

WESTERN REGIONAL HEALTH AUTHORITY

ANNUAL REPORT

2004

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A publication of the Western Regional Health Authority

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Information was gleaned from many sources, oral and written from the Statistical Institute of Jamaica (STATIN), Ministry of Health and several reports from the Western Regional Health Authority. The data being utilised is retrospective and its availability has been challenging as was the time constraint. The interest and support of Miss Marcia Clarke (WRHA) in providing data is commendable.

The report was enhanced by those who diligently reviewed it and provided constructive comments and criticisms. To those persons, I express deep appreciation.

I thank those who provided unfaltering secretarial services and support.

EXECUTIVE SUMMARY

Through monitoring of the management team of the Western Regional Health Authority, the Board which is committed to good governance at all levels executed its collective responsibility for providing strategic guidance that promoted the delivery of quality health care in the region.

In addition to acknowledging the activities of all the team leaders, I thank all employees of the WRHA who have continued to demonstrate resilience and commitment to the task of delivering quality health care.

- **Intersectoral Activities** - The WRHA continues to be grateful for the tremendous assistance received from government and non-government organizations, service clubs, private individuals and the public.

- The **Internal Audit** department maintained its focus of compliance based on audits. During the year, there was a Review of the Assets Management System. Additionally, the staff collaborated with:
 - Human resource team to prepare and implement a travel allowance policy and procedure for the region;
 - Clinical staff for the preparation of Clinical Audits (Nurses) which was tested at the primary and secondary care levels.

There were twelve (12) Audit queries, all of which were resolved.

- **Financial data** revealed that although there was a decrease in the grants, the increase in user fees and other income produced an overall increase in the region's finances. However, staff cost continued to make the largest demand on the budget. The operating deficit continued as well as the outstanding liabilities.

Financial policies and strategies provided guidance in the utilization of the grants to the WRHA.

- An exercise to prepare a regional staff list was undertaken by the **Human Resource Department**.
- Several activities related to the **infrastructure** were undertaken during 2004. The regional downtime was highest for laundry equipment and incinerators.
- The **maintenance** activities were undertaken in parish hospitals (Falmouth and Savanna-la-mar) as well as health centres. New clothes dryers were installed at Cornwall Regional and Savanna-la-mar hospitals while an air condition unit was installed at Falmouth Hospital.
- **Management Information System**
The focus was on enabling the varying departments within the WRHA to perform satisfactorily.
- **Health Education**
Health education activities continue to cluster around lifestyle changes with a view to promoting health and preventing or delaying illness.
- **Home visits** as a health promotion strategy decreased in WRHA in 2004. Visits for maternal health were lowest in the parish of St. James (7.8%) but highest in the parish of Westmoreland.

- **The Dental Health** programme's data registered decline in visits (3,144); the number of preventive procedures (1,554) and extractions (792). The parish of Trelawny performed the lowest number of preventive procedures (4,732).
- **Primary Health Care** visits declined in 2004, a trend visible since year 2001.
- The utilization of WRHA's **Accident and Emergency** services increased in all areas "except registered and not seen" in 2004. The lowest level of utilization was in the parish of Trelawny.
- There were 16 less beds for **Inpatient Care** in the WRHA in 2004 and the region experienced a 79.6% occupancy rate. The turnover rate of Hanover was below that of the regional (19.9%) and national levels (4.4%)
- Although performing 14,466 of all surgeries in public facilities, the WRHA's **Surgical Services** recorded a decline in total cases.
- The 99,761 cases seen in WRHA **outpatient clinic** yielded a ratio of one new case for every six cases seen.
- More than half a million clients received tests at the region's **Laboratories**. Major investigations related to Chemistry and Haematology.
- There were 38,516 clients and 55,775 **Radiographic** examinations during year 2004.
- The WRHA's **pharmaceutical services** dispensed 72% (271,763) of the 377,399 items presented for 137,851 clients.
- **Physiotherapy** services though increasing gradually each year, continued to have a large outpatient clientele.

