intravenous drug users). Sustainability of these activities is a problem as they rely almost entirely on external donor funding. NGO attempts to gain support from local and multinational corporations for these activities have not been very successful.

In November 1991, a national NGO AIDS coalition was organized in response to a UNDP meeting on inter-NGO collaboration, to meet regularly and share experiences in AIDS education and prevention activities and to develop policies on certain AIDS issues for submission to the NAPCP. However, the management structure of this coalition is not yet defined nor well organized. Most of the NGOs have technical capacity to carry-out small scale activities but many lack the financial and administrative capability to develop their AIDS prevention activities further.

2.4 Other Donors

World Health Organization/Global Programme on AIDS (WHO/GPA) has provided critical assistance to the NAPCP by funding the program's contract staff as well as providing budget for basic operations and program activities. WHO currently provides a long-term resident advisor who works with the head of NAPCP principally on program management. Discussions with WHO during the design of this project have been held to encourage a high degree of coordination between WHO and USAID over the coming years. WHO assistance will focus upon two areas: (1) building the management capacities and human resources needed by the DOH to develop and manage the National AIDS Prevention and Control Program; and (2) strengthening the DOH capacity to diagnose and treat sexually transmitted disease. The ASEP will complement WHO assistance by expediting development of a national HIV/AIDS sentinel surveillance system and initiating preventive AIDS education and communication programs.

Several donors, such as the Australian International Development Assistance Bureau (AIDAB) and the Asian

groups, the sentinel surveillance system will be expanded to include secondary risk groups, i.e., pregnant women attending antenatal care clinics. The Education Component will support mass media and community based education, communication, and public relations programs which encourage behaviors that reduce the risk of HIV transmission, are aimed at groups at risk and the population at large, and are in locations indicated by the sentinel surveillance system.

A detailed Description of Project Activities is contained as Annex A.

3. SCOPE OF WORK

The Grantee will have primary responsibility, in collaboration with the Department of Health and the partner NGO(s) for the implementation of the education component of the ASEP. The Grantee and the partner NGO(s), together with the DOH headed AIDS Education Committee, will finalize and operationalize the National AIDS Information, Education and Communication Strategy developed under this project. The Grantee's responsibilities will include: 1) institutional development of the partner NGO(s) by strengthening its management capabilities to assist smaller NGOs implement AIDS education activities designed to reduce the risk of HIV transmission in the Philippines; 2) support to the AIDS Education Committee including periodic refinement of the National AIDS IEC Strategy; 3) through the Partner NGO, implementation of the ASEP-financed private sector (e.g. mass media components) and NGO managed segments of the strategy. The grantee will work with the partner NGO(s) and the Department of Health to plan and carry out these activities to insure their continuation beyond the life of the project. The issue of sustainability should be a paramount concern in all activities implemented through this cooperative agreement.

3.1 Accomplishments Anticipated upon Completion of this Cooperative Agreement

1. A strengthened local health NGO(s) (partner NGO(s)) with capacity to effectively manage and administer an AIDS IEC grants program for the DOH. The partner NGO(s) will: 1) evaluate sub-grant proposals from other NGOs; 2) monitor and evaluate sub-grant activities; and 3) provide technical assistance to interested NGOs in sub-grant proposal development, administration, and implementation.

2. Provide support to strengthen the administrative and financial management capabilities of the partner NGO(s) to manage AIDS education subgrants to other NGOs; including provision of technical assistance, training, local costs and short-run personnel costs as needed. Special emphasis should be placed on the viability and sustainability of AIDS activities of the partner NGO(s).

3. Provide short-term technical assistance to strengthen the ability of the partner NGO(s) to develop effective guidelines and systems to: 1) identify opportunities for technical assistance to smaller NGOs, 2) analyze and review subgrant proposals on their technical merit and complimentarity with the national AIDS IEC Strategy, 3) effectively monitor and evaluate implementation of these activities and 4) transfer knowledge and skills to the NGOs which will enable them to efficiently maintain and/or implement their own AIDS education/prevention activities.

4. Provide a long-term IEC technical advisor to assist the Partner NGO(s) with the design and implementation of the ASEP education component activities. The advisor will provide technical assistance to the AIDS Education Component of the Project, and will work closely with the Assistant Secretary for Special Concerns.

