

INTRODUCTION

The annual report provides general information on departmental and programme activities undertaken by the Ministry of Health during 1992.

The departmental activities include the establishment of the Health Planning Unit, Services and the Department of Standards and Technical Services. Statistical data on significant health problems are provided.

In relation to specific programmes, the report describes activities in the area of Maternal and Child Health, Dental Health, Vector Control, HIV/AIDS, Hansen's Disease Control, and Pharmacy.

This report is not complete but it provides a general picture of the range of activities which are involved in the delivery of Health Care.

EXECUTIVE SUMMARY

The Ministry of Health pursued its traditional activities and sought to maintain the coverage levels in most areas, and assess the situation with a view to expanding activities to provide greater health care coverage in the many unserved and under-served areas of the country.

Programme areas which received particular attention included malaria, gastro enteritis in children under 5, immunization. In the last quarter of the year, continuing the cholera epidemic stretched the capacity and resources of the Ministry significantly.

By the end of the year, the Ministry had begun to adjust and anticipate the increase in momentum and change in strategy as a result of the change in the political administration and increased commitment to considerable reorganization of systems and procedures in the interest of improved the health sector.

Permanent Secretary

HEALTH PLANNING

The Health Planning Unit is still in its embryonic stages with the Director as the sole staff member in the Unit. The unit also supervises the Statistics Unit and has begun to train senior managers in strengthening their management skills using data.

ITEM #	TARGETS SET FOR YEAR	TARGETS ACHIEVED	ANALYSIS OF SUCCESS OR FAILURE
	<p>With technical assistance from PAHO/WHO assist a group of Senior Managers in the Ministry in reviewing and restructuring the National Health Planning (NHP) process</p> <p>Assist the heads of departments in identifying the mission and objectives of the respective services.</p>	<p>Between 50% - 60%</p>	<p>It was envisaged that health management at the sector level would be more effective policy decisions are informed by reliable data and there is more consensus in decisions. This was achieved to a limited extent</p> <p>The Mission of the Ministry has been specified and ratified. The objectives of some major sections in the Ministry have been identified. On a some countries, some departments did not submit this required information</p> <p>There is a clear commitment to the process of developing a National Health Plan for the health sector</p>
	<p>Facilitate the evolution of measures to advance the integration of health planning process into the Ministry's management practice</p> <p>Organise a Management Information System workshop for selected public and private sector hospitals</p>		<p>To a great extent this workshop which was organized to afford participants hands-on exposure to Management Information System (M.I.S) as a means to improve decision making on resource use in hospitals, achieved its objectives</p>

HEALTH STATISTICS UNIT

INTRODUCTION

During 1992, the Health Statistics Unit continued to concentrate mainly on the following areas of its works:-

- 1) Maintaining the 1992 coverage levels
- 2) Expanding activities to provide wider coverage where possible;

THE OFFICIAL NOTIFICATION OF BIRTHS

The Health Statistics Unit, in the course of 1992, continued its programme of collecting and processing data on births occurring in the country. The emphasis continued to be the collection of information on births by Place of Occurrence. Thus the distribution of births could be seen in the Regional/Geographic Perspective in Table 1 and also on Chart 1.

All births notified to the unit during the year have been edited, coded and put on worksheets by Institutions by Age-group by Type of birth.

Information on births, which is critical for the measurement of Immunization Status, Infant Mortality Rate, etc., has over the years been a source of some concern and in cases controversy. The main concern is the declining number of births reported to the unit and whether such declines reflect actual decline in deliveries or to under-reporting of births. It would appear that the decline is due more to the latter reason.

In 1992, the number of births recorded, as received was 14,537. Of these 14,141 (97.3%) were live births. The still births recorded were 396.

The total number of live births recorded as Low birth weights was 2,677 (18.9%). At a regional level, the total number of Low birth weights ranged from 1 in Region 8 to 1,237 in Region 4 as shown in Chart 3

Table 1

BIRTHS OCCURRING IN REGIONS, 1992 BY INSTITUTION

REGIONS	INST	DOM	TOTAL
	224		225
2	606	84	690
3	1,434	116	1,550
4	6,558	654	7,212
5	466	203	669
6	2,504	463	2,967
7	156	40	196
8	26	6	32
9	51	61	112
10	828	56	884
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TOTAL	12,853	1,684	14,537

INST - INSTITUTIONS

DOM - DOMICILIARY

OFFICIAL NOTIFICATION OF DEATHS

During 1992, the unit continued to collect and process data on Deaths occurring in the country. The collection of information on Deaths was done by Place of Occurrence.

An area of concern is the declining number of deaths reported to the unit. Three (3) hospitals show:- St. Joseph Mercy Hospital reported - 239, Georgetown Hospital - 1,083 and New Amsterdam Hospital - 246, totaling 1,568 as against the total number of Death forms sent to the unit for the whole country; totaling 1,350. This comparison shows that the unit is not notified of all deaths at the hospitals. No notifications of deaths were received from hospitals in Region 5, 7 and 9.

Table 2**10 LEADING CAUSES OF DEATH - ALL AGES**

1.	Cerebrovascular Diseases	430 - 438	177
2.	Endocrine & Metabolic Diseases	240 - 259	
	Immunity Disorders	270 - 279	132
3.	Conditions originating in the perinatal period	760 - 779	93
4.	Ischemic Heart disease	410 - 414	86
5.	Diseases of the other parts of the digestive system	530 - 579	79
6.	Diseases of pulmonary circulation and other forms of heart disease	415 - 429	78
7.	Other diseases of the respiratory system	466. 480 - 519	64
8.	Disease of the blood and blood forming organs	280 - 289	55
9.	Intestinal Infectious disease	001 - 009	50
10.	Hypertensive disease	401 - 405	40

Table 3**DEATHS REPORTED TO HEALTH STATISTICS UNIT BY REGIONS - 1992**

REGIONS	HOSPITAL	DOMICILARY	TOTAL
	10		10
2	59		59
3	68		68
4	781		781
5			
6	217	35	252
7			
8	1		
10	107	72	179
Total	1,243	107	1,350

IMMUNIZATION RETURNS

The Statistics Unit continued to process data on Immunization. While all information submitted to the Unit was processed, a greater emphasis was placed on the analysis of vaccines given to children ages 0 - 4, that is the most susceptible sub-group of the nations children.

NOTIFICATION OF COMMUNICABLE DISEASES

During 1992 the Health Statistics Unit collected, collated, analysed and administered all information on communicable/Notifiable Diseases.

The Reports of weekly and cumulative totals to PAHO/WHO and the Caribbean Epidemiology Centre (CAREC), has improved. The unit was able to send off all reports to CAREC for 1992.

All notifications received were edited, coded and transferred worksheets. Table 5 shows the number of cases of the various diseases notified to Statistics Unit for 1990 - 1992.

The total for Malaria - 1991 was reported for the period January to September and for 1992 - January to June

Pulmonary Tuberculosis decreased in 1991 and increased in 1992 by 48 cases.

Gastroenteritis, under 5 years and over 5 years has increased in 1992, but this figure is still under reported. This total does not even include notifications from Georgetown Hospital since the Hospital treats a proportional part of Region 4 population.

Diarrhoea increased in 1992, but this figure also is under reported.

Among the gastrointestinal diseases notified, the figures show that Amebiasis has decreased over the 3-year period, dysentery decreased in 1991 and increased in 1992; Typhoid Fever increased in 1991 and decreased in 1992.

Overall, the reporting system of Communicable Diseases needs to be improved. The Health Statistics Unit along with the Epidemiologist will be working towards this improvement for 1993.

The main difficulties faced by the Statistics Unit during 1992 was:-

- (1) Reluctance on the part of the Hospital Staff, especially the Nursing Staff to complete the Midnight Census;
- (2) Inaccuracies in the reports;
- (3) Failure to despatch reports to the Medical Records Department and Health Statistics Unit on time.

In 1992, the unit implemented the system at Hospitals that were not doing census reports, such as Lethem, Aishalton, Mabaruma and Pakera Hospitals, it was re-implemented at Mibicuri Hospital because of the rapid turnover of staff. But to date no reports were received from Pakera and Aishalton

The unit will do some on the job training on its site visits to the hospitals.

PRIMARY HEALTH CARE

To meet the Ministry's Policy of presenting and monitoring services of the various population groups at the National and District level, the Primary Health Care System was introduced.

This system is maintained by all Health Centres throughout the country with a monthly report being submitted to the Health Statistics Unit.

An average of 77% monthly reports were received, checked and filed.

At present, arrangements are being made to have this information computerised so that the fundamental principles of information system could be appropriately put in place for feedback in the form of quarterly and annual reports to those who provide the basic data and to users of such information for decision making.

REGIONAL HEALTH SERVICES

MATERNAL AND CHILD HEALTH PROGRAMME

The year under review started with the usual M.C.H activities which were conducted in all the region, despite the conditions staff conscientiously, provided services to more than one Health Facility to take health care to the population.

MATERNAL HEALTH

There was an increase in Pre-Natal mothers attending clinics for 1992 as compared with 1991. Those admitted under 20 weeks were also on the increase. The Family Spacing clinics admitted more clients for 1992 than 1991 and all methods were available. Haemoglobin levels under 10 grams showed a slight increase: more domiciliary deliveries were recorded and there was a drop in the still birth rate in 1992 compared with 1991. Region 4, East Coast Demerara recorded the highest number of domiciliary deliveries, probably due to the number of midwives operating in this area.

CHILD HEALTH

The attendance at the Child Health clinics showed an increase. This increase was probably due to the food supplements being supplied to some health facilities in the regions. School health continues to be low priority on the clinics schedule, as staff have now become engaged in other activities.

Quarterly E.P.I evaluation meetings were conducted to assess the immunization status of the 0-1 population and to ascertain that targets were being met.

There was a high percentage of coverage in all the antigens except O.P.V. This was probably due to the Measles month activities in the regions which was aimed at eliminating measles. Health workers used this month of activities to administer other antigens to susceptible clients.

IMMUNIZATION

Vaccines were available in adequate supplies throughout 1992. The quantities received were as follows:-

D.P.T	120,000 Doses
O.P.V	160,000 Doses
Measles	32,000 Doses
B.C.G	27,000 Doses
T.T	75,000 Doses
D.T	35,000 Doses
Yellow Fever	35,000 Doses

Quarterly E.P.I. evaluation meetings were conducted to assess the immunization status of the 0-1 population and to ascertain that targets were being met. The 1992 targets were as follows:-

	1991	1992
Target	17,267	18,137
B.C.G.	15,820 or 91.6%	15,891 or 87.6%
D.P.T	14,536 or 84.18%	14,377 or 79.3%
O.P.V	14,438 or 83.6%	15,813 or 87%
Measles	13,951 or 80.7%	13,308 or 73.4%

As can be seen, there was a high percentage of coverage in all the antigens except O.P.V. This was probably due to the Measles month activities in the regions to accelerate Measles Immunization with the view of eliminating measles. Health workers used this month of activities to administer other antigens to susceptible clients.