- The region's delivery of total **oncology treatments** declined by 4,480 in 2004.
- The **morbidity profile** reflected the illnesses/disorders that have been managed at the primary health care and inpatient hospital services.
- Diseases of the Circulatory System (especially Hypertension); Diseases of the Genito-urinary System and Gynaecological conditions (mostly PID) as well as Diseases of the Skin were the main causes of visits to the Region's **primary health care** facilities.
- Excluding Obstetrics, Accident and Injuries; Diseases of the Circulatory System and Diseases of the Digestive System were the major causes of **hospital discharge**.
- The Region's focus on the **national priorities** have yielded many health benefits for its people and visitors:
 - The **Environmental Health** team continued to address those issues related to health and the environment.
 - Immunization coverage to control **Communicable Disease** was below the targeted levels despite being above national averages.
 - There were no disease outbreaks in the region during the year under review.
 - Monitoring of the **Chronic Non-communicable Diseases** is an important focus for the region:
 - The Region experienced approximately 9% of all visits to primary health care facilities for **Asthma**.

- Data relating to **Cancer** revealed that the 5,438 persons screened for cervical cancer yielded 514 abnormal smears with 190 being among the under 25 year olds. The region delivered approximately 34% of all cancer treatments offered in public facilities.
 - Twenty two thousand and twenty three (22,023) visits were made to primary health care services for **Diseases of the Circulatory System**. Additionally, there were 2,674 discharges from the Region's four hospitals for Hypertension.
 - Although the Region managed 13.6% of all primary health care visits for **Diabetes** in 2004, there were annual declines in the visits since 2004.
 - Among the **Other Monitored Diseases** at the primary health care level, Skin Diseases and the co-pathology of Diabetes and Hypertension continued to be the two major causes of visits.
- The Region's **Child Health** profile revealed declines in the number of births/low birth weight babies as well as exclusively breastfeeding at six and twelve weeks. Immunization coverage in the parish of Trelawny was above regional and national levels. Bed occupancy levels for child health increased as did the average length of stay.
- The Region's **Adolescents** continued to be mainly healthy and the focus of their health needs was mainly for reproductive health care. There were 6,271 visits with 218 persons having haemoglobin levels that were below 10gms/dcl.
 - Based on the Region's data (antenatal visits and deliveries) **Reproductive Health** Care tended to be female focussed.

- There were 7,691 visits to primary health care facilities for **Mental Health** care and 78% of clients with psychotic disorders received consistent care. During 2004, the human resource team for community mental health increased by two – Senior Psychiatric Resident and Mental Health Nurse Practitioner. The community rehabilitation agencies in Montego Bay were operationalised.

Additionally, the separation of admitted patients based on gender; the community rehabilitation agencies in Montego Bay and the establishment of the Mental Health Review Board were accomplished.

- In year 2004 the primary health care visits for emergency and **Accident and Emergency** cases have been highest since the base year. However there was a decline in total treatment. Medical, Surgical, Paediatric and Unintentional Injuries were the major conditions managed in the Region.

The profile of injuries revealed that Blunt Injuries, Motor Vehicle Accidents and Lacerations were the major injuries.

- Total **Inpatient Deaths** have declined and the Region boasts zero (0) Anaesthetic Deaths.
- The three major causes of **mortality** included Diseases of the Circulatory System, Neoplasms and Endocrine, Nutritional and Metabolic Disorders.

1.0 THE CONTEXT

1.1 National

1.2 Western Regional Health Authority (WRHA)

1.3 Population Profile

1.0 THE CONTEXT

1.1 National

Jamaica is positioned 45 kilometres south of Cuba and 161 kilometres west of Haiti. The island has a total land mass of 10,991 square kilometres. A land of mountains, plateaux and plains, the highest peak is the Blue Mountains at an elevation of 2,256 metres

The island has a maritime tropical climate with temperatures ranging from 26.2 degrees Celsius to 31 degrees. The island lies in the hurricane belt and the rainfall occurs mainly in May and October. There are fourteen parishes and two major urban centres – Kingston in the South East and Montego Bay on the North West coast.

An independent state in the Commonwealth of Nations, since 1962, the Governor General represents the Queen. The executive arm of the parliamentary democracy is headed by the Prime Minister.

The Western Region of the island occupies portions of the northern and southern coasts and all of the western coastline. Included are the parishes of Trelawny (874.6 km); St. James (549.9 km); Hanover (450.4 km); and Westmoreland (867.4 km). The area has mostly calm, clear seas and white sand beaches, backed by flat, raised plains and coral reefs. Home to the island's second airport and teeming with beaches, hotels and guest houses, the area serves as the tourist mecca of Jamaica.