5. Provide short-term technical assistance in developing and implementing mass media and community-based education, communication, and public relations activities which encourage behaviors that reduce the risk of HIV transmission within high risk groups and within the general population. These will include such areas as:

   a. provision of support directly to NGOs in developing outreach and counseling programs for groups at risk

   b. development of mass-media advertising and promotion campaigns using radio, television, and print media

   c. utilization of public relations strategies to enhance and reinforce communications programs conducted through mass-media and community-based, interpersonal channels

4. PERSONNEL

In order to carry out this program of work, the Grantee is expected to assign a full-time resident Subproject Manager and Communication Specialist for 48 person months.

In addition, the Grantee will provide short-term staff as required to implement this subproject.

5. SUBSTANTIAL INVOLVEMENT UNDERSTANDING

It is anticipated that, in addition to Grantee collaboration with the DOH, performance of the Scope of Work requires substantial involvement of USAID. Specific areas of involvement include, but are not limited to:

1. The selection of the local partner NGO(s);
2. Concurrence in the selection of the full time Subproject Manager and IEC advisors;
3 Review and approval of an initial action plan and annual implementation plans, including a separate annual plan for mass media activities;
4. Review and approval of criteria to be used in reviewing and approving implementation grants to other NGOs;
5. Site visits, quarterly review meetings, and, planning workshops; and
6. Review and approval of component evaluation plans.

6. DURATION OF GRANT

The estimated period of the grant will be from September 15, 1993 to September 15, 1997.

7. INDICATORS OF GRANTEE PERFORMANCE

The grantee will adhere to meeting the following indicators by the dates provided:

	Indicator	Date
a.	Selection of at least one partner NGO	November 1993
b.	Selection and placement of resident advisor for AIDS communications	October 1993
c.	Finalization of IEC Strategy	January 1994

d.	Initiation of subgrant activities	March 1994
e.	Mid-term evaluations of subgrants completed	July 1995 July 1996

ASEP EDUCATION COMPONENT

DRAFT (1/5/94)

FIRST ANNUAL IMPLEMENTATION PLAN

September 15, 1993 - September 15, 1994

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1. Institutional Development of Partner NGO/PO													
1.1 Select Partner NGO/PO for Metro Manila and Cebu City													
o Develop selection criteria for Partner NGO/PO	XX	XXXX	X										
o Identify potential Partner NGO/PO	XX	XXXX	XX										
o Assess grant administration capabilities			XXX										
o Concurrence by DOH and USAID for Partner Selection			X	XXX									
o Develop Scope of Work for Partners					XXXX								
o Solicit proposoals from Partners						XXXX							
o Review proposals and formalize contract with Partners							XXXX	XXXX					
1.2 Strengthen Partner's Capabilities													
o Conduct Finance Management Assessment of Candidate Partner NGO/PO			XX										
o Develop plans and schedule upgrading on Financial Control and Grant Management skills of Partners				XXXX	XXXX	XXXX							
o Conduct first and second round of training on Financial Control and Grant Management								XXXX				XX	XX

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
o Develop benchmark/indicators to measure institutional development of Partner NGO/PO							XXXX						
o Assess AIDS IEC capability of Cebu Partner NGO							XXXX						
o Identify IEC Technical Advisor for Partner NGO in Cebu							XXXX	XXXX					
o Concurrence by DOH and USAID for TA								XXXX					
o Start implementation of TA & training of prospective sub-grantees								XXXX	XXXX	XXXX	XXXX	XXXX	XXXX
1.3 Co-Select Sub-Grantee NGOs/POs with PATH													
o Develop eligibility criteria for sub-grantees				XXXX	XXXX								
o Develop criteria for technical evaluation of proposals from prospective sub-grantees					XXXX	XXXX							
o Concurrence by DOH and USAID to technical criteria and procedures for awarding sub-grants						XXXX							
o Develop and issue RFPs for sub-grant program							XXXX	XXXX					
o Review solicited and unsolicited proposals								XXXX	XXXX	XXXX			
o Award sub-grants to qualified NGOs/POs									XXXX	XXXX	XXXX		
2. Development of IEC Strategy													
2.1 Coordinating Mechanism													
o Reach agreement with DOH on coordinating mechanism for strategy-setting		XXXX											
o Assist DOH with preparation of Department Order for Education Sub-Committee		XXXX	XXXX										
o Preparation for ASEP Organizational Meeting(s)			XXXX	XXXX									
o Convene ASEP Organizational Meeting			X										

