## 1. ORGANISATIONAL OBJECTIVES AND FUNCTIONS

The Ministry of Health is responsible for the delivery of preventative and curative health services in the country.

### 1.1 STRATEGIC DIRECTIONS

The Ministry's VISION for the future is "MAKING A DIFFERENCE" and "CORE PURPOSE is,

To respond effectively to the health needs of the Tongan people by providing the appropriate range and level of high quality health services and being accountable for the outcomes of these services.

The Ministry's CORE VALUES are,

- Commitment to quality care
- Professionalism and accountability
- Care and compassion
- Commitment to education and training

The Ministry's DARING GOAL is,

To be the healthiest nation in the Pacific Rim as judged by international standards and determinants.

#### 1.2 STRATETGIC KEY RESULT AREAS AND GOALS

- 1.2.1 Healthy Communities and Populations through improved services
- Prevent or delay the onset of cardiovascular disease and diabetes, and to reduce complications and improve the quality of life through health promotion and improved management.
- Improve mental health services by improving the management of chronic psychiatric patients in the community and decrease the number of re-admissions.
- Decrease motor vehicle injuries and emergencies in Tonga and improve the services available to manage them.
- Improve the health of the Tongan people by ensuring equitable access to, and rational use of, safe and effective drugs of good quality.
- Reduce the incidence of dental decay in Tonga.
- Clearly identify existing cancer cases and increase the early detection of cancer in Tonga.
- Extend and develop general and specialised health promotion services.
- Develop strategies to prevent substance abuse.
- Support child and adolescent health and development.
- Combat communicable diseases with a focus on HIV/AIDS, Tuberculosis, and Filariasis.
- Develop community health services by gaining community support for the health centres and developing a team approach.
- Support services development in the island hospitals.
- Develop clinical services through improved clinical care and staffing.

### 1.2.2 Health Sector Development

- Significantly improve the efficiency and effectiveness of management systems and processes.
- Provide the Tonga health system with an efficient and effective financial management system.
- Provide the Tongan health system with improved facilities and equipment and to maintain these well.
- Strengthen informed decision making within the Ministry of Health through the provision of appropriate information management.

## 1.2.3 Staff Training and Development

- Improve and strengthen workforce management and development.
- Continue to organise formal education, and in service training programs for staff.
- Prioritise training needs.
- Develop workforce planning processes.

#### 1.2.4 Service Partnerships

 Work with Non Government Organisations, communities, other Government departments and donor organisations to implement these priorities.

#### 1.3 PROGRAMME OBJECTIVES AND MISSION STATEMENT

Operationally the Ministry mirrors the budget structure to facilitate programme evaluation and consists of four programmes,

- 1. Leadership, policy advice and programme administration
- 2. Preventative health services
- 3. Curative health services
- 4. Dental health services

#### 1.3.1 Programme 1: Leadership, policy advice and programme administration

Programme Objectives and Mission Statement: To provide quality and effective support services to the Ministry and all health districts with regard to donor coordination, strategic, operational and workforce planning, administration, human resources and financial management, transport and communication services.

### 1.3.2 Programme 2: Preventative health services

Programme Objectives and Mission Statement: To help the people in Tonga to achieve the highest attainable level of health as defined by World Health Organisation's constitution as "a state of complete physical, mental and social well-being and not merely the absence of infirmity", by:

- Significantly reduce morbidity and mortality due to infectious diseases.
- Provide environmental health services which result in a healthier community due to improved regulation, monitoring and health promotion activities.
- Assisting all health providers in the promotion of health through their respective areas of care and to empower the public at large in looking after their own health.
- Providing effective services to the health of mothers, children and others through a reproductive health strategic
  approach extending community health services to the people who need our services the most.

### 1.3.3 Programme 3: Curative health services

Programme Objectives and Mission Statement: To be able to provide the best possible care for patients, to prioritise areas that need change and to use the available resources in the most appropriate and effective way.

#### 1.3.4 Programme 4: Dental services

Programme Objectives and Mission Statement: To respond effectively to the oral health needs of the people of Tonga by providing preventive and curative oral health programmes, information and services and be responsible for its outcomes.

In implementing its services and activities the Ministry is governed by the following Acts:

- Public Health Act 1992
- Mental Health Act 1992
- Health Practitioners Registration Act 1991
- Health Services Act 1991
- Garbage Act 1945
- Tobacco Act 2001

The following legislation was approved by the Legislative Assembly and His Majesty's Ascent has been granted.

- Health Practitioners Review Act 2001
- Medical and Dental Act 2001
- Nurses Act 2001
- Pharmacy Act 2001
- Mental Health Act 2001
- Therapeutic Goods Act 2001
- Drugs and Poisons (Amendment Act 2001)

#### 2 HEALTH ADMINISTRATION AND MANAGEMENT

In delivering its services to the public, the Ministry is divided into six functional divisions,

- Administration
- Health Planning and Information
- Public Health
- Medical
- Nursing
- Dental

Divisional heads are responsible to the Director of Health for the implementation of each Division's services.

2.1 As of 31 December 2004 the following officers were responsible for the administration and management of the Ministry and its respective Divisions.

2.2	Ministerial Health	Dr Viliami Ta'u Tangi
2.3	Head of Department	Dr Litili 'Ofanoa
2.4	Divisional Heads	
Publi	c Health	Dr Malakai 'Ake Chief Medical Officer, Public Health
Medio	cal	Dr Taniela Palu Chief Medical Officer, Clinical Services
Nursi	ng	Ms 'Amelia Lata Malu Chief Nursing Officer
Denta	al	Dr Viliami Sikalu Latu Chief Dental Officer

Administration

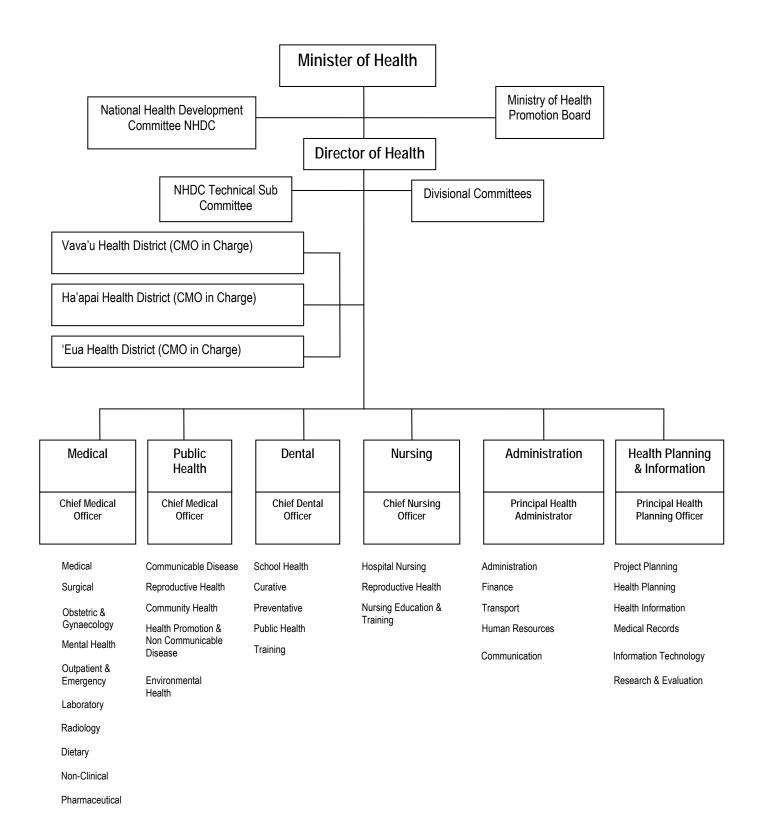
Health Planning and Information

Mr Tu'akoi 'Ahio Principal Health Administrator

Mr Taniela Sunia Soakai Principal Health Planning Officer

# **MINISTRY OF HEALTH**

## **ORGANIZATION STRUCTURE**



## 2.5 DISTRICT HOSPITALS

As of 31 December 2004 the following officers were responsible for the management of the outer island health districts.

Prince Ngu Hospital Vava'u Health District

Niu'ui Hospital Ha'apai Health District Dr Edgar 'Akau'ola Chief Medical Officer

Dr Lisiate 'Ulufonua Acting Chief Medical Officer

Niu'eiki Hospital 'Eua Health District Mr. 'Amone Vaka'uta Acting Chief Medical Officer

#### **3 OVERVIEW OF HEALTH INDICATORS**

The health situation for Tonga in the last five years is reflected in the following table.

## HEALTH INDICATOR(S) FOR TONGA 2000 - 2004

	INDICATOR	2004	2003	2002	2001	2000
1	Estimated Population ('000)	101.8	101.4	101.0	100.7	100.3
2	Annual Population growth	0.3	0.3	0.3	0.3	0.3
3	Percentage of Population less than 14 years	37	36**	36**	37**	37**
	Percentage of population 65 years and over	6	5.9**	5.8**	5.7**	5.6**
4	Percentage of urban population	36	36	36	36	36
5	Rate of natural increase	17.7	20.2	18.4***	19.4***	18.1***
6	Crude Birth Rate	23.8	26.2	24.2***	25.1***	24.6***
7	Crude Death Rate	6.1	5.8	5.8***	5.7***	6.5***
8	Maternal Mortality Rate (per 100,000)	82.3*	0	78.2*	0.0*	77.5*
9	Life Expectancy at Birth (combined)					
	Life Expectancy (Male)	70	70	70	70	70
	Life Expectancy (Female)	72	72	72	71	71
10	Infant Mortality Rate	15.7	12.8	9.8	13.0	13.0
11	Perinatal Mortality Rate (per 1,000 live births)	10.3	13.2	15.8	18.5	16.9
12	Total Health expenditure ('000)	13019	11294	9895	9545	8413
	Per Capita	128	111	98	95	83
	As a percentage of total recurrent budget	11.6	10.2	10	11	9.1
13	Health workforce					
	Medical Officers at post	41	42	32	35 ***	33
	Health Officers at post	20	21	20	26	28
	Nursing and Midwifery at post	316	344	326	322	325
14	Percentage of population with safe water supply	94	97	97	97	96.2
15	Percentage of household with adequate sanitary facilities	90	94	94.7	94	93.7
16	Immunization coverage	99.6	98.5	97	93.4	95.2
17	Percentage of pregnant women immunized with tetanus	92	93	94.7	81.1	94.1
	toxoid					
18	Percentage of population with access to appropriate health	100	100	100	100	100
	care services with regular supply of essential drugs within					
	one hours walk					
19	Percentage of infants attended by trained personnel	100	100	100	95.3	95.2
20	Percentage of married couples practicing contraception	23	22.1	23.1	33.6	33.9
21	Percentage of pregnant women attending ante natal care	99	98.7	98.5	98.5	98
22	Percentage of deliveries conducted by trained personnel	98	97	95.1	95.3	92.1
23	Total Fertility Rate	3.8	3.4	3.3	3.4	3.3

\* Maternal Mortality Rate has been calculated using standard formula (per 100,000 live births).

\*\* Calculated based on the assumption fertility rates will decrease and life expectancy will increase overtime.

\*\*\* Amended from statistic published in 2001 Annual Report.

#### 3.1 Life Expectancy

The projected life expectancy at birth in 2004 for females is 72 and 70 for males.

#### 3.2 Projected Population

The results of the 1996 population census indicate the country's population was 97,784 and the projected population for Tonga for 2004 is 101,865 increasing to 103, 289 by 2007.

#### 3.3 Morbidity

The five leading cause of morbidity during the year (Table 30) were,

Medical Condition	No. of Cases	% of Total Notifiable Diseases
Acute Respiratory Infection	20819	46
Influenza like illness	20057	44
Broncho Pneumonia	1947	4
Diarrhoea (Infant)	1011	2
Diarrhoea (Adult)	671	2
Total for 5 Leading causes of morbidity	44505	98
Total Notifiable Diseases	45218	100

#### 3.4 Mortality

A total of 617 deaths were reported during the year. The five lead causes of mortality in 2004 (Table 9 and 29) were,

Medical Condition	No. of Cases	% of Deaths
Disease of the Circulatory System	151	25
Neoplasms	72	12
Endocrine, Nutritional and Metabolic	52	8
Disease of the Respiratory System	40	7
Injury and Poisoning	35	6
Total for 5 leading causes of mortality	350	57
Total No. of Deaths	617	100

### 4 HEALTH RESOURCES

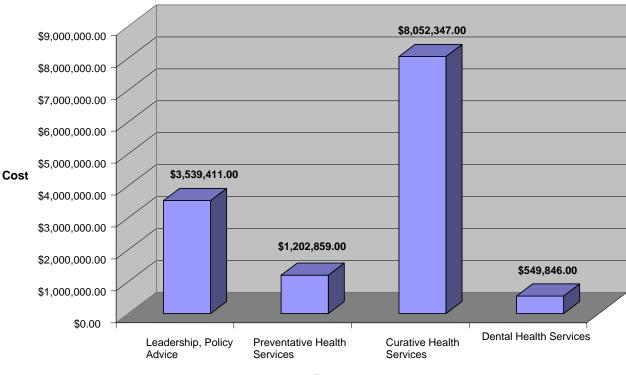
In proposing to Government the annual budget for the Ministry reports under four programme areas,

- Leadership, policy advice and programme administration
- Preventative health services
- Curative health services
- Dental services

#### 4.1 Financial Resources

The total recurrent allocation for the Ministry for the 2004-2005 financial year was \$13,344,463.00 with an estimated expenditure per head of \$128. The allocation to health represents 11.6 percent of government's total budget. Budget details can be found in Table 2 and 3.





#### Programmes

### 4.2 Human Resources for Health

As of 31 December 2004 the Ministry's staff establishment consists of 945 established posts of which 782 were filled and 163 are vacant.

The Ministry continues to place priority in the development of its various cadres of health personnel, through inservice, local training, overseas attachments and formal programmes at both undergraduate and postgraduate levels.

The Ministry conducted various local workshops and trainings as part of its ongoing staff development initiative. The Ministry participates in local training under the auspicious of the Civil Service Training and Community Development Training Centres. Medical and dental undergraduates continue to be trained overseas.

#### 4.3 Staff Promotions

In acknowledging academic achievements and outstanding performance the following staff members of the Ministry were promoted during the year.

Names	From	То	Effective Date	Cabinet Decision
Mele Taufa	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
'Atuekaho				
Meleane Fangupo	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Sela Folau	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Katalina Kelepi	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Liku Kioa	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Fipe Lama	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Latai Lui	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Tutaleva Maea	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004

Ane 'Otumuli	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Salome Pomana	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Finau Malia Solo	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Keasi Talakai	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Manu Vainikolo	Student Nurse	Staff Nurse	18/08/2003	CD.No.15 of 16/01/2004
Limisesi Vainikolo	Student Nurse	Staff Nurse	24/10/2003	CD.No.15 of 16/01/2004
Mohulamu Lavemai	Nurse Midwife	Public Health Senior	1/16/2004	CD.No.15 of 16/01/2004
		Nurse Midwife	1/10/2004	00.100.100110/01/2004
Emeline Takai	Nurse Midwife	Public Health Senior	1/16/2004	CD.No.15 of 16/01/2004
		Nurse Midwife		
Ana Mafi Paletu'a	Senior Public Health Nurse	Public Health Nurse	11/11/2003	CD.No.15 of 16/01/2004
		Midwife		
Taufa Mone	Senior Public Health Nurse	Public Health Nurse	11/11/2003	CD.No.15 of 16/01/2004
		Midwife		
Amelia Fusi	Public Health Nurse	Public Health Nurse	11/11/2003	CD.No.15 of 16/01/2004
		Midwife		
Matelita Holani	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Lower Leaving Mafi	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Sofia Nuku	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Misty Fifita	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Tilisa Falase	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Lata Ma'u	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Folau Lepa	Staff Nurse	Nurse Midwife	11/11/2003	CD.No.15 of 16/01/2004
Mele Kapani	Senior Staff Nurse	Nursing Sister	1/16/2004	CD.No.15 of 16/01/2004
Elaine 'Alofi Faletau	Staff Nurse	Nursing Sister Graduate	1/16/2004	CD.No.15 of 16/01/2004
Fusi Kaho	Senior Public Health Nurse	Nurse Practitioner	1/7/2003	CD.No.15 of 16/01/2004
T USI IKano	Midwife	Nuise i lacuionei	1/1/2003	00.100.100110/01/2004
Dr Sela Fatu	Dental Chairside Assistant	Dental Officer	2/1/2004	CD.No.95 of 19/02/2004
Miss Kolotita Vimahi	Student Nurse	Staff Nurse	18/08/2003	CD.No.85 of 19/02/2004
Miss Sauliloa	Student Nurse	Staff Nurse	18/08/2003	CD.No.85 of 19/02/2004
Vaka'uta				
Miss Mele Lutui	Student Nurse	Staff Nurse	18/08/2003	CD.No.85 of 19/02/2004
Dr Sililo Tomiki	Senior Dental Officer	Principal Dental Officer	26/03/2004	CD.No.114 of 26/03/2004
Dr Susitina Piukala	Dental Officer	Senior Dental Officer	26/03/2004	CD.No.113 of 26/03/2004
Dr Peta Tu'iano	Dental Officer	Senior Dental Officer	26/03/2004	CD.No.113 of 26/03/2004
Dr Reynold 'Ofanoa	Medical Officer	Medical Officer Special	26/03/2004	CD.No.113 of 26/03/2004
		Grade		
Mr 'Eva Mafi	Health Education Assistant	Assistant Health	26/03/2004	CD.No.113 of 26/03/2004
	Grade i	Education Officer		
Mrs Levaitai 'Asaeli	Assistant Pharmacist Grade	Pharmacist Graduate	19/01/2004	CD.No.113 of 26/03/2004
	II			
Miss Losaline Titiuti	Assistant Pharmacist Grade	Pharmacist Graduate	2/2/2004	CD.No.113 of 26/03/2004
	II			
Mr 'Amone Vaka'uta	Health Officer	Senior Health Officer	26/03/2004	CD.No.113 of 26/03/2004
Mr Sione 'Ulufonua	Health Officer	Senior Health Officer	26/03/2004	CD.No.113 of 26/03/2004
Mrs Kafo'atu	Dental Maid	Dental Sterile Supply	1/6/2004	CD.No.210 of 01/06/2004
Tu'ivailala		Assistant		
Miss Sesimani	Accountant	Senior Accountant	1/6/2004	CD.No.205 of 01/06/2004
Taulanga				
Dr. Taniela Palu	Medical Superintendent	Chief Medical Officer	1/6/2004	CD.No.238 of 1/06/2004
Dr Edgar 'Akau'ola	Senior Medical Officer	Chief Medical Officer	1/6/2004	CD.No.238 of 1/06/2004
Dr Sione Talanoa	Medical Officer	Senior Medical Officer	1/6/2004	CD.No.238 of 1/06/2004
Latu				
Dr Siale 'Akau'ola	Senior Medical Officer	Medical Superintendent	28/10/2004	CD.No.411 of 28/10/2004
Mr Manavahe Ata	Senior Health Education	Accounting Officer	1/7/2004	CD.No.327 of 26/07/2004

Mrs Mele S	Computer Assistant	Computer Operator Gr	1/7/2004	CD.No.327 of 26/07/2004
Faka'iloatonga Mrs Finau 'Akau'ola	Computer Assistant	Computer Operator Gr	1/7/2004	CD.No.327 of 26/07/2004
Mr Niu Fakakovikaetau	Public Health Inspector Gr I	Public Health Inspector	1/7/2004	CD.No.327 of 26/07/2004
Mrs Fetongi Tukutau	Public Health Inspector Gr II	Public Health Inspector Graduate	1/7/2004	CD.No.327 of 26/07/2004
Mr Tu'ifua Taumoefolau	Hospital Engineer Graduate	Senior Hospital Engineer Graduate	1/7/2004	CD.No.327 of 26/07/2004
Mr Sunia Soakai	Senior Health Planning Officer	Principal Health Planning Officer	1/7/2004	CD.No.327 of 26/07/2004
Mr 'Eva Mafi	Assistant Health Education Officer	Health Promotion Officer Graduate	1/7/2004	CD.No.327 of 26/07/2004
Mr Namoe Sau	Senior Health Education Officer	Senior Health Promotion Officer Grad	1/7/2004	CD.No.327 of 26/07/2004
Mr Le'omolotu Havea	Assistant Health Education Officer	Health Promotion Officer Education	1/7/2004	CD.No.327 of 26/07/2004
Mr Solomone Matangi	Health Education Assistant Grade II	Health Promotion Officer Education Gr II	1/7/2004	CD.No.327 of 26/07/2004
Mr Paea Tiueti	Health Education Assistant Gr II	Health Promotion Officer Education Gr II	1/7/2004	CD.No.327 of 26/07/2004
Mr Filisonu'u Taumoefolau	Audio Visual Aid Officer	Health Promotion Officer Technician	1/7/2004	CD.No.327 of 26/07/2004
Miss Naomi Fakauka	Health Education Assistant Gr II	Health Promotion Officer Grade I( Edu )	1/7/2004	CD.No.327 of 26/07/2004
Mr Vilisoni Kaivelata	Art Illustrator	Health Promotion Technician Trainee	1/7/2004	CD.No.327 of 26/07/2004
Mr Siutaka Siua	Pharmacist Graduate	Senior Pharmacist Graduate	6/12/2004	CD.No.463 of 17/12/2004
Mr 'Osaiasi Kioa 'Alatini	Hospital Fitter Electrician	Hospital Maintenance Electrician	17/12/2004	CD.No.461 of 17/12/2004
Mrs 'Anilona 'Onesi	Senior Nurse Midwife	Nurse Practitioner	5/8/2004	CD.No.446 of 19/11/2004

# 4.4 Staff Retirement

The Ministry acknowledges the dedicated service provided by the following officers who retired from the service during the year.

Name	Post	Effective Date	Cabinet Decision
Mrs Siosi'ana Loto'a'atu	Staff Nurse	26/07/04	CD.No.283 of 28/10/2004
Mrs Saipaleti Ikahihifo	Senior Public Health Nurse	3/1/2005	CD.No.478 of 17/12/2004
Mr Movete Tupou	Senior Pharmaceutical Product		
	Technician	3/1/2005	CD.No.477 of 17/12/2004
Mrs 'Eneti Mafi	Cook	1/6/2004	CD.No.224 of 1/06/2004
Mr Siaosi Militoni	Radiographer	1/3/2004	CD.No.92 of 2/04/2004
Mr Siale Ngahe	Psychiatric Assistant	26/03/04	CD.No.101 of 26/03/2004
Mr 'Ovaleni Tai	Painter	1/3/2004	CD.No.133 of 26/03/2004
Mr 'Okusitino Halatanu	Groundskeeper	1/3/2004	CD.No.71 of 19/02/2004
Mrs Fe'ao Vaipulu	Wardsmaid	19/02/04	CD.No.61 of 19/02/2004

# 4.5 Staff Appointment

Through its ongoing staff development, training and services requirements the following officers were appointed to the Ministry during the year.