The major economic activities emanate from the tourism product. Agriculture, fishing, manufacturing and information also contribute to the economy. HEART Trust/NTA operates two vocational centres in the region.

1.2 The Western Regional Health Authority (WRHA)

The WRHA was established by an Act of Parliament in 1997 to respond to the health needs of clients and visitors to the region and began operations in 1998.

The management structure consists of a:

- ⇒ Board of Directors nominated by the Honourable Minister of Health
- ⇒ Regional Director (RD) that manages all the related affairs of the Region
- ⇒ Regional Technical Director (RTD)
- ⇒ Director of Finance
- ⇒ Director of Human Resource
- ⇒ Director of Management Information Systems
- ⇒ Director of Operations and Maintenance

The coordination and delivery of all health care services reside at the parish level.

1.3 Population Profile

Table 1.1 End of Year Population: Jamaica, WRHA and Parishes 2000-2004

Year	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
2000 (Base Year)	2,597,080	452,734	73,074	174,041	67,127	138,492
2001	2,612,396	455,199	73,084	175,729	67,018	139,305
2002	2,621,457	458,548	73,341	177,686	67,329	140,192
2003	2,635,673	461,935	73,972	178,844	67,944	141,126
2004	2,648,224	464,762	74,324	180,036	68,439	141,967

Source: Demographic Statistics 2006

By the end of year 2004, Jamaica's estimated population was 2,648,224 persons while that of the WRHA's was 464,762 (Table 1.1).

When compared to the base year the national increase was approximately 51,144 and that of the WRHA just about 23.5% (12,028) of the national increase, demonstrating small increases in each of the parishes (Table 1.1).

Table 1.2 End of Year Population by Age Groups – Jamaica, WRHA and Parishes 2004

AGE GROUP (IN Years)	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
0-4 years	239,776	44,356	7,540	16,441	6,858	13,517
5-9 years	278,754	50,373	8,240	19,474	7,144	15,515
10-19 years	534,568	89,692	15,032	35,223	13,347	26,090
20-49 years	1,131,255	192,776	28,314	80,502	26,984	57,076
50-59 years	188,952	35,182	5,881	12,628	5,309	11,364
60-64 years	69,536	24,541	4,273	7,832	3,828	8,608
65 and Over	205,384	27,842	5,141	7,937	4,969	9,795
Total Population	2,648,424	464,762	74,324	180,036	68,439	141,967

Source: Demographic Statistics 2006

The WRHA 2004 population formed 17.5% of the nation's population. The parish of St. James had the largest portion of the Region's population 38.7% (180,036) (Table 1.2). The data however, demonstrated that the largest number of the age group 60 and over (18,403) continued to be residents in the parish of Westmoreland (Table 1.2).