At the end of this campaign an measles surveillance system was set up. A total of 43 cases of rash illnesses were reported and blood samples were taken. The results were as follows:-

Sample taken	Discarded	Negative	Rubella	Dengue	Allergy
13	11	3	26	2	1

As can be observed, there was an increase in the number of cases of rash illness after the campaign and 26 positive cases of rubella were detected from samples taken, but no positive samples of measles were detected.

Health Education

Health Education activities continued at Health Centres.

TRANSPORTATION

This continues to be a problem in the hinterland regions as fuel is very costly. For the ensuing years it was recommended that fuel be supplied from the E.P.I. programme to effect E.P.I. activities

COMMUNITY RESOURCE PERSONS

The Community Resource Person continue to work in areas identified with Nutritional problems. These persons have been doing a good job carrying out their home visits and advising parents on minor illnesses in the family and referring clients to the health workers at the Centres. They must be commended for their sterling contribution to the health system, and it is recommended that these persons be given a tangible sum as remuneration for their work done.

BUILDINGS

Many of the Health Facilities in the regions need up-grading or maintenance work needs to be done, so that Health Workers could work in a more conducive atmosphere.

	1991	1992
Target	17,267	18,137
B.C.G.	91.6%	87.6%
O.P.V.	83.6%	87.1%
D.P.T.	84.18%	79.3%
Measles	80.7%	73.4%

TRAINING

In-service education to health professionals in the regions continued. The topics dealt with included, E.P.I., A.R.I., Primary Health Care Information system, C.D.D. and Growth Monitoring. Eighty (80) persons were trained.

COMMUNITY RESOURCE PERSONS

The Community Resource Persons (CRP's) continued to work in areas identified with Nutritional problems. These persons have been doing a good job carrying out their home visits and advising parents on minor illnesses in the family and referring clients to the health workers at the Centres. They must be commended for their sterling contribution to the health system.

The MCH clinic continue to monitor the health of pregnant women, during 1992, 1095 women attended ante-natal clinics other services for infants and the elderly were also offered at the health centres these services were utilized by 3251 men 5049 women over the age of 20.

DEPARTMENT OF STANDARDS AND TECHNICAL SERVICES

(LABORATORY, X-RAY, DENTAL)

MISSION STATEMENT

To establish and monitor norms and standards within which all components of the Health Care System must function and to serve as a channel for issues from the heads of technical Services to the top decision makers in the Ministry.

BACKGROUND

During the year 1992, this Department continued to be manned by the Director alone. With respect to the establishment of norms and standards, this activity was constrained mainly because it was not given any priority within the Ministry. Coupled with this, was the lack of skilled human resources to effect the necessary work. In terms of monitoring of standards, this was done in an ad hoc manner by some departments. The Private Hospital Inspectorate that should monitor standards in institutions was dormant for yet another year.

The main activities during the year in which this department was involved were in relation to the technical services within the Ministry. The Technical Services that should report through this department in the Ministry are Regional Laboratory, X-Ray, Physiotherapy, Dentistry and Pharmacy.

HOSPITAL LABORATORIES

REGIONAL LABORATORY SERVICES

Throughout the year, many of the laboratories suffered from inadequacy of human and material resources. There are 8 laboratories for which the Ministry of Health has responsibility, only 5 were functional during 1992. The non-functional status of the laboratories was as a result of lack of personnel. Of those that were functional during the year, few of them were headed by qualified Medical Technologists. In this regard, only New Amsterdam, West Demerara and Suddie laboratories had qualified technologists. Laboratory Aides also played a major role in the running of these laboratories Multipurpose Technicians cases of Skeldon and Lethem hospital.

TRAINING

One significant achievement during 1992, was in the area of training and human resource development. In October a programme was started to upgrade the skills of laboratory aides throughout the public health system. A total of seventeen (17) Laboratory Aides embarked on the six months programme.

XRAY

There are 9 X ray units with the MOH's system but the delivery of service from these units were severely affected by shortage of staff. To improve the situation, training of X ray technician was conducted and ended in November 1992. There was also an inadequate of films and stock drugs see appendix 3 for details.

PHARMACY

The Government Pharmacy is the major supplier of pharmaceutical throughout the Public Health System. Every health care institution provides a pharmacy service. During 1992, inadequacy of pharmaceuticals was pervasive in the health care system. Another major problem was in the area of personnel. Shortage was less acute in some areas for e.g., Region No. 6 which seemed to be better off than the other regions. This situation prompted the training of pharmacy assistants whom it was hoped would assist in this department after upgrading their skills.

PHYSIOTHERAPY SERVICES

Introduction

The Physiotherapy Services, Ministry of Health, continued to function favorably inspite of the many difficulties which persisted to plague the Services. The following is an overview of the performance of the various units which comprise the Physiotherapy Services, Ministry of Health, Georgetown, Guyana.

STAFFING

To ensure that the various Departments can performance the functions required of them effectively, it is imperative that the staffing needs of these Departments be addressed urgently. In 1992 the Physiotherapy Services was once again affected by limited skilled personnel necessary to deliver quality patient care.

EQUIPMENT/MAINTENANCE AND PURCHASE

General equipment maintenance was done routinely except for the difficulties experienced in obtaining spare parts. Reasons for this difficulty being:

1. Manufacturing date of the equipment(**most of the equipment have been bought over fifteen to twenty years ago and many companies now do not exist.**
2. Origin of the equipment, a few were assembled in **Russia and Germany** which made it difficult to access spares.
3. Those acquired through gifts were without handbooks or **manuals.**

These was no purchase made by the Ministry of Health for **Physiotherapy equipment** or supplies in the last fifteen to twenty years inspite of the orders and needs short **listed by the Head of the Physiotherapy Services.**

PTOLEMY REID REHABILITATION CENTRE

The physiotherapy Department at the Ptolemy Reid Rehabilitation Centre **delivered services** for the entire year of 1992 and these extended to the **Convalescent Home in Durban Backlands.** The services offered were both **Therapeutic and Extra Curricular.**

SPORTS CLINIC - HOMESTRETCH AVENUE

During 1992 the Sports Clinic was manned by two (2) **Physiotherapy Assistants** under the supervision of a Senior Physiotherapist. Since the Sports Clinic is a **“first contact clinic,** it is necessary for a **Physiotherapist** to be on duty so that patients can be **adequately assessed and treated.** However, due to the severe staff shortage, primarily of **physiotherapists** this was sometimes difficult to maintain.

FUTURE OF THE SPORTS CLINIC

The Sports Clinic was started during the 1970s when it became increasingly difficult to treat Sports personnel along with the regular wide range of patients seen at the **Physiotherapy Department** at the Georgetown Public Hospital. It is therefore suggested that the clinic be allowed to continue at its present location under the management of the **Ministry of Health** through the **Principal Physiotherapist.** This would ensure the **efficient running** of the clinic and that its needs are met promptly. To this end it is **hoped that the matters of the treatment room, dividing walls or curtains, the sign, the access to the clinic and its various needs in relation to equipment and supplies will be dealt with promptly by the Ministry of Health.**

The clinic saw participants from a wide range of sports of **varying ages** and of both sexes. The youngest patients were a 13 year old male football player and a 9 year old male athlete. The oldest patients seen were a 69 year old golfer and a 71 year old **calisthenic participant/former weight lifter.**

*The most frequently seen were injuries from **football, athletics, cricket, and basketball,** with fewernumbers from **calisthenics, martial arts, lawn tennis, weight lifting, power lifting, body building, rugby, swimming, table tennes, grass track and motor racing, drumming, volleyball,**

badminton, jobbing, walking, boxing, dancing, netball, golf, goat racing, (seen for the first time at the clinic dominoes, chess, squash and cycling.

*Common injuries were muscle and ligament strains (mainly of the lower extremity and back), miniscus injuries and contusions

*Unusual conditions seen during 1992 were Benign Tumors, hernia, transitional Lumbosacral Vertebra, "Writer's Cramp", Belvic Inflammatory Disease, Venous Stasis, Anterior Compression of the Vertebra, Patello Femoral Over-use Syndrome and Cervical Prolapsed Intervertebral Disc.

CONCLUSION

The year 1992 was a fair one for the Physiotherapy Department. Despite problems and equipment and staff, the department functioned efficiently and provided a high level of care for patients. However, the shortage of Physiotherapists continues to be a pressing needs to be urgently addressed.

DENTAL PROGRAMME

OBJECTIVES

1. To provide appropriate preventive, restorative, surgical orthodontic, periodontic, endodontic, and prosthodontic dental care to the population through the National Health Service utilizing both professional and para-professional staff.
2. To acquire and train appropriate professionals and para-professional in sufficient numbers, capable of providing such services to the population.

ITEM #	TARGET SET FOR YEAR	TARGET ACHIEVED	ANALYSIS OF SUCCESS OR FAILURE
1.	Preventive measures: a. Flouride mouth rinse programme - one area.	Not achieved	Due to lack of plastic bottles
2.	Curative measures: a. Oral surgery.	10% achieved	Due to lack of anaesthetic needles, etc.
	b. Periodontics.	5% achieved	Due to lack of materials/instruments etc. 6 students graduated
3.	Training of Staff a. Dental Auxillary School		

The main problems of the departments are:-

Budget allocation is very limited

Trained personnel leaving the job.

TOTAL EXTRACTIONS DONE AT NATIONAL DENTAL CENTRE:

JANUARY, 1992	1,822
FEBRUARY, 1992	1,004
MARCH, 1992	1,805
APRIL, 1992	2,426
MAY, 1992	2,153
JUNE, 1992	1,655
JULY, 1992	988
AUGUST, 1992	208
SEPTEMBER, 1992	No anesthetic/needles, etc
OCTOBER, 1992	1,094
NOVEMBER, 1992	1,773
DECEMBER, 1992	<u>1,517</u>
TOTAL	16,445

CONTROL OF COMMUNICABLE DISEASES

The Division for the Control of Communicable Diseases includes Epidemiology, Vector Control, AIDS and Hansen's Disease. Each of these Units has a manager who reports to the Director. Following are the summaries of the activities of each of these units.

EPIDEMIOLGY DEPARTMENT

This department was re-established in April, 1992 after several years without the employment of a full time Epidemiologist. With the threat of Cholera hovering over Guyana, most of the activities were directed to the surveillance, and management of acute diarrhoeal diseases and establishment of a mechanism to respond to cholera when it arrived.

Workshop and seminars were held in Regions 1,2,3,4,5,6 and 10.
A massive health education drive was undertaken in Region 1.