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
o Convene Education Sub-Committee Meetings				XXXX	XXXX	XXXX	XXXX	XXXX	XXXX				
2.2 Update Interim Communication Strategy													
o Preparatory meetings of Educatiion Sub-Committee			XXXX	XXXX									
o Update synthesis of KAPB studies of target beneficiaries (short-term consultant)				XX	XXX								
o Review epidemiologic data on HIV/AIDS					XX								
o Convene ASEP Meeting to select target areas and groups					X								
o Conduct Workshop to develop plan of action to operationalize the strategy						X	X						
o Identify and prioritize geographic areas of implementations						X	X						
o Identify and prioritize area-specific target beneficiaries						X	X						
o Finalize detailed implementation plan						X	X						
o Collect audience research and public opinion polls							XXXX	XXXX	XXXX				
2.3 Develop monitoring system for IEC component of the National AIDS Strategy													
o Develop conceptual framework and indicators of monitoring system with external technical assistance							XXXX	XXXX					
o Pretest and adapt indicators for monitoring system								XXXX	XXXX	XXXX	XXXX	XXXX	XX

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2.4 Gather information in preparation for the development of a National HIV/AIDS Strategy					XXXX	XXXX	XXXX	XXXX	XXXX				
2.5 Workshop to finalize inputs to IEC components of National HIV/AIDS Strategy									XX				
3. Implement Communication Strategy Activities													
3.1 Initiate activities in Cebu													
o Initiate dialogue with LGUs, local NGOs, POs		X	XXXX										
o Conduct Consensus Building Workshop				X									
o Develop plan of action					XXXX								
o Recruit part-time IEC Advisor and obtain DOH/USAID concurrence					XXXX	XXXX							
o Design participatory communication project interventions for target beneficiaries including evaluation to track behavior trends in sub-groups						XXXX	XXXX						
o Issue sub-agreement and start implementation of intervention/s									XXXX	XXXX	XXXX	XXXX	XX
3.2 Initiate activities in priority districts in Metro Manila													
o Initiate dialogue with LGUs, local NGOs, POs						XX	XXXX						
o Conduct local area consensus building and planning workshop/s							XXXX	XXXX					

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
o Evaluate on-going communication interventions in Manila						XXXX	XXXX						
o Strengthen on-going communication interventions in priority districts							XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	
o Design new innovative communication interventions including evaluation to track behavior trends in sub-groups								XXXX	XXXX	XXXX			
o Issue sub-agreement and start implementation of innovative communication intervention/s								XXXX	XXXX	XXXX	XXXX	XXXX	
4. Public Relations and Mass Communication (Refer to detailed Annual Plan for Mass Media and Public Relations Activities)													
5. Monitoring and Evaluation													
5.1 Site visits (1xQ3 &Q4)									XXXX			XXXX	
5.2 Analyze baseline data in Cebu and Manila							XXXX	XXXX					
5.3 Conduct Project Review Meetings									XX				XX
6. Project Management and Administration													
6.1 Staffing													
o Project Manager													
Recruitment	X												
Consultation/Approval	X												

ASEP EDUCATION COMPONENT

First Annual Plan for Mass Media and Public Relation Activities

September 15, 1993 - September 15, 1994

ACTIVITY	1993				1994								
	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1. NGO/PO Support for World AIDS Day				X									
2. *Develop National Public Relations* Strategic Plan for STD/AIDS Prevention					XXXX	XXXX							
3. Placement of existing PSAs in Metro Manila and Cebu City (CAMPAIGNS Phase II) o *Plan for adaptation and schedule* o Solicit sponsorship from the private sector (for placement of PSAs in mass media)						XXXX	XXXX	XXXX					
4. Conduct Second Round of Public Opinion Poll on *HIV/AIDS Prevention & Education* and/or market and lifestyle research o Develop SOW o Solicit Proposal o Review Proposal o *Consultation/Approval*										XXXX			
5. Design and produce new PSAs to support interpersonal communication interventions in Metro Manila and Cebu City												XXXX	XX
6. Technical support to local media and influentials in Cebu City, Pasay City and other priority area					XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XX
7. Provide routine technical assistance in developing press releases for DOH *AIDS Unit* and the *Cebu City* Health Office					XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XX

APPENDIX P

HIV Surveillance Strategies

Florante P. Magboo, MD
National HIV Surveillance Program Coordinator

Introduction

The National HIV Surveillance is a systematic and regular collection of information on the distribution and trends of infection in the different high risk groups identified at a given time. This information will be used to develop, prioritize and direct effective education interventions and risk reduction activities. It will also be used to evaluate the effectiveness of the prevention and control strategies of the National AIDS Prevention and Control Program.