Name	Post	Effective Date	Cabinet Decision
Mrs Sisifa Fehoko	Staff Nurse	3/09/04	CD.No.409 of 28/10/2004
Lu'isa Tupou	Clerk Class III	17/06/2004	CD.No.287 of 26/07/2004
Matamoana Lynn Tupou	Medical Officer	18/10/2004	CD.No.444 of 28/10/2004
Mr Mesui Pule	Oxygen Plant Operator	31/08/04	CD.No.336 of 25/08/2004
Mr Moala Finau	Plumber Tradesman Leadinghand	31/08/04	CD.No.336 of 25/08/2004
Dr Viliami Tutone	Physician Specialist	2/8/2004	CD.No.339 of 25/08/2004
Mrs Kelesi Havea	Laundrymaid	9/09/04	CD.No.340 of 25/08/2004
Mrs Makeleta Te'ekiu	Wardsmaid	9/09/04	CD.No.340 of 25/08/2004
Mr Kolovo Ma'ake	Male Orderly	9/09/04	CD.No.340 of 25/08/2004
Miss Lesieli Vanisi	Health Education Assistant Gr II	7/6/2004	CD.No.263 of 25/06/2004
Mrs Mele Fepale	Health Education Assistant Gr II	7/6/2004	CD.No.263 of 25/06/2004
Mrs Siale Taumoefolau	Health Administration	7/6/2004	CD.No.262 of 25/06/2004
Mrs Aspasia Ramsay	Tutor Sister Graduate	16/06/2004	CD.No.240 of 16/06/2004
Mrs Lesieli Po'uli	Staff Nurse	14/06/04	CD.No.195 of 1/06/2004
Dr Laxmi Aryal	Medical Officer	20/04/04	CD.No.154 of 15/04/2004
Miss Falekakala Mila	Assistant lab Technician Gr II	13/04/2004	CD.No.156 of 15/04/2004
Miss 'Aiona Ha'unga	Assistant lab Technician Gr II	5/4/2004	CD.No.156 of 15/04/2004
Miss Viela Ha'unga	Assistant lab Technician Gr II	5/4/2004	CD.No.156 of 15/04/2004
Miss Mele Vea	Assistant lab Technician Gr II	5/4/2004	CD.No.156 of 15/04/2004
Miss Mina Lu'isa 'Eliesa	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Eseta Finau	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Mele Fonua	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Maikale Fuka	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Salome Fusitu'a	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Mr Sione Hala'api'api	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Mr Solomone Halatoafa	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Fifita Havea	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Sivani 'Inoke	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Ana'ofa Kauvaka	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Malia Lanumata	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Mr Vaka Lao	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Alisona Lasukau	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Anauini Lataimu'a	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Ana Tupou Latu'ila	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Katokakala Li	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Ana Sisilia Lolohea	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Malia Losaki	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss 'Emeline Mafi	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Mr Sione Mafi	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Kavafau Maile	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Nelaia Maliepo	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Jocylene Muna	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Jocylene Muna Miss 'Iunisi Palu	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Kalolaine Sinipata	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Miss Kanitiola Taufa		2/2/2004	CD.No.108 of 26/03/2004
Miss Kanitiola Taula Miss Matileti Taulanga	Student Nurse Student Nurse	2/2/2004	CD.No.108 of 26/03/2004 CD.No.108 of 26/03/2004
Miss Matileti Taulanga Miss Senitila To'aho	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004 CD.No.108 of 26/03/2004
		2/2/2004	
Mr Sione Tu'ionetoa	Student Nurse		CD.No.108 of 26/03/2004
Miss Sela 'Uluheua	Student Nurse	2/2/2004	CD.No.108 of 26/03/2004
Mr Sateki Vainikolo Nateitei	Health Officer	1/3/2004	CD.No.106 of 26/03/2004

NA 146 11 6		4 10 10 0 0 4	
Mr 'Afa Hoeft	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Titania Peti	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Miss Molimoli Pole	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Miss Moala Tomiki	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Sione Mausia	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Filipe Mateo	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Laiolo Ika	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Sailopa Vea	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Mr Taukei'aho Halauafu	Medical Scientist	10/06/04	CD.No.261 of 25/06/2004
Mr Sonasi Hu'ahulu	Health Officer	1/3/2004	CD.No.106 of 26/03/2004
Dr Sela Takitaki	Medical Officer	2/1/2004	CD.No.14 of 16/01/2004
Dr 'Elenoa Matoto	Medical Officer	2/1/2004	CD.No.14 of 16/01/2004
Dr 'Afa Taulangovaka	Dental Officer	2/1/2004	CD.No.14 of 16/01/2004
Dr Kyan Ahdieh	Medical Officer	29/01/04	CD.No.9 of 7/01/2004
Mr Tu'amelie Paea	Computer Programmer	26/1/2004	CD.No.33 of 19/02/2004
Dr Sepiuta Lopati	Medical Officer	15/01/04	CD.No.95 of 19/02/2004

#### 5 INTERNATIONAL COLLABORATION

#### 5.1 International Meetings attended by the Honourable Minister

The Minister of Health, Hon. Dr Viliami Ta'u Tangi attended the following international meetings and conference during the year.

- XV International Aid Conference, Bangkok, Thailand, 11-16 July.
- First Pacific Parliamentarians meeting on HIV/AIDS, Fiji, 11-13 October.
- 4<sup>th</sup> Annual Pacific Islands Regional Multi Country Coordinating Mechanism (PIRMCCM) meeting, Nadi, Fiji, 25-29 October.
- Bid Opening and Contract for Upgrading and Refurbishment of Vaiola Hospital Project, Tokyo, Japan, 17-26 November.
- 5.2 International and regional meetings attended by the Director of Health

The Director of Health, Dr Litili 'Ofanoa attended the following international and regional meetings;

- Health Summit for Sustainable Disaster Risk Management, Hawaii, United States, 14-18 June.
- Developing national policy coherence and capacities in trade and health, New Delhi, India, 12-13 October.
- 5.3 International Organisations collaborated with the Ministry.

The Ministry throughout the year continued its collaboration with various international organisations in the following areas;

- The 2002-2003 WHO Detailed Programme Budget for Tonga
- The Medical Treatment Scheme under the New Zealand Governments Bilateral Aid Programme with Tonga
- The Twinning Programme with St. John of God Hospital, Ballarat, Victoria, Australia
- Diabetic Project with the Prince of Wales Hospital, New South Wales, Australia
- The World Bank Health Sector Support Project
- European Union Project

## 5.4 AusAID funded Tonga Health Sector Planning and Management Project

Phase III of the Tonga Health Sector Planning & Management Project was designed as the final stage of what had become a five year project. Its emphasis was on consolidation of the achievements of previous phases to ensure sustainability of activities.

The goal of phase III of the project was "to develop a management approach for line ministries which would be used as a model for the Government of Tonga in reforming governance and economic management". In line with this, emphasis was placed on introducing and documenting policies, procedures and guidelines that could be transferred to other line ministries.

Phase 3 of the Project had 3 technical components: management development, human resource management, and financial management and procurement.

(i) Management development: Management development focused on developing the competencies and skills of executive and middle management with training and mentoring in the four management functions of planning, organising, leading and controlling. Additionally, a Balanced Scorecard and executive performance appraisal system were introduced to promote accountability and ensure that the performance of division heads and the Ministry as a whole was monitored on an ongoing basis.

(ii) Human resource management: A strong emphasis of the previous phases of the project was to improve human resource management and training in the Ministry. The Human Resource Management component was designed to continue this work in order to ensure sustainability of the functions. Regrettably, however, technical and staffing issues hindered progress with planned activities and affected achievement of outputs in these areas.

(iii) Financial management and procurement: Improved budgeting and financial management and the computerisation of financial processes have been important themes for the project since its inception. The Financial Management component continued this work with a strong emphasis on ensuring sustainability of the computerised financial management system, which had been expanded to include the Sun Purchasing module, with a focus on assisting managers in using financial information to manage services better. The Financial Management component also include the development of policies and procedures to improve procurement in the Ministry of Health and, as much of the procurement in the Ministry relates to pharmaceuticals, a specific input was given to this area.

A TAG assessment carried out in March 2004 identified that significant progress and changes had occurred in the Ministry during the first 6 months of phase 3 of the project however, there were opportunities to improve sustainability by embedding a culture of performance management and building on the progress made in financial management and purchasing and AusAID therefore agreed to provide additional funding to extend phase 3 of the Project for a further year, which commenced in late November 2004.

The goal of year 2 of Phase III of the Project is: "to further strengthen the management approach within the Ministry of Health, building on progress made in previous project phases".

The purpose of the extension is "to further embed a culture of performance management and strengthen the functions of general, financial and human resource management within the Ministry." Summary of Key Achievements for Phase 3, Year one

- Developed and implemented a Balanced Scorecard approach to monitor and measure organisational performance.
- Developed and implemented a system for reporting performance against KPIs and targets at the sectional and divisional level.
- Developed and implemented an Executive Performance Appraisal System.
- Regular Human Resource Development Committee meeting conducted.
- Guidelines for Effective Committees produced and distributed to all relevant managers and staff.

- Executive and management development programmes, communications skills and customer service training course developed and training courses run.
- Individual mentoring on aspects of leadership undertaken.
- Assistance provided to review and update the Ministry of Health's Corporate Plan.
- Policies and processes developed and implemented to ensure that the Micropay Human Resource Management Information System (HRMIS) database is maintained accurately and on a timely basis and that the data is verified regularly.
- Policies and Procedures Manual for the HRMIS developed and distributed.
- Training sessions conducted on budget preparation and financial management.
- Expenditure control strategies developed and implemented throughout the Ministry.
- Allocation of overtime to Divisions included in the 2004/2005 Budget Estimates.
- Overtime procedure reviewed, revised and implemented throughout the Ministry.
- Regular Finance & Budget Committee meeting conducted.
- Accounting staffing structure revised, responsibilities realigned and Job Descriptions updated.
- Financial reports adapted for easier budget versus actual monitoring.
- Report from the SUN Accounting System established to enable reporting by location & source of funds.
- Stock control training conducted.
- Computerised purchasing system introduced and staff trained to use the system.
- Procedures established & endorsed by the Finance & Budget Committee for the computerised Sun Purchasing system.
- Revised purchasing policies and procedures developed and implemented and a manual produced.
- Pharmacy Information Management System (PIMS) extended from the Central Pharmacy to Vaiola Dispensary and reports on drug usage produced regularly.
- 5.5 World Bank Health Sector Support Project

The World Bank Health Sector Support Project, effective in February 2004, is funded under a World Bank Loan, IDA Credit Number 3814 0 – TON. The project was designed for a five year time period and for a World Bank credit of approximately US\$10.94 million with US\$1.4 million counterpart funding from the Government of Tonga.

<u>Project Objective</u>: The objective of the project is to support health reform in Tonga within the framework of its Corporate Plan by improving the capacity of the Ministry of Health to develop and implement health policy and to improve the functional and technical quality of health facilities.

The project is comprised of the following components:

(i) Strengthening Health Care Financing: This component review, develop and implement policies which define the funding and overall allocation of resources to health services. In particular, it strengthens the capacity of the Ministry of Health to identify approaches towards strengthening the financing of health care (including resource mobilization), improving the allocation of available resources, and developing an appropriate public-private partnership.

(ii) Improving the Health Information System: This component assists the Ministry of Health to develop capacity and establish structures for Information Management and Information Technology Management. Capacity will be developed within the Ministry of Health to design, implement field, target facility based surveys and surveillance systems to collect data on a periodic and ad hoc basis. It is anticipated that communication and access to management information in the Ministry of Health will be improved. It will implement and establish an appropriate integrated computerized information system for patient care at Vaiola Hospital and develop a population-based information system.

(iii) Upgrading of Health Infrastructure: This component supports the first phase of the design and implementation of rehabilitation and facilities improvement at the Vaiola Hospital to overcome identified major deficiencies and to improve functional relationships and the overall operational efficiency of the hospital. These developments are guided by the master plan for the hospital and will enhance the hospital's capacity to efficiently meet its future service obligations.

<u>Project Status:</u> Since February 2004, a total of USD\$5.1 million from the total credit of USD\$12.38 million has been committed with 12% of total credit proceeds being disbursed.

(i) Health Care Financing Component:

- The first National Health Accounts Report has been completed and endorsed by the Ministry of Health.
- Various surveys surveys of donors, traditional healers, insurance companies and non-governmental
  agencies in the health sector which are necessary to collecting information for the development of the NHA
  have now been completed and analyzed.
- The Tonga Health Household Survey 2003 was completed in August 2003 as part of the preparation for this
  project.

(ii) Health Information Component:

- Standardization of clinical data being developed
- Births and Death registration and non-communicable diseases notification
- Developed a Tonga Health Data Dictionary
- Ongoing computer training for Ministry of Health staff

(iii) Infrastructure Redevelopment of Vaiola Hospital:

- Package A includes the construction of the Psychiatric Ward and Kitchen/Laundry: this is currently under construction and it is anticipated to complete by end of 2005.
- Package B1, funded under a Japanese Grant includes the construction of the Clinical Services Building and Surgical/Obstetrics Wards Building: this is also under construction and is expected to complete by March 2006.
- Packages B2 includes the construction of the Medical/Paediatric Wards Building and Isolation Ward: this is
  expected to start in early 2006 and to be completed later in the same year.
- Packages C, D, E and F are expected to complete the redevelopment of Vaiola Hospital.

### 6 HEALTH DISTRICTS

6.1 'Eua Health District

### 6.1.1 Management

Medical Officer Dr. Louise Fonua was responsible for managing Niu'eiki Hospital and 'Eua health district from 01 October 2003 until Senior Health Officer Mr. 'Amone Vaka'uta took over in January 2005 and is supported by 1 Health Officer.

### 6.1.2 The hospital's objectives are,

- To promote the "Healthy Island" concept in the Island of 'Eua.
- To improve maternal and child health services.
- To increase awareness of the people of 'Eua regarding non-communicable disease especially diabetes, hypertension and heart disease.
- To increase the rate of family planning usage in 'Eua.
- To improve the skills and knowledge of staff in order to provide quality care to the people of 'Eua.
- To maintain a high rate of childhood immunization coverage.
- To foster and improve relationship between the health sector and public.
- To increase community awareness and partnership programme.

### 6.1.3 The hospital's function is,

Provide quality health care and to cater for the health needs of the people of 'Eua.

### 6.1.4 Nursing

Nursing Sister 'Ana Hausia is responsible for managing nursing services in 'Eua and is supported by 12 nursing staff.

### 6.1.5 Laboratory

Laboratory Technician Grade II, Mrs Lalamea Tu'ipulotu is responsible for managing and delivering laboratory services at Niu'eiki.

All specimen are referred to Vaiola Hospital for analysis

#### 6.1.6 Dental

Senior Dental Therapist, Mr Sione Halahala is responsible for managing and delivering dental services in 'Eua. Services provided during the year includes oral examination, minor surgery, filling, tooth extraction, ante natal dental care and the school dental health programme

6.1.6.1 The section's objectives are,

- To introduce a system of charts for patients rather than log book.
- To improve the process of ordering supplies.
- To update knowledge and skills of staff.
- To upgrade equipment and instrument in the department.
- To improve functioning of equipment and reduce breakdowns.
- To recruit 1 dental therapist or dental chairside.

#### 6.1.7 Environmental Health

Public Health Inspector Grade II, Mrs 'Amelia Vea is responsible for environmental health services and include village, retail and wholesale meat selling premises inspection, garbage and waste disposal and construction inspection.

#### 6.1.7.1 The section's objectives are,

- Upgrade healthy living standard of the island.
- Minimize public complaints from 80% to 100%.
- 100% upgrade and inspect all food establishments.

#### 6.1.8 Administrative Support

Junior Clerk, Mrs 'Unaloto Sateki is responsible for clerical and financial duties and Ms Kilisitina 'Aholelei, Daily Paid Junior Medical Recorder is responsible for medical records services.

#### 6.1.9 Auxiliary Staff

Niu'eiki Hospital employs the standard compliment of non-clinical support staff which includes drivers, laundry, catering, domestic and grounds keepers.

6.1.10 In delivering its services, the following were identified as milestones during the year,

- Establishment of a Hospital Board of visitors for Niu'eiki Hospital.
- Establish a hospital week for 'Eua for the first time.
- Establish a reach out programme in Houma for the first time.
- Construction of hospital parking area.
- Construction of hospital fence.
- Hospital telephone now extended to allow inter-island calls.

## 6.2 Ha'apai Health District

### 6.2.1 Management

Health services in the Ha'apai group are provided through 1 Hospital (Niu'ui) at Pangai, 2 Health Centres and 3 Reproductive Health Clinics. Acting Chief Medical Officer Dr Lisiate 'Ulufonua is responsible for managing Ha'apai health services in Ha'apai and is supported by 1 Medical Officer and 2 Health Officers. There was a total of 54 staff working in Niu'ui Hospital during the year.

### 6.2.2 The hospital's objectives are,

- To promote and improve a healthy environment for the community as in Public Health and reduce incidence of morbidity in Ha'apai by 10%.
- To review, reactivate and reinforce regular health promotion activity and clinics within the community of Lifuka, Foa and Outer Islands within the next two years.
- To provide an efficient health services with the availability of adequate staffing and essential basic monitoring, diagnostic and curative equipments in the hospital in the next two years.
- To update in-service training activity for staff of Niu'ui with regards to their hospital duties.
- To upgrade the information and technical services within Niu'ui Hospital in the next two years.
- To upgrade the staffing quarters for staff of Niu'ui Hospital in the next three years.
- To reactivate and maintain working relationship with the community through Ha'apai Hospital Board of Visitors Committee support.

### 6.2.3 The hospital's functions are,

- Preventative Health Service (Community Medicine)
  - Conduct health promotion activities in the communities, schools, youth groups, government workers and town
    officers.
  - Provide reproductive health care such as immunizations, adolescent health care and family planning.
  - Conduct health inspections and prevention of infectious disease through monthly inspection of villages, shops, food handlers, and water care etc.
  - Provide outreach health clinics in villages and islands especially on Communicable Diseases.
- Curative Service
  - Provide essential and basic curative service in all disciplines (Obstetrics, Paediatrics, Medicine and Surgery).
  - Provide basic laboratory tests such as full blood count, platelets and filming.
  - Provide x-rays and pharmaceutical services.
- Dentistry
  - Provide dental services such as extractions, restorations, dressing, x-ray, endodontic, scaling, polishing, oral hygiene instruction, minor oral surgery, impaction and ante-natal dental care.
  - Conduct outreach preventative programmes in primary schools throughout the Ha'apai Group.
- 6.2.4 Niu'ui Hospital was allocated \$487,896 and was utilized for operation, maintenance and purchase of technical equipment.
- 6.2.5 In delivering its services, the following were identified as milestones during the year,
- The first ever Ha'apai Hospital Week was conducted towards the end of the year and there were mass participation from the community. The theme was "MOVE FOR HEALTH" and the objective was "Promoting Healthy Living Awareness".
- The Ha'apai Hospital Board of Visitors was revived.
- Commencement of review and in-service training of services at Niu'ui Hospital for all the clinical staff.
- Renovations of all staff quarters at Niu'ui compound and its regular monthly inspection.
- Renovation work conducted on the hospital.
- Personnel visit from the Japanese representative (JICA), Australian High Commissioner, New Zealand High Commissioner and the Canadian Fund Coordinator to Niu'ui Hospital under the request of the Acting Chief Medical Officer

## 6.3 Vava'u Health District

## 6.3.1 Management

Chief Medical Officer Dr. Edgar 'Akau'ola is responsible for managing health services in the Vava'u District and is supported by 2 Medical Officers and 2 Health Officers. Health services in Vava'u are provided through Prince Wellington Ngu Hospital at Neiafu and 4 Health Centres at Tefisi, Ta'anea, Falevai, and Hunga.

The primary responsibility of the Vava'u Health District is to improve the health of the people by promoting healthy lifestyle and prevent health problems, detecting and treating disease with available treatment.

### 6.3.2 Clinical Services

Dr. Edgar 'Akau'ola is responsible for the provision of clinical services and was supported by Medical Officers Dr. Siaki 'Ela Fakauka and Dr. Veisinia Matoto until her permanent transferral to Tongatapu and was replaced by another Medical Officer Dr. Tupou Pua'a.

### 6.3.3 Nursing

- Nursing Sister Graduate 'Akesa Halatanu is responsible for the supervision and management of all nursing staffs. A total of 26 clinical nursing staff is assigned to Ngu Hospital.
- Senior Nurse Midwife Mrs. Kalisi Fa'asolo retired after 42 years of service and was replaced by Sister 'Ilisapeti Kolopeaua who is responsible for managing Public Health Nursing services and is supported by 8 public health nursing staff.

### 6.3.4 Laboratory

Laboratory Technician Grade II Mr. Timote Fakasi'i'eiki and Mr. Sione 'Inia are responsible for the provision of laboratory services.

#### 6.3.5 Pharmacy

Assistant Pharmacist Grade II Mr. Petelo Manu is responsible for the provision of pharmaceutical and dispensing services and is supported by Assistant Pharmacist Grade II Mr. Ma'u Tu'ineau.

#### 6.3.6 X-Ray

X-Ray Technician Grade II Mrs. 'Atomi Palu is responsible for the provision of x-ray services.

#### 6.3.7 Dental Services

Acting Senior Dental Officer Dr. Doris K Young is responsible for the provision of dental services and is supported by Dental Assistant Mrs. 'Anaseini Lauti and Dental Therapist Mrs. Nasinu Mahe.

Dental services provided include oral health education, dental scaling and prophylaxis, fissure sealants for class 2 children, restorations, root canal therapy, and extractions.

#### 6.3.8 Environmental Health

Public Health Inspectors Grade II Mr. Leopino Fa'asolo and Mr. Manase Malua are responsible for provision of environmental health services and are supported by three staff sanitation officers and 1 daily paid sanitation officer.

### 6.3.9 Medical Record

Medical Recorder Ms. Kaliopeta Vainikolo is responsible for provision of medical record services and is supported by Junior Medical Recorder Ms. Palaniketi Talia'uli.

## 6.3.10 Diabetic Clinic

Dr. Veisinia Matoto was responsible for conducting the Diabetic Clinic until her transference to Vaiola Hospital and was replaced by Dr. Tupou Pua'a who is supported by Staff Nurse Losa Lea.