CHOLERA

In November 1992, an epidemic of cholera broke out in Mabaruma, Sub-Region of Region 1. Later there was an outbreak on the Essequibo Coast, region 2. At the end of the year, a total of 556 cases of Cholera were reported.

NATIONAL AIDS PROGRAMME

The Medium Term Plan 1992-1997 for AIDS was formally launched on March 13, 1992, The main strategies include:-

1. Programme Management
2. Epidemiological Surveillance
3. Prevention and Control of sexual transmission
4. Prevention of transmission through blood/blood product infected materials/equipment
5. Prevention of perinatal transmission
6. Provide health care to STD/HIV infected persons and AIDS cases
7. Provide support to STD/HIV infected persons and AIDS cases
8. Reduce socio-economic impact of STD/HIV/AIDS

Regionalisation of the programme continued apace. Regional AIDS Committees were established in Regions 3,4,5,6 and 9.

Epidemiological Surveillance

Efforts were made to strengthen the laboratory facilities in Regions VI and VII.

The use of filter paper for testing of population in remote areas (**Lethem**) has started.

Sentinel surveillance for HIV among ante-natal persons is in progress.

Information Education, Communication

A comprehensive package on AIDS Education has been prepared for use in Schools and is with the Ministry of Education

Rap sessions/lectures were held with workers at G.P.S.'s **Head Office - Georgetown** and the farm complex: **Beacon Foundation**, Staff at Ministry of Agriculture; **Police Officers' Annual Conference**, **Eve Leary Church Groups and Clubs**. Education material on HIV/AIDS was distributed at every session

Two AIDS Educators were at work continuing activities with **parents**, **Teacher's Association**. Linkage was established with the **Youth Services Unit of the Ministry of Labour**.

World AIDS Day 1992, "Theme "AIDS A COMMUNITY COMMITMENT" was observed on 1st December, 1992. Activities included World AIDS Day message by the **Senior Minister of Health**, **Ms. Gail Teixeira**, Radio programmes - **Quiz Catch**; **Man in the Street**; a **Rally** and Cultural presentation in front of **Guyana Stores Limited, Church Street**, with the **Honourable Minister of Health, Ms. Gail Teixeira** being the **Guest Speaker**.

Prevention of Transmission and Treatment STD/HIV/AIDS

Treatment protocol is being studied by **Health Care Workers** for implementation.

Physical facilities in **Region # 5** for treatment of **HIV/AIDS** patients have been improved.

The follow-up of **STD/HIV** cases and contact tracing have started in a **limited** manner because of shortage of social workers at the **GUM Clinic**.

AIDS IN GUYANA

No. Of Cases by Quarter and Sex - 1992

Quarter	Male	Female
January - March	16	12
April - June	29	14
July - September	22	10
October - December	39	18
Total	106	54

No. Of Cases by Transmission

HEMOPHILIAC	-	-
TRANSFUSION	-	2
IVDU	-	1
CHILD	-	9
HETEROSEXUAL	-	240
HOMOSEXUAL	-	65
BISEXUAL	-	36
UNKNOWN	-	37
TOTAL	-	390

Cumulative Total by Year (1987 - 1992)

	MALE	FEMALE	TOTAL
1987	10	0	10
1988	29	5	34
1989	30	10	40
1990	45	16	61
1991	59	26	85
1992	106	54	160
	279	111	390



NATIONAL LABORATORY FOR INFECTIOUS DISEASES

Equipment. The position is the same as at the end of 1991. That is, all items of equipment provided by the E.E.C., PAHO/WHO and Ministry of Health are in working order except

- a) one (1) Varion ELISA Reader and
- b) one small vacuum pump

A replacement reader has been requested from PAHO/WHO. In the meanwhile a second Varion Reader is in use. The pump is being serviced.

Performance: 1991 figures in brackets

	<u>Tests Done</u>	<u>Confirmed Positives</u>
VDRL - B.T.S	3355 (3550)	195 (114)
Others	17,796 (15,234)	3,074 (1,545)
HB A - B.T.S	4,094 (3,726)	83 (104)
Others	768 (139)	79 (37)
HIV - B.T.S	4,025 (4,044)	65 (48)
Others	1,695 (784)	312 (151)

Quality Control

There is internal Quality Control daily, using controls from kits and the laboratory control panel. External control for HIV is one by CAREC on a semi-annual basis, and for VDRL by C.D C Atlanta on a four monthly basis.

Miscellaneous

Du Pont Quick test kits for HIV, have been supplied to New Amsterdam and Suddie.

During the year, the Laboratory implemented a decision to test all HIV samples for VDRL/RPR activity and report

HIV SURVEILLANCE

During 1992, sentinel surveillance in Georgetown and environs continued to be the main activity. There was no target group survey. - see appendix 5 for sentinel surveillance results - 1992

Sentinel Surveillance Results - 1992

(Figures for 1991 are in brackets)
(also percentage differential with 1991)

	<u>Tested</u>	<u>Confirmed Positive</u>
Low Risk group	1,085 (832)	23 (9) (+1.0)
High Risk group	24 (107)	7 (43) (-11.0)
B.T.S. (control)	4,081 (4,044)	69 (48) (-0.5)

- The low risk group was composed mainly of ante-natal mothers and some persons sampled from the G.R.P.A.
- At about the middle of 1992, samples from the high risk group no longer came to the laboratory. The figures for 1992 cannot therefore be considered as a reliable High Risk picture. The system for the identification/sampling at the G.U.M. clinic of persons with high risk behaviour will be reviewed in 1993.
- In 1992, only the Blood Transfusion Service donors were used as the control group, since the samples from private clinics mainly came to National Laboratory for Infectious Diseases for I.F.A confirmation of an ELISA positive result already obtained.
- A new approach to the surveillance of hinterland/mining workers will be developed in 1993.

Private Laboratories

As far as is known, four private laboratories were engaged in HIV testing during 1992, using both the ELISA method and the DuPont HIV-CHEK. Positive results obtained were submitted for supplemental testing either through the GUM clinic or directly to N.L.I.D.

The following total number of tests have been submitted by two of the private laboratories. Figures are not available from the others.

<u>Tests Carried-out</u>	<u>Confirmed Positive</u>
5,945	40

VECTOR CONTROL SERVICE

OBJECTIVE

"Take positive steps to reduce the incidence of malaria both as a health measure and as a prerequisite to economic development in areas of high endemicity and of economic importance

The Vector Control Services is a Sub-division of the Communicable Division in the Ministry of Health.

It is directly responsible for the Control of Malaria, Filariasis, and Aedes Aegypti.

This service provides planning, co-ordination, administration, supervision and technical support to the field operations. It also provides tropical diseases diagnostic facilities for the population in the hinterland and coastland, and surveillance systems for the Malaria free areas through the Regional Health System

The malaria programme receives support from other Health Services Personnel such as Medex, C.H.W's and laboratory technicians and collaborates with the Armed Forces and other agencies for control of outbreaks especially in the hinterland areas.

Status report - 1992

The number of diagnosed cases were 39,702 of which 23,717 (59.7%) were due to Plasmodium falciparum, and 15,831 (39.8%) to Plasmodium vivax and 154 (0.38) due to mixed infection.

These cases were 5.92% less than those in 1991. This decrease was amongst the number of P. vivax cases reported. The age group most affected by both P. falciparum and P. vivax was 15-29.

Males represented (30%) of persons affected by falciparum and 20.9) of those affected by P vivax.

Attempts were made at stratification of the programme in order to give priority to areas within respective Regions, which were previously free of the disease and in critical areas where the use of insecticide (DDT) would be greatest benefit.

Residual House Spraying was carried out to a minimum in focus areas with the following results

The main vector in the hinterland is identified as An. darlingi, on the Coastland An. aquasalis still persists. Cases were epidemiologically classified as being introduced on the coastal areas.

The majority of the cases diagnosed at the Central Malaria Lab in Georgetown, were from coastlandes who returned to their home from the hinterland areas.

The presence of An. aquasalis, a proven vector of malaria in appropriate conditions, meant that there was both receptivity and vulnerability on the coast. Cases were diagnosed within the coast

Falciparum	24
Vivax	11
Mixed	
TOTAL	

Given these conditions, the majority of persons from houses where cases were classified as being introduced had blood smears examined. Fever cases in their immediate neighbourhood were also investigated parasitologically.

IMPORTED CASES OF MALARIA

- a) Region No. 1 39 cases (from Venezuela/Guyana Border - Delta Amacuro - area)
- b) Georgetown 4 cases (2 Suriname, 1 French Guiana, 1 Venezuela).

SPECIAL PROJECT

From September 1992 a project commenced funded by S.I.M.A.P for a total of US\$50,000.00. This project provides emergency assistance to the programme in Regions 1, 7, and 8 - those areas with the highest incidence of malaria. Funds were provided for:

- a) Anti-malaria Drugs
- b) Laboratory Reagents
- c) Laboratory Supplies
- d) Stationery
- e) Repairs to infrastructure

This project will conclude at the end of February 1993. The assistance offered during this period was invaluable to the programme and enhanced the activities in the above regions.

During the year 1992, deaths associated with Malaria were reported from the following Regions.

Region	
1	6
6	
7	
8	
9	
10	Nil
G/town	1

Hospitalization of severe malaria patients was routine during this period. Cases hospitalized by Region

Region	
1	93 persons
2	185
6	26
7	105
8	16
9	27
10	76
G/town	266

TROPICAL DISEASE LABORATORY

This laboratory is managed by two technicians and was supervised by a PAHO/Technologist (Ms Pascale Challet). This technologist left in October 1992 when her contract came to an end. Another technologist from Central Medical laboratory was then assigned to assist in her place (Mr. A. Boyle). During the year this laboratory carried out various hematological, biochemical, and serological tests.

Number of Patients seen:	309
Amount of tests done:	704
Skin scrapings	41 (18 positive for cutaneous leishmaniasis)

AEDES AEGYPTI CONTROL

INTRODUCTION

The entire coastland is infested with *Aedes Aegypti*, the vector for dengue fever and yellow fever.

OPERATIONS

The treatment of all containers holding water was carried out during the year in Georgetown. Due to a shortage of staff, wards within Georgetown was selected for treatment depending upon

- The *Aedes Aegypti* index
- The average population in the area

ULV fogging was also carried out in selected areas.

Also, various buildings with high concentration of persons dwelling daily were inspected and containers treated.

Hotels	138 visits
Schools	64 visits
Cinemas	22 visits
Ministries	60 visits
Hospitals	28 visits

During the year 1992 weekly clinics were held at the Vector Control Department for Micro-filariasis (Monday, Wednesday and Thursday from 8.00 pm to 11.00 pm). A total of 2,344 smears were examined and 122 (5.2%) were found to be positive with the parasite.

RESEARCH

A study to compare the available diagnostic tools for lymphatic filariasis was carried out in collaboration with CAREC.