The general objective of the National HIV Surveillance System is to provide early warning of increases in HIV infection or the high risk behaviors that may predispose the country to HIV infection so that necessary interventions can be instituted.

The specific objectives of the National HIV Surveillance System are:

1) to provide early warning of dangerous levels of HIV infection;
2) to estimate the incidence/prevalence of HIV infection among the sentinel groups;
3) to monitor trends in HIV infection;
4) to identify surveillance groups or subgroups and sites with high and low risk for infection;
5) to identify risky behavior patterns for HIV transmission;
6) to project future occurrence of HIV infections; and
6) to provide information for prioritizing intervention programs.

Operations

The HIV surveillance system was implemented during the first year after initial pilot studies in 1992. These pilot studies, conducted in Baguio City and Cebu City, pre-tested procedures and protocols. The first round of surveillance was implemented on the second half of 1993 in Quezon City and Cebu City. This surveillance system is a semestral series of testing, each lasting for 8 weeks and adding new sites incrementally until 1997.

Surveillance Sites

Surveillance sites have been selected based on the following criteria:

1. the number of HIV positive individuals identified in a particular area or known to come from the area;
2. availability of risk or sentinel groups;
3. a reliable laboratory is available to perform serologic tests for HIV;
4. geographical representativeness of the site; and
5. on-site staff must be willing to cooperate and be capable of conducting surveillance for at least 5 years.
6. urban/big cities (highest risk geographical areas)
7. data from previous HIV prevalence assessments

Exclusion criteria:

a. re-attending male STD patients whose blood has been extracted within the study period since they are already considered enrolled in the study..

Again, re-attending patients should be asked the date of the last visit to check whether blood has been extracted. The patient is enrolled as subject if no medical record is available.

C. Female commercial sex workers (FCSWs) - are women who exchange sex for money and work in establishments for this purpose.

Inclusion criteria:

a. are those who work in establishments and exchange sex for money - whether regular workers or contractuals (dancers and models).

Establishments may include bars, casa, massage parlors, night clubs, beer houses, etc.

Exclusion criteria:

a. ancillary staff, such as cashiers and floor managers who do not engage in sex work.

D. Male commercial sex workers (MCSWs) - are individuals who exchange sex for money and work in establishments for this purpose.

Inclusion criteria:

a. men who work in establishments and exchange sex for money. The clients of the male CSW may be male or female.

b. all identified men who engage in sex in exchange for money and voluntarily agree to participate in the study (e.g. paid partners of MSMs).

Exclusion criteria:

a. Ancillary staff such as security guards, floor managers and other staff in the establishment who do not engage in sex for money.

Reminder: Male clients of male CSWs are eligible for inclusion in the "Men who have sex with men" surveillance group. They do not meet the inclusion criteria for male CSWs.

The second round will commence in the 1st quarter of 1994. This round will involve 4 cities: Quezon City (NCR), Pasay City (NCR), Cebu City (Region VII) and Davao City (Region XI). The third round shall have no more than 6 sites to ensure adequate planning and coordination.

Surveillance or Sentinel Groups

When the prevalence of HIV remains low, scarce resources should be focussed on groups with the highest risk or risk behaviours for HIV infection. High risk behaviours include having multiple sexual partners with demonstrated unsafe sexual practices and the use of injectable drugs. These groups warrant preventive interventions in their own right and represent the most cost-effective application of resources at this stage in the epidemic.

HIV sentinel groups shall then be selected according to the following criteria:

1) predominant modes of transmission[1] in the Philippines;
2) known prevalence of HIV infection in the Philippines;
3) can be easily identified and accessed in adequate numbers to meet sample size requirements;
4) and whose behaviour make them targets for HIV/AIDS prevention and control activities.

These groups shall be tested twice during the next twelve months. Once in the first quarter of 1994 and again in the third quarter of 1994. The sample size of each group per site has been determined at 300 except for the MCSWs and FLSWs (Free Lance FCSWs). This sample size has been calculated to allow detection of 1% prevalence using the estimated 95% confidence interval.