Month	Diabetes	Hypertension	Dressing	Home Visit	Total Attendance
Jan	134	167	91	11	392
Feb	107	211	57	14	375
Mar	208	104	41	8	353
Apr	163	142	25	4	330
May	113	128	16	8	257
Jun	141	36	19	3	196
Jul	152	160	24	12	336
Aug	138	134	31	Nil	303
Sept	200	242	35	22	477
Oct	152	204	11	Nil	367
Nov	178	137	18	10	333
Dec	133	131	15	36	279
Total	1819	1796	383	128	3998

Newly Diagnosed, 2004

New Cases	М	F
Diabetes-DM	7	11
HTN-Hypertension	13	9
Stroke	3	12
IHD	2	Nil
RHD	Nil	1
DM and HPT	9	16
Total New Cases	34	49

6.3.11 Operating Theatre and Anaesthesia

Senior Health Officer Talilotu To'ia was responsible for Anaesthesia and supported by Sister 'Akanesi 'Avala and Staff Nurse Salome Toko.

Major Cases, 2004

Month	Sedate	LA	Spinal	GA	Block	Minor	Major	No. of PTS
Jan	1	3	4	10	2	15	6	41
Feb	0	3	2	9	0	12	2	28
Mar	0	4	8	9	0	11	11	43
Apr	0	9	7	11	0	20	11	58
May	1	16	11	11	0	27	14	79
Jun	1	24	8	11	0	39	13	95
Jul	2	10	6	4	0	12	11	45
Aug	2	0	6	4	16	23	8	59
Sept	0	4	3	38	0	49	9	103
Oct	0	18	3	12	1	35	4	73
Nov	0	10	7	13	4	31	12	67
Dec	0	17	3	6	0	28	7	64
Total	7	118	68	138	23	302	108	755

### 6.3.12 Transport Services

Senior Driver Mr. Polutele Kupu is responsible for this section with the assistance of four Drivers.

### 6.3.13 Administration Services

Computer Operator Grade III Ms. Pelenatita Siasau, First Class Clerk Ms. Sesili Tupou Tu'ifua and two daily paid clerks are responsible for this section.

6.3.14 In delivering its services, the following were identified as milestones during the year,

- Dr. Edgar 'Akau'ola was promoted to Chief Medical Officer after years of being Acting Chief Medical Officer.
- In-service training conducted by Dr. 'Aivi Puloka and Supervising Public Health Sister Sela Paasi.
- The availability of the Ultrasound Scan Machine had made a great difference to the health services provided.
- Surgeon Faka'osi Pifeleti joined Ngu Hospital health staff for a month.
- Commencement of the European Union three years project with renovation of 5 existing staff quarters and construction of compound fence in Prince Wellington Ngu Hospital.
- Received four containers from Vava'u Lahi Health Trust of Auckland containing beds, cots, scales and linens etc.

#### 6.4 Niuatoputapu Health District

#### 6.4.1 Management

Medical Officer, Dr. Tupou Pua'a Mesol was responsible for managing this centre until June when Dr. Sione 'Akau'ola took over. Dr. 'Akau'ola is supported by a Public Health Nurse, Dental Therapist, 2 Clinical Nurses and 3 daily paid employees.

#### 6.4.2 The Centre's objectives are,

- To provide the best possible quality care to all people of Niuatoputapu and Tafahi Islands with the available resources.
- To improve patient-care and staff performance.
- To increase community awareness regarding common Non-communicable diseases.
- To improve patient competency in home care of acute diarrhoea and acute respiratory diseases.
- To establish effective patient referral procedure for Likamonu Health Centre.
- To strengthen community involvement in strategies to improve overall health.
- To decrease the number of smokers by at least 20% by the end of 2006.
- To have 100% coverage and follow up for anti-filariasis medications.

#### 6.4.3 The Centre's functions are,

- Attend to all health needs of each individual which includes:
  - Outpatient services for patient consultations.
  - In-hospital acute care and continuous care by special clinics.
  - Maternal and child health care delivery.
  - Regular community health visits.
  - Water disinfection for all water reservoirs.
  - Village and retail stores inspection.
  - Sailing yachts clearance.

#### Health Centre Admissions, 2004

Conditions	Number	Percentage
Acute abdomen	12	21
Antenatal	10	18
Others (Diabetes-related, ischaemic heart diseases, asthma and hypertension)	34	61
Total	56	100

Health Centre Mortality, 2004

Condition	Number	Percentage
Sudden death from suspected Myocardial infarction, all above the age of 70	3	50
Stroke	1	17
Ca Stomach with metastases	1	17
Renal failure	1	17
Total	6	100

#### 6.4.4 Dental

Dental Therapist Nenase Latu is responsible for the conservative treatment, extractions and tooth fillings.

Total number of patient examined and treated	333
Total number of tooth extraction	134
Total number of fillings (Permanent & Temporary dressings)	177

#### 6.4.5 Nursing

Mrs. Monika 'Uvea and Mele Kava are responsible for clinical nursing services and they assist with both inpatient and outpatient care.

#### 6.4.6 Public Health

Senior Staff Nurse 'Ana Paletu'a is responsible for all reproductive health services (immunisation, family planning, ante and post natal).

6.4.7 In delivering its services, the following were identified as milestones during the year,

- Staffing:
  - Dr. Tupou Pua'a Mesol heroically performed a successful C-section during hurricane in January 2004. She also started the routine Blood Grouping for the Islands.
  - Mrs. Monika 'Uvea completed 3 months of Clinical rotation in Vaiola Hospital and later promoted to Senior Staff Nurse.
  - Mr. 'Ana Paletu'a was promoted to Senior Mid-wife.
  - 3 daily paid employees become established staff.
  - The hospital staff initiated the "Walk for Health" and aerobic session in July with an average participants of about 30.
- During the hospital week in October the Hospital visiting board during a 1 week fundraising activities collected \$14,000 to purchase a new generator.
- Health Centre was provided with a new motor vehicle and a standby generator from Vaiola.
- The Anti-filarial Mass drug administration commenced in April. Follow up blood tests were carried out in positive cases only. This was done by Mrs. 'Ana Paletu'a and Mrs. Monika 'Uvea.
- Our friends from visiting sailing yachts donated first-aid kits as well as medications.
- 6.5 Niuafo'ou Health District

#### 6.5.1 Management

Health Officer, Sione T. 'Ulufonua is responsible for managing health services in Niuafo'ou and is supported by 1 Public Health Nurse, 1 clinical nurse and 1 non clinical support staff.

### 6.5.2 The centre's objectives are,

- To improve the quality of inpatient services in the Island.
- To improve oral health.
- To improve the mother and child health by strengthening family planning method.
- To enforce public health act regarding cigarette smoking.
- To improve the source of electrical energy in the Island.
- To strengthen workers relationship and incentive.

#### 6.5.3 The centre's functions are,

### Curative

- Casual out patient and emergency
- Special clinic out patient for Hypertension and Diabetic once a month
- Antenatal care once a week
- Postnatal care
- Dental care and school visit
- Home visit and follow up of cases
- Immunization

#### In Patient

- Admission of very ill patient and those who prefer admission
- Admission of all delivery mother and baby
- Referral of cases we need an advise of a medical officer
- Transfer of cases prefer to manage by a medical officer

## Preventive

- Health education
- Village inspection and sanitation
- Retail store and food seller inspection
- Water supply approaches
- Village development committee
- Youth development committee
- Village and patient transfer fund committee

6.5.4 In delivering its services, the following were identified as milestones during the year,

- Establishment of a Hospital Board for Niuafo'ou Health Centre.
- Filariasis campaign and filariasis blood test achieved 17 people with positive reaction.
- Denture team from Vaiola Hospital lead by Silaiti Kakala visited the island for 3months; more than 50 people (denture) were made.
- Hon. Minister of Health visited the Island.
- Workshop conducted on Family Planning.

### 7 PUBLIC HEALTH SERVICES

7.1 Management

Chief Medical Officer, Dr. Malakai 'Ake is responsible for managing this Division and is supported by a Health Administrator. The Division consists of six sections, (Communicable Diseases, Reproductive Health, Community Health, Environmental Health, Health Promotion and Non Communicable Diseases).

### 7.2 Communicable Diseases

Senior Medical Officer, Dr. Seini Kupu who manages this section was appointed as an Epidemiologist by the Asian Development Bank (ADB) located at South Pacific Commission, Epidemiology Unit, Noumea, New

Caledonia. Medical Officer Special Grade, Dr. Reynold 'Ofanoa manages the section and is supported by 1 Health Officer and 5 Public Health Assistants.

- 7.2.1 The section's objective is,
- To reduce the incidence and prevalence of Communicable Diseases in Tonga through implementation of strategy, policy and preventative health care programmes.

7.2.2 The section's functions are,

- Develop and implement strategy, policy and preventative health care programmes to minimize the occurrence of communicable diseases throughout the Kingdom.
- Responsible for the management and treatment of all communicable disease patients admitted to the Infectious Ward at Vaiola or undergo either outpatient or home treatment.
- Formulate standard protocols for the management of all communicable diseases in Tonga.
- Responsible for processing medical examination required for visa application, employment, shopkeeper and food-handlers, and any other medical examination requirements.
- Ensure active participation in matters related to communicable diseases.

7.2.3 The section was allocated \$1,969.00 and was utilized for purchase of technical equipment.

7.2.4 In delivering its services, the following were identified as milestones during the year,

- Collaboration with Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) Project has enabled funding specifically towards Tuberculosis and HIV/AIDS. Hence the following were received:
  - <u>TB Program:</u> New 4x4 Toyota Hilux Van for increasing TB case detection and monitoring.
  - Supervisory visits and training workshops conducted in the outer islands by Dr. Reynold 'Ofanoa and Mr. Saia Penitani.
  - New safety cabinet to be used by the Microbiology laboratory section in the direct smear testing of sputum for Mycobacterium tuberculosis.
  - Inter-country training for our Laboratory technicians that was conducted at Vaiola Hospital also attended by participants from Tuvalu and Western Samoa.
  - Dr. Reynold 'Ofanoa attended TB Data Management Workshop at Noumea.
  - <u>HIV/AIDS Program</u>: Dr. Niklas Danielsson, Dr. Reynold 'Ofanoa and Mr. Saia Penitani attended preparatory meeting in Nadi, Fiji for HIV/STI Seroprevalence Survey.
  - Commencement of HIV/STI Seroprevalence Survey for Antenatal Mothers attending Vaiola Hospital.
- In-service training: Kolamina Faiva and Mele Tu'ikolovatu attended computer training at the computer lab conducted by the Health Statistics section.

### 7.3 Environmental Health

- 7.3.1 Medical Officer Special Grade Dr. Reynold 'Ofanoa is responsible for managing this section and is assisted by 1 Supervising Public Health Inspector, 1 Public Health Inspector Graduate, 2 Senior Public Health Inspector, 1 Public Health Inspector, 1 Public Health Inspector Grade I, and 11 Public Health Inspector Grade II.
- 7.3.2 The section's objectives are,
- To strengthen and improve the quality of environmental health services.
- To improve the development of rural water supplies.
- To minimize the incidences and prevalence of communicable diseases.
- To increase the populations access to safe water.
- To increase the number of households with proper sanitary disposal with proper sanitary facilities.
- To strengthen and develop new skills and knowledge of staff.

- To develop new approaches to increase public health awareness regarding environmental health.
- To enforce the Public Health Act.

7.3.3 The section's functions are,

- Provide adequate and high standard of environmental health services to the public.
- Assist and implement a safety programmes ensuring the public are adequately provided with portable water and safe food.
- Assist promotion of safe environment knowing that will provide healthy environment through proper sanitation.

7.3.4 In delivering its services, the following were identified as milestones during the year,

- Upgrading of rural water supplies and development in Nukunuku, Houma, Tatakamotonga and Lapaha through installation of water meters to control problems of water consumption and minimize spending on other means of drinking liquids. Regular monitoring and maintaining of existing water materials in these 4 villages.
- Controlling of Communicable Diseases such as dengue fever and food poisoning. Strengthening of community cleaning up programmes and Environmental Health management to control the spread of the disease.
- The enforcement of the Public Health Act in relation to environmental health activities and application of legal action.
- Various workshop and training have been conducted to further strengthen the skills and knowledge of the staff.
- 7.4 Health Promotion and Non Communicable Disease
- 7.4.1 Senior Medical Officer, Dr Viliami Puloka is responsible for managing this section and is supported by 7 Health Promoter, 2 Technician, 2 daily paid staff and 2 Japanese Volunteers.
- 7.4.2 The section's goals and objectives are governed by,
- A philosophy of health prevention, health promotion and health protection in all it's service delivery.
- A view of health as being broad well-being.
- A focus on population and population approach.
- The importance of the participation of individuals/communities in the maintenance and improvement of their own health.
- As a working tool, this section adopts the concept of "Healthy Island Initiative" as the main framework for the development of its various services and activities. This framework addresses health not so much as an end point or a destination to be reached but rather the choices one makes in every step of our daily living. Thus, the great emphasis on" making healthy choice an easy choice"

7.4.3 The section's function is,

- Promotion of Healthy Life Style through all Life Stages from "womb to the tomb" at all levels of Life Settings, whether in schools, church, work place, community or homes. Health Promotion and Non Communicable Disease seeks to empower the public at large so they may be able to make informed choices in every day decisions of life. The main strategy employed focus on the four main risk behaviours contributing to Non-Communicable Diseases. They are poor eating habits/eating too much causing obesity; lack of physical activity; tobacco smoking and the harmful effects of drinking alcohol. Social marketing approach and the use of media especially television and radio has become a major part of health promotion activities.
- 7.4.4 The section was allocated \$22,219.00 for all its activities including production and payment of air time for radio and TV programs, purchase of office supplies, technical equipment, printing and stationaries. The section is fortunate to have the additional assistance of donor agencies such as WHO, SPC, PAHP and AusAID and NZAID.
- 7.4.5 During the year, this section was able to implement the following activities.

7.4.5.1 Radio Programme: The section continued to coordinate the various radio programmes of the Ministry. A total of about 148 radio programmes were produced and broadcasted.

	RADIO PROGRAMMES AIRED DURING 2004								
No	Subject	No. of Programmes	%						
1	Health Promotion	26	18						
2	Dental Health	40	27						
3	Reproductive Health	5	3						
4	Environmental Health	6	4						
5	Nutrition	4	2						
6	Psychiatric	1	1						
7	Pharmacy	1	1						
8	Obstetric	1	1						
9	Out patient	3	2						
10	Communicable Disease Out Patient	2	1						
11	Community Health	1	1						
12	Medical Ward	1	1						
13	Diabetic Issue	1	1						
14	Obesity	2	1						
15	Inpatient Services	2	1						
16	Non Communicable Disease (Diabetes/ Hypertension/ Heart Disease/ Cancer/ Stroke)	52	35						
	Total	148	100						

- The section hosted 26 radio talks back to promote, highlight and discuss different priority health issues. Starting
  of a biweekly live talk back show on radio has proven to be a very effective way of informing the public and very
  useful means to get immediate feedback from the audience.
- 7.4.5.2 **TV Programme**: The use of television to promote priority health issues in Tonga is one of the major responsibilities of the section. A total of 75 TV programmes were produced and telecasted during the year.

	TELEVISION PROGRAMME TEI	LEVISED DURING 2004	
No.	Television Programmes at TV Tonga	No. of programmes	%
1	Filariasis	2	3
2	Tobacco Act	2	3
3	Effect of tobacco	2	3
4	Exercise	2	3
5	Blood donor	1	1
6	Leptospirosis	1	1
7	Risk factor of Non Communicable Disease	1	1
8	Diabetes	2	3
9	Nutrition	4	5
10	Obesity	5	7
11	Hypertension	1	1
12	Community Health (check up)	1	1
No.	Television Programmes at TV OBN		0
1	Tobacco Effect	6	8
2	Tobacco Act	6	8
3	Communicable Disease	5	7
4	Health food	4	5
5	Risk factors of Non Communicable Disease	10	13
6	Diabetes	10	13
7	High blood pressure	4	5
8	Heart disease	4	5
9	Stroke	2	3
	Total	75	100

7.4.5.3 I.E.C Materials: The development of I.E.C materials is one of the major activities of this section. The section reviewed and produced pamphlets, posters and banners on different health issues and commemorative days.

I.E.C PRODUCTION 2004								
Type Subject Quantity								
Pamphlets	Tobacco sticker	2000						
	Tobacco poster	1500						
	Exercise	500						
	Total	4000						

- 7.4.5.4 Community Health Education/ Promotion Activities: This section initiate an outreach health promotional activities and extends the ministry's "caring hands" to reach out to the people where they are both in the state of their health and the setting of their existence. A team consists of clinical, dental and public health staff plan and implement this promotional activity in Tongatapu and has started a few visits to Ha'apai and 'Eua. Details of the activity and nature of work and villages visited are listed below.
- Trip to 'Eua on Dengue Fever Outbreak by Mr Manavahe Ata from 17-22/3/04
- Commencing of drama outreach on 29/3/04 for the communities on Tobacco Cessation Program with the Psalm 127 Group of Sopu.
- Candle Night on Commemoration of World Health Day with theme of "Road Safety, No Accident" done on 11/4/04 at Free Wesleyan Church of Longolongo.
- Trip to Ha'apai on Filariasis test and drug administration by Mr Manavahe Ata on 21/5/04.
- Parade and float on ATS Campaign and World No Smoking Day together with Police Department on 29/5/04.
- Special commemoration of World No Tobacco Day at the Free Wesleyan Church Minister's meeting on the 31/5/04.
- Exhibition on Environmental Awareness Day at Mala'e Pangai Si'i on the 5<sup>th</sup> June with Environmental Health.
- Commencing of the 4<sup>th</sup> MDA Campaign on Filariasis eradication throughout the Kingdom.
- Trip to 'Eua on promoting health lifestyles during hospital week from 1-5/11/04.
- Trip to Ha'apai on filariasis test review at 'O'ua from 22-25/11/04.

7.4.5.5 Community Work place Outreach Program:

- 'Auhani Program The program has been targeted on workplaces as part of the identified objectives for fortnight weighing of height, weight, body fat and identifying of each target for every participant to workout during the stated period. Program started from 1/5-17/12/04.
- Latter Day Saints Program- Three Latter Day Saints Wards conducted healthy programmes such as weighing of weight, height, body fat and waist circumference together with advising and counselling (Folaha/Veitongo and Pea).
- Walk for health continues every Saturday morning at usual route from Treasury Department to Queen Salote Wharf and back. Partners in health sponsored the program such as Parliament, Tonga Development Bank, Peace Corp, Tonga Communication Cooperation, E.M Jones Ltd, Westpac Bank of Tonga and Various Churches and community groups.
- Seventh Day Adventist at Nuku'alofa, Vaini and Havelu worked closely with our team in implementing and monitoring of their healthy programme.
- 7.4.6 Local and Overseas Workshops:
- Dr. Viliami Puloka has been attended the following meetings and workshops:
  - Meeting on scaling up non communicable disease prevention and control in the Western Pacific: Beyond demonstration archiving from 3-6/8/04
  - Meeting on investigator's for OPIC study in Tonga from 30/8- 3/9/ 04, Suva, Fiji.
  - Meeting on alcohol and health in the Pacific from 28-30/9/04, Noumea, New Caledonia.
  - Meeting on economic gains of promoting health from 22-25/11/04.
  - Training on health promotion leadership training pilot program from 26/7- 6/8/04, Manilla, Philippines

- Workshop on 5 A Day Symposium 9-10/8/04 and Post-Symposium workshop 11-12/8/04, Christchurch, New Zealand.
- Sixth annual workshop on filariasis elimination in the Pacific from 23-27/8/04, Apia, Samoa.
- Local training and workshops were conducted as follow:
  - Computer training for staff conducted by Mr. Norisha Kitamura (JOCV) assisted by Mr. Le'omolotu Havea.
  - Customer service attended by Miss Naomi Fakauka from 15-18/3/04.
  - Tobacco Act Enforcement conducted by Mr. Mathew Allen and Mr. Steve Anthony from 17-19/3/04, New Zealand.
  - In service training on planning staff was conducted on the 18/8/04 at Good Samaritan Inn.
  - Reviewing of workshop on Tobacco Act Enforcement has been implemented from 13/10-15/10/04.
  - Health Promotion Foundation was conducted on 1/11-2/11/04.
- The following workshops were attended by staff:
  - Workshop on physical exercise attended by Miss Naomi Fakauka and Peseti Ma'afu from 18-22/10/04, Nadi, Fiji.
  - Workshop on Filariasis MDA Campaign participated by Miss Nukonuka Mafile'o and Miss Maiko Nakata from 2-23/10/04.
- 7.4.7 In delivering its services, the following were identified as milestones during the year.
- Recruited 2 new staff and 2 daily paid staff to accommodate and energize manpower capacity of the section.
- Establishing of annual review workshop for Public Health Division
- Regular meetings of National NCD committee and sub-committees
- Review and passing of amendments to Tobacco act
- High light of Road traffic accidents and putting of crosses as reminders on black spots.
- British High Commission sponsored one weighing scale 200kg/10 pedometers.
- Screening Free Wesleyan Church Leaders and office staff in May for promoting health. Sia'atoutai Theological College were also joined on screening of blood pressure, blood sugar level, height/ weight, body fat and counselling on healthy issues.
- Successful recruitment of companies, organizations, churches such as Santarium Company, SDA, different LDS Wards, TCC, Parliamentarians, various Banks to host a Walk for Health Program as our partner in the promotion of Healthy Life Style.

### 7.5 Community Health

- 7.5.1 Acting Training Coordinator, Mr. Simione Tei is responsible for managing this section and is supported by 19 Health Officers and 2 Nurse Practitioner.
- 7.5.2 Community health services entail health services beyond the boundaries of four hospitals in the country. Services consist of 7 rural Health Centres in Tongatapu, 2 in Ha'apai, 3 in Vava'u and 1 each in Niuatoputapu and Niuafo'ou. The Health Centre is the base from which comprehensive primary health care services are delivered to the community.
- 7.5.3 The section's goal is,
- To extend health services to those who need it most in the community, the group at highest risk and most health problems.

7.5.4 The section's objectives are,

- To promote community participation in repairing, renovation and maintenance of health centre premises.
- To improve data collection and reporting system from the health centres.
- To educate and promote healthy life style in the community
- To coordinate, plan and implement school health programmes.
- To upgrade staff skills and knowledge

- To improve the patient referral system from health centres to hospitals.
- To engender and motivate Health Officer to rural and isolated areas.