ENTOMOLOGY UNIT

The Entomology Unit continued to assist in the efforts towards the control of vector-borne diseases in Guyana. This was undertaken by providing both epidemiology/entomological information and advice to the Guyana Vector Control Services for operational decision-making.

FAUNASTIC STUDIES

- a) Further progress continued on the systematic of the mosquitoes of Guyana. In 1992, the department continued to explore and place emphasis on the systematic studies on the other general activities of mosquitoes rather than on the Anopheles. We are still in the process of confirmed determination and therefore details at this time can be considered premature.
- b) In 1992, we embarked on preliminary studies on the vector intermediate hosts of Schistosomiasis in Guyana. Emphasis was placed on the identification of both species and their distribution including some details on aspects of their biology. The details of these studies will be available in the 1993 Annual Report.

HANSEN'S DISEASE CONTROL PROGRAMME

This report covers the period January to December 1992. The activities carried out are as far as possible based on the objectives set out in the Project Document 1988-1992.

LONG TERM OBJECTIVES

To enhance the effectiveness of the existing medical services in the treatment of leprosy patients and leprosy control by initiating and accelerating the process of leprosy control into the general health services eventually leading to the eradication of the disease.

ACHIEVEMENTS OF TARGETS

Targets were fairly well met. There was an increase in the number of new patients for 1992 (48) as compared with the figure for 1991 (36). No pilot project for integration was implemented as certain problems prevented the projects from getting off the ground. These constraints also contributed to a marked shortfall in the targets set for contact examinations and school surveys.

No. of domiciliary patients at the end of year	30
No. of domiciliary patient on surveillance	169
No. of patients released from treatment	44
No. of patients released from surveillance	51

NEW CASES

No. of cases...	48
No. of consultant clinics held	102
No. of rural clinics held. (14 locations)	180 sessions
No. of contact examinations done	319
Proportion of disabled among new cases	1:48

PREVALENCE RATE

Year	'88	'89	'90	'91	'92
Population	756,000	756,000	756,000	756,000	756,000
Prevalence	0.16	0.13	0.10	0.11	0.1

CONCLUSION

The objective of integration has not been realised and needs to be addressed seriously. All other targets have been fairly well executed. There is a general improved attitude of Guyanese to Hansen's Disease and short term therapy seems to be much preferred. Complaints has been good.

Since the introduction of MDT in December, 1981 and the releases of many patients from the register there has been a marked fall in prevalence rates being 0.25 in 1992.

FOOD AND DRUG DEPARTMENT

OVERVIEW

The Food and Drugs Department, as the Regulatory Agency, continued its mandate to ensure safe, sound, wholesome and nutritionally acceptable foods, safe and efficacious drugs and good quality potable water reach the consumer

Accordingly, it continued its dynamic role to administer and enforce the Food and Drug Act and its supporting regulations of 1977, to achieve its primary objective of consumer Protection and Safety. To this end the department has orchestrated the following sub-programmes.

- 1) Good quality
- 2) Food Contamination Monitoring
- 3) Drug Quality Control
- 4) Water Quality Control
- 5) Pesticide Residue Monitoring.

The accomplishment of the Programme and Sub-programmes revolved around the areas of analytical services and The enforcement of mandatory standard, education programmes, consultatory services and inspectorate activities.

The department's total through-put for January to December, 1992 could be obtained from the perusal of the data as presented in Table 1.

It is worthwhile to note that as a result of the numerous constraints plaguing the department, there was dramatic decrease in the various analytical activities over the past year. They have failed to achieve targeted goals and many of them including the Food Chemistry, Water Chemistry, Drug Chemistry, Drug Microbiology and Forensic Laboratory have been practically non-functioning with a minimum of analytical work being carried out by the Food and Water Microbiology and the Excise Laboratories.

HIGHLIGHTS

Education Programme

During the nine months of the year, (18) eighteen food safety seminars were held by this department for employees of a number of food factories. Workers were educated on basic aspects of food hygiene, food poisoning, personal hygiene and minimum requirements for food factories.

2 Unlabelled and unlicensed foods

A campaign was effected to remove and prohibit the sale of unlicensed, unlabelled, improperly labeled, damaged, improperly packaged, painted and recycled crowns, rusty and blown cans and expired foods. Quantities of foods including milk powder, monosodium glutamate, tomato ketchup, sardines, cassava cassareep, oatmeal, mustard sauce and ground spices were seized and destroyed by officers.

3 Factories ordered closed

A total of (28) twenty-eight food factories were ordered to cease operation as a result of unsatisfactory operating conditions found during inspection. This included the National Milling Company and Ricks and Sari Industries Limited. Some factories were found to be operating under grossly insanitary conditions, factory records were inadequate, while others were found to have produced substandard or unsafe products.

4 Import Control

Food and drugs Inspectors worked in close collaboration with Customs Officers to ensure that foods entering the country are safe. All Customs documents are scrutinised and the necessary stamps are affixed prior to processing by Customs Officers. Physical examination and sampling were done by Inspectors when necessary. Import Control Officers are stationed at Springlands Wharf and Timehri International Airport. Food and Drugs Inspectors also make frequent checks at various wharves, examining the quality of Foods, the labels and the condition of packaging materials.

5. National Food Safety and Control Committee

This committee is convened once a month to plan and co-ordinate various Food Safety and enforcement activities. This ensured that a uniform and harmonious programme is expedited countrywide.

6. Technical Committee

Officers of this department form part of the Standards Council and Technical Committee of the Guyana National Bureau of Standards, and thus participate in the formulation and promotion of food standards.

7. Training of Food Inspectors

One Food Inspector was exposed to a 2 weeks FAO Sponsored Workshop in Barbados in relation to the "Strengthening of food Control Capabilities in response to Cholera".

The Senior Food and Drugs Inspector was attached to the Health protection Branch of health Welfare Canada for a period of six (6) weeks.

PHYSICAL METHODS LABORATORY

There are (10) ten pieces of major analytical instruments housed at this department, all of which are non-functioning.

These instruments are as follows:

- I High performance liquid chromatograph (H P L C)
- ii & iii Atomic absorption Spectrophotometers (A A)
- iv Ultraviolet visible spectrophotometers (U V)
- v Gas Chromatograph (G C)
- vi Infra-red Spectrophotometer (I R)
- vii Gas Chromatograph - Mass spectrometer (GC - MS)
- viii X-ray diffraction spectrometer
- ix Nuclear magnet resonance spectrometer (N M R)
- x Gas liquid chromatograph

CENTRAL BOARD OF HEALTH

The Central Board of Health continued its operations during 1992. The department maintained its staff complement which comprises the Secretary to the Board one (1) Typist/Clerk and one records/Clerk.

The life of the last Board came to an end in October, 1991 and formal approval for the appointment of the new Board was not received until the end of June, 1992. Then Board is not yet fully constituted since two organisations namely the Mayor and Town Council of New Amsterdam and the Guyana Pandits Council failed to name a representative to sit on the board. The nominee for the National Congress of Local Democratic Organs was submitted after Cabinet's approval of the Board. Cabinet did not approve of the representative named by the Ministry of Regional Development. These positions are still to be filled.

The amendments to the legislation which was approved by the Board was not completed since the Secretary was unable to get guidance on the Administrative Section. The proposal for the charging of fees for certain services rendered by the board and which was approved by Cabinet was not put into effect since this would have to be incorporated into the Act.

There was an outbreak of Cholera in Region No 1 two EHO's spent 2 months in the area to advise and educate the residents on the prevention and control of the disease. Again, because of the shortage of Environmental Health Officers no officer could have been placed there permanently. There was also an out-break in Region 2 and the Chief Environmental Health Officer went into the area to assist and monitor the situation, take water samples, educate residents with the assistance of the only two officers who service Essequibo Coast.

Squatting has become the order of the days and officers are finding it extremely difficult to cope with the situation. This is due to the number of areas to be covered by one officer. The process to take action against these persons is very much drawn out and it involves officers having to attend

court ever so often to deal with one care.

All in all 1992 was a favorable year for the Board and we look forward for a better year in 1993

X-RAY SERVICES

<u>FACILITY</u>	<u>FUNCTIONAL STATUS</u>
Mabaruma	Non Functional
Suddie	Functional
Charity	Functional
West Demerara Regional Hospital	Functional (during most of year)
Leonora	Functional
Georgetown Hospital	Functional
Fort Wellington	Non Functional
Bartica	Functional
Lethem	Non Functional

STAFFING

<u>FACILITY</u>	<u>STAFF</u>
Mabaruma	Nil
Suddie	1 Radiographer 1 X-Ray technician (Pursuing studies in Radiography) 1 Darkroom Technician

DATA ON MALARIA CASES IN REGION # 7

	1988	1989	1990	1991	1992
P F	2926	1655	1357	2394	1059
P.V	1173	924	1054	2570	577
P F V	20	37	21	14	2
	4119	2616	2343	4978	1638

SMEARS					
ACTIVE	8694	6382	3183	1792	1012
TAKEN					
PASSIVE	20462	11060	11020	12645	7283
	29156	17442	14203	14437	8295

ANTENATAL SERVICES - YEAR 1992
TABLE 1.1 - NUMBER OF PREGNANT WOMEN ATTENDED (FIRST AND VISITS)

HEALTH CENTRES	NO. OF PREGNANT WOMEN ATTENDED
Region # 2	320
Region # 3	2,030
Region # 4 (GEORGETOWN)	1,593
Region # 4 (EAST COAST)	2,298
Region # 4 (EAST BANK)	950
Region # 4 (MUNICIPAL)	1,607
Region # 5	1,350
Region # 6	3,065
Region # 10	14,095

TABLE 1.2 NUMBER 7 PERCENTAGE OF AT-RISK PREGNANT WOMEN ATTENDED - A. AGE (YEARS)

HEALTH CENTRES	NO.	UNDER 15		15 - 17		35+	
		%	NO.	%	NO.	%	NO.
Region # 2	4	1.2	47	15.0	23		7.2
Region # 3	24	1.2	248	12.2	76		3.7
Region # 4 (G./town)	12	0.8	193	12.1	75		4.7
Region # 4 (E./Coast)	10	0.4	228	9.9	134		5.8
Region # 4 (E./Bank)	11	1.2	165	17.3	139		15.
Region # 4 (Municipal)	13	0.8	158	9.8	380		24.0
Region # 5	14	1.03	110	8.1	58		4.3
Region # 6	14	0.4	392	12.7	146		4.7
Region # 10	4	0.4	60	7.0	52		6.0
	106	0.75	1,601	11.3	1,083		8.0