The surveillance groups to be tested during the second round shall be:

- injecting drug users (IDUs)
- male STD patients (MSTDs)
- male commercial sex workers (MCSWs)
- men who have sex with men (MSM)
- female commercial sex workers in establishments (FCSWs)
- free lance FCSWs (FLSWs)

Sample Size

It is important that each site monitor the level and trend of HIV prevalence, since these values can vary substantially between sites. Sample sizes must detect a 1% prevalence if possible, which requires at least 300 individuals in each group. For groups which may be

[1] Though variations in the predominant modes of transmission may occur between and within regions, these major transmission patterns should be considered when selecting surveillance groups.

difficult to access like the FLSWs and MCSWs, the target should be 100 individuals, which will allow detection of 5% prevalence.

Inclusion/Exclusion Criteria for Sentinel Groups

A. Injecting drug users (IDUs) - are individuals who use or have used injectable drugs recreationally whether intravenous, subcutaneous, and/or intramuscular within the last 5 years.

Inclusion criteria:

a. IDUs who are attending treatment facilities (rehabilitation centers, detoxification centers, etc.) for drug abuse. They may be either residential or treated as out-patient.

b. IDUs outside treatment clinics who are encouraged/advised to consult treatment centers (e.g. voluntary submissions, prisoners who are incarcerated because of possession or use of prohibited drugs)

Exclusion criteria:

a. IDUs who have not injected drugs during the past 5 years.

b. Re-attending IDUs in treatment centers whose blood has been extracted within the study period since it is likely that such patients have been previously enrolled as subjects.

To verify whether re-attending patients have already been enrolled in the study, subjects should be asked the date of the last visit to check whether blood has been extracted. When no medical record is available to prove the patients claim, blood should be extracted and subsequently enrolled as subjects.

B. Male patients of STD Clinics (MSTDs) - are men who consult private and government sexually transmitted disease (STD) clinics for treatment of STD.

Inclusion criteria:

a. men who are consulting private/government STD clinics for the treatment of STD.

b. they may be first time clients or re-attending clients.

Schedule of Surveillance testing - according to surveillance groups, sites and sizes.

Surveillance groups	Collection Site	Method of Testing	Sample Size
1. Injecting drug users	Treatment facilities Rehabilitation centers	Voluntary anonymous	300
2. Male STD patients	Social Hygiene Clinics Private laboratories	Anonymous unlinked	300
3. Male commercial sex workers	Gay bars & sex venues	Voluntary anonymous	100
4. Men who have sex with men	Gay venues & bars	Voluntary anonymous	300
5. Female commercial sex workers in establishments	Streets of trade	Voluntary anonymous	300
6. Free lance female commercial sex workers	Commercial establishments	Voluntary anonymous	100

Data collection

After blood extraction, the subject will be given a card with a code number. This card is presented to the local surveillance unit after a specified period of time (to be determined by the local surveillance team in collaboration with the local testing laboratory) in order to obtain the result of the test. The result shall be released upon request from the subject. The subject should agree to undergo counselling. The local surveillance unit will not initiate the notification of subjects for their results.

The time period for each sera collection, to be known as collection time, will be eight weeks in duration. It is anticipated that the documented total of sera required for all surveillance groups and sero-survey groups may not be collected during the collection time available. Prevalence rates shall be determined if possible with the available sera during the collection time.

During the surveillance, the City Health and Regional Health Laboratories including the Bureau of Research and Laboratories (as the NCR Regional Laboratory) will perform all tests for surveillance groups at the surveillance sites.

Sera collected by the local surveillance units shall be sent to the designated laboratory for testing.

In the instance of linked testing, results with appropriate counselling will be given to individuals concerned by a designated officer of the local surveillance unit. All information on tests performed and data collected will be forwarded to the data management unit at the central office which will handle the analysis and interpretation of data.

Reporting

A feedback of semestral results shall be given to Field Epidemiology Training Program of the Department of Health (DOH) and subsequently to local officials concerned.

At the completion of each round of surveillance a report shall be coordinated by the Field Epidemiology Training Program of the National HIV Surveillance System. Surveillance reports shall be completed according to the following timelines: 1st Round - 3rd quarter 1993; and 2nd Round - 1st quarter 1994.

These reports shall include data on the following: the surveillance sites involved; the surveillance groups involved; the number of subjects in each group; the prevalence rates of groups upon which it can be determined and the conclusions drawn. Also included in the reports shall be the problems encountered and recommendations to overcome these problems.