7.5.5 The Health Centre's functions are,

Treatment

- Provide 24-hour primary health care services to its community.
- Provide limited inpatient care at health centres.
- Refer patients requiring specialized medical and nursing service.
- Provide follow up of cases referred from hospitals.
- Provide rural dispensary services.
- Diabetic clinic.
- Family Health
- Provide supervised childcare, immunization, family planning, ante natal care and selection of patients needing admission for hospital care.
- Provide immunization for tetanus, measles, whooping cough, polio and diphtheria.

Dental Health

Provide or assist with the provision of dental services.

Disease Control

- Control communicable diseases through case finding, default tracing, surveillance, immunization and assistance with treatment.
- Promote programmes for nutritional improvement through community, schools and liaison with other agencies.
- Advise on and promote suitable water supplies, methods of waste disposal, housing and vector control.

Health Education

 Promote personal and community awareness of the value of health, importance of nutrition, environmental sanitation, personal hygiene, and community cooperation with disease control activities.

Community Involvement:

- Work with communities to promote participation and contribution to the management of rural health services.
- Cooperate, assist and integrate services within a rural health district.
- Report regularly on health status of the population and activities carried out within the service.

### Health Centre Visits (Tongatapu)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Kolonga	780	801	823	926	934	933	881	927	867	908	832	716	10,328	861
Mu'a	NA	NA	NA	NA	NA	NA	NA	NA	601	560	539	448	2,148	537
Fua'amotu	1,174	894	904	1,054	904	676	690	768	920	630	515	711	9,840	984
Vaini	392	319	636	567	267	315	348	258	371	261	325	265	4,051	338
Houma	NA	NA	NA	427	481	491	478	422	432	480	497	423	4,131	459
Nukunuku	452	620	563	533	323	270	389	480	527	607	447	NA	5,211	434
Kolovai	896	905	739	993	820	709	405	436	501	383	420	344	7,551	629

### Health Centre Visits (Outer Islands)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Average
Niuatoputapu	NA	NA												
Niuafo'ou	NA	NA												
Nomuka	154	130	134	130	105	103	87	95	96	98	142	162	1,436	120
Ha'afeva	250	320	437	291	315	217	289	239	366	210	308	180	3,422	285

7.5.6 In delivering its service, the following were identified as milestones during the year.

- Achievement through partnership with the community.
  - Houma district purchased a new van for Houma Health Centre.

- Training
  - Recruitment of 10 Health Officer Trainees.

# 8. MEDICAL SERVICES

## 8.1 Management

Chief Medical Officer Clinical Services, Dr Taniela Palu is responsible for the administration and management of Vaiola Hospital and is supported by the Acting Hospital Administrator, Mr Viliami Tautua'a. Vaiola Hospital is divided along the traditional medical disciplines by wards and specialities and supported by clinical and non-clinical services.

### Vaiola Hospital Ward Occupancy Rate for 2004

Ward	Occupancy Rate (%)	Beds Available	Occupancy Rate (%)	Bed Capacity
ICU	8	2	8	2
Paediatrics	38	30	37	31
Surgical	69	41	69	41
Obstetrics	71	28	67	28
Obstetrics (Nursery)	81	6	81	6
Medical	50	41	51	40
Mental health	18	22	14	29
Total	47	192	46	199

## 8.2 Paediatric Ward

8.2.1 Senior Medical Officer, Dr Toakase Fakakovi is responsible for managing the ward and is supported by 2 Medical Officer, 21 Nursing Staff and 1 Non Clinical Support staff.

### 8.2.2 The section's objectives are,

- To improve and upgrade patient management and staff performance
- To upgrade and maintain ward equipments and facilities.
- To ensure and maintain best infection control.
- To reduce overall inpatients case fatalities by 10%.
- To reduce inpatients mortality from common illnesses by 10%.
- To develop protocols and guidelines for management and treatment of common paediatric and neonatal illnesses.
- To organize and implement CDD and Acute Respiratory Infection workshops for health care workers to help
  decrease the overall morbidity and mortality from these illnesses throughout the country.
- To establish and register Vaiola Hospital as a Baby Friendly Hospital.

### 8.2.3 The section's functions are,

- Provide the best possible health services to ensure best physical, social and economical development and good health status for all children aged 0 to 14 years in Tonga.
- Provide care for acutely ill children and those with chronic diseases.
- Special care for premature babies.
- Support and care for disabled children.
- Refer children who need overseas treatment.
- Provide health education for staff, parents and the public regarding child care.
- Provide support and advice to all other hospitals and health centres in the country.
- Collaborate with other sections (Public Health, Obstetric) and organizations that are directly involved in the care
  of children.
- Continuous improvement and upgrading of health services for the children of Tonga.

- 8.2.4 The ward was allocated \$ 5,000.00 for the purchase of non-clinical supplies and \$ 25,000.00 for medical equipment.
- 8.2.5 Provided below is a summary of the wards activities during the year.

#### 8.2.5.1 Paediatric Ward Nursing Staff

- The Paediatric ward provides services to children from age 0-14 years which contribute 37% of the population in Tongatapu. Total admission to Paediatric ward in 2004 was the lowest in the past 5 years for the first time total admission was below 1,000 for the year. In the last 3 years 65% were medical admission, 30% surgical with very few Dental, Ear Nose Throat and Eye cases. Similarly there have always been more male 58% children being admitted compared to female 42%.
- The predominant gender among inpatients was male 70% of children being admitted were children under 5 years old.
- Acute Respiratory Infection (ARI) remains the major cause of admission to Paediatric ward and 9% due to Acute Gastroenteritis. About 5% of admission was due to invasive infections and quite significant this year despite the decrease number of admissions there were lots of cardiovascular disease (2%) compared to the previous years.
- Bronchiolitis (47%) remained the most common cause of Respiratory Infection followed very closely by Pneumonia (40%). An increasing rate by 7% from the usual. Asthma contributed only 10% of the Respiratory causes of admissions.
- The ward had their first case ever of Congenital Hypothyroidism diagnosed and successfully treated this year.
- There were only 45 cases (4.6% of total admission) of Invasive Infection compared to 176 in 2003. Meningitis (30%) being the most common cause followed by septicaemia and pyomyositis.
- Overall comparison to 2003 there were a decreasing rate to all cases.
  - 14 cases of meningitis compared to 23 cases in 2003.
  - 10 cases of septicaemia compared to 12 cases in 2003.
  - 1 case of meningococcal disease compared to 10 in 2003.
- No case admitted of epidemic, meningitis and septicaemia contributed of 50% of Invasive Infection.
- First case of scalded skin syndrome most likely due to staphylococcus in an 8 years old girl with Hodgkin's Lymphoma due to Leucopoenia secondary to Chemotherapy.
- As for surgical cases, a decreasing rate compared to 2003, 3 cases of Osteomyelitis, 3 cases of Arthritis but more cases of Pyomyositis compared to 2003.
- The Case Fatality Rate among Paediatric Inpatients at Vaiola Hospital for 2004 was 30 per 1000, an increase from 10 per 1000 in 2003.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	%
Medical	40	45	66	93	54	33	43	50	59	71	48	36	638	65
Surgical	32	25	28	30	20	20	21	21	20	22	24	30	294	30
Dental	0	1	5	5	4	1	1	0	2	2	1	1	23	2
ENT	0	1	5	0	2	3	2	0	1	2	1	1	18	2
Eye	0	0	0	0	0	1	1	0	0	0	2	0	4	1
Total	72	72	104	128	80	58	68	71	82	97	76	68	977	100

Paediatric Admission by Discipline, 2004

#### Selected Paediatric Admissions, 2004

Condition	Number	%
Pertusis	2	1
AGE	88	21
Acute Respiratory Infection	252	62
Invasive Infra	45	11
CVS – Disease	19	5
Total	416	100

Acute Resi	piratory	Infection	Admissions,	2004
noute nes	pinatory	meetion	/ umi5510115,	2001

Condition	Number	%
URTI	11	4
Bronchiolitis	118	47
B/Asthma	23	9
Pneumonia	100	40
Total	252	100

Paediatric Invasive Infection, 2004

Condition	Number	%
UTI	3	7
Septicaemia	10	22
Meningitis	14	31
Meningitis Sepsis	2	4
Viral Encephalitis	3	7
Osteomyelitis	3	7
Pyomyositis	7	15
Septic Arthritis	3	7
Total	45	100

Case Fatality for Paediatric Admissions, 2004

Jan	admission	C C	Cause of Death	Stay
	1	F/ 6yrs	Posterior Fossa Medulloblastoma with spinal metastases	6 hrs (12/1/04)
Feb	2	M/ 3yrs	Staph Septicaemia, SBE, Cerebral Abscess	34 days (24/2/04)
		M/ 4 days	Sever Neonatal Sepsis +/- Meningitis	7hrs (23/02/04)
Mar	2	F/ 7yrs	Chronic Renal Failure with complications	4hrs (22/3/04)
		M/ 5 months	DSS	9hrs (30/3/04)
Apr	5	F/ 5 months	AGE with severe Dehydration and Electrolyte Imbalance	13hrs (1/4/04)
•		F/ 9 months	CHD, Bronchiolitis, Aspiration Pneumonia	3 days (5/4/04)
		F/ 3 months	Meningitis (ICU)	(12/4/04)
		M/ 11 months	Meningococcemia/ Malnutrition	2days (19/4/04)
		M/ 2yrs	Meningococcemia Meningitis (ICU)	3 days (30/4/04)
May	5	F/ 5 months	Chronic Gastroenteritis and Electrolyte Imbalance	3 days (2/5/04)
		M/ 1yr 2 months	Strep Pneumonia Meningitis with Diabetes Insipidus (ICU)	8 days (5/5/04)
		M/9 months	Septicaemia 2∘ to 30% Burn	4 days (6/5/04)
		M/ 6 months	AGE	2 days (14/5/04)
		M/ 11 months	Dengue Shock Syndrome/ Septicaemia	5hrs (31/5/04)
June	2	M/ 3 months	Cyanotic Attack CHD	4hrs (28/6/04)
		M/ 3 months	Hyperkalemia 2∘ to 1, Septicaemia (2) Bowel obstruction	8hrs (30/6/04)
July	NIL			
Aug	3/4	M/ 9 months	Obstructed Inguinal Hernia Septicaemia + Metabolic Acidosis	24hrs (6/8/04)
0		F/ 7 months	Intussusception Sepsis 2 Gangrenous Bowel (ICU)	5days (21/8/04)
		F/ 1 ½ yrs	Septicaemia Shock (ICU)	18hrs (28/8/04)
		M/ 12 yrs	Pancolitis-died in NZ after TF	**
Sept	3	M/ 6 months	G-ve Sepsis	4days (14/9/04)
		M/ 1yr	CP with Chronic Lung disease NZ residence	7hrs (18/9/04)
		F/ 11yrs	Pulmonary Tb, SLE (ICU)	13days (29/9/04)
Oct	1	M/ 9 months	Septicaemia Shock 2° to old burn-6days	2hours (28/10/04)
Nov	2	M/ 4yrs	Septic Arthritis Left Hip with Septic Shock	12hrs (15/11/04)
		M/ 1 yrs 3 months	Near Drowning (ICU) with Cerebral Insult	7 days (18/11/04)
Dec	4	F/ 8yrs	Scalded Skin Syndrome 2° Feb Neutropenia/ Hodgkin's	4days (8/12/04)
		M/ 9yrs	Severe Head Injury 2∘ MVA, Subdural Heamatoma	11hrs (11/12/04)
		F/ 9 months	Status Epilepticus, dehydration	36days (17/12/04)
		M/ 1 month	Septicaemia, Chest Infection, Other Congenital Anomalies	3days (30/12/04)

# 8.2.5.2 Special Care Nursery

- The total admission to the Special Care Nursery (SCN) was 315 for the year with 18% difference in gender.
- Neonatal Jaundice had always been the major cause of admission to the special care nursery. For 2004, 48% of admissions, 150 babies were due to jaundice with 71% being due to Physiological jaundice.
- Prematurity (17 %) is still the second cause of admission to the Special Care Nursery. Premature babies range from gestational age of 26 weeks to 36 weeks.
- Neonatal fever (12%) was the third commonest cause of admission to Special Care Nursery but only 11 cases (3%) of total admission actually had sepsis.
- Low Birth Weight (LBW) babies of Hypertensive mothers contribute another significant of 5% of admission.
- Babies of Diabetic mothers with RDS or Hypoglycaemia contributed 4% of admission.
- Congenital Abnormalities contributed 2% (6 cases) of admission compared to 4% (10 cases) last year.
- There were only 10 babies who needed CPAP for the year compared to 25 last year despite the highest rate of the admissions.
- The Case Fatality Rate for the Special Care Nursery for the year was 22 per 1000 compared to 54 in 2003, the lowest rate for Vaiola Special Care Nursery ever.

8.2.6 In delivering its services, the following were identified as milestones during the year.

- Dr. Kyan Ahdieh an Australian Volunteer assist the Senior Medical Officer of the section for the year.
- The ward had their first case ever of Congenital Hypothyroidism diagnosed and successfully treated.
- The ward acquired new equipment this year including ECG, SpO<sub>2</sub>, Bp monitor.
- The Case Fatality rate for Paediatric admission decreased by 27% compared to the previous year. The decrease
  admission rate contributed to the Case Fatality rate.
- The ANZ Bank painted the ward walls and provided new curtains before Christmas.
- The case fatality rate for the Special Care Nursery babies has decreased from 54 per 1000 last year to 22 in 2004.
- A newborn baby with tracheo-oesophageal fistula (TOF) was treated successfully here in our own operating theatre.

### 8.3 Surgical Ward

8.3.1 Senior Medical Officer Dr. Samson Mesol is responsible for managing the ward and assisted by 1 Medical Officer and rotating interns. Nursing Sister Graduate Salote Schaumkel headed the team of 16 nurses and 4 non-clinical support staff.

### 8.3.2 The ward's objectives are,

- To deliver safe surgical quality services to our customers with the best possible health outcomes for the people
  of Tonga, and to practice surgical services within the Ministry of Health with available resources at all time.
- To ensure that most surgical clients are provided with enough health education at all times.
- To continue to value surgical staff by enhancing staff sense of pride and commitment through ongoing training, allow flexibility and innovative practice in all level of services.
- To practice good communication skills through revising staff job descriptions according to each staff roles and responsibilities.
- To promote team work and training of staff at all level.

### 8.3.3 The ward's functions are,

- Treat and manage all patients presenting with surgical problems.
- Provide safe, efficient, effective and timely pre-operative and post-operative services for those undergoing surgery above the age of 12 years old except for caesarian clients whom are admitted to obstetric ward.
- Determine, screen and stabilize clients for surgery.

- Provide effective health education for surgical patient at all times.
- Conduct ongoing training for staff of surgical ward.
- Respond effectively to surgical referral of clients from community clinics, Outer Islands and overseas referral when needed.
- Provide safe and clean working environment in the ward by ensuring that instrument and equipment is available and in good condition at all time.
- Follow-up discharge patients and out patient surgical patients by providing Special Outpatient Clinic on Monday and Wednesday every week.

#### Surgical Admissions for 2004

There were 927 surgical admissions for 2004 and 24 recorded deaths, the breakdown of admissions were:

Condition	Number	Percentage
Gastro Intestinal Tract	255	28
Orthopaedic	128	14
Diabetic Sepsis	143	15
Breast	42	5
Hernia/chest	57	6
Head & Neck	96	10
Genitourinary tract.	98	11
Others	108	12
Total	927	100

## Surgical Ward Mortality for 2004

Condition	Number	Percentage
Cancer	8	33
Road Traffic Accident	4	17
Diabetic Sepsis	4	17
Multi Organ Failure	1	4
Gastro Intestinal Tract Bleed	2	8
Burn	2	8
Obstructed Hernia	1	4
Head Injury	2	8
Total	24	100

8.3.4 The ward was allocated \$5,000.00 and was utilized for purchase of non clinical supplies and equipment.

8.3.5 In delivering its services, the following were identified as milestones during the year,

• Returning Scholar:

- Dr. Kolini Vaea successfully completed his 1 year Post Graduate Diploma in Surgery from Fiji School of Medicine.
- Attachment and Workshops:
  - Staff Nurse Fiona Va'eno gained valuable working experience from her one month attachment in Gynaecology from St John of God Hospital, Ballarat, Victoria, Australia.
  - Staff Nurse 'Olive Tu'ipulotu attended a three months attachment on general surgical ward in Suva, Fiji, 16/1-19/4/04.
  - Staff Nurse Lona Uaisele attended a one week workshop on Ophthalmology in Vaiola.
    - Sister Graduate Salote Schaumkel attended the following workshops:
      - Workshop on "Cancer Epidemiology Studies" 17-28/5/04
      - Short Course training for Nurses Middle Level Management Course in Singapore, 2/7-19/10/04.
      - Enrolling for Post graduate Diploma in Public Sector Management Course by the Tonga Government Intake 4, Massey University, June 2004-December 2005.

- About 60% of Surgical Staff Nurses attended various workshops throughout the year such as Customer Service, Nursing Process, Dental training and Diabetic courses.
- 8.4 Medical Ward
- 8.4.1 Senior Medical Officer Dr 'Akanesi Makakaufaki is responsible for managing this ward and is supported by 1 Senior Medical Officer, 1 intern, and 16 nursing staff.
- 8.4.2 The ward's objectives are,
- To provide high standard of clinical training to all staff.
- To acquire essential equipment and supplies for wards needs.
- To develop high dependency facilities for the critically ill.
- To expand our capacity and level of staffing.
- To develop treatment protocols as a standard guideline for medical emergencies.
- To decrease mortality of the three leading cause of death: diabetes, hypertension and ischaemic heart disease.
- To empower and strengthen skills, knowledge and confidence of health centre staff in management of non communicable disease with the view to slowly devolve and decentralize non communicable disease management.
- 8.4.3 The ward's functions are,
- Manage all patients admitted to the Medical Ward.
- Manage patients referred from other wards, health centres and outlying island hospitals.
- Conduct outpatient follow up at the special clinic at Vaiola Hospital and the Mu'a and Kolovai Health Centres.
- Facilitate Overseas Patient Referral that can not be managed locally.
- 8.4.4 The ward was allocated \$5,000.00 and was utilized for purchase of equipment and office supplies.
- 8.4.5 The total admissions for the year were 1452 as compared to 1475 in 2003 and 1098 in 2002.

#### Medical Ward Admissions 2004

Diseases	Total	Percentage
Diabetes related Diagnosis	248	17
Hypertension related Diagnosis	245	17
Cardiac related Diagnosis	209	14
COAD	114	8
CVA	92	6
Chest Infection / Pneumonia	87	6
Renal failure / End Stage Renal Failure	76	5
Viral illness	73	5
Asthma	52	4
GI Bleeding\PUD	44	3
Other conditions	212	15
Total	1452	100

- It can be seen that non communicable disease, diabetes, hypertension and heart disease still takes the leading majority (>66%) of admissions for the year.
- The End Stage Renal Failure (ESRF) and the different degrees of renal failure is one of the commonest complications of diabetes mellitus that necessitates these patient's admissions to the ward.

# Mortality

• A total of 91 deaths were recorded by the ward in comparison to 90 in 2003 and 99 in 2002.

## Medical Ward Mortality 2004

Causes of death	Total	Percentage
Diabetes Mellitus Type II	24	26
End Stage Renal Disease		
ESS Hypertension/CCF		
CVA I/C Haemorrhagic/Seizures	18	20
Intracranial Bleed/Stroke		
Cardiac Arrest/AMI/IHD	10	11
Exacerbation of COAD with CCF	6	7
Pulmonary edema RHD/MS/MR/AF	8	9
Septicaemia	6	7
Peptic Ulcer Disease	8	9
Meningitis	3	3
Liver Cirrhosis/Hepatoma	3	3
Malignancy	5	5
Total	91	100

 Again the leading causes of death result from diabetes, hypertension, heart conditions and the complications associated with them. They make up >66% of all deaths.

8.4.6 In delivering its services, the following were identified as milestones during the year,

- Hospital Board of Visitors provided a Life Pak 20 defibrillator, an ECG machine and a Cardiac Monitor in August 2004. These equipments have greatly upgraded our intensive care facilities in the ward.
- Our staffs were enriched by Senior Medical Officer Dr Sione Latu joining us permanently at the beginning of the year.
- Dr Viliami Tutone also worked with us for 5 months on a temporary basis.
- Our strength is the spirit of compassion and team work that is practised everyday on all patients by all staff.

### 8.5 Obstetrics and Gynaecology

8.5.1 Senior Medical Officer, Dr. Semisi. F. Latu is responsible for managing this ward and is supported by 2 Senior Medical Officers and 21 nursing staff.

#### 8.5.2 The ward's objectives are,

### Obstetrics

- To send Interns on minimum of 4 months Obstetric attachment.
- To secure Postgraduate and Master trainings for career doctors in Obstetrics for 2 doctors.
- To offer local midwifery course to cater for the needs of island hospitals.
- To obtain mobile ultrasound machine for emergency use in Obstetric Ward.
- To attain Emergency Obstetric equipment in Obstetric Ward.
- To implement clinical protocol in Vaiola Hospital.
- To transfer clinical protocol to the islands.
- To screen for Gestational Diabetes by OGT on all mothers.
- To undertake routine ultrasound scanning at 20-24 weeks gestation.
- To conduct regular 6 months Senior Medical Officer Obstetrics & Gynaecology visit to outer islands.
- To introduce Antenatal STI Surveillance in Vaiola Hospital.
- To provide information leaflets and media production.
- To introduce evening Antenatal classes.

## Gynaecology

- To implement clinical protocol in Vaiola Hospital.
- To transfer clinical protocol to the islands.
- To conduct pap smear screening for cervical cancer in Gynaecology outpatient clinic.
- To provide a colposcope to Gynaecology clinic.
- To secure clinical attachment for nursing staff to an overseas hospital.
- To provide information leaflets and media production.