2.0 MANAGEMENT AFFAIRS

2.1 Organizational Chart

2.2 Management Team

2.3 Health Services Management

2.4 The Health Services

2.1 ORGANIZATIONAL CHART – Western Regional Health Authority

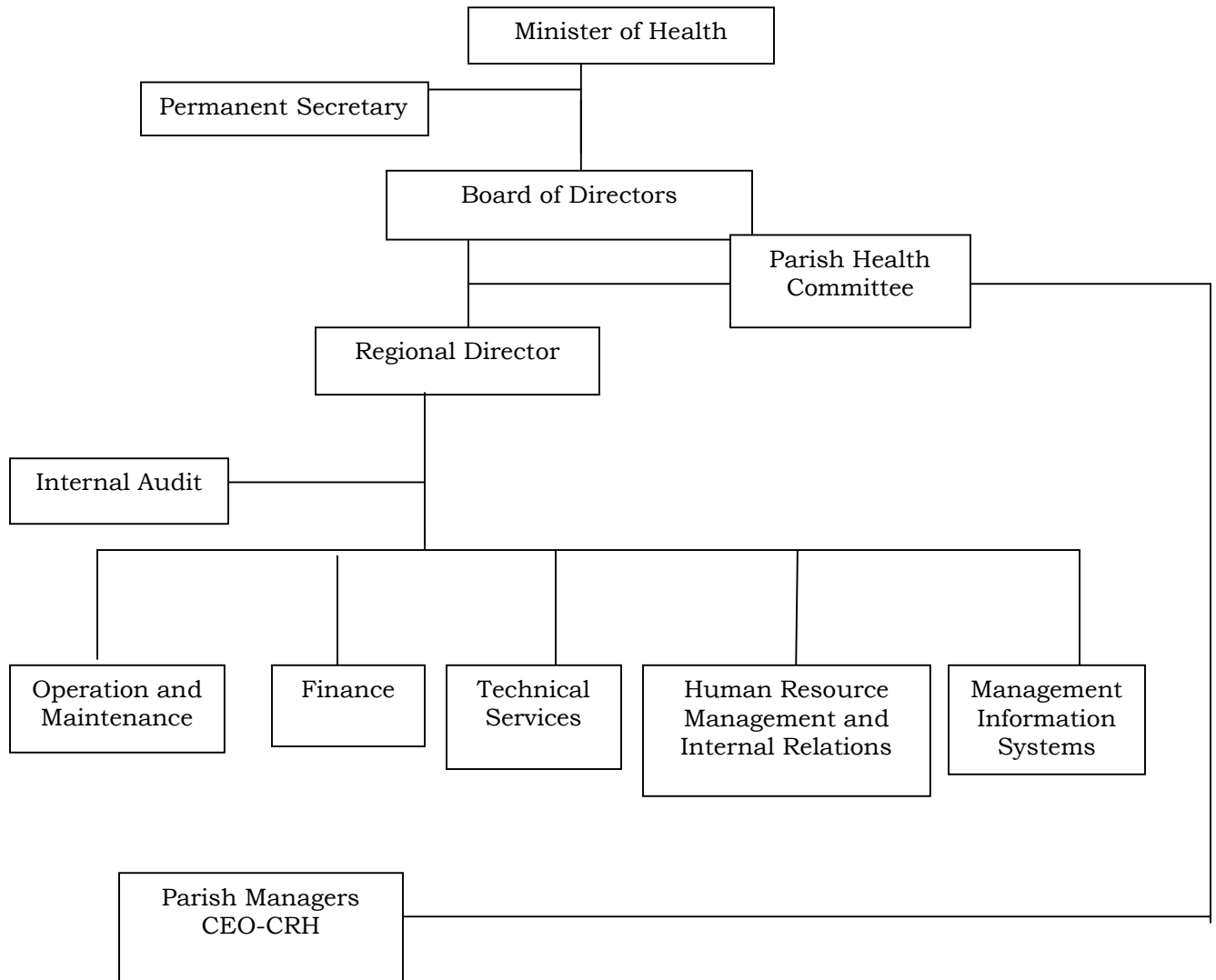


Figure 1.1 Organizational Chart – WRHA

2.2 THE MANAGEMENT TEAM

The Board of Directors

Mr. Gordon Brown	-	Attorney at Law - Board Chairman
Mr. Everton Anderson	-	Chief Executive Officer, CRH
Dr. Sheila Campbell-Forrester	-	Regional Director, WRHA
Miss Evelyn Bloomfield	-	Director of Budget, MOH
Miss Toycia Collins	-	
Mr. Winston Comrie	-	Councillor, Westmoreland Parish Council
Dr. Barrington Dixon	-	Senior Medical Officer, CRH
Mrs. Hyacinth Forde	-	_____, Jamaica Tourist Board
Dr. Alexander Konstantinov	-	Regional Technical Director, WRHA
Mrs. Florence Logan	-	General Manager, NWC
Miss Isiah Madden	-	Architect, c/o Maddens Funeral Home
Miss Erma Ridguard	-	Bankers, Bank of Nova Scotia
Miss Marjorie Thelwell	-	Matron, Noel Holmes Hospital
Mr. Sunil Khatani		
Dr. David Stair		
Mr. Fred Hamaty		

The In-house Managers

Dr. Sheila Campbell Forrester	Regional Director (RD)
DR. Alexander Konstantinov	Regional Technical Director (RTD)
Mr. Raymond Kitson-Walters	Director of Finance
Mr. Arthur Warren	Director, Human Resource and Industrial Relations
Mr. Daniel Evans	Director, Operations and Maintenance
Mr. Auldrick Brown	Director, Management Information System