Recommendations concerning the surveillance groups to be included and excluded in the next round of surveillance and the reasons why shall also be included in the reports. Also recommendations concerning the size of the surveillance groups and the surveillance sites to be included/excluded in the next round of surveillance shall be included.

The recipients of such reports shall include the Secretary of Health; the DOH AIDS - Unit; local government officials; local DOH personnel; field personnel at all surveillance sites; NGOs concerned with HIV control; the media; and international agencies including WHO and USAID.

Operations Manual

The manual of practices and procedures shall be utilized by the National HIV Surveillance System detailing all aspects of operations, serving as an on-site guide to undertaking the surveillance.

Laboratory Testing

Serum pooling shall be utilized in HIV-testing for the surveillance program. This is recommended in areas where the prevalence of HIV infection is low and resources are scarce. The cost of HIV-testing can be significantly reduced.

A pool of five samples shall be tested with the use of Particle Agglutination (PA). If an HIV antibody-positive is found among the pooled samples tested, individual samples of that particular pool shall be tested. Example: With 20 individual samples, 4 pools of 5 samples shall be tested. If one pool is found positive, individual testing of all 5 samples in the positive pool shall be conducted. Hence, only a total of 9 screening tests shall be performed instead of 20. Confirmatory tests of positive individual tests shall be done using Western Blot.

Laboratory procedures

The following laboratory testing procedures for all sera shall be as follows:

1) preparation of pooled sera from every five consecutively-numbered serum samples for testing.
2) testing of pooled sera using Particle Agglutination (Serodia HIV) test kits.
3) repeat testing of individual serum samples comprising the pooled sample which gives a PA-positive or inconclusive result.
4) supplemental testing of positive or inconclusive individual serum samples by the Western Blot technique using Diagnostic Biotec. Ltd. kits

[All collected serum samples (n=individual serum samples plus pooled sera) shall be stored in the freezer for future reference.]

Data Management and Analysis

The general flow of the surveillance activity commences at the blood/data collection site. Screening for HIV antibodies by PA shall be done by the regional laboratories/Social Hygiene Clinics. Confirmatory tests using Western Blot shall be done by RITM. All indeterminate WB tests shall also be referred to RITM.

The Regional laboratory/Social Hygiene Clinic is responsible for notifying the data collection sites of the test results. The responsible member of the local surveillance unit will relay the test results to the person concerned and administer post-test counselling (in the instance of voluntary linked testing and the individual returning for the test result).

Statistics on HIV sero-positives, number of tests performed and all other related information obtained by all the laboratories involved are relayed to the Field Epidemiology Training Program for review. This information shall be relayed by both the local surveillance units and RITM. Data obtained by this central unit shall be entered into the computer using the EPI INFO software. Tables and statistical analyses shall likewise be generated. The frequency of the presence of HIV infection among the study groups shall be estimated from the data collected. For surveillance A groups, results should be presented as prevalences with 95% confidence intervals or as LQAS tables.

CONSULTANT REPORT ON HIV/AIDS SURVEILLANCE STRATEGIES AND ESTIMATION AND PROJECTION OF HIV/AIDS IN THE PHILIPPINES

Introduction

A request was forwarded to AIDSCAP in mid-October, 1993, through the USAID Mission in the Philippines from Assistance DOH Secretary Manuel Dayrit to have a consultant (J Chin) carry out the following activities in Manila from November 8-12, 1993:

1. Review the current HIV surveillance system and strategies in the Philippines.
2. Review available HIV prevalence and incidence data and produce best case and worst case scenarios for HIV incidence in the coming years using assumptions that apply to the Philippines situation.
3. Present these forecast scenarios in a symposium scheduled in Manila to discuss surveillance, forecasting and interventions, focusing on how this information can be used by a large, mutltisectorial audience.

The following is a report of this consultancy regarding HIV/AIDS surveillance and estimation/projection of HIV infections and AIDS cases in the Philippines.

Status of the Reported HIV/AIDS Epidemic in the Philippines

Up to October, 1993, over 100 AIDS cases and more than 300 "asymptomatic " HIV infections have been reported to the DOH. No specific studies are available to estimate how incomplete, inaccurate, and delayed such reports may be, but it is believed that the actual number of AIDS cases may be 3-4 times the reported number and the actual number of HIV infections may be from 50 to 100 times the reported number.