### 8.5.3 The ward's functions are,

- Conduct and supervise the antenatal clinic.
- Conduct and supervise the gynaecological clinic.
- Provide family planning services, including contraception and infertility services.
- Provide obstetrics services to all patients admitted in pregnancy, labour, and puerperium.
- Provide services to all patients admitted with gynaecological problems.
- Advise and/or provide service to all obstetric and gynaecological cases referred from health centres, private clinics, and district hospitals in the outlying islands.
- 8.5.4 The ward was allocated \$5,000.00 for the purchase of equipment and supplies.
- 8.5.5 In delivering its services, the following were identified as milestones during the year,
- Continued education was still carried out during the year including regular ward meeting, ward round, individual case discussions and workshops. Doctors also had their weekly Monday morning meeting although not regularly due to other first priority problems.
- Antenatal clinic at Vaiola Hospital is fully staffed by Clinical nurses and doctors.
- Dr. 'Aivi Puloka together with Sr. 'Ana Kavaefiafi and Sr. Afu Tei attended a Reproductive Health Technical Training Workshop in Suva, Fiji in April 2004.
- In November 2004 a local workshop was carried out to implement the above regional workshop. The same workshop was repeated in December 2004.
- 8.6 Anaesthesia and Intensive Care Unit
- 8.6.1 Anaesthetist Specialist, Dr. Bernard Tu'inukuafe is responsible for managing these services and is supported by 1 Anaesthetist Specialist, 1 Medical Officer Special Grade, and 1Senior Health Officer.
- 8.6.2 The section's objectives are,
- To ensure continuous level of high standard anaesthetic services.
- To assist as much as possible in intensive care management.
- To continue education and training of Intensive Care Unit and anaesthetic staff.
- To maintain high level of equipment, drugs and facilities.

### 8.6.3 The section's functions are,

- Provide a safe and high standard of anaesthetic services to patients undergoing operative services.
- Assist with the intensive care management of critically ill patients.
- Provide pre operative and post operative assessment and care of patients.
- Assist with the resuscitation and transport of critically ill patients.
- 8.6.4 The section was allocated \$10,000.00 and was utilized for purchase of equipment.

## 8.6.5 Summary of activities performed during the year.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Anaesthetists	3	3	3	2	2	3	3	3	3	3	3	2	33
General anaesthetic	152	132	127	109	110	88	85	110	95	137	112	110	1367
Spinals	8	13	19	11	11	14	18	24	13	7	7	8	153
Epidurals	4	3	5	3	4	4	2	1	0	0	1	2	29
Other Blocks	13	11	11	12	12	10	15	17	66	8	7	13	195
IV Anaesthetics & Sedations	11	5	1	5	0	2	1	3	13	4	1	7	52
Local Anaesthetics	16	18	27	20	22	40	34	23	34	43	27	17	321
												Total	2150

8.6.6 In delivering its services, the following were identified as milestone during the year,

- Dr Maureen Nelson, an anaesthetist sponsored by the Commonwealth Secretariat completed her 2 years contract in February 2004. Her contract was further extended for another year ending February 2005.
- Dr Bernard Tu'inukuafe and Senior Health Officer Mr. Talilotu To'ia attended a one week Pacific Society of Anaesthetists Annual Refresher Course for 2004 held in Suva, Fiji in February.
- Successful 5 weeks intensive care unit management of 15 years old who suffered from severe tetanusprolonged mechanical ventilation with tracheostomy, paralysis and IV sedation, artificial feeding.
- Successful surgical correction of a double laryngeal stenosis utilizing bone grafting by an Australian ear nose throat paediatric surgeon together with the Tongan ear nose throat surgeon, anaesthetist and nurses. This case brought congratulations and admiration from Australian colleagues and medical circles.

## 8.7 Mental Health

8.7.1 Senior Medical Officer, Dr Mapa Puloka is responsible for managing mental health services and is supported by 1 Medical Officer, 7 Nursing Staff, 1 Mental Health Welfare Officer, 1 Psychiatric Social Worker and 7 Psychiatric Assistants.

## 8.7.2 The section's objectives are,

- To improve the quality follow-up of mental health patients.
- To establish a half-way house.
- To develop mental health services in the outer island.
- To promote mental health and dissolve misconceptions, stigmatization, ignorance and discrimination of patients.
- To improve mental health staffs' skill, competencies, performance and job commitment.
- To implement the Mental Health Act 2001.
- To formulate policy for mental health and substance related disorder.
- To implement a mental health pilot research project in the community (research and informal training) 'Ulutea Club Project in Kolofo'ou and other Kava Tonga clubs in Tongatapu especially the Nuku'alofa area where psychiatric cases are prevalent. The project is known as the Fiefia Project.

## 8.7.3 The section's functions are,

- Treat and contain acute psychiatric cases and emergencies.
- Treat and rehabilitate chronic psychiatric cases.
- Provide care to patients who have suffered institutionalization and to continue the process of deinstitutionalization.
- Treat and contain forensic psychiatric cases according to the provision of the Mental Health Act 2001.
- Follow-up outpatient cases and to continue psycho-social rehabilitation (PSR).
- Implement an "Open Door Policy" for drop in cases with psychiatric problem and respite care. Patients admitted via open door policy are known as "revolving door patients" or RDP.
- Ensure active participation in matters related to the promotion of mental health

- 8.7.4 The section was allocated \$76,043.00 and was utilized for purchase of supplies and equipment.
- 8.7.5 Summary of community based activities performed during the year.

Activities	Number	
Number of admission via section 23 of the Mental Health Act 2001 (02/01/04 – 31/12/04)		
Number of Mental Health Review Tribunal (MHRT) Meeting in 2004	36	
Number of applications for extended orders to the Mental Health Review Tribunal (MHRTC) were approved	34	
Total number of Community Treatment Orders issues	49	
Number of consultation Liaison Psychiatry (CLP) for the year 2004	6	
Number of admissions pursuant to the requirement of the Criminal Offence Act		
Number of home visits for the year 2004		
Number of new outpatients for the year 2004		
Total number of attendants for the Psychiatric Special Outpatient Clinic (SPOC)		
Total number of defaulters of SOPC thus 37.2% defaults		
Total number of deaths for the year 2004 (all outpatient)	7	
(Causes of death: - 3 CA colon		
- 1 cardiac arrest		
<ul> <li>2 "old age" – COD not determined yet!</li> </ul>		
- 1 suicide (hanging)		

8.7.6 In delivering its services, the following were identified as milestones during the year,

- WHO sponsored national workshop for district officers and town officers of Tongatapu regarding their official duties documented in the Mental Health Act 2001 was held during the year 2004.
- Dr Viliami Vao successfully completed a one year course for a Certificate in Mental Health in Auckland University, New Zealand.
- Two psychiatric staff approved by the Hon Minister to drive the government vehicle allocated to the psychiatric unit when there is shortage of official driver, has alleviated to a greater degree the persistent chronic problem regarding transport.
- A significant reduction of 3<sup>1</sup>/<sub>2</sub> times of the number of readmission of psychiatric patients to the psychiatric unit since the extension of the Medication on Wheel (MOW) programme in the community to cover all days of the week. This was started in early July 2004.

## 8.8 Operating Theatre

8.8.1 Nursing Sister Graduate Sr. Kalesita Fotu is responsible for managing this service and is supported by 1 Nursing Sister Graduate, 1 Senior Staff Nurse, 7 Staff Nurses, and 2 support staff.

#### 8.8.2 The section's objectives are,

- To provide experienced and trained staff to maintain and expand the services to save life in emergencies and to promote improved health.
- To provide staff with adequate in-service education to enable them to maintain and expand their knowledge and skills required for competent practice.
- To maintain quality and standard services at all times.
- To provide a safe working environment.

8.8.3 The section's functions are,

- Provide high quality services whether it is pre-operative or post-operative or during the operation that is
  professionally sound, cost effective and to comply with the ethical principles of the Ministry of Health.
- Provide good services for the comfort of patient who is going to surgery.
- Explain to the patient the Theatre procedure both pre-op and post-operative so as to reduce the anxiety the
  patient may have concerning his/her sickness.

- Encourage staff to involve in policy formation including developing and implementing of such policies.
- Share the responsibility for the recruitment of staff.
- 8.8.4 The section was allocated T\$5000.00 and was utilized for purchase of supplies and medical equipment.
- 8.8.5 In delivering its services, the following was identified as milestone during the year,
- 4 Staff Nurse undertook distance learning course via the Ministry's Computer Lab.

#### 8.9 Ophthalmology

- 8.9.1 Medical Officer Special Grade Dr Paula Vivili is responsible for managing this section and is supported by 1 Health Officer and 1 Nursing Staff.
- 8.9.2 This section's objectives are,
- To ensure that Eye care is seen as a priority area.
- To provide appropriately trained staff to carry out primary care education of the public.
- To provide adequately equipped facilities to ensure provision of quality eye care at all hospitals.
- To strengthen cataract services and develop an audit of outcomes.
- To develop an appropriate diabetic eye disease screening and management programme.
- To provide low cost glasses.
- To develop a system for assessing and detecting the extent of eye problems in Tonga.
- To develop a system for delivering eye care services both centrally and an outreach component.
- 8.9.3 The section was allocated \$10, 000.00 for Technical Equipment which is used to support the section. A large amount of our equipment and consumables are provided by visiting teams. The section provides all the Eye Care requirements of the country and staff makes outreach trips to the outer islands to provide these services.

	Activity	Tongatapu	Vava'u	Ha'apai	'Eua	Niuatoputapu
1	Routine tests	706	292	190	0	0
2	Refraction only	199	0	0	0	0
3	Refraction with glasses	404	299	136	540	50
4	Presbyopia	215	0	0	0	0
5	Conjunctivitis	404	0	0	0	0
6	Cataract	268	60	30	20	9
7	Pterygia	142	20	15	0	2
8	Contusion eye injury	40	0	0	0	0
9	Uveitis	20	0	0	0	0
10	Corneal Ulcer	50	0	0	0	0
11	Glaucoma	3	0	0	0	0
12	Diabetic check up:					
	-No Retinopathy	290	100	30	0	0
	<ul> <li>Some Retinopathy</li> </ul>	98	60	15	0	0
13	Review cases	431	60	10	0	0
14	Minor Surgery	10	15	0	0	0
15	Major Surgery	45	38	8	0	0
16	Argon laser	40	30	5	0	0
17	Yag capsulotomy	4	1	0	0	0
18	Others	661	0	0	0	0
	Total	4030	975	441	560	61

Services provided, 2004

- 8.9.4 The section continued to benefit from services provided by visiting teams. Their contribution both in expertise and equipment plays an integral role in the Section's ability to provide the services it does. The following teams visited during the year:
- Pacific Island Project (AusAid, Australia)
- Desert Foundation
- Volunteer Ophthalmic Services Overseas (NZ)
- Les Shipley and Team (USA)

8.9.5 In delivering its services, the following were identified as milestones during the year,

- Donations
  - Operating microscope from Dr. John Willoughby.
  - Slit lamp from Dr. Michael Toohey.
  - Consumables and glasses from other visitors.
  - Container loads of books and hospital equipment donated through the Barossa Valley Rotary Club to Ha'apai. The connection to this Rotary Club is through Dr Willoughby's nurse (Helen) husband Mr. Brian Craetz.
- Meetings and Conference
  - <u>Pacific Eye Care Society (PacEYES) Meeting</u>: Dr Paula Vivili attended this meeting in June held in Port Villa, Vanuatu, which was funded and organised by the Fred Hollows Foundation. The meeting was a follow up to the inaugural meeting held in Fiji in 2003 before and addressed issues such as training, audit, research and small incision cataract surgery.
  - Royal New Zealand and Australian College of Ophthalmology (RANZCO) Annual Conference: Dr. Paula Vivili attended this annual meeting held in Melbourne in November. RANZCO was kind enough to fund for two doctors from the Pacific and waive the registration fee (AUD1,100.00) for all doctors (seven attended). The meeting was also essential for updating knowledge and catching up with colleagues from other countries. Dr. Vivili also took the opportunity to visit a couple of donors to the section at Adelaide such as Barossa Valley Rotary and Donations in kind.
- Training Workshop
  - Health Officer Savelina Veamatahau and Staff Nurse Mele Vuki attended Training for Trainers Workshop on Primary Eye Care from 22-28/5 in Cook Islands. The aim of the Training of Trainers course is to provide eye care nurses with the knowledge, skills and attitudes so they can in turn train nurses to identify and manage common eye conditions. The workshop was run by the International Centre for Eye Care Research (ICEE) and funded by the Fred Hollows Foundation.
  - Fifteen health officers and nurses attended one week course on Basic Ophthalmology in October conducted by Doctors Dick Galbraith and Julian Rait from Australia. The one week course was funded by the Aspect Foundation of Australia.
- Outreach
  - During the year the section was able to carry out one trip to Vava'u, Ha'apai, 'Eua and Niuatoputapu. Ha'apai has its own microscope now and Vava'u has an extra slit lamp. Further training for staff in the outer island is a vital component in the long term sustainability of the Outreach programme.
- 8.10 Ear Nose Throat
- 8.10.1 Senior Medical Officer, Dr. Lei Saafi is responsible for managing this specialty service and is supported by a Staff Nurse.
- 8.10.2 The Clinic's objectives are,
- To promote cost-effective patient management through;
  - Providing high standard clinic management techniques
  - Faster but safe discharge of patients from the wards
- To improve the service by upgrading management techniques.

- To recruit and train 1 more Ear Nose Throat Surgeon and 1 more Ear Nose Throat Staff Nurse.
- To establish a new post for an audiometric technician.
- To continuously provide 'On the Spot' training to the staff.
- Provide health education especially to parents on ear hygiene, prevention of foreign bodies lodging in Ear Nose Throat areas.
- To reduce overseas referrals to an absolute minimum.

8.10.3 The Clinic's functions are,

- Provide 24 hour coverage for in-patients and all acute emergencies at Out Patient Department.
- Manage all Ear Nose Throat problems and their complications, both in outpatient and inpatient.
- Perform weekly (Monday) Ear Nose Throat routine operations.
- Conduct four weekly Out Patient sessions for new patients and follow-up.
- Establish and maintain links with Health Centres, district Hospitals and Private Practitioners.
- Keep proper recordings for the section.
- 8.10.4 The section was allocated \$5,000.00 for the purchase of supplies and equipment.

8.10.5 In delivering its services, the following were identified as milestones during the year,

- Major tracheal reconstruction done for a 2 levels tracheal stenosis as complications of previous intubation and tracheostomy for a 13 year old boy who suffered severe tetanus. This huge achievement was made possible through a good will mission by Professor Robert Berkowitz, Professor of Paediatric Ear Nose Throat of the Royal Melbourne Hospital. This major reconstruction procedure went smoothly during operation as well as post operative period. Recovery was uneventful and there was no wound infection. This boy has been symptom-free ever since. The success of this surgery alone saved the Ministry and the Government of Tonga of over NZD\$100,000.00.
- An Ear Nose Throat Pacific Island Project organized by the Royal Australian College of Surgeons, Melbourne
  was led by Dr. Magdi Ghali, Ear Nose Throat Surgeon. This team visited Tonga from 25/9 9/10/04 and spend a
  week in Prince Ngu Hospital and a week in Vaiola Hospital.
- 8.11 Emergency and General Outpatients
- 8.11.1 Medical Officer, Dr. Tevita Vakasiuola was responsible for managing this ward from April until August when Dr. Lemisio Sa'ale took over. Dr Sa'ale is supported by 4 Medical Officer, 13 Nursing Staff and 2 support staff.
- 8.11.2 The section's objectives are,
- To improve quality of services for patients seeking emergency and outpatient care.
- To provide ongoing training of staff (doctors and nurses).
- To improve its management and planning.
- To improve ambulance services.
- To improve relationships with other disciplines within the hospital.

8.11.3 The section's functions are,

- Provide in-hospital emergency and outpatient services
- Provide pre-hospital emergency ambulance services.

8.11.4 Pre-Hospital Emergency Ambulance Services

 This service is still under improvement and further improvements are needed in area of equipment, staffing and ongoing education of staff.

## 8.11.5 In-Hospital Emergency and Outpatient Services

- Emergency cases are transferred immediately to the Emergency Room (ER).
- All other patients are registered and triage using the international triage system (1 to 5). They are seen according to their triage scale.

Services provided during the year, 2004.

Comilao	Total Number
Service	Total Number
Consultations	67,329
Emergencies	593
Dressings	6,354
Minor Operations	584
Nebulizations	4,072
Ambulance	45

The table reflects the trends for the past eight years.

Service	1997	1998	1999	2000	2001	2002	2003	2004
Consultations	61,992	67,636	62,789	71,049	60,606	87,139	70,577	67,329
Admissions	3,586	4,188	4,144	4,445	4,030	3,470	7,079	6,292
Emergencies	381	396	415	731	793	983	839	593
Dressings	31,092	43,992	41,672	13,029	13,782	15,504	5,715	6,354
Minor Ops.	600	744	1,127	1,044	1,020	655	836	584
Nebulization	5,255	6,128	3,789	4,065	4,855	4,619	3,174	4,072

• Outpatient consultations contain the bulk of the service.

- Total number of emergencies decreased in 2004. As compared to 2003, there were higher proportions of emergencies that were death on arrival (DOA) and emergency (ER) death. Most common causes of emergency death are cardiac (29%) and trauma mainly from motor vehicle accident (18%). 72% of all emergencies got admitted and 15% sent home on medications. Of all admissions from Emergency Room:
  - 51% to medical ward
  - 28% to surgical ward
  - 19% to paediatric ward
  - 1% to Intensive Care Unit
  - 1% to obstetric ward

8.11.6 In delivering its services, the following were identified as milestones during the year,

- Airport emergency exercise:
  - This was a partial airport emergency exercise held in early December.
  - Short coming of the previous exercises were improved during this exercise.
  - There is still space for improvement especially those activities at the airport.
- Visiting Consultants:
  - Cherry Pretty, an Emergency Nurse from St. John of God Hospital visited the department for the second time. She worked and conducted teaching sessions.
- Overseas visits and trainings:
  - Dr. Sa'ale attended a 1 week conference on the 2<sup>nd</sup> international meeting on Emergency Medicine for the Pacific Region held in Tahiti.
  - Staff Nurse Malolo Vea pursued 3 weeks attachment in St. John of God's Hospital Accident and Emergency, Ballarat, Australia.
- Infrastructure and Equipment:
  - Computer at General Outpatient was upgraded with internet connection. Dr. Vakasiuola organized training
    of all staff in basic computer skills.

## CLINICAL SUPPORT SERVICES

- 8.12 National Centre for Diabetes and Cardiovascular Diseases
- 8.12.1 Chief Medical Officer Clinical Services, Dr. Taniela Palu is responsible for managing the Centre and is supported by 2 Nutritionist and 3 Nursing staff.

8.12.2 The Centre's objectives are,

- To prevent or delay the onset of complications caused by diabetes and cardiovascular diseases, and to improve their management hence ensuring a more productive and healthy population.
- To participate and support the establishment of National policies for the integrated prevention and control of diabetes and cardiovascular diseases.
- To develop and implement integrated strategies for the prevention of diabetes and cardiovascular diseases, with emphasis on primary prevention and promotion of healthy lifestyles.
- To increase community-based detection and control of diabetes and cardiovascular disease.
- To establish or strengthen the management of diabetes and cardiovascular diseases and their complications (Tertiary prevention).
- To establish and strengthen appropriate epidemiological surveillance and monitoring for diabetes and cardiovascular disease and their risk factors.
- To further strengthen the development of human resources and research for the prevention and control of diabetes and cardiovascular disease.
- To maintain and strengthen the working partnership with the Australian Centre for Diabetes Strategies at the Prince of Wales Hospital in Sydney, Australia and to ensure the continuity of the AusAID funded Tonga Diabetes Project.

8.12.3 The Centre's functions are,

- Provide specialist care for all in patients and out patient diabetics in Tonga.
- Provide advice on diabetic management to other hospitals and health centres.
- Provide education and training for health workers on diabetes and Non Communicable Disease.
- Work closely with the Health Promotion and Non Communicable Disease Section of the Public Health Division on prevention strategies relating to diabetes and Non Communicable Disease risk factors intervention and management.
- Advise the Hon. Minister of Health and Director of Health of the National Plan for the prevention and control of diabetes and cardiovascular diseases.
- Provide advice to other Ministries on issues relating to diabetes and cardiovascular disease through the National Non Communicable Disease Committee and participate in the subcommittees of the National Non Communicable Disease.
- Work closely with the Australian Centre for Diabetes Strategies of the Prince of Wales Hospital in planning and implementing the Tonga Diabetes Project funded by AusAID.
- Serve as a referral centre for diabetes and cardiovascular diseases.

Month	Clinic	Rebook & Refill	Dental	HbA1c	Screening	New (	Cases
						DM	IFG
Jan	365	86	33	5	44	14	8
Feb	593	38	19	3	33	10	7
Mar	382	26	25	8	48	13	14
Apr	701	18	14	5	77	19	8
May	594	35	17	14	41	16	5
June	689	52	23	0	64	21	7
July	392	31	20	0	41	12	11

## Patient Attendance and Service

Aug	162	18	12	1	14	3	2
Sept	662	26	14	149	30	12	3
Oct	441	37	26	40	35	15	4
Nov	529	35	23	148	55	24	12
Dec	572	37	29	38	26	4	2
Total	5717	439	255	411	508	163	83

- Clinic Appointment: During the months of March, July, August and October, the Diabetes Centre conducted the Nutrition and Risk factor Survey of School Children and the national Non Communicable Disease survey hence the less number of patients attending clinics.
- Refill and Rebook of appointment: There is a marked decrease in the number of patients visiting the Diabetes Centre for refill as compared to 2003 (71% drop) due to patients using Medication Card which started in July 2003.
- Dental clarification: There is a 36% decrease as compared to 2003.
- Screening: The number of people attending the Diabetes Centre for screening for diabetes decreased by 33% as compared to 2003. However in 2003, 36% of those screened were diagnosed to have diabetes whereas of those screened in 2004, 48% were diagnosed new cases of diabetes. The number of new cases recorded does not include those diagnosed in the 2 surveys conducted during the year.
- HbA1c: Glygateds haemoglobin test reagents were made available through donations of Bayer and the Tonga Diabetes Project thus enabling the testing of patients.

Month	No. of dressing	No. of people dressed	Admission from D. Centre	Total admission in Ward
Jan	474	76	4	10
Feb	389	37	4	7
Mar	319	40	4	13
Apr	296	42	5	12
May	254	40	3	7
Jun	360	43	5	8
Jul	291	31	3	6
Aug	145	20	1	5
Sep	180	44	6	8
Oct	112	20	1	7
Nov	173	39	6	8
Dec	181	46	2	9
Total	3175	478	44	100

Diabetic wound dressing is conducted 3 days a week and daily for patients with ulcers and those requiring daily dressings.

- There is 50% decrease in the number of people dressed compared to the previous year. The number of admission from the Diabetes centre and the total diabetic sepsis admission in surgical ward increased.
- There are more patients with diabetic sepsis being admitted from Out-patient than from the Diabetes Centre.