TABLE 1.3 - NUMBER 7 PERCENTAGE OF AT-RISK PREGNANT WOMEN ATTENDED - B. GRAVIDITY

HEALTH CENTRES	NO.	1ST		4TH	
		%	NO.	%	NO.
Region # 2	81	25.3	34	11.0	
Region # 3	549	27.0	153	7.5	
Region # 4 (G./Town)	460	29.0	120	7.5	
Region # 4 (E./Coast)	685	30.0	173	7.5	
Region # 4 (E./Bank)	256	27.0	140	15.0	
Region # 4 (Municipal)	460	29.0	186	11.5	
Region # 5	379	28.07	127	9.4	
Region # 6	-	-	-	-	
Region # 10	239	27.09	114	13.	
	3,109	22.05	1,047	7.4	

TABLE 1.4 - NUMBER & PERCENTAGE OF PREGNANT WOMEN ATTENDED FOR FIRST TIME BEFORE 20TH WEEK OF GESTATION

HEALTH CENTRES	NO. & % OF WOMEN	
	NO.	%
Region # 2	94	29.0
Region # 3	791	39.0
Region # 4 (Georgetown)	489	31.0
Region # 4 (East Coast)	668	29.06
Region # 4 (East Bank)	260	27.3
Region # 4 (Municipal)	192	12.0
Region # 5	335	25.0
Region # 6	1,191	39.0
Region # 10	279	32.0
	4,299	30.5

TABLE 1.5 NUMBER AND % OF PREGNANT WITH WOMEN WITH ABNORMAL TEST RESULT FOR HAEMOGLOBIN AT 1ST VISIT

HEALTH CENTRES	NO. OF WOMEN TESTED		NO. & % OF WOMEN WITH HB. LEVEL 10 G/DL	
	NO.	%	NO.	%
Region # 2	256	80.	25	25.3
Region # 3	1,024	50.4	435	42.5
Region # 4 (Georgetown)	1,476	93.0	538	36.4
Region # 4 (East Coast)	1,886	82.07	820	43.6
Region # 4 (East Bank)	705	74.2	283	40.1
Region # 4 (Municipal)	1,475	92.0	348	23.5
Region # 5	1,240	92.0	269	22
Region # 6	2,330	76.0	951	40.8
Region # 10	687	78.0	265	39.0
	11,079	79.0	3,986	35.5

TABLE 1.6 - NUMBER AND % OF PREGNANT WOMEN ATTENDED AT TERM WITH ADEQUATE FREQUENCY OF VISITS

HEALTH CENTRES	NO. OF WOMEN SEEN AT TERM	NO. WITH 4+ VISITS UP TO 32ND WEEK		NO. WITH 8+ VISITS UP TO TERM	
		NO.	%	NO.	%
Region # 2	122	40	33	17	14
Region # 3	666	402	60.4	308	46.2
Region # 4 (Georgetown)	1,126	606	54.0	525	47.0
Region # 4 (East Coast)	1,227	670	54.6	507	41.3
Region # 4 (East Bank)	283	156	55.1	129	46.0
Region # 4 (Municipal)	1,316	986	75.0	878	67.0
Region # 5	558	332	59.4	226	40.5
Region # 6	137	137	100.	-	-
Region # 10	308	219	71.	174	56.
	5,743	3,548	62.0	2,764	48.1

TABLE 1.7 - NO. OF BIRTHS DELIVERED IN THE DISTRICT WITH PERCENTAGE DISTRIBUTION BY OUTCOME

HEALTH CENTRE	TOTAL DELIVERIES	LIVE BIRTHS			STILL BIRTHS		
		TOT.	FT. %	PM %	TOT.	FT. %	PM %
Region # 2	96	96	100	-	-	-	-
Region # 3	294	290	98.6	-	4	1.4	-
Region # 4 (G/town)	6	6	100	-	-	-	-
Region # 4 (E/Coast)	590	587	99.5	-	3	0.5	-
Region # 4 (E/Bank)	117	117	99.1	0.8	-	-	-
Region # 4 (Municipal)	-	-	-	-	-	-	-
Region # 5	270	270	99.6	0.37	-	-	-
Region # 6	347	347	100	-	-	-	-
Region # 10	120	120	95	5	-	-	-
	1,833	1,833	99.1	0.43	*	0.3	-

TABLE 2.1 - NUMBER OF FIRST VISITS IN YEAR FOR FP SERVICES BY ALL CLIENTS,
WITH PERCENTAGE DISTRIBUTION BY METHOD

HEALTH CENTRES	NO. OF 1ST VISITS	(%) DISTRIBUTION BY METHOD									
		ORAL		IUD		COND.		INJ.		OTHER	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
Region # 2	345	128	35.0	18	5.2	119	34.5	29	8.4	59	17.1
Region # 3	1,344	574	43.0	14	1.04	521	39.0	63	5.0	172	12.7
Region # 4 (Georgetown)	1,347	676	50.2	53	4.0	213	16.0	222	16.5	183	13.6
Region # 4 (East Coast)	2,326	991	42.6	13	0.6	654	28.1	301	13.0	367	15.8
Region # 4 (East Bank)	846	345	41.0	24	2.8	184	22.0	125	15.0	168	20.0
Region # 4 (Municipal)	1,297	559	51.8	-	-	326	38.0	16	1.0	196	18
Region # 5	1,526	877	57.4	1	0.06	411	27.0	60	4.0	177	11.5
Region # 6	-	NO FIGURES AVAILABLE									
Region # 10	1,225	519	42	13	1.0	535	44	60	5.0	98	8.0
	10,056	4661	46.3	136	1.3	2963	29.4	876	8.7	1420	14.1

TABLE 2.2 - NUMBER OF FIRST VISITS IN YEAR FOR FP SERVICES BY ALL CLIENTS
WITH PERCENTAGE DISTRIBUTION BY AGE

HEALTH CENTRES	NO. OF 1ST VISITS	(%) DISTRIBUTION BY AGE (YEARS)							
		20		20-34		35+		UNKNOWN	
		NO.	%	NO.	%	NO.	%	NO.	%
Region # 2	345	32	9.3	279	81.0	31	9.01	3	0.8
Region # 3	1,344	134	10.0	1,023	76.1	167	12.4	26	1.4
Region # 4 (G/town)	1,347	166	12.3	1,054	78.2	125	9.3	2	0.1
Region # 4 (E/Coast)	2,326	280	12.03	1,800	77.4	244	10.5	2	0.08
Region # 4 (E/Bank)	846	123	14.5	551	65.1	158	19.0	14	1.6
Region # 4 (Municipal)	1,097	156	14.2	698	64.0	216	20.0	27	2.4
Region # 5	1,526	172	11.3	1,123	74.0	223	15.0	8	0.5
Region # 6	-	NO FIGURES AVAILABLE							
Region # 10	1,225	186	15.0	832	69.0	194	16.0	13	1.06
	10,056	1,249	12.4	7,360	73.2	1,358	13.5	89	0.8

CHILD CARE SERVICES

TABLE 3.1 NUMBER OF CHILDREN (0-59 MOS) ATTENDED (FIRST CLINIC VISITS)

HEALTH CENTRE	AGE (MOS)	
	0 - 11	12 - 59
Region # 2	282	789
Region # 3	2,362	4,606
Region # 4 (Georgetown)	2,072	4,177
Region # 4 (East Coast)	2,493	6,264
Region # 4 (East Bank)	1,200	1,701
Region # 4 (Municipal)	2,730	7,137
Region # 5	1,149	2,241
Region # 6	3,988	6,250
Region # 10	1,700	5,925
	17,976	39,090

TABLE 3.2 - TOTAL NUMBER OF CLINIC VISITS BY CHILDREN (0-59 MOS) AND AVERAGE NUMBER OF VISITS PER CHILD

HEALTH CENTRE	0 - 11 MOS		12 - 59 MOS	
	TOTAL AVG./CHILD VISITS		TOTAL VISITS	AVG./CHILD
Region # 2	1,864	7	2,459	3
Region # 3			12,392	3
Region # 4 (Georgetown)	11,426	5	10,006	2
Region # 4 (East Coast)	11,081	5	15,881	3
Region # 4 (East Bank)	15,003	6	6,664	4
Region # 4 (Municipal)	5,592	5	15,389	2
Region # 5	10,533	4	5,779	3
Region # 6	7,026	6	29,999	5
Region # 10	17,499	4	9,268	2
	5,940	3		
	85,964	5	107,837	3

TABLE 3.4 - NUMBER AND PERCENTAGE OF CHILDREN (0 - 59 MOS) ATTENDED WITH SPECIFIC ILLNESS/CONDITION FIRST REPORTED IN YEAR

HEALTH CENTRE	DIARR		ARI		SCABIES		WORMS		MEASLES	
	No.	%	No.	%	No.	%	No.	%	No.	%
Region # 2	75	6.6	79	7.0	15	1.3	28	2.4	-	-
Region # 3	165	3.1	775	15.0	392	7.5	427	8.1	-	-
Region # 4 (Georgetown)	383	6.1	1049	17.0	582	9.3	462	7.4	-	-
Region # 4 (East Coast)										
Region # 4 (East Bank)	629	7.2	1293	14.8	650	7.4	590	6.7	-	-
Region # 4 (Municipal)	215	5.4	412	10.4	161	4.08	241	6.1	-	-
Region # 5	117	1.2	566	6.0	152	1.5	128	1.2	-	-
Region # 6	110	3.9	539	19.1	213	7.6	277	9.8	-	-
Region # 10					NO FIGURES AVAILABLE					
	217	16.	776	56.	-	-	301	22.	-	-
	1911	6.9	5489	2.8	2165	1.1	245	1.2	-	-

SERVICES FOR ADULTS AND ELDERLY (20 YRS & OVER)
TABLE 5.1 - NUMBER OF PERSONS (20 YRS & OVER) ATTENDED FOR FIRST TIME IN YEAR, BY AGE AND SEX

HEALTH CENTRE	20 - 44		45 - 64		65+		UNK		TOTAL	
	M	F	M	F	M	F	M	F	M	F
Region #2	-	-	-	-	-	-	-	-	-	-
Region #3	844	1728	440	781	364	406	50	42	1698	2955
Region #4 (Georgetown)	-	-	-	-	-	-	-	-	-	-
Region #4 (East Coast)	-	-	-	-	-	-	-	-	-	-
Region #4 (East Bank)	-	-	-	-	-	-	-	-	-	-
Region #4 (Municipal)	-	-	-	-	-	-	-	-	-	-
Region #5	-	-	-	-	-	-	-	-	-	-
Region #6	-	-	-	-	-	-	-	-	-	-
Region #10	861	1033	437	722	235	285	26	54	-	-
	1705	2761	877	1503	599	691	76	94	3257	5049

TABLE 5.2 - AVERAGE NUMBER OF CLINIC VISITS PER PERSON (20 YRS & OVER)