The first round of HIV Sentinel Surveillance was completed and reported in June, 1993. In Baguio, a total of 1,044 persons comprised mostly of female commercial sex workers (CSWs) and sexually transmitted disease (STD) patients were tested and none were found to be HIV positive. The median number of male sexual partners for female CSWs from establishments was 4, and condom use was reported to be very low. In Cebu, a total of 951 persons in high risk "groups" were tested and all specimens were found to be HIV seronegative.

HIV Sentinel Surveillance in the Philippines is proceeding, albeit at a relatively slow pace, along the general outline and schedule recommended by Detels and Frerichs in 1991. All of the recommended sentinel "groups" with the exception of returning overseas workers have been included in the first round of HIV Sentinel Surveillance in the Philippines. The findings to date continue to reflect a very low prevalence (less than 1%) in high risk "groups". An HIV serosurvey of close to 1500 female prostitutes in meto Manila was recently carried out by the US Navy's Biomedical Research unit in the Philippines and 8 seropositives were detected for a seroprevalence of about 0.5%.

HIV/AIDS Surveillance

Reported numbers of AIDS cases are of limited value for public health planning. In addition to reflecting HIV infections which were acquired many years previously, significant "adjustments" usually have to be made to the reported data to account for delays and incompleteness of reporting. Estimates of the prevalence of HIV infection are essential for

monitoring the epidemiological patterns and scope of individual epidemics. In addition, future cases of HIV-related diseases, including AIDS, will depend on the number of persons infected with this virus.

The basic questions which need to be answered before the development of any surveillance system include: what data are needed, with what frequency, and with what accuracy? However, before these basic questions can be answered in detail, the more basic question - what specific action or actions, if any, will be taken as a result of surveillance findings? - needs to be answered first. Surveillance data are supposed to be data for public health action. Up to now, it seems that very little, if any, specific actions have resulted from most of the public health HIV/AIDS surveillance data which have been collected to date.

For surveillance data to be relevant and useful to the AIDS program, the basic objectives of the program should be reviewed to determine if the surveillance findings are useful for the achievement of program objectives. The basic and primary objective of any AIDS prevention and control program is to prevent the transmission of HIV infections; a secondary objective is to be able to estimate the current and future number of AIDS cases so that adequate health and social services can be mobilized. It needs to be critically asked - would the most accurate and timely data on the patterns and prevalence of HIV infections and AIDS cases significantly change any of the programs and policies currently in place? From what has been learned about the epidemiology of HIV infections over the past decade, it is clear that multiple and to some extent separate epidemics of HIV infections can occur in any

country or region depending on the distribution and prevalence of specific HIV risk behaviors - men who have sex with many men (MSM), injecting drug users (IDU) who routinely share injecting equipment, and heterosexuals who have multiple sex partners (HMS). HIV surveillance systems need to be designed to appropriately monitor each of these relatively separate HIV epidemics.

Since it is not feasible to monitor the trends of HIV infection in the total or "general" population, public health surveillance must rely on the routine and consistent collection of data from sentinel groups. Such surveillance needs to focus on easily defined and accessible population groups. The basic purpose of sentinel HIV surveillance is to detect changes in the prevalence of HIV infection in the groups selected. If different sentinel groups are monitored uniformly over a period of time at selected sites, the data collected will provide information on HIV trends in these groups which should be sufficient for the design and direction of HIV/AIDS prevention and control programs. The sentinel populations selected should allow for the monitoring of all the major HIV risk behaviors or factors known to be prevalent in any given area.

What information is needed regarding the prevalence of HIV in different population groups for HIV/AIDS prevention and control programs? If HIV prevalence is estimated from the available surveillance data to be low (i.e., less than 1 percent), is there a need to attempt to determine precisely how low the actual prevalence might be? It may be quite sufficient for HIV/AIDS prevention and control programs to be aware of the following general levels of

HIV prevalence for different population "groups" :