8.12.4 In delivering its services, the following were identified as milestones during the year,

- The Nutrition and Cardiovascular Disease (CVD) Risk Factor survey of school children in Tonga 2004.
   A survey conducted in March in seven High Schools in Nuku'alofa with sample of 596 determined the dietary practices and physical activity level obtaining baseline information on Non Communicable Disease risk factors. Analysis was done on the meals and dietary pattern, food choices and physical activity.
- National Non Communicable Disease (NCD) Survey 2004.
  - Combination of two surveys:
    - Diabetes and Cardiovascular Disease Risk Factor survey funded by AusAID
    - STEPS survey funded by World Health Organisation.

	Number of Samples
Part One	Tongatapu: 600
	Vava'u: 200
	Ha'apai: 200
	Total: 1000
Part Two	Tongatapu: 1500
	Vava'u: 500
	Ha'apai: 500
	Total: 2000

- Due to shortage of staff and other commitments, the first round of the National Non Communicable Disease survey 2004 involved 1025 participants, leaving the remaining 1475 to be tested and hence anticipate to complete the survey in July 2005.
- Quality Assurance Program for DCA machine
  - The centre participates in this program run by Flinders University in Melbourne, Australia. The percentage of Acceptable Results for the last quarter of 2004 was 100%. This shows the DCA machine at the diabetes centre is operating well and results are comparable internationally.
- 8.13 Nutrition and Dietetic
- 8.13.1 2 Nutritionists are responsible for managing the section. One has been on special leave since December 2003.
- 8.13.2 The section's objectives are,
- To develop and implement integrated strategies for the prevention of non communicable diseases with emphasis on health promotion and healthy lifestyles.
- To increase community awareness of risk factors and to decrease the incidence of non communicable diseases.
- To strengthen patient education to inpatients and outpatients
- To enhance and maintain nutritional status of patients.
- To ensure that inpatients receive well and appropriate healthy diet while in the hospital.

8.13.3 The section's functions are,

- Provide special care for all inpatients and outpatients with diet related problems.
- Provide advice on nutrition to the public.
- Provide education and training for all health workers on nutrition and related topics.
- Work closely with the Public Health section on health promotion issues.
- Provide advice to other Ministries on nutrition issues through the National Food and Nutrition Committee, Ministry of Education and Non-Government Organisation.
- 8.13.4 A Diet Clinic operates on Tuesdays and Thursdays follow up of diabetic patients is performed daily and inpatients are seen as referred.

Outpatients - Diet clinics for diabetics on Tuesdays and Thursdays.

Month	No. of patients attending
Jan	42
Feb	53
Mar	55
Apr	60
May	62
Jun	65
Jul	67

Aug	36
Sep	43
Oct	11
Nov	70
Dec	40
Total	604

**Inpatient Referrals** 

Cases	No. of patients referred
Diabetes	30
Hypertension	20
Lipid lowering	20
Weight reduction	45
Malnutrition	8
Tube Feed	10
High protein	12
Total	145

8.13.5 In delivering its services, the following were identified as milestones during the year,

- A survey was conducted on Nutrition and Cardiovascular Disease risk Factor of school children to determine the dietary practices and physical activity level.
- National Non Communicable Disease survey was implemented.
- 8.14 Laboratory
- 8.14.1 Dr. Siale 'Akau'ola, Senior Medical Officer is responsible for managing this section and is supported by 19 technical, 1 clerical and 5 supporting staff
- 8.14.2 The section's mission statement is to "Provide customers with high quality cost effective services in all aspects and the standard of such services to comply with or exceed all accepted ethical and professional principles as embodied in any accreditation criteria that may at some time apply in Tonga".
- 8.14.3 The section's objectives are,
- To maintain quality standards of services at all times.
- To promote innovation and encourage constructive experimentation to improve on techniques.
- To maintain continuous training and education.
- To provide a safe and productive working environment.
- To use all problems encountered as an opportunity for improvement.
- To comply with the law and statutes of the Kingdom of Tonga.
- 8.14.4 The section was allocated \$122,600.00 and was utilized to fund its various activities. This attributes to an increase of \$14,600.00 from previous financial year.
- 8.14.5 Provided below is a summary of services provided by the Laboratory during the year.
- The total number of tests performed in 2004 (172,027) increased by 2.6% from the previous year. Since 93.1% of all tests performed were blood tests, Haematology carried out about 54.1% of all blood tests, a decrease of about 8% from previous years.
- This decrease reflects the period when the Haematology analyser (Technicon) broke down. The everyday manual took over the performance undertaken by the analyser.

- Biochemistry performed about 22% of the total number of tests for all Hospitals, an increase of about 17% compared to the previous year. Reason for the increase was the purchase of a new chemistry analyser.
- The number of tests referred overseas increased by 3.6%. The primary reason was the availability of fund and the increase of requests by certain doctors.
- A decrease of 4 % in the number of serological tests done throughout the Kingdom from the previous year.
- A decrease of 11.8% in the number of donors bled due to irregularity of Donor Awareness Program which depends heavily on the implementation of the Program by the Tonga Red Cross.
- Increase of 1.6% in the number of HIV tests compared to previous year out of 3476 tests, using quick test
  methods; both involving foreigners. One case was confirmed a false positive while the other was a confirmed
  positive case.
- The first case of hepatitis C virus in three years was reported as inconclusive however the case is under surveillance.
- An increase of 39.5% in the total number of microscopy performed in all Hospitals compared to the previous year.
- Tuberculosis culture is still not being done due to safety precautions not up to standard. Endeavour is being
  pursued to overcome this dilemma so that Tuberculosis culture is functional again.
- Leprosy has not been isolated for many years and suddenly three positive samples from one case were noted this year.

	2004	%	2003	%	2002	%
Salmonella typhi	4	0.6	27	3.3	6	0.7
Other Salmonella	0	0.0	0	0.0	8	1.0
Shigella	11	1.6	14	1.7	48	5.8
Escherishia Coli	113	16.8	167	20.1	179	21.8
Klebsiella	45	6.7	66	8.0	62	7.6
Proteus	66	9.8	63	7.6	48	5.8
Pseudomonas	46	6.8	65	7.8	66	8.0
Staph Aureus	74	11.0	110	13.3	89	10.8
Pneumococcus	8	1.2	20	2.4	17	2.1
Haemophilus	12	1.8	21	2.5	14	1.7
Strep/Group A	15	2.2	6	0.7	2	0.2
Neisseria Gonorrhoea	2	0.3	35	4.2	40	4.9
N. Meningitidis	111	16.5	6	0.7	4	0.5
V. Parahaemolyticus	7	1.0	0	0.0	0	0.0
M. Tuberculosis	0	0.0	28	3.4	54	6.6
Others	158	23.5	201	24.2	184	22.4
Total	672	100.0	829	100.0	821	100.0

Number of major pathogens isolated throughout the Kingdom in the past three years

8.14.6 In delivering its services, the following were identified as milestones during the year,

- Mrs. Latu Soakai rejoined the staff on 2/1/04 following completion of her Postgraduate Diploma in Medical Laboratory Science from the University of Otago, Dunedin, New Zealand.
- Mrs. Latu Soakai attended a Round Table Discussion on Food Analysis Food Composition (FAO) at the Institute of Applied Science, University of the South Pacific, Fiji 16/-23/8/ 04.
- Mr. Taukei'aho Matafolau Halauafu was recruited on the 10/6/04 after graduating with a Bachelor in Medical Laboratory Science from Auckland University of Technology, Auckland, New Zealand.
- Miss Lu'isa C. Tupou was recruited on the 17/6/04.
- Miss Senisaleti Tatafu attended a Customer Service Training Course on the 15/3-17/3/04 at Fasi, Nuku'alofa.
- Dr. Siale 'Akau'ola attended the 2<sup>nd</sup> Epinet meeting on need for Influenza Surveillance, Dengue Lepto Surveillance from 5-12/6/04 in Noumea, New Caledonia. He also attended a Pasifika Medical Association Conference from 9-13/9/04 in Wellington, New Zealand. On a special leave to take up a World Health Organisation short term consultancy from 15/10- 1/11/04 in Apia, Samoa.

- Mrs. Fele'unga Vaka'uta is currently attending a Group Training Course in Clinical Laboratory Technology from November 2004 to March 2005.
- Mr. Viliami Pakalani and Miss Telesia Talia'uli both attended a Workshop on Strengthening Blood Safety and Laboratory Management in the Pacific from 4-11/12/04 at Mocambo Hotel, Nadi, Fiji.

## 8.15 Radiology

- 8.15.1 Dr. 'Ana 'Akau'ola, Medical Officer Special Grade is responsible for managing this section and is supported by 11 technical and 1 clerical staff.
- 8.15.2 The section's objectives are,
- To provide diagnostic information to all clinicians.
- To promptly aid clinicians in identifying potential fatal conditions.
- To screen most pregnant mothers by providing services for routine mid-trimester scanning.
- To work closely with clinicians both in country and overseas to provide satisfactory radiology report for patients undergoing examinations.
- To provide staff knowledge and skills.
- To provide good quality films and ultrasound reports to medical officers.

8.15.3 The section's function is,

 Provide good quality radiological diagnostic services to clinicians and the people of Tonga at all times, with the available modalities.

8.15.4 The table indicates the number of ultrasound examinations performed
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Examination	No. of cases	%
Upper abdomen	914	23
Pelvis and lower abdomen	692	18
Small parts	170	4
Obstetric	1742	44
Echocardiography	379	10
Others – FB, Pleural Effusion marking, US guided procedures	39	1
Total	3936	100

- 8.15.5 The section was allocated \$43,375.00 and was utilized for purchase of technical equipment, medical and office supplies.
- 8.15.6 In delivering its services, the following was identified as milestone during the year,
- Mr. Teputepu Laiseni successfully completed his Diploma in Radiology from the Fiji School of Medicine and resumed duty last year.
- 8.16 Pharmacy
- 8.16.1 Principal Pharmacist, Mrs. Melenaite Mahe is responsible for managing this section and is supported by 31 established staff.
- 8.16.2 The section's objective is,
- To provide good quality, safe, effective and affordable essential drugs and standard medical supplies at all times to all the people of Tonga and ensure its rational use.

## 8.16.3 The section's functions are,

- Ensure availability of safe, effective, affordable and good quality drugs and medical supplies for the people of Tonga.
- Ensure proper selection of drugs and medical supplies through the National Drugs and Medical Supplies Committee.
- Ensure best procurement practice is adopted.
- Ensure appropriate storage conditions are used and effective and timely distribution process is in place.
- Ensure that legislative framework is operational.
- Ensure that rational use and appropriate information are available.
- Ensure best pharmacy practice is adopted.
- 8.16.4 The section was allocated \$1,379,251.00 and was utilized for purchase of drugs and medical supplies.
- 8.16.5 The Central Pharmacy and Medical Store (CPMS) are divided into six units. Manufacturing, Procurement, Administration and Finance, Stores and Distribution, Drug Registration, and Dispensing.

### 8.16.5.1 Manufacturing

- The Manufacturing unit was staffed by a complement of three personnel during the year.
- Two trainee are rostered to the manufacturing every quarter where they manufacture a range of products for distribution throughout the Kingdom.

### Production Output for 2004

Item	No. of Batches	Total	Cost
Oral Preparation	185	10474 L	\$26,963.42
Dermatological Preparation	173	2679L	\$9444.36
		226kg	
Extemporaneous	164	23.56L	\$586
		1kg	
Total	522	13,177.26 L	\$36,993.78
		277 kg	

Production output for 2004 decreased by 10% from the previous year. This was attributed to short staff and production schedule were not met.

#### 8.16.5.2 Procurement/Registration

- The Procurement and Registration have been joined to ensure that information is shared within this unit.
- A Procurement Officer is responsible for procurement of all drugs and medical supplies.
- Drugs and medical supplies are procured worldwide.
- Tenders are put out for the majority of items and smaller items are procured directly from the supplier.
- An Assistant Pharmacist Grade II is responsible for conducting product registration for the country as required by the Therapeutic Good Act 2001.
- Registration is done based on what is currently used with the need to utilize paper registration where products would be screened before they are registered to be used in the country. The aim is to ensure that only effective, safe and good quality products are allowed into the country.

#### 8.16.5.3 Administration and Finance

- This section is responsible for handling correspondences, filing, personnel and financial management.
- Maintaining of vote book and preparation of vouchers for payment of local and overseas expenditures is managed by the section.

# 8.16.5.4 Stores and Distribution

- This section is responsible for receiving all incoming goods, checked, record and stored for distribution upon receipt of requisitions from all stations throughout Tonga.
- This section provides services for 4 Hospitals, 14 Health Centres, 34 Reproductive Health Clinics and few village health workers throughout Tonga.
- The distribution to the outer islands is done on a bimonthly basis but some are more frequent depending on the availability of drugs and supplies.
- Supplies for Vaiola Hospital Pharmacy is done on a weekly basis and it is planned that there should be limited areas in the hospital who would get their supplies direct.
- The distribution of the locally manufactured products was as follows: Vaiola Hospital 69%, Prince Ngu Hospital 12% Niu'ui Hospital 6%, Niu'eiki Hospital 4%, Health Centres 6% and Others 3%. 0.8% of goods were reported to be damaged or expired.

### 8.16.5.5 Dispensing

 Dispensing Counter is an extension of the outpatient dispensing at Vaiola except that a limited range of items are available from the Central Pharmacy and Medical Store to ensure control of usage.

Month	Pres	Items	Salbutamol	Beclomethasone	Insulin 70/30	Isophane	Soluble	Repeat
			inhaler	inhaler		insulin	Insulin	
Jan	727	1522	284	49	180	70	0	199
Feb	369	1154	245	48	188	90	0	274
Mar	457	1360	286	78	191	80	0	293
Apr	537	1334	293	76	189	74	4	177
May	484	1263	282	76	180	84	8	247
Jun	425	1355	287	88	181	78	3	300
Jul	472	1383	261	86	185	82	1	279
Aug	421	1434	273	88	203	82	17	366
Sep	598	1550	275	139	186	89	9	298
Oct	633	1373	222	26	192	77	3	438
Nov	630	1435	228	134	194	95	14	259
Dec	535	1361	215	68	199	60	3	351
Total	6288	16524	3192	956	2268	960	62	3481

### Central Pharmacy and Medical Store Dispensing Counter Record

 The dispensing counter receives 11% of the total cost of items issued from the Cental Pharmacy and Medical Store. It was noted that due to better control of stock the discrepancies between what was issued, compared with what was recorded as issued out for prescription was dropped to a small percent. The Asthma Project improved the management of asthma and more patients are now on Beclomethasone as compared to previous year.

## 8.16.6 Vaiola Hospital Pharmacy

 Mr. Siutaka Siua is in charge of Vaiola Pharmacy and is supported by 2 returning scholars with diploma in Pharmacy from the Fiji School of Medicine, 5 Assistant Pharmacists, and 2 trainees as part of their rotation programme which was completed in December 2004.

Month	AM Shift			OPD			PM Shift			
	Pres	Items	RPT	WDI	Pres	Items	Pres	Items	RPT	Wards
Jan	5,866	9,234	568	1,020	592	1,360	3,817	5,756	95	435
Feb	5,815	9,825	363	930	536	968	4,017	7,446	105	427
Mar	7,420	12,807	530	990	884	1,201	3,958	10,634	92	452
Apr	5,118	9,205	162	589	748	1,120	7,304	8,653	98	236
May	5,095	9,536	204	1,036	576	1,020	4,306	10,102	106	591
Jun	4,952	13,259	162	975	524	812	3,773	5,633	69	316
Jul	6,228	11,498	310	708	612	1,067	4,368	7,787	91	302
Aug	5,770	10,065	391	3,115	776	1,100	5,152	7,559	189	350
Sept	5,454	10,503	409	782	798	1,232	3,943	5,736	124	388
Oct	5,322	8,008	1,518*	815	576	889	4,064	7,072	300*	425
Nov	3,801	7,267	1,654*	798	498	7,401	2,874	4,936	232*	309
Dec	5,669	11,417	2,589*	1,188	260	311	4,104	7,398	489*	385
Total	66,510	122,624	8,860	12,946	7,380	18,481	51,680	88,712	1,882	4,616

Please note: These represent the repeat prescription that was recorded on a separate booklet.

- The total cost of goods received from Central Pharmacy Medical Store to the Vaiola Pharmacy was \$1,476,135.77.
- The pharmacy is responsible for outpatients and inpatients dispensing and also participates in a monthly basis
  visits to Mu'a and Kolovai Health Centres to replenish patient's medication.
- A computerised inventory system mSupply was installed in July to provide relevant information for a better control over the stocks.
- In comparing prescription dispensed in the past 7years, it is noted that there is an increase in the number of
  prescriptions dispensed during and after normal hours, and then dropped in year 2002, whereas midnight shift to
  8.30am was not.
- There is an increase in the number of people using the pm shift therefore the number of prescription dispensed is nearly three quarters of those dispensed during normal hours.

## 8.16.7 Prince Ngu Hospital Pharmacy

- Prince Ngu Hospital Pharmacy is managed by 2 Assistant Pharmacists Grade II.
- Working hours has increased to open from Monday to Saturday from 8.30am to 4.30pm and again from 5.00pm to 11.00pm on Monday to Sunday. This was started during the second half of the year.
- The Pharmacy now has a storeroom close to the Pharmacy and it requires shelves for proper storage of goods.

## Prescriptions Record for Prince Ngu Hospital Pharmacy 2004

Month	Pres	Items	Ward	Outpatient	Outpatient items	Repeats	Pres	Items
			items	Pres				
Jan	2,300	3,857	514	1,354	2,479	216	0	0
Feb	2,375	3,916	392	1,504	2,535	262	0	0
Mar	3,440	5,604	393	1,890	3,259	218	0	0
Apr	2,141	3,398	414	1,178	2,018	148	0	0
May	2,432	3,917	358	1,407	2,197	171	0	0
Jun	3,405	5,204	544	1,890	2,859	270	0	0
Jul	2,205	4,071	486	1,482	2,759	206	0	0
Aug	2,211	3,999	270	646	1,279	269	767	1,427
Sept	2,621	4,901	379	315	604	376	1,000	1,950
Oct	2,210	3,998	451	265	471	363	810	1,350
Nov	2,023	3,402	486	423	770	357	793	1,355
Dec	2,218	4,183	547	459	776	521	814	1,475
Total	29,581	50,450	5,234	12,813	22,006	3,377	4,148	7,557

• There is a decrease in number of prescriptions and items dispensed this year compared to year 2003.

## 8.16.8 Niu'ui Hospital Pharmacy

• A single Assistant Pharmacist Grade II is responsible for the operation of the Niu'ui Hospital Pharmacy.

Prescriptions Record for Niu'ui Hospital Pharmacy 2004

Month	Pres	Items	Repeat	After hours	Items
Jan	829	1,265	273	284	427
Feb	914	1,525	196	227	419
Mar	893	1,421	180	294	446
Apr	1,018	1,203	127	222	632
May	907	1,591	166	253	531
Jun	835	1,441	358	277	499
Jul	1,127	1,842	298	288	531
Aug	1,033	1,917	314	275	437
Sept	1,251	2,115	333	131	223
Oct	1,307	2,314	279	211	417
Nov	1,051	1,705	257	180	309
Dec	983	1,619	198	171	298
Total	12,148	19,957	2,979	2,813	5,169

- It is noted that there is a decrease in the number of attendance in the after hours from 28% to 19% as compared to 2003.
- The number of asthmatic in year 2004 has nearly doubled as compared to 2003, and the number of diabetic
  patients that rely on insulin injection has also increased dramatically.

#### 8.16.9 Niu'eiki Hospital Pharmacy

• A single Assistant Pharmacist Grade II is responsible for pharmaceutical services at Niu'eiki Hospital.

Prescriptions Record for Niu'eiki Hospital Pharmacy 2004

Month	Pres	Items	RPT	Pres	Item	OPD
Jan	546	839	301	260	487	121
Feb	594	904	232	392	612	169
Mar	741	1,284	288	322	686	175
Apr	748	1,134	376	586	960	186
Мау	613	972	331	378	660	189
June	530	895	357	105	269	90
July	644	1,100	365	145	276	148
Aug	848	1,394	270	164	270	175
Sep	823	1,284	315	210	355	224
Oct	764	1,159	466	250	408	237
Nov	898	1,396	419	756	390	214
Dec	772	1,161	336	188	331	233
Total	8,521	13,522	2,161	3,243	5,704	2,161

 In general the supplies to the outer islands were satisfactory. Oxygen supplies continued to be a major challenge in all the hospitals. 8.16.10 In delivering its services, the following were identified as milestones during the year,

- Mr. Siutaka Siua successfully completed his study for a Master in Clinical Pharmacy from the University of Queensland in December 2004 and was promoted to the post of Senior Pharmacist.
- Ms. Losaline Titiuti and Mrs. Leva'itai 'Asaeli successfully completed their study for their Diploma in Pharmacy
  from the Fiji School of Medicine and were promoted to the post of Pharmacist.
- Mrs. Louhangale Sauaki successfully completed her Diploma in Accounting from the Ministry of Education in December 2004.
- The Tonga Health Project through the assistance of AusAID had installed mSupply and provided the Vaiola Hospital Pharmacy with a computer to assist with their inventory control in July 2004.
- Mrs.Melenaite Mahe and Dr. Toakase Fakakovikaetau attended a 2 days informal meeting on Human Resources Development in Pharmaceuticals in Pacific Island Countries followed by 3 days workshop on EC-WHO partnership on pharmaceutical policies and the implementation of the Regional strategy for Improving Access to Essential Medicines, Nadi, Fiji, 3-5/11/04
- The six trainees have completed their second year of their two-year training in December 2004.
- 8.17 Central Sterilising Supply Department
- 8.17.1 Senior Sterile Supervisor, Mr. Tony Kerr is responsible for managing this section and is supported by 4 Sterile Supply Assistants.

8.17.2 The section's objectives are,

- To maintain quality standard of services at all times
- To provide Sterile equipment in quality standard procedures
- To establish and maintain quality activities, to ensure the continued monitoring of the sterilizing of all articles are processed through this department.
- To co-ordinate the collection, cleaning, decontamination, delivery and sterilization of equipment in accordance with the need of each department and essential clients.
- Maintain a harmonious working environment.

8.17.3 The section's function is,

 Provide the Operating Theatre, Wards, Health Centres, Reproductive Health Clinics, and Special Clinics with Sterile Surgical instruments, linens and other sterile items.

8.17.4 This section was allocated \$2,000.00 and was utilized for maintenance and technical supplies.

8.17.5 In delivering its services, the following were identified as milestones during the year,

- Senior Nursing Sister Sr. Lavinia Vakasiuola was permanently transferred from Niu'ui Hospital and joined the Central Sterilising Supply Department team.
- Utilization of new heat sealer for laminating packs for autoclave.
- Installation of new steam autoclave transferred on 22/11/04 to replace the old and broken one.
  - Mr. Tangitau Fukofuka attended the following workshops:
    - Customer service training on 17/6/04.
    - Stock control training on 24/6/04
    - Management training for section heads
    - Computer laboratory training on 2/8/04
    - Budget workshop on 5/8/04
    - Dissemination workshop on Tonga National Health Accounts on 8/11/04.