HEALTH CENTRE	TOTAL VISITS	AVG. NO. OF VISITS PER PERSON
Region #2	NO REPORTS	
Region #3	10,598	2
Region #4 (Georgetown)	NO REPORTS	
Region #4 (East Coast)	" "	
Region #4 (East Bank)	" "	
Region #4 (Municipal)	NOT APPLICABLE	
Region #5	NO REPORTS	
Region #6	" "	
Region #10	10,025	1
	20,623	1

TABLE 5.5 - NUMBER AND PERCENTAGE OF PERSONS (20 YRS & OVER) ATTENDED REFERRED TO SPECIALIST/HOSPITAL

HEALTH CENTRE	NO.	NO. & % OF PERSONS REFERRED %
Region #2		NO REPORT RECEIVED
Region #3	146	3.1
Region #4 (Georgetown)		NO REPORT RECEIVED
Region #4 (East Coast)		" " "
Region #4 (East Bank)		" " "
Region #4 (Municipal)		" " "
Region #5		" " "
Region #6		" " "
Region #10	19	0.2
	165	1.2

REF #	COMPONENT/ACTIVITY	PRESENT STATUS	OBJECTIVE/TARGET	RESOURCES
1	Procurement of drugs and medical supplies.	Pharmaceuticals and medical supplies were ordered on the basis of the Essential Drug list. The Pharmacy Department itself does not operate with a budget and all supplies could only be obtained by the prior approval of the Permanent Secretary, Ministry of Health. During the year supplies were obtained through the tender arrangement.	Provision of pharmaceuticals to all Public Health facilities run by the Ministry of Health in amounts that are needed when they are needed.	<ol style="list-style-type: none"> 1. Budgetary 2. Bilateral e.g. PAHO, IDB Health Care II Project, Maternal & Child Health through UNICEF. 3. Gifts (donations)
2	Distribution	This is presently done using a private contractor. This arrangement is satisfactory since the Ministry is divested of cost of maintenance. The management of the distribution system is facilitated by the use of a schedule. Orders are not kept for more than 10 days. There is no vehicle attached to this Unit.	To deliver pharmaceuticals requested by the various health facilities in a timely and organised manner.	Private land and air services are used in these activities.
3	Drug Selection	There is presently an Essential Drug List which was developed by the Essential Drug Committee of the Ministry of Health.	<ol style="list-style-type: none"> 1. Selection of Drugs to meet real medical needs. 2. Selection of drugs which favourable cost/benefit, cost/effective and benefit/risk ratios. 3. Selection of drugs to meet needs of all sections of the population. 	Drug information references (computer on line services, up to date reference books and magazines)

4	Drug Inventory Control	This is computerised and the whole system of the bond has been upgraded and improved. There is a need to extend the system.	Maintenance of an up to date Information System in order to generate reports to effectively manage the stocks.	<ol style="list-style-type: none"> 1. Data entry personnel 2. Information sheets for Data Entry 3. Software Drug Information Package 4. Hardware IBM compatible machine 5. Stationery
5	Drug Policy Implementation	<p>Various aspects of Drug Policy recommended by the IDB consultants are being implemented. The problem is sustainability. A national Drug Policy conference needs to be held so that all stock holders can be sensitized to the benefits of such a policy and also to contribute to the development of same.</p> <p>At the present time at least two senior Pharmacists are undergoing University training in Management.</p>	<ol style="list-style-type: none"> 1. Rational Drug Utilization. 2. More efficient use of resources. 3. Increased benefits to all sections of the community. 4. To develop and maintain standards of pharmaceutical at the Public and Private Sector Hospital Pharmacies and other related services. 	<ol style="list-style-type: none"> 1. Epidemiological data 2. Drug use review studies 3. International and Regional Exchange of information.
6	Training	At the present time at least two senior Pharmacists are undergoing University training in Management.	<ol style="list-style-type: none"> 1. To promote greater job satisfaction by senior staff 2. Upgrading staff towards more efficient delivery of their services 	
7	Miscellaneous	226 Import Licences were processed during 1992. The value of these Licences amounted to G\$541,912,322.18 or US\$1,335,298.00		

Ref #	COMPONENT/ACTIVITY	PRESENT STATUS	OBJECTIVE/TARGET	RESOURCES
8	Drug Expenditure	<p>The following suppliers sold to the Ministry Pharmaceuticals and Medical Supplies having the values as shown:-</p> <p>G.P.C. \$68,813,174.29 EAGLE CO. 7,493,654.00 ROCK'S PHARMACY 1,556,654.00 SUPER HORIZON 2,074,000.00 QUALITY MARKETING 51,930.00 PHARMAGEN ENT. 4,773,255.00 GEMINTER 1,814,927.76</p>		

TARGET SET FOR THE YEAR	TARGET ACHIEVED	ANALYSIS OF SUCCESS OR FAILURE
<p>Staff Requirements:</p> <p>Region #2 - Suddie - two (2) Radiographers - one (1) X-Ray Technician - one (1) Dark Room Technician</p> <p>Charity: - one (1) X-Ray Technician</p> <p>Region #3 - West Demerara Regional Hospital: - two (2) Radiographers - one (1) X-Ray Technician - one (1) Dark Room Technician</p> <p>Leonora: - one (1) X-Ray Technician</p> <p>Region #4 - Georgetown - one (1) Principal Radiographer - one (1) Senior Radiographer - fourteen (14) Radiographers - eight (8) X-Ray Technicians - six (6) X-Ray Technicians - six (6) Darkroom Technicians</p> <p>Region #6 - New Amsterdam - two (2) Radiographers - one (1) X-Ray Technician - one (1) DarkRoom Technician</p>	<p>one (1) Radiographer one (1) X-Ray Technician one (1) Dark Room Technician</p> <p>Nil</p> <p>one (1) Radiographer (ag.) one (1) X-Ray Technician one (1) Dark Room Technician</p> <p>Nil</p> <p>one (1) Principal Radiographer one (1) Senior Radiographer two (2) Radiographers three (3) X-Ray Technicians two (2) X-Ray Technicians/Radiographer trainee four (4) Darkroom Technicians</p> <p>Nil, the Radiographer assigned then resigned</p> <p>Achieved, as Darkroom Technician completed course in X-Ray Techniques</p> <p>Nil.</p>	<p>Not enough Radiographers available</p> <p>None available</p> <p>Radiographers not available</p> <p>None available</p> <p>Someone has to be trained to fill this vacancy</p>

Region #'s 7 & 8 - Barica - one (1) X-Ray Technician	Multipurpose Technician graduated from X-Ray Technician course - December, 1992	100% achieved
Region # 9 - Jethem - one (1) - Multipurpose Technician	one (1) Multipurpose Technician	100% achieved

TARGET SET FOR THE YEAR	TARGET ACHIEVED	ANALYSIS OF SUCCESS OR FAILURE
Training: Identification of a Government Medical Officer for Post-Graduate training in Radiology.	Not done	
Training of X-Ray Technicians for Government and Private Institutions	Achieved	Training commenced in November, 1991 completed in November, 1992
To have a batch of 1st year students for the Diploma in Radiology.	Partly achieved	Batch consists of one X-RAY Technician
Supplies: X-Ray films To have in stock all sizes throughout the year	Not achieved	Shortage experienced throughout the year especially - 17" x 14" x 14" and 15" x 12".
Processing Chemicals To maintain an adequate supply during the year.	Partly achieved	There is an abundance of automatic processing chemicals but no manual processing chemicals.
Drug/Contrast Agents To have an adequate supply of all contrast/agents for special examinations.	Not achieved	Many contrast examinations were not done during the year.
Work Performance - Region # 2 Suddie 2,000 patients to be X-Rayed	50%	This was due to shortage of films and breakdown of equipment.

ITEM #	TARGET SET FOR YEAR	TARGET ACHIEVED	ANALYSIS OF SUCCESS OR FAILURE
1.	<u>Preventive measures:</u> a. Flouride mouth rinse programme - one area. b. Flouridation of major water system. c. Bonded sealants programme. d. Flouride testing programme for all water system.	Not achieved Not achieved Not achieved Not achieved	Due to lack of plastic bottles Due to lack of foreign exchange Lack of material Due to lack of foreign exchange
2.	<u>Curative measures:</u> a. Oral surgery. b. Periodontics. c. Operative dentistry. d. Endodontics/Rothodontics Orthodontic.	10% achieved 5% achieved 0% achieved 0% achieved	Due to lack of anaesthetic needles, etc Due to lack of Materials/instruments etc. No materials etc. No materials etc.
3.	<u>Training of staff:</u> a. Dental Auxillary School. b. Dental Assistant. c. Overseas training of dentist (graduate level). d. Overseas training of dentist (post graduate). e. Continuing education.	100% Not achieved Not known Not known Not achieved	6 students graduated Deferred to 1996 Planned for 1993

4.	<u>Regionalisation:</u> Region # 1 Region # 2 Region # 3 Region # 4 Region # 5 Region # 6 Region #7 to 10	Partly achieved	
5.	<u>Maintenance/Repair of Building, Equipment, etc.</u> a. Extension of National Dental Centre - patient's waiting room. b. Maintenance of Dental equipment. c. Setting up new Department (X-Ray) at N.D.C. d. Prosthodontics, endodontics. e. Upgrade oral surgery department - operative and periodontics.	Achieved Partly achieved Not achieved Not achieved Not achieved	Successful Need more foreign currency to buy parts, etc No foreign exchange/budget No foreign exchange/budget No foreign exchange/budget
6.	<u>Create New Post</u> Senior Dental Surgeon Senior Dental Assistant Administrative Assistant Store Keeper	Not achieved Not achieved Not achieved Not achieved	Estimate submitted
7.	Dental Health Education for school children.	Not achieved	Planned but abandoned because of no funds
8.	Transportation	Not achieved	No funds

Staffing Pattern

National Aids Programme

CATEGORY	ESTABLISHMENT	1991	1992
Programme Manger	1	1	1
Aids Educators	4	4	2
Programme Administrator	1	1	1
Secretary/Typist Clerk III	2	1	1
Officer Assistant	1	1	1
Cleaner	1	1	1

Gum Clinic

Director	1	1	1 (ag)
Government Medical Officer	2	1	1
Nurse Epidemiologist	1	1	Resigned
Nurse Supervisor	1	1	1
Social Worker	4 (2 males and 2 females)	1 (female)	2 (1 male and 1 female)
Director, N.L.L.D.	1	1	1
Director, N.B.T.s.	1	1	1
Drivers		1	2