The Senior Members of the Parish Team

Mr. Anthony Smikle	Parish Manager, Trelawny
Dr. Maung Aung	Medical Officer (Health), Trelawny
Mrs. Valencia Maponya	Parish Manager, St. James
Dr. Rao Ponnado	Medical Officer (Health), St. James
Mrs. Lorene Whinstanley	Medical Officer (Health), Hanover
Dr. Ogunnowo Olufemi	Parish Manager, Hanover
Mr. Verlie James	Parish Manager, Westmoreland
Dr. Kyaw Tint	Medical Officer (Health), Westmoreland

2.3 HEALTH SERVICES MANAGEMENT

2.3.1 Vision

Healthy families living in healthy communities

2.3.2 Mission

The mission of Western Regional Health Authority encompasses the tenets of public health:

- To provide quality preventative, curative and rehabilitative health care that is affordable, accessible and reliable to the population of the Region;
- To provide and maintain facilities and conditions conducive to the promotion of health;
- To attract, train, motivate and retain a high calibre of staff and to provide opportunities for the development of our employees to their fullest capabilities.

2.3.3 Resources for the Health Sector

The health sector is resource intensive in all its major operations.

As a statutory body, the WRHA is funded through grants. The Government of Jamaica's FAA Act as well as International Financial Accounting Standards govern the accounting policies of the Region.

2.3.3.1. Finance

Table 2.1 Health Service Financing \$'000: WRHA 2000-2004

SOIURCES	Base Year 2000	2001	2002	2003	2004
Budgets, Grants	948.4*	1,072,745	1,047,153	1,614,965	1,478,788
Actual Fees Collected	156.2*	156,190	196,711	236,167	275,009
Other income	DNA	10,678	5,434	8,278	10,753
TOTAL		1,623,062	1,350,805	1,859,410	1,970,175

Source: WRHA Finance & Accounts Department 2001-2004

*MOH Jamaica Annual Report 2004

The WRHA's major income source declined in 2004 with grants showing J\$136,177.00 less than the 2003 figures. Simultaneously, user fees increased by approximately J\$38,842.00 (Table 2.1).

Table 2.2 Health Service Delivery Expenditure \$'000: WRHA 2001-2004

Objects of Expenditure	2001	2002	2003	2004
Staff Cost	1,366,924	1,302,176	1,683,321	1,753,127
Rental	1,683	2,247	3,457	3,711
Public Utilities	46,155	65,415	71,646	87,610
Other Operating Expenditure	206,427	215,515	268,321	251,325
Capital Items	2,165	4,569	4,954	14,672
TOTAL	1,623,354	1,589,922	2,031,709	2,110,415

Source: WRHA - Finance and Accounts Department Report 2001-2004

Staff costs continued to make the largest demand on the budget (J\$1,753,127). Other operating cost declined by approximately 6.3% (J\$16,996). The operating deficit was approximately J\$140 million when compared to the income (Table 2.2).

Table 2.3 Outstanding Liabilities \$'000: WRHA 2000-2004

Liabilities	2000	2001	2002	2003	2004
Drugs & Medical Supplies	73,951,541	83,221,087	52,319,259	37,595,506	73,543,000
Statutory Deductions	45,826,362	21,307,532	215,881,533	249,238,000	385,131,000
Utilities	19,346,397	21,584,028	19,517,345	19,281,000	37,967,000
Other	20,648,137	8,241,093	3,839,749	4,402,000	24,078,000
TOTAL	159,772,437	134,353,740	291,557,886	410,517,000	520,719,000

Source: WRHA – Finance and Accounts Department Report 2001-2005

In 2004, the WRHA continued to have outstanding liabilities (which increased by approximately J\$110,202,000 above year 2003). Statutory deductions increased by J\$135,893,000 and liabilities for utilities increased by approximately J\$18,686 when compared to year 2003 (Table 2.3).

Table 2.4 Emoluments (J\$) for Senior Managers: WRHA 2004

Position	EMOLUMENTS				
	Salary	Motor Vehicle/ Upkeep/ Travelling	Uniform/ Clothing	Other	Vacation
Regional Board Member	AS STIPULATED BY GOVERNMENT SCHEME				
Regional Director	2,583,298.32	356,238.42		1,875,415.74	
Regional Technical Director	2,283,259.04	189,336.80		1,707,779.04	
Director of Finance	1,996,992.00	341,270.00			
Director of Human Resource and Industrial Relations	1,996,992.009	347,270.00		1,899.50	
Director of Operations and Maintenance	1,839,329.34	284,350.00			
Director of MIS	958,863.00	211,048.80		179,937.00	
Parish Manager					
Medical Officer (Health)					

Source: WRHA - Finance and Accounts Department Report, 2004

2.3.3.2 Human Resource

The value of human resource in the demanding environment of health care delivery cannot be overstated.