### NON CLINICAL SUPPORT SERVICES

Acting Hospital Administrator, Mr. Viliami Tautua'a is responsible for the supervision of non-clinical services at Vaiola and includes Hospital Security, Laundry, Seamstress, Hospital Grounds Maintenance, Domestic, Telephone Communications and Catering services.

#### 8.18 Hospital Security

8.18.1 This section consist of 3 staff and its objective is to maintain the safety of Vaiola and its staff and patients in 24 hours a day, 7 days a week and 2 hourly check of the thermostat and temperature of the mortuary's cooler.

The section collaborated with a private security company (Friendly Island) in January to meet the section 's objective.

#### 8.19 Laundry

8.19.1 This section consists of 1 supervisor, 4 Laundry men and 6 Laundry maids.

The section objective is to ensure all laundry requirements for Vaiola Hospital and the 7 Health Centres are performed in an efficient and cost effective manner. Thus its primary responsibility is the washing, ironing and labelling of all hospital linen.

- 8.20 Seamstress
- 8.20.1 This section employs a Seamstress Supervisor and 2 Seamstresses and its function is to provide all sewing requirements of the Ministry including Vaiola Hospital and the 7 Health Centres on Tongatapu, Niu'ui and Niu'eiki Hospital.
- 8.21 Hospital Ground Maintenance
- 8.21.1 This section employs 4 Groundsmen and its principle function is to ensure the cleanliness of Vaiola Hospital and the 7 Health Centre grounds in Tongatapu.

The section received tools and equipments for maintaining the hospital grounds and assist in planting of new gardens at the Administration Building compound.

- 8.22 Domestic
- 8.22.1 The section is responsible for the cleanliness of all wards and offices at Vaiola Hospital to maintain an environment that is clean and hygienic for patients and staff. The section employs 12 Wardsmaids and 8 Orderlies.

The section received new tools and equipment for maintaining the cleanliness of all wards and offices at Vaiola Hospital.

- 8.23 Telephone Communications
- 8.23.1 The Senior Telephone Operator is supported by 4 Telephone Operators. The section's responsibility is to facilitate efficient and effective local and international telephone communications on a 24-hour basis.

#### Telephone Usage for 2004

Month	Incoming Calls	Outgoing Calls
Jan	7567	7758
Feb	7421	7335
Mar	8117	7936
Apr	8154	8079
May	8009	8201
Jun	8365	8350
Jul	8587	8500
Aug	8865	8876
Sep	8799	8811
Oct	8906	8769
Nov	9003	8991
Dec	9300	9451
Total	101,093	101,057

#### 8.24 Catering Services

8.24.1 This section consists of 1 Cook and 7 Assistant Cook. The main functions of this section are to provide all catering requirements of the Ministry and deliver patient's meals in Vaiola Hospital.

### 8.25 Maintenance

8.25.1 Senior Hospital Engineer, Mr. Tu'ifua Taumoefolau is responsible for managing this section and is supported by 15 staff.

#### 8.25.2 The section's objectives are,

- To stock most vital spares.
- To enforce planned maintenance for all facilities and equipment.
- To improve provision of medical gases
- To improve monitoring of hospital equipments and facilities.
- To develop best-practice equipment management and maintenance processes.
- To introduce regular equipment maintenance program for the island hospitals.
- To develop a facility maintenance program for Vaiola Hospital.
- To appropriately manage the use of utilities.
- To appropriately manage and improve equipment purchases.
- Establish cost of repairs for biomedical equipment record.

#### 8.25.3 The section's functions are,

- Sourcing and procurement of equipment and spare parts from overseas.
- Commission and decommission of equipment.
- Provide engineering maintenance services for equipment and facilities.
- Perform minor alterations to facilities.
- Prepare proposals for improvement of equipment and facilities.

8.25.4 Medical Gas: The following table lists the oxygen produced at the Vaiola Oxygen Concentrating Plant:

Year	Number of large oxygen cylinders produced	Number of large oxygen cylinders purchased	Total Number of large oxygen cylinders supplied.
2000	1272	52	1324
2001	1700	42	1742
2002	1701	18	1719
2003	2226	30	2256
2004	2530	66	2596

Large Medical air	= 56 cylinders
Large Nitrous Oxide	= 10 cylinders

8.25.5 The Vaiola Hospital Steam Boiler used a total of 58,325 litres of diesel. The significant decrease from last year is mainly due to better maintenance of the steam system.

Year	Boiler fuel (Diesel) Consumption, litre
2000	97969
2001	98393
2002	69023
2003	60378
2004	58325

8.25.6 In delivering its services the following were identified as milestones during the year.

- Mr. Moala Finau was recruited as a Plumber Tradesman Leading Hand.
- Mr. 'Osaiasi 'Alatini completed a 10 months electrical maintenance program in Japan and was promoted to the post of Hospital Maintenance Electrician.
- Mr. Tu'ifua Taumoefolau completed his Master of Philosophy in Mechanical Engineering in Australia and was
  promoted to the post of Senior Hospital Engineering.
- Outer island and engineering duty tours were carried out, maintaining and repairing electrical hospital, dental and biomedical equipments was completed.
- Mr. Ian Davies advisor for the Medical Equipment Maintenance (MEMP) completed his one year term with the Maintenance Section in July 2004.
- The oxygen supply capacity was increased by renting extra 43 G size cylinders from BOC and a 20' shipping container was purchased to store the cylinders and the hospital unused medical equipment.

## 9 NURSING SERVICES

#### 9.1 Management

- 9.1.1 Chief Nursing Officer Mrs Lata Malu is responsible for the efficient and effective management of the Nursing Division.
- 9.1.2 The division's goal is to contribute to the health of the nation through the provision of the best possible nursing care services.
- 9.1.3 The division is made up of three sections,
  - 1. Hospital Nursing
  - 2. The Queen Salote School of Nursing
  - 3. Public Health Nursing

- 9.2 Vaiola Hospital Nursing
- 9.2.1 Matron, Mrs. Valoa Fifita is responsible for the management and administration of this section and is supported by 5 Senior Nursing Sister, 1 Assistant Senior Nursing Sister, 7 Nursing Sister Graduate, and 187 nursing staff.
- 9.2.2 The section's objectives are,
- To improve and upgrade Nursing Staff management.
- To upgrade standard of Hospital Nursing Services.
- To review and provide policies and regulation staff performance.
- To upgrade Nursing Staff skills and knowledge.

9.2.3 The section's functions are,

- Provide best quality Nursing Services to all patients.
- Implement therapeutic measures ordered by Medical Officers with intelligent application to the needs of the patients.
- Co-operate with all hospital staffs and services to facilitate and improve patient management.
- Support in-service and Post Basic Training of Nurses.
- 9.2.4 The section was allocated \$54,000.00 and was utilized for purchase of uniforms for nurses and linen requirements for all the hospitals and health centres.
- 9.2.5 In delivering its services, the following were identified as milestones during the year,
- Trainings implemented:
  - Staff Nurse Pinomi Latu completed her Bachelor of Nursing from the Campus of Central Queensland University, Fiji.
  - Nursing Sister Graduate Salote Schaumkel attended a Cancer Studies from 17-28/5/04 and a short course on Nursing Management, Singapore General Hospital, 21/6-20/7/04.
  - Nursing Sister Graduate Seilini Soakai attended Diabetes Training Manual for Health Workshop in Fiji 6-9/9/04.
  - Senior Sister 'Ofa Takulua attended Equity in Pay and Employment Workshop in Wellington, New Zealand, 2-5/3/04.
  - Staff Nurse Malolo Vea and Staff Nurse Fiona Va'eno attended attachment during Ballarat Exchange.
  - Staff Nurse Mele Vuki attended Primary Eye Care training, Cook Island, 21-28/5/04.
  - Nurse Midwife Lower Mafi, Staff Nurse Mafi Tupou and Staff Nurse 'Olive Tu'itupou attended 3 months attachment, Suva, Fiji 16/1 – 19/4/04.
  - Nurse Midwife Mafi Ealelei attended Midwifery attachment, NSW 13/05/04 25/06/04.
- 9.3 Queen Salote School of Nursing
- 9.3.1 Mrs 'Ana Kavaefiafi, Principal, Queen Salote School of Nursing is responsible for the management and administration of the School and is supported by 8 nursing education staff, 1 Computer Operator Grade III and 1 Librarian.

9.3.2 The school's objectives are,

- To provide a continuous process of curriculum development/review based on evidence-based practice and assessment of its effectiveness in the preparation of students for nursing practice.
- To develop the full potential of the nursing student to enable him/her to apply the knowledge and skills in various health care setting.

- To direct educational programme to utilize physical, medical, social sciences and humanities as foundation for learning the art and science of nursing.
- To develop appropriate instructional strategies to cope with individual differences of the learner.
- To render student–based training to nursing students.
- To provide transport for student's field experience.
- To effectively manage all post-basic nursing training.
- To provide a forum where others can contribute to the preparation of future nurses.
- To utilize other health professionals in the training of nursing students.
- To upgrade all staff of Queen Salote School of Nursing to degree level for implementation of diploma level training for nurses.
- To upgrade and maintain the physical facilities at Queen Salote School of Nursing to sufficiently accommodate staff offices, a science laboratory, a nursing science laboratory, a library, and a staff common room with rest room facilities.
- To facilitate the upgrading of instruments and equipments in hospital wards as support service for student learning.

9.3.3 The school's functions are,

- Develop, implement and evaluate a curriculum that is academically sound, scientifically based, culturally acceptable, socially appropriate and internationally recognized.
- Recruit and prepare suitable nursing candidates (Basic and Post-Basic Nursing) for quality and effective health care delivery to the people of the Kingdom of Tonga.
- Work collaboratively within the Nursing Division and other divisions of the Ministry to maintain the highest standards of nursing practice for nurses of the Kingdom of Tonga.
- Provide an educational programme that will continuously upgrade the knowledge and skills of nurses both locally and in isolated areas.
- Initiate a programme that prepares the staff of Queen Salote School of Nursing to function at an optimum level of competency.
- 9.3.4 The School was allocated \$9,000.00 for implementation of its various activities during the year.
- 9.3.5 The School conducted, facilitated and attended the following meetings and workshops.
- Curriculum Development and Review Workshop conducted from 7-8/7/04 and again from 26-28/7/04, Queen Salote School of Nursing, Nuku'alofa.
- In-service Training for Tongatapu Nurses conducted from 30-31/9/04, 7-8/10/04 and again on 14-15/10/04, Queen Salote School of Nursing, Nuku'alofa.
- Senior Staff Nurse 'Ana Fevaleaki as relieving Clinical Nurse Tutor attended the Sign Language training conducted on 12-18/1/04, Training Centre, Nuku'alofa.
- Sr. Tilema Cama attended the Train of Trainers training on Reproductive Health conducted from 2-13/2/04, Sydney, Australia.
- Sr. 'Ana Kavaefiafi attended the Train the Trainers for use of the Reproductive Health manual conducted from 15-23/4/04, Suva Fiji.
- Sr. 'Ana Kavaefiafi attended the International Code for marketing Breast Milk Substitute conducted from 29/11-3/12/04, Suva, Fiji.
- Sr. 'Ana Kavaefiafi attended a meeting on Open Learning Health Network held on 9-10/12/04, Nadi, Fiji.
- Sr. 'Amelia Tu'ipulotu attended a Research Training conducted on 17-28/5/04, Nuku'alofa.
- Mr 'Isileli Fietonu attended a Safe Blood Workshop held on 22-24/11/04, Red Cross, Nuku'alofa.

9.3.6 During the year, the school was fortunate to host these Overseas Nursing Students,

- 3 Auckland University of Technology Nursing students gained Clinical Experience in Vaiola Hospital.
- 8 Nursing students from Camosun College of Nursing gained 5 weeks Clinical experience in Vaiola Hospital and Community.

# 9.3.7 In delivering it services, the following were identified as milestones during the year,

- A memorandum of Agreement was signed with Camosun College of Nursing Victoria for nursing students, Canada to obtain their clinical experience at Vaiola and in the Community.
- A Revised Curriculum for a Critical Care Course was developed and approved to be implemented in February 2005.
- A policy was approved for student nurses that fail to achieve the requirements for year II or Year III, after being terminated, may return at a later date (semester) to complete the subjects failed.

## 9.4 Public Health Nursing

- 9.4.1 Supervising Public Health Sister, Mrs Sela Sausini Paasi manages this section and is supported by Senior Nursing Sister Talau Takau, Senior Nurse Midwife Falahola Lavaki and 39 Reproductive Health Nurses.
- 9.4.2 The section's goals and objectives are,
- To provide effective and quality Reproductive Health services to women of child bearing age through:
  - Easy access to reproductive health, adolescent and sexual health.
  - Maintaining high coverage of ante natal and post natal care.
  - Helping couples and individuals to plan their families.
- To develop skilled and committed staff to meet the evolving roles of Reproductive Health Nurses.
- To ensure and monitor good health and normal development among infants and under five years old children through good immunization coverage, good nutrition and good management of illnesses.
- To promote and improve the rate of exclusive breast feeding.
- To achieve safe motherhood with continuing low mortality rates and high coverage levels of all services
- To maintain and equip the Reproductive Health Clinics and health centres.
- Provide on-going in-service training for all Reproductive Nurses in issues related to their work.
- To restore the nursing numbers to the establishment level.
- Conduct regular meetings liaise with other community programmes and conduct regular island visits.

### 9.4.3 The section's functions are,

- Provide services to women during their child bearing age, adolescents, children and infants and the community at large.
- Provide ante natal and post natal care to women
- Responsible for the health of the adolescents' population
- Assisting couples to plan their family and provide family planning methods depending on the couples choice
- Provide immunization services to ante natal mothers, children and infants as indicated by the National Immunization Policy.
- Responsible for school health and school clinics
- Responsible for the health of under five year old children and infants
- Promote and encourage mothers to exclusively breast feeding their babies for at least four months
- Responsible for the community nursing services to sick people as well as healthy people
- Collaboration, coordination, teamwork and participation with other health team and some government sectors in a wide range of community development initiatives.
- 9.4.4 The section was allocated \$320,472 for implementation of its services and also received financial support from United Nation of Population and Development (UNFPA) and World Health Organisation.
- 9.4.5 In delivering its services, the following were identified as milestones during the year,
- Senior Nurse Midwife Falahola Lavaki attended a Community Health Administration Course in Okinawa, Japan in early January 2004.

- Supervising Public Health Sister Sela Paasi attended the Adolescent Reproductive Health, Train the Trainers Workshop in Sydney, February 2004. She also attended the Pacific Immunization Workshop in Auckland, New Zealand in March 2004.
- Dr. 'Aivi Puloka, Sr 'Ana Kavaefiafi and Nursing Sister Afu Tei attended the Reproductive Health Technical Workshop in April 2004.
- Nurse Practitioner, 'Anilona 'Onesi successfully completed her training in July 2004.
- Supervising Public Health Sister Sela Paasi and Mrs Poaki Totau attended the UNFPA Project Management Workshop in Nadi, Fiji in October/ November 2004.
- Submission of the Section Corporate Plan for 2004-2007 to the Ministry of Health was in April 2004.
- The Policy for National Immunization Programme and the Immunization Handbook for health workers which were endorsed by the Hon. Minister of Health on 22<sup>nd</sup> September 2003 were implemented as from January 2004.
- Electronic Registry of Immunization Services started in November 2004.
- The 3<sup>rd</sup> Cycle of UNFPA (2004-2007) started implementation as from September 2004.
- The Public Health Nurses conducted the 5<sup>th</sup> dose of DPT antigens to school entry students and Td Immunization to school leavers' at Form 6 throughout the Kingdom with coverage over 95%.
- Draft Cold Chain Policy, Draft Immunization Certificate and Revised Immunization card approved by National Health Development Committee.
- Good partnership and effective collaboration between the Ministry of Health, people of the community and Tofa Family Health Association were strengthened in working towards production of outputs in both Reproduction Health and Adolescent Reproductive Health programmes.
- Reproductive Health Nurses were able to attend various trainings, workshops, seminar meetings throughout the year.
- Supervisory visits to the Reproductive clinics and health centres at Tongatapu were conducted throughout the year at regular intervals.

# 10 DENTAL SERVICES

- 10.1 Chief Dental Officer, Dr. Viliami Telefoni Latu is responsible for managing and coordinating all activities relating to dentistry to ensure the services delivered are efficient and effective, monitor and maintain high quality standards to ensure the ongoing improvement in the dental services.
- 10.2 The division's objectives are,
- To reduce the incidence of dental caries and other oral health problems.
- To provide best available treatment to people seeking dental care with available resources.
- To ensure that all people in Tonga have access to the best possible care to achieve optimal oral health.
- T o comply with the laws and statutes of the Kingdom of Tonga.
- To create and maintain a working environment that is safe and productive to maintain the interest and motivation of staff.
- To use every problem identified as an opportunity for improvement.

## 10.3 The division's functions are,

- Prevent dental diseases.
- Promote oral health.
- Treat dental diseases.
- Provide curative and preventive dental care for the people of Tonga.
- Ensure the public has access to the best oral health care.
- 10.4 The Division was allocated \$110,000.00 and was utilized to facilitate efficient and effective deliverance of curative services, school dental services and public health (promotion and preventive activities not in school).

- 10.5 The dental establishment consists of 47 posts of which 41 were filled with 6 vacancies. This consist of 1 Chief Dental Officer, 2 Principal Dental Officer, 4 Senior Dental Officer, 5 Dental Officer, 4 Senior Dental Therapist, 6 Dental Therapist, 1 Dental Technologist, 1 Senior Dental Technician, 7 Dental Chairside Assistant, 7 Dental Therapist Trainee, 1 Dental Sterile Supply Assistant, 1 Dental Computer Assistant, and 1 Dental Receptionist.
- 10.6 Dental services are made available to the public through dental outpatient and inpatient services at Vaiola Hospital and health centres for the people of Tongatapu, Prince Wellington Ngu Hospital and Health centres for the people of Vava'u, Niu'ui Hospital and Health centre for Ha'apai people, Niu'eiki Hospital for 'Eua, as well as Likamonu Health Centre for Niuatoputapu and Tu'akifalelei Health Centre for Niuafo'ou people.
- 10.7 These services were provided during the year:
- Oral health promotion and education is ongoing.
- Actively support and enforce improvement of oral hygiene.
- Provide advice and instruction on appropriate use of fluoride.
- Educate people how to control intakes of sugar.
- Support and encourage continued education of Dental Staff.
- Still enforce school dental preventive programme.
- Still continue "Bright Smile Bright Future", "Fluoride Mouth Rinse", and "Pit and Fissure Sealants" programmes.
- Training of 7 Dental Therapist Trainees.
- 10.8 In delivering its services, the following were identified as milestones during the year,
- World Health Organisation funded workshops on Awareness and Oral Health Promotion to Health Officers, Midwife and Public Health Nurses; communities of Tongatapu, Vava'u and Ha'apai.
- Decline of caries rate from DMF3 to DMF2 on 12 years school children.
- Ballarat Dental Team from Australia upgraded and equipped the Niu'eiki Dental Clinic.
- Two more Primary Schools included in the Fluoride Mouth Rinse Programme in Tongatapu.
- Extension of Pits and Fissure Sealant programme to Vava'u and Ha'apai.

#### 11 ADMINISTRATION

- 11.1 Management
- 11.1.1 Principal Health Administrator, Mr. Tu'akoi 'Ahio is responsible for managing the division.
- 11.1.2 The Division's general vision is doing the right thing right.
- 11.1.3 The Division's core mission is to respond effectively to all the support services required by the Ministry in term of,
- Administration.
- Human Resources.
- Finance.
- Transport.
- 11.1.4 The Division's goal is to provide the best Administrative supporting services in the Government Departments.
- 11.2 Administrative and Corporate Services
- 11.2.1 The Health Administrator is currently managing this section and is supported by 1 Clerk Class II.

## 11.2.2 The section's objectives are,

- To improve customer service.
- To improve the basic management skills of the section heads.
- To establish a standard transference for processing of administrative procedures.
- To provide an administrative protocol as reference for the Divisional and Sectional Managers.
- To improve administrative support for overseas and domestic referral.
- To establish an inventory database of Ministry's assets.

11.2.3 The section's function is,

- Provide an effective and efficient administrative support services for the Ministry.
- 11.2.4 This section was allocated \$1,175,394.00 and was utilized for office operation.
- 11.2.5 In delivering its services, the following were identified as milestones during the year
- Streamlined of administrative procedures.
- Documentation of administrative proceeding.
- Weekly Staff Meeting.
- Partially completed inventory's registry of asset.
- 11.3 Human Resource Management
- 11.3.1 The Health Administrator, Mrs. 'Olivia Tu'ihalamaka who is responsible for these services is currently on study leave. The Computer Operator Grade III, Ms. Moli Kiola is managing this section and is supported by 5 staff.
- 11.3.2 The section's objectives are,
- To ensure that staff level meet work needs.
- To maintain an accurate and up-to-date Human Resource Management Information System.
- To provide managers with accurate, relevant and timely Human Resource Information.
- To develop and introduce an induction programme suitable for all new members of staff.
- To ensure that staff being recruited/selected meet the criteria for the position and fit in with the culture of the Ministry.

11.3.3 The section's function is,

- Provide human resource management services for the Ministry of Health.
- 11.3.4 In delivering its services, the following were identified as milestones during the year,
- Micropay Human Resource Management Information System report produced.
- Train Human Resource staff to use micropay.
- Human Resource policies developed and revised.
- Induction program developed.
- Performance appraised and agreement for the executive developed and signed.
- 11.4 Financial Management
- 11.4.1 Senior Accountant, Ms. Sesimani Taulanga is responsible for managing this section and supported by 14 staffs.

11.4.2 The section's objectives are,

- To provide a timely payment of staff salary/wages/income tax etc.
- To improve revenue collection within the Ministry of Health and achieve annual revenue target.
- To provide an updated reports on financial matter.
- To provide budget to all cost centres and monitor expenditure against the budget.
- To produce a realistic Draft Estimates annually.
- To broaden staff skills in Sun System.

11.4.3 The section's functions are,

- Salary and Wages Payment.
- Revenue Collection.
- Financial Management.
- Preparation of Draft Estimates and Budgeting.
- 11.4.4 The section was allocated \$13,125.00 and was utilized for office operation.