SN	ACTIVITY	TARGET	ACHIEVED	
	<p>1.1 Case finding case holding</p> <p>2. Chemotherapy</p> <p>3. Laboratory Services</p> <p>4. Training</p> <p>5. Supervision</p>	<p>1.1 To maintain 13 rural skin clinics as screening centres</p> <p>1.2 To maintain weekly dermatological consultant clinics at the Public Health Clinic</p> <p>1.3 Screening of school children at 4 schools</p> <p>1.4 Bi-monthly visits to the leprosanarium at Mahaica.</p> <p>2.1 To have all registered patients on MDT with a regularity of 95%</p> <p>2.2 All patients to be placed on sunsillane at completion of treatment.</p> <p>2.3 To maintain an ongoing programme of care and rehabilitation to all disabled patients.</p> <p>3.1 Maintain Hansen's laboratory services for skin smears and biopsies.</p> <p>3.2 Training of one laboratory technologist in Hansen's Disease techniques.</p> <p>3.3 Training courses for health personnel.</p> <p>4.1 Follow-up training for Primary Health care staff at 2 centres.</p> <p>5. Maintain patient records.</p>	<p>1.1 Fourteen (14) clinics were maintained for a total of one hundred & eighty (180) sessions. The total number of patients screened was 6904.</p> <p>1.2 A total of one hundred & four (104) clinic sessions were held.</p> <p>1.3 No screening was done.</p> <p>1.4 With few exception this was maintained.</p> <p>2.1 99.5% regularity rate was achieved.</p> <p>2.2 One hundred and seventy-two (172) patients 48 new and 124 old. See fig.1</p> <p>2.3 Forty-one (41) HD ulcer dressings were done at Public Health Clinic. 30 unad HD dressings were also done.</p> <p>3.1 259 skin smears and 3 biopsies done.</p> <p>3.2 One lab technician had on the job training.</p> <p>4.1 204 health personnel received lectures. 40 persons were attached to the clinic. No medex programme was held this year.</p> <p>4.2 No work was done on training for the integration process.</p> <p>5. All patient records maintained.</p>	<p>3.1 Difficulty in getting biopsies read. Attempts to work with CLARIC failed.</p> <p>3.2 Since September 1992, the HD Programme has a new technician (was trained by old technician).</p> <p>5. Record keeping continues to be satisfactory.</p>

A study was done among males who attended the GUM Clinic, Georgetown Hospital with a new complaint of STD during the period 13 July to September, 1992. The objectives were to -

- a) Determine their Sociological profiles
- b) Ascertain existing sexual practices and
- c) Assess their knowledge of AIDS

Conclusion on the Study

Radio and Television should be exploited as the means of dissemination of AIDS information to the lay public. Information should be simple and directed towards removing the fallacies which still prevail. AIDS Education needs to be intensified in Guyana. Promotion of health sexual life style and stable family relationships are strongly indicated among those at risk group for STD infection in Guyana.

Condoms

During the year 1992, 53,240 condoms were issued to all the regions, of this amount 36,000 were purchased through PAHO/WHO and the remaining amount was issued from G.R.P.A to whom we were grateful. All condoms are stored at the Guyana Responsible Parenthood Association and are issued upon request, from GUM Clinic, Regional Committees and Secretariat.

Management

Programmes planned by the Regional AIDS Committees were given the usual support.

Meetings of the National AIDS Committee were held bi-monthly. Dr. John Farley, CAREC Consultant visited early in the year to review existing status of the National AIDS Programme and strategy for implementing the Medium Term Plan.

The Project Manager, Dr. Edgar H. London and Dr. Lloyd Godette, Director, National Laboratory for Infectious Diseases, attended the Workshop in Barbados on 10 - 14 May, 1992, on Operational aspects and monitoring for AIDS Medium Term Plans in the Caribbean.

Drs. Morris Edwards and Clement Mc Ewan attended the VIIIth International conference on AIDS in Amsterdam. The Secretariat has not received a written report on that Conference.

The first draft of policy guidelines extracted from those operating in Canada was circulated to members of the National AIDS Committee.

Training

Ms Lynette Hardy, Senior Technician at the National Blood Transfusion Service went on a 6 weeks PAHO Fellowship attachment to the New York Blood Bank to upgrade her skills. Dr. Lloyd Godette, Director, National Laboratory for Infectious Diseases attended a 6 weeks course at C.D.C., Atlanta Georgia in Laboratory Tests, Surveillance, National Policies, Legal Issues, STD/HIV Epidemiology

Financial Statement

Expenditure

PUBLIC INFORMATION ACTIVITIES	\$ 831, 689.24
REGIONAL AIDS WORKSHOP AND SEMINARS	677, 049.10
SURVEILLANCE	80, 220.00
OFFICE FURNITURE AND EQUIPMENT	145, 900.00
NATIONAL BLOOD TRANSFUSION SERVICE	114, 432.00
OFFICE MATERIALS	219, 063.95

Central Supplies Unit

FIELD MATERIAL	25, 640.56
DIET. ARY	5, 489.05

Objectives

Assessment

Comments

National Conference of H.C	Not done	Postponed to Staff 1993 (Surveillance sample collection and Testing).
Net-work visits in Guyana to improve Quality visited.	Partial Achievement	Suddie and Bartica not
Request Automatic ELISA reader.	Done	In process
Preventative maintenance to equipment.	Done	
Improve internal arrangements	Done	Position much better

for logistical support.

Contribute to preparation
of Medium Term Plan.

Review terms of E.E.C support. Done Support continued.

Continuation of service to Done Daily basis. Research
B.T.S. G.U.M. Clinic and Activities included.
Private hospitals.

Provide system of Q.C for Not completed
private Laboratories
engaged in HIV testing

Performance 1991 figures in brackets

	<u>Tests Done</u>	<u>Confirmed Positives</u>
VDRL - B.T.S	3355(3550)	195 (114)
Others	17, 796 (15, 234)	3,074 (1, 545)
HB A - B.T.S	4, 094 (3. 726)	83 (104)
Others	768 (139)	79 (37)
HIV - B.T.S	4,025 (4,044)	65 (48)
Others	1,696 (784)	312 (151)

Figures are not available for tests done by the Quick - test method. These kits are mainly used by the Blood Transfusion Service to facilitate emergency Blood collection at weekends. in Georgetown, New Amsterdam and Suddie.

Qualit. Control

There is internal Quality Control daily, using controls from kits and the laboratory control panel.

External control for HIV is one by CAREC on a semi-annual basis, and for VDRL by C.D.C Atlanta on a four monthly basis.

Some of the test controls from C.D C have been held up in the mail delivery system during the year. but this fault has been corrected.

The Director, G.U.M. clinic continues to exercise **further random external control**, of both HIV and VDRL.

The Director, N.L.I.D. was awarded a six (6) weeks Fellowship to C.D.D Atlanta, by P.A.H.O./W.H.O. The main objective of the award, was to enable him on his return, to upgrade the capability and quality of the Laboratory

These cases were 5.92% less than those in 1991. This decrease was amongst the number of P. vivax cases reported.

The age group most affected by both P. Falciparum and P. Vivax was 15-29

Males represented (30%) of persons affected by falciparum and 20.9%) of those affected by P vivax

MAIN PROBLEMS

The lack of continuous progress can only be attributed to several factors including logistical, administrative and financial.

Accessibility to most endemic areas have become increasingly difficult. Riverain transport is slow, costly and often hazardous. Within malarious areas there has been a paucity of reliable transport and fuel supplies.

These problems have resulted in:

- a) Inadequate logistical and supervisory support for trained personnel and thus their consequent of motivation.
- b) Concentration of active case detection activities in easily accessible localities, but, often with negligible coverage in problem areas that are remote from the field stations.

PROBLEMS ENCOUNTERED DURING THE YEAR:

Semi-nomadic behaviour of indigenous Amerindians and miners.

- a) Shelters with little or no walls to afford residual spraying.
- b) Persons who only seek medical attention when very ill.
- c) Broken radical treatment.

P. Falciparum parasites resistant to chloroquine.

3. Malaria is at present an interior problem where farms, houses, miners etc. are widely scattered and often inaccessible.

4. Continuous Finances
5. Logistics (land/water transportation)
6. High turnover rate of trained Personnel.
7. Acute shortage of field facilities eg. accommodation.

There are other factors which have to be taken into consideration. Although the objective in control, the present resources are insufficient to achieve this.

Priorities have to be identified and stratified. While a better understanding of the epidemiology and transmission characteristics of the disease is required.

STRATIFICATION

From the ecological point of view, stratification is the separation between the organisms present in an ecosystem in space and time. Epidemiologically speaking it is the result of breaking down a sample into several sub samples in accordance with previously specified criteria. (In malaria, stratum is a homogeneous area both ecological and epidemiological with more or less similar factors of transmission throughout, for example: climate, geography, vectors and parasites. control measures.

Attempts were made at stratification of the programme in order to give priority to areas within respective Regions, which were previously free of the disease and in critical areas where the use of insecticide (DDT) would be greatest benefit. Residual House Spraying was carried out to a minimum in focus areas with the following results

A bilateral commission with Suriname holds periodic meeting to discuss ways of co-operation and promoting the exchange of information on malaria, filariasis and other health issues. During 1991, one meeting was held at Springlands, Guyana.

FINANCES

Financial resources of the programme have diminished over the years. During this period the national expenditure for Vector Control was approximately \$7,000 000 00. This amount had to be sanctioned by the finance department in terms of allocation for

Reduction of malaria to mortality and morbidity through the case of:

- a) Activities to be carried out.
- b) Supervisory visits to be made.
- c) Purchases to be made.
- d) Remuneration to be made to personnel.

STAFFING

During the year there were several resignations from various categories of staff. At the end of the year, there were 97 vacancies of a total of 198 staff positions.

TO ACHIEVE CONTROL IN MALARIOUS AREA:

Reduction of malaria mortality and morbidity through:

- 1) Chemoprophylaxis applied to non-miners subjects going into malarious area.
- 2) Chemotherapy to all presumptive and actual malarious area.
- 3) Follow-up on medical treatment.
- 4) Hospitalisation of acute with associated treatment.
- 5) Training of health personnel in Malaria Microscopy of ensure quick and reliable diagnosis.
- 6) Mass blood and fever case survey.

These surveys are undertaken routinely in all malarious areas to detect both asymptomatic and clinical cases, thus depleting the parasite reserve.

SPECIAL PROJECT

From September 1992 a project commenced funded by S.I.M.A.P. for a total of US\$50,000.00. This project provides emergency assistance to the programme in Region 1, 7, and 8 - those areas with the highest incidence of malaria. Funds were provided for:

- a) Anti-Malaria Drugs
- b) Laboratory Reagents.
- c) Laboratory Supplies.
- d) Stationery.
- e) Repairs to infrastructure.

This project will conclude at the end of February 1993. The assistance offered during this period was invaluable to the programme and enhanced the activities in the above regions.

TRAINING

During the year one (1) Malaria Microscopy Course was conducted with funding from PAHO/WHO for six (6) Officers of the vector (Malaria) Service. This course was held in the Georgetown laboratory for:

- 3 = Regional Supervisors
- 2 = Sub-Regional Supervisors
- 1 = Field Assistant

All students were successful, and their training did not only enhance their Supervisory capabilities but also the general diagnostic facilities throughout the Interior locations.