A. HIV not detected

B. HIV present and prevalence probably very low (less than 0.5 percent?)

C. HIV prevalence close to 1 percent

D. HIV prevalence more than 5 percent

These arbitrary HIV prevalence levels are within the capability of most public health HIV/AIDS surveillance systems to measure and monitor with reasonable sample sizes. To be able to measure any specific prevalence level below 1 percent with any degree of statistical confidence would require very large sample sizes, and the additional problems of biases in sample selection and participation also contributes to the general lack of precision in public health surveillance data. In many developed countries, the HIV seroprevalence levels in MSM and IDU groups reached level D within a few years of the start of HIV epidemics in these risk "groups", whereas many high HMS risk groups in many areas are still at level B. These arbitrary "threshold" levels can be changed by HIV/AIDS programs to fit their own priorities or anxieties. It also has to be emphasized that public health HIV surveillance systems cannot provide complete surveillance coverage of all areas and populations, nor is there any overriding need for such a comprehensive surveillance system. A frequent criticism of starting sentinel HIV surveillance in only a few of the highest HIV risk "groups" in the highest risk areas (usually the largest cities) is that possible epidemics in other areas and populations will go undetected. While this is always a possibility, more than a decade of experience in public health surveillance of HIV/AIDS indicate that concern about HIV

epidemics occurring outside of the largest urban areas before high HIV seroprevalence levels are reached in the large cities are unfounded.

Experience in many countries, where HIV epidemics have reached level D among several heterosexual high HIV risk groups such as female prostitutes and/or heterosexual STD patients, also indicate that spread to the "general" population of heterosexuals as reflected by HIV seroprevalence levels among antenatal women may take up to 5 years or more to reach level C. There has been a general uneasiness of public health programs to accept the fact that the incidence and prevalence of HIV infection are difficult to measure with any great degree of precision and/or confidence. In addition, there has been an even greater reluctance on the part of HIV/AIDS program managers and policy makers (including many public health epidemiologists) to accept the fact that even the most accurate and timely surveillance data on the incidence and prevalence of HIV infections and AIDS cases will not provide adequate or sensitive indicators of the effectiveness of HIV/AIDS prevention and control programs.

The more appropriate and essential surveillance data needed by AIDS prevention and control programs are the patterns and prevalence of sexual behaviors related to multiple sexual partners and the patterns and prevalence of sharing injecting equipment among injecting drug users. There is a critical need to develop routine surveillance of these HIV risk behaviors. If public health programs are to be effective in reducing or at least modifying these HIV risk behaviors, they must first obtain reliable baseline data on sexual and injecting drug behaviors in population "groups" who are known to practice these risk behaviors. The essential data

needed for all risk "groups" are:

1. On average, how many different sexual partners did persons in this "group" have over the past month and/or week?
2. For each of these sexual encounters, was a condom used?

Tabulation and analysis of the answers to these questions yields two basic numbers which can provide programs with:

A. Specific and reasonable targets to achieve over a specified period of time; and

B. A specific means of evaluating the effectiveness of program interventions with regards to achieving the stated targets.

For example, if the targeted population were truck drivers, and the baseline behavioral surveillance survey indicated that this "group" had an average of 3.5 different sexual partners per month and the condom usage or coverage rate for these sexual contacts was 20%, then the program can initially set objectives or program targets to reduce the average number of sexual contacts in this "group" to 2 or less per month, and to increase the condom usage rate to 50% over the next 6 months or year. Such program objectives should be pursued regardless of whether the HIV seroprevalence in the community is very low, moderate or high. A second behavioral survey 6 months or a year later can be used to measure if program targets were achieved, or at least to determine if any statistically significant changes occurred or not.

All identified high HIV risk "groups" need to have routine sexual behavioral surveillance surveys (not research studies) carried out on a regular basis. For those "groups" who may engage in injecting drug use, the essential behavioral questions they need to be asked in addition to the two basic sexual behavioral questions are:

1. How many persons, and/or times did they share drug injecting equipment during the past month and/or week; and
2. Whether they would use separate and clean injecting equipment, if available, to eliminate the sharing of injection equipment.

The answers to these behavioral questions will provide public health programs with data to develop targets for changing these behaviors and with data to evaluate the effectiveness of education and other interventions in achieving these targets. Public health epidemiologists, in collaboration with behavioral scientists and experts need to develop and evaluate instruments (questionnaires, etc.) and methods (telephone interviews, etc.) for the routine collection of behavioral surveillance data for specific populations.

As described above, surveillance data on HIV infections and AIDS cases are needed to estimate the current patterns, prevalence, and trends of the epidemic, since routine HIV/AIDS surveillance data are not sensitive or timely for the direction of prevention programs. By the time that HIV surveillance data indicate that HIV infections are increasing at a very rapid rate in any specific population, it is generally too late and/or too difficult to prevent further extensive spread. In addition, without extensive data on behavioral patterns,