“There were more than 2,300 persons with over 70 job categories working with the WRHA in 2004” (WRHA Human Resource Report).

A regional staff list was prepared based on posts on the establishment. It identified excess cadre accordingly.

There is a need to reconcile the employment differences between WRHA and Office of the Services Commission employees, especially those relating to vacation leave entitlement and disciplinary procedures.

Retirement workshops were held in each parish and training continued for varying categories of workers.

The industrial relations climate was stable during the year.

2.3.3.3 The Infrastructure

The Maintenance Services of the WRHA sought to ensure the efficient functioning of all medical equipment and vehicles as well as safe, intact buildings to support efficient service delivery.

Table 2.5 Infrastructure, Operations and Maintenance: WRHA and Parishes 2004

VARIABLES	WRHA		Trelawny		St. James		Hanover		Westmoreland	
	Hospital	PHC	Hospital Fal.	PHC	Hospital CRH	PHC	Hospital Noel H.	PHC	Hospital Sav.	PHC
Buildings										
- Maintenance Plan	4	-	1	-	1	-	1	-	1	-
- No. of maintenance activities	3,406	338	387	58	2,221	165	175	51	623	64
- Total Work Order Recorded	4385		FOR		THE		REGION			
Equipment										
- % on PPM Programme	60		70		50		60		60	
- No. of PPM activities	720		72		418	10	15		205	
- % Downtime on										
- Standby Generator	5	5	-	-	-	5	5	-	30	
- Elevators	17.2				5				30	
- Boilers	6.5		3		10		3		10	
- Laboratory	6.6	10	5		10			10	5	
- X-Ray	5				5				5	
- Anaesthetic	5		5		5		-		5	
- Autoclave/Sterilizer	20		20		30		10		20	
- Operating Table	6.6		5		5		0		10	
- Operating Theatre:										
- light	10.6		15		5		-		12	
- Equipment	8.3		10		5		-		10	
- Laundry Equipment	27.5		30		20		30		30	
- Central A C	38		15		60				40	
- Incinerators	13.3	10			10	10	15	-	15	
Motor Vehicle										
- No. of Vehicles - Ambulances										
- Other										
- % on PPM Programme										
- Average Annual Downtime:										
- Ambulances (Days)										
- Other										
Assets Management										
- % Inventorized										
- % replaced										
- % on Replacement Plan										

Source: WRHA Operations and Maintenance, 2004
*DNA

Approximately 9.0% (338) of the WRHA's 3,744 maintenance activities were carried out in primary health care facilities (Table 2.5).

Regional down time (average 27.5%) was highest for laundry equipment with Trelawny, Hanover and Westmoreland having the highest (Table 2.5).

During year 2004, several activities were undertaken:

- Renovation
 - patient kitchen at Falmouth Hospital
 - A&E Department – Savanna-la-mar Hospital
 - 4 major pharmacies in the region
- Roof repairs to Granville, Mount Carey, Mount Salem and Ramble Health Centres
- Installation of equipment:
 - Two 170 pounds clothes Dryer at Cornwall Regional Hospital
 - One 70 pounds clothes Dryer at Savanna-la-mar Hospital
 - 9-ton Air Conditioner at Falmouth Hospital

Thirty two vehicles were on the preventive maintenance programme in 2004. However, the Region's fleet is old (average 6.5 years) and the option for repair services, is limited. Petrol usage is also high.

2.3.3.4 Management Information

The Management Information System Department continued to perform duties that would enable different departments within the WRHA. Major activities included:

- Implementation of a web server that was to be housed in the Ministry of Health in Kingston because there was no independent service available for the Region.
- Modular implementation of the Great Plains accounting package to replace the Financial MIS for the Finance and Accounts Department.
- Establishment of Wide Area Network (WAN) with Cornwall Regional Hospital, Type 5 Health Centre and the Savanna-la-Mar Hospital. Bandwidth upgrade proposal was received and was being reviewed.
- Policies were drafted and were under review.