It must be noted however that death due to Malaria, must be confirmed by a post mortem examination (parasitological examination)

IMPORTED CASES OF MALARIA

- a) Region No. 1 = 89 cases (from: Venezuela/Guyana Border - Delta Amacuro-area)
- b) Georgetown = 4 cases (2 Suriname, 1 French Guiana, 1 Venezuela)
During the year 1992, deaths associated with Malaria were reported from the following Regions.

Region	
	6
2	2
6	1
7	
8	
9	
10	Nil
G/town	1

Hospitalization of severe malaria patients was routine during this period. Cases hospitalized by Region

Region No.	
	93 persons
2	185
6	26
7	105
8	16
9	27
10	76
G/town	266

3. OPERATIONAL RESEARCH AND CONTROL ACTIVITIES

Malaria investigations, Region # 7 Mazaruni/Cuyuni

The Mazaruni/Cuyuni/Potaro continued to show unprecedented malaria endemicity. Miners were the chief culprits of transmission and infection. Emphasis on malaria control continued to be placed on the Bartica Triangle where transportation was available.

This investigation was undertaken with the said objectives:

A brief review of malaria situation in Region # 7

To ascertain the vector's present in the Bartica Triangle and to advise whether transmission was actually taking place.

3. To advise on appropriate action as a result of investigation at 1 and 2.

TABLE 1: DATA ON MALARIA CASES IN REGION # 7

	1988	1989	1990	1991	1992
P F	2926	1655	1357	2394	1059
P V	1173	924	1054	2570	577
P F V	20	37	21	14	2
	4119	2616	2343	4978	1638
SMEARS ACTIVE	8694	6382	3183	1792	1012
TAKEN PASSIVE	20462	11060	11020	12645	7283
	29156	17442	14203	14437	8296

TABLE 11: DATA ON MALARIA CASES IN REGION # 3 & 7

No. of smears taken	Positivity							
	Active		Passive		Active		Passive	
	P.F.	P.V.	P.F.V.	P.F.	P.V.	P.F.V.		
26	1012	7283	110	44	0	949	533	2

* Data excluded the cases found in Georgetown

TABLE 111: DATA ON THE GENUS AND SPECIES OF MOSQUITOES FOUND BITING (OUTDOOR)

Locality	An.Triannulatus	An.Aquasalis	Cx.Davisi	Ae.Aegypti
Bartica (township)				+
4 Miles				+
2 Miles				+
Winiperu	+		+	+
Skull Point				+
Kartabo				+

Represents +: found; - = not found

BRIEFING CONCLUSIONS

1. No evidence of actual transmission was taking place within the bartica triangle was found.
2. Active case detection within the bartica triangle was not necessary and therefore scarce resources including fouds could be directed and utilised for operations elsewhere.

3. Every effort must include increasing financial allocations from the Ministry and also with the cooperation of the mining community to significantly increase active case detection in the Region. Passive case detection accounted for some 80% of the smearing effort and contributed some 85% of the malarial detection.
4. The high passive case detection clearly demonstrated that presons were seeking which was indeed acute and high. The gametocyte burden of the malaria reservoir pool in this Region can only be decreased and control attempted and achieved if active case detection was undertaken with getted frequency i.e at least every 21 day. The present effort was ill- directed.
5. As advised since 1983, we again recommend, "the suppressive treatment (prophylaxis as vehicle at present be immediately discontinued. Miners do spend long periods in the interior and from discussions with many of these persons, anti-malaria time of illness including fever. Consequently, it seem that the present system of so-called preventative treatment inerferes with the detection of postivity."

7 MALARIA INVESTIGATIONS, BERBICE REVER

In Decemder, 1991, an outbreak of malaria was reported in the berbice Rever about Kwakwani and above to Itabu, fifty (50) cases were recorded. Prior to 1991, a small outbreak of malana was also reported in 194 among itinerant miners of gold and diamond in the said areas but especially at Itabu. The only other date documented as regards malaria from Kwakwani were by Gigliolo (1945), Gigilioli (1948) The latter reported on inadequate house screening as a factor of malaria transmission.

This investigation was conducted with the said objectives:

1. to ascertain the vector/s or potential vector/s
 2. to determine the soure of the malaria problem
 3. to advise on control method/s feasible
 4. to initiate a viable health education programme.
- to initiate control measures.

1. Parasitological Surveys

Mass blood surveys and fever case surveys were conducted at camp sites, Itabu and Kwakwani township respectively. The results are given TABLES I, II, III, and IV.

2. Entomological Surveys

Vector/s or potential vector/s surveys as regards malaria transmission were also undertaken at Itabu and Kwkwani, Berbice Rever. The results are given in TABLE VI.

3. Control Operations

Three forms of control effort were employed as under:

1. Treatment of all positive cases found
2. Mass treatment of all other persons found at Itabu, B. River.
3. DDT residual spraying. The result on residual spraying with DDT is given in table V.
4. Health Education

A number of lectures and demonstrations on malaria parasites and vectors were given by the parasitologist/ Entomologist as follows:

1. Kwakwani Primary School
2. Kwakwani Secondary School
3. Kwakwani Hospital School
4. Kwakwani Bauxite Company staff
5. Miners - Itabu

TABLE I : DATA ON THE NUMBER OF MALARIA CASES

Areas	Total no. Smears	Positivity	SPR	P F	P V.
Itabu	42	16	6	62.4	
Kwakwani	10	0	3	30	

TABLE II: DATA ON THE EPIDEMIOLOGICAL CLASSIFICATION OF MALARIA CASES

Area	Indigenous	Imported (Local)
Itabu	10	9
Kwakwani	0	3

TABLE III: DATA ON THE AGE DISTRIBUTION OF MALARIA CASES BY SEX

Area	Male 15 years	Female 15 years
Itabru	17	2
Kwakwani	3	0

TABLE IV: DATA ON THE NUMBER OF MALARIA CAESE WITH GAMETOCYTES

Area	Species	
	P.F.	P.V.
Itabru	3	2
Kwakwani	0	1

TABLE V: DATA ON THE NUMBER OF HABITATIONS SPRAYED WITH DDT (75% WP)

Area	No. of Habitations		%
	Existed	Sprayed	
Itabru	25	25	100

TABLE VI: DATA ON THE GENUS AND SPECIES OF MOSQUITOES BITING PER MAN-HOUR OUTDOORS

	Genus and Species			Area
	Anopheles	Culex	Mansonia	
Itabru				
Kwakwani				

Represents: + = found; - = not found

CONCLUSIONS/RECOMMENDATIONS

That complete radical cure with anti-malaria drugs seem the cost effective method of intervention in the circumstances since:

- a) the mining camps were make-shif and rudimentary and offered little or no surface for residual DDT spraying against darlingi
- b) in the case of aquasalis - this mosquito is largely exophilic and exopagy and therefore DDT residual spraying will not be technically prudent.

That all persons infected with *P. falciparum* in all areas of Guyana including the Berbice River must be given radical treatment according to Schedule 4 to avoid recrudescence. Further, the primaquine should be given on day one rather than on the fourth day as recommended to immediately inactivate the gametocytes in infected persons and thus assist in the breaking of transmission.

That the identification card system of all miners as advocated with the endorsed malaria clearance certificate must be urgently implemented. This method if carefully and effectively must by urgently implemented. This method if carefully and effectively utilised can be an important tool in preventing the spread of malaria both to new areas and within endemic areas.

That a Collaborating Microscopist be trained from a member of the staff, Kwakwani endemic areas.

That literature on the subject be made available to staff, Kwakwani Hospital. That a viable health education programme as regards malaria be undertaken and maintained in the areas.

c) EPIDEMIOLOGICAL MALARIA SURVEILLANCE ACTIVITIES ANARIKA/RICKSTONE/BUTAKARI

In the Annual Report for 1991, a report was made of an outbreak of malaria in the above areas. This visit was a follow-up investigation to ascertain the status as regards malaria endemicity.

RESULTS

TABLE 1: DATA ON THE MALARIA CASES FOUND

LOCALITY	TOTAL No. OF SMEARS	SPECIES			TOTAL
		P.F.	P.V.	P.F.V.	
Anarika	180	22	8	0	30
Rockstone	98	12	7	0	19
Butakari	88	15	10	0	25

TABLE 11: DATA ON THE EPIDEMIOLOGICAL CLASSIFICATION OF MALARIA CASES

LOCALITY	INDIGENOUS	LOCALLY IMPORTED
Anarika	28	2
Rockstone	0	19
Butakari	0	25

TABLE 111: DATA ON AGE GROUP DISTRIBUTION OF MALARIA CASES BY SEX

LOCALITY	MONTH		YEARS				TOTAL MF	
	6	7-11	1-2	3-6	7-11	12-14		15
	MF	MF	MF	MF	MF	MF		MF
Anarika			1 0	2 0		22 5	25 5	
Rockstone						17 2	17 2	
Butakari			2 1	2 2		1 1	14 2	

TABLES IV: DATA ON THE GENUS AND SPECIES OF MOSQUITOES BITING PER MAN-HOUR (OUTDOOR)

GENUS AND SPECIES ANOPHELES CULEX	DENSITY ANOPHELLES CULEX
Anarika	
Rockstone	
Butakari	

+ = found; - = not found

BRIEF CONCLUSIONS

Continuous surveillance activities in these areas are necessary.

Indigenous transmission of malaria was again confirmed at Anarika in contrast to imported cases at Rockstone and Butakari.

The presence of *An. darlingi* at Anarika is of grave concern to this logging concession. Our experience over the years demonstrated that with the rain, this dangerous species of *Anopheles* breeding nearby quickly establish itself. Gametocyte carried from the mining areas of the Cuyuni/Mazaruni/Potaro uses the concession as a very temporary stay-over rest facility in their journey to Linden and Georgetown. These persons provide the ready pool of infection for the outbreaks at Anarika. In addition, many of the residents of the logging concession do fishing at nights in the Essequibo River where they may also become infected and return to the concession. Self-treatment is also much practised at the concession. These uncured subjects also serves as potential gametocyte carriers.

Malaria health education must continue year around. The indiscriminate use of anti malaria drugs must be emphasized and discourtaged.

ACHIEVEMENTS OF TARGETS

Targets were fairly well set. There was an increase in the number of new patients for 1992 (48) as compared with the figure for 1991 (36). No pilot project for integration was implemented as certain problems prevented the projects from getting off the ground. These constraints also contributed to a marked shortfall in the targets set for contact examinations and school surveys.

CONCLUSION

The objective of intergration has not been relaised and needs to be addressed seriously. All other targets have been fairly well executed. There is a general improved attitude of Guyanese to Hansen's Disease and short term therapy seems to be much prefered. Complaints has been good.