11.4.5 In delivering its services, the following were identified as milestones during the year,

- Achieved revenue target for 2003/04 fiscal year.
- Monthly report distributed to Programme Managers on a monthly basis.
- 11.5 Transport Services
- 11.5.1 Transport Supervisor, Mr. Tu'itavake Lavaki is responsible for managing this section and supported by 31 drivers.
- 11.5.2 The section's objectives are,
- To improve the working schedule.
- To have better control of vehicle movement.
- To improve the system of maintaining and replacing of old vehicles.

11.5.3 The section's function is,

- Provide an effective transport supports system for the Ministry of Health's needs.
- 11.5.4 The section was allocated \$82,116.00 and was utilized for purchase of fuel and maintenance of vehicles.
- 11.5.5 In delivering its services, the following were identified as milestones during the year,
- Weekly roster maintained.
- Effective control of vehicle movement through radio network.
- Established two standby ambulance drivers daily.
- Established refilling contract with BP Oil at Tokomololo Machinery station.
- Secure new vehicles for HIC(s) usage.

## 12. HEALTH PLANNING AND INFORMATION

### 12.1 Management

- 12.1.1 Principal Health Planning Officer, Mr Taniela Sunia Soakai was responsible for managing the Division until 14<sup>th</sup> September when he took up an appointment with World Health Organisation in Geneva. Health Statistic Officer Mr. Sione Hufanga is currently managing the Division that consists of the Health Planning, Health Information, Information Technology, Medical Records and Research Sections.
- 12.1.2 The Division's objective is to provide efficient and effective, health planning, health information, project planning and medical records services to its customers within and from outside the Ministry locally, regionally and internationally.
- 12.2 Health Planning
- 12.2.1 This section is headed by the Principal Health Planning Officer and is assisted by a Health Planning Officer and a Computer Operator Grade III.
- 12.2.2 The section's mission statement is; To provide efficient, timely and effective health planning services to the Ministry and partner organizations.

12.2.3	The section's key	result areas and objectives are:
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Key Result Area	Objective	Status
1. Staffing and staff development.	<ul> <li>To ensure the required number of staff with the appropriate knowledge and skills, to provide efficient and effective health planning services are employed.</li> <li>To provide opportunities for staff training.</li> <li>To secure funding for staff training.</li> <li>To prioritize training needs.</li> </ul>	<ul> <li>The Health Project Officer's post was advertised and closed on 7/6/04. 3 candidates applied however only one was qualified thus the interview was conducted on 7/7/04.</li> <li>The Health Project Officer awaits Public Service Commission approval thus it is anticipated her recruitment by late January 2005.</li> <li>Training objectives on planning for the Health Planning Officer was submitted to World Health Organisation to identify appropriate institution for 3 months short term training in 2005.</li> <li>Training needs identified for the Ministry includes distance learning computer studies on work-related areas e.g. diabetes, laboratory, health informatics, etc. Critical Care Nursing Course was also identified with Auckland University of Technology and to be taught at Queen Salote School of Nursing.</li> <li>Most of these trainings are funded by World Health Organisation.</li> </ul>
2. Planning approach for health services In Tonga.	<ul> <li>To document the planning process.</li> <li>To disseminate the planning approach and educate staff.</li> </ul>	<ul> <li>The Principal Health Planning Officer and Health Planning Officer were assisted by Dr. Lynleigh Evans of the Tonga Health Project to review the 2001-2004 Corporate Plan via workshops and one-to-one consultations with Heads of Sections and Heads of Divisions of the Ministry.</li> <li>This process allows the development of the 2005/06 – 2007/08 Corporate Plan and Key Performance Indicators were identified and incorporated.</li> </ul>

3. Master Plan for Vaiola Hospital.	<ul> <li>To prepare a Master Plan and Stage 1, facilities plan for Vaiola.</li> <li>To undertake detailed Stage II facilities planning.</li> </ul>	<ul> <li>Negotiations with both the World Bank and JICA for Package B1 have been finalized.</li> <li>Package A – US\$3921815; Package B1/i – US\$10,349,354</li> <li>Package B2 – US\$6,375,499; Package C – US\$4,319,281</li> <li>Package D – US\$2,216,100; Package E – US\$1,450,672</li> <li>Package F – US\$2,705,380</li> </ul>
4. Policy development capabilities.	<ul> <li>To establish a research capability.</li> <li>To provide support for development of relevant health policies.</li> </ul>	<ul> <li>Senior Medical Officer (Dr. Sunia Foliaki) resumed duty to the Research Section and undertook responsibilities of conducting health surveys.</li> <li>Dr. Foliaki also assists clinicians with submission of health research proposals to Cabinet for approval via the National Health Development Committee and National Health Ethics and Research Committee.</li> </ul>
5. Concepts of evaluation and health outcomes.	<ul> <li>To evaluate planning processes.</li> <li>To develop the concept of key performance indicators.</li> </ul>	<ul> <li>Review of Corporate Plan for the period 2001-2004 allowed the documentation of achievements of the Sections, Divisions, and the Ministry as a whole during the period.</li> <li>Principal Health Planning Officer and Health Planning Officer were assisted by Dr. Lynleigh Evans to develop and adopt the concept of key performance indicators in the development of Corporate Plan for the period 2005 – 2008.</li> </ul>
6. National Health Development Committee.	<ul> <li>Formulation of recommendations on matters pertaining to the Kingdom's health policy, including legislation and regulations as may be required.</li> <li>Planning for health development, including the training and utilization of the required health manpower, as part of the national development plan.</li> <li>Determine the programmes and projects required to fulfil the health development plan, and recommending development and recurrent estimates to support the programmes</li> <li>Fostering intra-service and interorganizational cooperation and coordination of the various health programmes in operation.</li> <li>Monitoring the implementation of programmes and updating plans and programmes as required.</li> </ul>	<ul> <li>The Hon Minister of Health is the Chairman of the Committee and permanent members include the Director of Health, Director of Planning, Chief Medical Officer Public Health, Chief Medical Officer Clinical Services, Medical Superintendent Clinical Services, Medical Superintendent Support Services, Chief Dental Officer, Chief Nursing Officer, Principal Queen Salote School for Nursing, Principal Health Administrator, Principal Health Planning Officer, Senior Accountant and Health Planning Officer as Secretariat.</li> <li>Continues to meet every last Friday of every month.</li> <li>A new Quarterly Reporting System have been introduced by the Team Leader of the Tonga Health Project thus the 6 Heads of Divisions present these reports in the month following end of each quarter.</li> </ul>

# 12.2.4 The section's functions are;

- In consultation with programme managers responsible for the development, implementation and monitoring of the Ministry's Strategic planning process.
- Development, implementation and monitoring of the bi-annual WHO Programme Budget.
- Liaise with donor agencies in regard to development projects and activities.
- Provide secretariat functions for the National Health Development Committee.
- Prepare, implement and monitor the Ministry's Development Estimates.
- Oversee activities related to human resource training and development.

- 12.2.5 The Section was allocated \$9,575.00 and was utilized for purchase of office supplies, printing and stationery, and processing of the Ministry's staff overseas training needs (visa application etc).
- 12.2.6 In delivering its services, the following were identified as milestones during the year,
- Redesignation of the post "Senior Health Planning Officer" to "Principal Health Planning Officer".
  - Principal Health Planning Officer, Mr. Sunia Soakai attended the following meetings and workshops:
  - Pacific Health Summit for Sustainable Disaster Risk Management, 14–18/6/04, Hawaii, United States.
  - Workshop on Financial Planning and Management for Health for Pacific Island Countries, 23-26/8/04, Nadi, Fiji.
  - Pasifika Medical Association Conference 2005, 9-11/9/04, Wellington, New Zealand.
  - Bid Opening and Contract Negotiations for the Upgrading and Refurbishment of Vaiola Hospital Project, 17-26/11/04, Tokyo, Japan.
  - Mr. Soakai was approved to pursue 11 months temporary appointment with World Health Organisation as a Human Resource Specialist Workforce Planning, October 2004 – September 2005, World Health Organisation Headquarters, Geneva, Switzerland.
- Computer Operator Grade III, Mrs. Poaki Totau attended a Regional workshop on Management of United Nation of Population and Development (UNFPA) Programme, 25–28/10/04, Nadi, Fiji.
- Reviewed Corporate Plan 2001/02 2003/04 and successful development of Corporate Plan for the period 2005/06 2007/08 for the Ministry.
- Health Planning Officer, Mrs. Mafi Hufanga attended a Corporate Planning Workshop in the Government Training Center, 10-12/2/04, Fasi, Nuku'alofa.
- European Union funds 3 years project for Vava'u Health Sector with ToP\$1,000,000 each year. Year 1 2004/05
  activities include Renovation of 5 existing staff quarters and Fencing of hospital compound in Ngu Hospital. The
  Renovation contract was awarded to Vava'u Construction and it is anticipated to complete by March 2005. The
  Fencing contract was awarded to Naitoko Contractor and it's anticipated to complete by March 2005 as well.

#### 12.3 Health Information

12.3.1 Health Statistics Officer, Mr Sione Hufanga is responsible for managing this section and is supported by 3 staff.

Key Result Areas	Objectives
Adequate number of skilled and committed staff	<ul> <li>To train staff.</li> <li>To provide staff with further training in health information management and data analysis.</li> </ul>
Efficient and effective health information systems	<ul> <li>To improve data analysis capability.</li> <li>To improve data quality to international standard.</li> <li>To improve the reporting of clinical information and report production.</li> </ul>
Adequate facilities, equipment and supplies	<ul> <li>Improve working environment.</li> <li>Ensure that staffs are supported with appropriate equipment and office supplies.</li> </ul>

12.3.2 The section's objectives are,

#### 12.3.3 The section's functions are,

- Computerize district hospital discharge data.
- Computerize Health Centre weekly and monthly reports.
- Computerize Hospital weekly and monthly reports.
- Disseminate health information locally, regionally and internationally.
- Prepare statistical tables for the Annual Report of the Hon. Minister of Health.
- Computerize Births and Deaths.
- Liaise with Justice and Statistics Department in matters pertaining to births and deaths registration.

- 12.3.4 The section was allocated \$3,750.00 and was utilized for the purchase of office supplies and maintenance of office equipment.
- 12.3.5 In delivering its services, the following were identified as milestone during the year,
- Computer Assistant Mrs. Finau 'Akau'ola was promoted to Computer Operator Grade III.
- Mrs Finau 'Akau'ola participated in a 2 weeks code training in Brisbane funded by Health Information Component under the World Bank Project.
- Ms. Leonia Malungahu attended an in-country statistics course funded by South Pacific Commission and coordinated by Government Statistic Department.
- Ms. Nauna Paongo attended the Health Information Course in Suva, Fiji as part of the Postgraduate Diploma Programme hosted by Otago University. This programme is expected to complete at the end of this year 2005.
- Mr. Sione Hufanga pursed 6 week fellowship in Malaysia in Health Information Management.
- Mr. Sione Veilofia is pursuing his final year for a Bachelor in Health Information Management (3 years) in Sydney University, Australia.
- Ongoing planning, coordinating, implementing and monitoring of Inpatient Working Group activities.
- A series of meetings and workshops were conducted to develop the Minimum Data Set (MDS). This is a
  preliminary step for standardizing data definitions used by the Ministry.
- In November 2004, the Health Information Component under World Bank Project provided two good quality computers for this section.
- Pacific Open Learning Health Network (POLHN) Computer Lab has become the major communication centre for staff of the Ministry of Health especially the Nursing School. It provides health related course for staffs through Online Health Network. This mode of study is very cost effective and productive since almost all of the applicants have successfully completed the available course.
- 12.4 Information Technology
- 12.4.1 Computer Programmer, Mr. Tu'amelie Paea is managing the section and assisted by 1 daily paid Computer Operator Grade III.
- 12.4.2 The section's objectives are,
- To ensure adequate staffing levels.
- To ensure computer standards are maintained.
- To optimize support and development Costs.
- To improve data quality.
- To improve access for health planning and information internationally.
- To improve workplace.

#### 12.4.3 The section's function is,

- Responsible for supporting functioning of computer within the Ministry and developing policies and procedure for procurement of new information technology equipment.
- 12.4.4 Provided below is the number of new computers installed during the year, 2004

Division/Section	No. of computers
Administration/ Accounts	3
Administration/ Human Resource	1
Health Planning & Information/Information Technology	1
Outpatient	1
Laboratory	1
Blood Transfusion	1
Hospital Engineering	1

Public Health	2
Public Health Nurse	1
Total	12

Total number of computers in the Ministry of Health, 2004

Network	Number of computers
Health	67
Medical Store	6
Nursing School	5
Computer Lab	12
Standalone computers	15
Outer Islands	1 in each island
Total	108

12.4.5 In delivering its services, the following were identified as milestones during the year:

- Setup Wed Mail for the Ministry http://www.health.gov.to.
- Connect various office computer network.
- Setup a server and to use for:
  - mail server (local web mail).
  - internet connection through Ministry of Finance server.
- Provide fully control e-mail accounts for staff.
  - Create e-mail address for staff.
- Computer inventory or the device audit.
  - Number of new computers.
- Computer virus on network (Update anti-virus form Ministry of Finance).
- In-house maintenance and repairing.

#### 12.5 Medical Records

12.5.1 Acting Senior Medical Records Officer in Charge, Ms 'Ana Leha'uli is responsible for managing this section and is supported by 8 staff.

12.5.2 The section's objectives are,

- To continue training and development of Medical Records staff.
- To have proper completed records.
- To ensure staff understand their job description.
- To have a proper secondary storage area to accommodate all inactive records for future reference, research and education purposes.
- To cull inactive medical records to allow storage space for active medical records.

#### 12.5.3 The section's functions are,

- Ensure all medical record inpatient and outpatient needs are attended to.
- Ensure all admissions, transfer and separation procedures are completed and in order.
- Attend to all health care professionals' requests regarding patients' medical records.
- Ensure notifiable diseases as required by the Public Health Act 1992.
- Issuing of death certificates.

12.5.4 This section was allocated \$4,000.00 for office supplies and equipment.

12.5.5 In delivering its services, the following were identified as milestones during the year,

- Operate 24-hours to ensure efficient and effective medical record services.
- Recruited 1 daily paid staff to assist the section with their many responsibilities.
- On-the-job training is continuously conducted to ensure skilled and committed staff.
- Acting Senior Medical Records Officer in Charge attended a short course on ICD-10 Coding, Brisbane, Australia.
- World Bank consultant Mrs Jackie Kent assisted the section with coding skills.
- 1 Medical record staff attended the programme for youth in Japan.
- Acting Senior Medical Records Officer in Charge was awarded a World Health Organisation Fellowship in Malaysia.
- Medical record staffs attended in-country training courses like customer services and management training programme.

## 12.6 Research Unit

12.6.1 Senior Medical Officer, Dr. Sunia Foliaki is responsible for managing the section and is supported by one daily paid clerk.

12.6.2 The section's objectives are,

- To be the primary recipient and processor of all health research proposals submitted to the Ministry of Health and its consequent submission to the Director of Health and/or the National Health Ethics and Research Committee.
- To initiate and recommend to the Ministry of Health appropriate health research.
- To conduct specific health research as approved by the Ministry of Health.
- To collaborate and coordinate national and international health research involving the Ministry of Health.
- To ensure that any collaboration is mutually agreed on in terms of conduct of research and Intellectual Property matters.
- To coordinate and develop health research capacity for local staff.

12.6.3 The section's function are,

- Promote, collaborate and conduct appropriate and high quality health research on priority issues affecting the health of the people of Tonga and the development of national capacity to undertake health research.
- 12.6.4 Provided below is a summary of the section's activities during the year.

## 12.6.4.1 Asthma Self Management Project

- Operationalized a special clinic for all asthmatics (all age groups) in Tongatapu in the last quarter of the year with a total of 212 clients to date been seen and participated in an interview/educational session on asthma. 53 clients of the 212 clients were excluded and referred back to the general medical clinic due to concurrent medical conditions and the remaining 159 are regularly reviewed and participate in the Asthma Self Management Project. This is a follow up and part of the special attention and research on asthma whereby Tonga including 5 other Pacific Islands participated in the International Study of Asthma and Allergies in Childhood (ISAAC).
- The aim of the Project is to enlighten and educate people suffering from asthma on how to better manage their asthma with available medications.
- The Project is running well and receives financial assistance from Wellcome Trust (UK) and Massey University, New Zealand.
- The special clinic for asthmatics is supported and collaborated with staff from the Medical Unit, Paediatric Unit and the Outpatient Department of Vaiola. Part of the project is a control group (Vava'u District) in which the delayed intervention is expected to be implemented in September 2005. The rest of the Kingdom will participate in the protocol for asthma self management when funds are available for travels to outlying stations.

# 12.6.4.2 Cancer in Pacific Populations Study

- The section is currently the Principal Investigator and Implementor of the above study which collectively involves:
  - a descriptive analyses of cancer incidence and mortality in Tonga;
  - a case-control study of breast cancer in women in Tonga beginning from the 1<sup>st</sup> of January 2005;
  - the women with breast cancer who agree to participate in the case-control study will also form the basis of a follow-up study, which will examine factors that determine cancer survival.
- The study is closely linked to the establishment of Tonga's Cancer Registry detailed below. A similar study is being carried out in Fiji, Samoa and Niue as well as among Pacific people in New Zealand.

## 12.6.4.3 Cancer Registry

- The section in collaboration with Massey University and the New Zealand Cancer Registry has obtained and adapted the World Health Organisation's International Agency for Research on Cancer (IARC) cancer registry software CanReg4 (formatted for a Tonga registry) as Tonga's cancer registry data management software.
- Data entry for cancer since the last 10 years. Approval of recommendations for the full establishment of the cancer registry was approved by the Ministry of Health's National Health Development Committee in its meeting conducted on 1<sup>st</sup> April 2005.
- The section is undertaking this task closely with Dr. Siale 'Akau'ola and staff of the Laboratory Services. It is anticipated that a Cancer Registry for Tonga in the initial stages at least calls for manpower and skills from personnel and institutions with experience in Cancer Registry.

## 12.6.4.4 Pacific Obesity Prevention in Communities (OPIC) Project

- The section on behalf of the Ministry of Health (Tonga) is collaborating with the Fiji School of Medicine (FSM), Fiji Ministry of Health, the University of Auckland and Deakin University on a 5-year study entitled the PACIFIC OBESITY PREVENTION in COMMUNITIES (OPIC) PROJECT.
- Obesity Prevention in Communities (OPIC) will provide data on the effectiveness on a range of interventions to
  prevent obesity among young people in Fiji, Tonga, New Zealand and Australia.
- The interventions used in this project will include education, policy, environmental and social strategies in several settings such as schools, churches, villages and neighbourhoods. The study groups in Tonga are the districts around Kolonga, Houma and Nukunuku.
- A full time Research Assistant funded by Obesity Prevention in Communities (OPIC) whose primary task to oversee data management for the Obesity Prevention in Communities (OPIC) project will be based with the section for the lifetime of Obesity Prevention in Communities (OPIC) to assist with other health research activities of the section. The decision to base one of Obesity Prevention in Communities (OPIC) Research Assistants directly under the section is one of the strategies whereby Obesity Prevention in Communities (OPIC) "helps" out with the effort by the Ministry of Health at capacity building for its research agenda.

## 12.6.4.5 Prevalence of Group B Streptococcus (GBS) among pregnant women in Vaiola Hospital

- The section is a Co-Investigator of the above study with the Paediatric Unit as Principal Investigator. This project is commencing in May 2005.
- The main objectives of the study are:
  - to determine the carriage rate of GBS among pregnant mothers,
  - to determine the relationship of GBS carriage among mothers to Premature Delivery,
  - to ascertain the relationship between GBS positive mother and sepsis among neonates as well as determining any relationship between GBS positive mother to the overall outcome of pregnancy

12.6.5 In delivering its services, the following were identified as milestones during the year,

- 17-28 May 2004; Tonga Reserve Bank, Nuku'alofa: International Course on Cancer Epidemiology: Principles and Methods.
  - Dr. Sunia Foliaki was co-director of the International Course on Cancer Epidemiology: Principles and Methods. This international course is held once a year in different parts of the world and has not been held in the Pacific including Australia, New Zealand or Hawaii.
  - The coursework is one of the international courses of the International Agency for Research on Cancer (IARC) with faculties from the International Agency for Research on Cancer, Hawaii, Australia and New Zealand universities.
  - A total of 43 international participants attended and included representatives from Asia, Australasian and Oceania and as far as Iran and Scotland. A total of 10 participants were from Tonga, 7 of whom attended 90% of the coursework throughout the 10 days.
- September 2004; CanReg4
  - The section in collaboration with IARC, the New Zealand Cancer Registry and Massey University had developed IARC's cancer registry software (CanReg4) and specifically designed the software for Tonga's needs such as including Tongan districts, villages and ethnic groups in its "drop down" menu and tables.
- 13-14 November 2004; International Dateline Hotel, Nuku'alofa: Meeting of the Steering Committee of the International Study of Asthma and Allergies in Childhood (ISAAC
  - The section hosted the Annual Meeting of the Steering Committee of the International Study of Asthma and Allergies in Childhood (ISAAC).
- 15 November 2004; Tonga Medical Association, Nuku'alofa: Postgraduate Symposium
  - The section conducted a Postgraduate Symposium in conjunction with the Annual Meeting of the Steering Committee of the International Study of Asthma and Allergies in Childhood (ISAAC).
  - This one day symposium focused on asthma, respiratory diseases, allergy and infections, eczema and paediatric respiratory infections. A presentation of the preliminary findings for ISAAC Pacific was also presented by Dr. Foliaki.
- 23 November 2004; Canberra: Member of the Australasian Association of Cancer Registries
  - Dr. Foliaki participated in the Annual General Meeting of the Australasian Association of Cancer Registries.
  - One of the outcomes of the Meeting was the approval for Tonga to be a full member of the Australasian Association of Cancer Registries.
  - The Meeting also offered to help in training and support from AACR members. It was further suggested that
    the possibility of a twin registry system could be set up to facilitate technical assistance to Tonga's Cancer
    Registry.

#### 13. ACKNOWLEDGEMENT

I wish to acknowledge my appreciation to the Director of Health and all staff of the Ministry of Health for their loyalty, cooperation and dedication during the year, without which much of what is contained in this Annual Report would not have been achieved.

I wish to make special mention of the villages and districts throughout the Kingdom that have embraced and supported the Ministry's efforts to extend its services to the community and request this excellent relationship be continued into the future.

I am indebted to members of the Royal Family, Honourable Ministers of the Crown, Nobles of the Realm, Heads of Government Departments, Development Partners and Agencies, Non Government Organisations which the Ministry was associated with for the valuable partnership and support throughout 2004.