There was some groundwork done to ensure that the expansion of the WAN could commence.

2.4 THE HEALTH SERVICES

2.4.1 Provisions of Services/Programmes

Health services include the public, private and NGO institutions, facilities/departments that are managed, equipped and staffed to deliver promotive, preventive, curative and/or rehabilitative health care to individuals, families or communities.

The WRHA provided public health care services that are in keeping with nationally mandated programmes that address epidemiological, age, gender, diagnostic and medical/surgical concerns/interventions.

2.4.1.1. Health Promotion

2.4.1.1.1 Health Education

Health promotion/health education is a strategy that is implemented in all health care services/programmes to encourage the acquisition and use of knowledge/information in order to maintain/improve individual, family and community health. It promotes changes in behaviour/lifestyle and thus the messages are transmitted using varying media and are designed to encourage and support these changes.

Although the majority of health promotion/health education strategies were implemented at the primary health care level, there were activities in hospitals which tend to use the model of face to face interpersonal communication among patients and caregivers.

In 2004, the WRHA's pursuit of health for its people continued to be achieved through several avenues. That of health promotion included:

- Wellness centres that catered to physical activities and the promotion of changes in behaviour/risk factors that negatively affect health;
- The promotion of activities that helped to establish and maintain healthy schools;

- Attention to adolescent health through the training and use of peer counsellors to promote their own health and the health of other groups.

2.4.1.1.2 Nutrition

Nutrition is intimately related to the delivery of health care and as a specific strategy is threaded throughout several programmes - Child Health, Reproductive Health, Chronic, Non-communicable and other nutrition related diseases and Communicable Disease Control.

2.4.1.1.3 Home Visits

Table 2.6 Home Visits: WRHA 2000-2004

HOME VISITS	WRHA				
	2000	2001	2002	2003	2004
Total	50,547	49,387	46,262	44,189	40,390
Maternal	11.6	11.4	10.7	11.7	11.5
Child	41.4	44.0	42.1	40.6	39.8
Other	47.0	44.6	47.3	47.6	48.7

Source: MOH: MCSR; 2004

In 2004, while home visits decreased by 3,799, 11.5% of all home visits were made to mothers. Child health visits represented 39.8% of all home visits. Home visits for other purposes were highest in 2004 when compared to other years (Table 2.6).

Table 2.7 Home Visits: Jamaica, WRHA and Parishes 2004

Home Visits	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total	333,697	40,390	8,391	10,151	12,858	8,990
Maternal (%)	8.8	11.5	9.6	7.8	8.2	20.6
Child (%)	46.3	39.8	42.0	30.8	48.1	38.1
Other (%)	44.9	48.7	48.4	61.4	43.8	41.3

Source: MOH MCSR 2004

Year 2004 WRHA data indicated that home visits were highest in Hanover (12,858). Maternal (11.5%) and other visits (48.7%) were higher than national levels. However, the parishes of St. James (7.8%) and Hanover (8.2%)

performed at sub-regional and sub-national levels for maternal visits. However, Westmoreland registered higher than national levels (Table 2.7).

Home visits in the region for child health (39.8%) were below that of the national levels and all parishes except Hanover (48.1%) and Trelawny (42.0) were similarly affected (Table 2.7).

2.4.1.2 Services/Facilities

Table 2.8 Provisions/Availability of Public Health Services: Jamaica, WRHA and Parishes 2004

Health Facilities	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Health Centres:						
- Type 1	128	42	10	14	8	10
- Type II	87	25	7	6	7	5
- Type III	72	13	2	3	2	6
- Type IV	6	3	1	0	1	1
- Type V	4	1	0	1	0	0
Dental Clinic	8	4	1	1	1	1
Family Planning Clinic	3					
Rural Maternity Centres						
Hospitals:						
- Type A	3	1	0	1	0	0
- Type B	4	1	0	0	0	1
- Type C	11	2	1	0	1	0
- Specialist	6	1	0	0	0	0
Laboratory Services	13	2	1	1	0	1
Radiography Services	16	2	1	1	0	1
Pharmacy: Hospital	20	4	1	1	1	1
Physiotherapy	9	2	0	1	0	1
Blood Banking	11	2	0	1	0	1
Radiation/Oncology	2	1	0	1	0	0

Source: MOH: HMSR, MCSR 2004

In 2004, there were approximately thirty five (35) hospitals on the island – twenty three (23) public, one (1) quasi-public and eleven (11) private.

The WRHA boasts one hospital in each of its four parishes. Based on classification there are:

- Two (2) type Cs (Falmouth and Noel Holmes) providing basic, non-specialist inpatient and outpatient care in medicine, surgery, obstetric, gynaecology and paediatric services

- One type B (Savanna-la-mar) delivering specialist medical, surgical, obstetric/gynaecological and paediatric services

- One Type A (Cornwall Regional) providing interdependent, complex diagnostic, curative and emergency services (Table 2.8).

In year 2004, there were (88) primary health care facilities that met the basic health care needs of the region's population. Diagnostic services were offered through two (2) laboratories and two (2) radiographic units; while pharmaceuticals were dispensed from four (4) hospitals and several primary health care facilities (Table 2.8)

2.4.2 UTILIZATION OF SERVICES/PROGRAMMES

The Western Regional Health Authority responds to a variety of individual, family and community health needs at the primary, secondary and tertiary levels of care. The services are integrative, addressing illness prevention, health promotion, diagnosis and interventions of medical or surgical nature.

2.4.2.1. Dental/Oral Health Services

Table 2.9 Utilization of Dental/Oral Health Services: WRHA 2001-2004

DENTAL HEALTH ACTIVITIES	2001	2002	2003	2004
Primary Care - Visits (Total)	28,105	22,425	25,349	22,205
▪ Preventive Procedures (Total)	27,179	24,604	24,935	23,381
Restoration				
(i) Posterior Filling	9,339	8,268	1,512	6,779
(ii) Anterior Filling	1,516	1,080	7,142	995
Cleaning	13,551	11,444	11,337	10,750
Orthodontic	5	219	150	106
Other				
- Clinic	2,037	2,412	4,134	3,958
- School	731	1,181	660	793
▪ Extractions	13,403	9,320	10,532	9,740
▪ Dentures	15	3	74	11
▪ Other Procedures	17,936	17,706	16,353	12,001
Hospital Care - Faciomaxillary Surgery (Total)	171	28	33	25
- Emergency	33	3	5	-
- Elective	118	11	17	21
- Day	20	14	11	4
Outpatient Clinic				
- Total Cases	2,809	2,516	2,732	*
- New Cases	0	0	-	*

Source: MOH: MCSR; HMSR, 2004

*DNA

In comparing year 2003 figures with those of year 2004, there were declines in major areas of dental health care delivery at the primary health care level. Total visits declined by 12.4% (3,144) and extraction by 7.5% (792) (Table 2.9). The number of elective surgical cases increased by 4 (Table 2.9).

Preventive procedures represented 23,381 of the dental health procedures performed in primary care facilities in the region (Table 2.9).

Table 2.10 Utilization of Dental/Oral Health Services: Jamaica, WRHA and Parishes 2004

VARIABLES	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total PHC Visits	181,052	22,205	3,990	6,413	5,877	5,925
Preventive Procedures (Total)	147,553	23,381	4,732	6,959	6,068	5,622
Restoration						
- (Anterior Filling)	6,196	995	197	335	330	133
- Posterior Filling	35,225	6,779	1,689	2,780	1,639	671
Cleaning	78,756	10,750	2,121	3,359	2,351	2,919
Orthodontic	1,473	106	38	1	54	13
Other Preventive						
- Clinic	22,084	3,958	338	454	1,358	1,808
- School	3,819	793	349	30	336	78
Extraction	74,208	9,740	1,848	2,330	3,253	2,309
Dentures	280	11	-	11	-	-
Other Procedures	147,281	12,001	3,373	947	2,541	5,140
Hospital Care						
Dental/Facio maxillary Surgery						
- Total	269	25	-	-	-	-
- Emergency	20	-	-	-	-	-
- Elective	133	21	-	-	-	-
- Day	116	4	-	-	-	-
Outpatient Clinic						
- Total Cases	*	*	*	*	*	*
- New Cases	*	*	*	*	*	*

Source: MOH MCSR> HMSR 2004

*DNA

In year 2004, the data revealed that for every 2.4 preventive dental health procedures done at the regional level, there was one (1) extraction (Table 2.10).

The parish of Trelawny performed the lowest number (4,732) of preventive procedure while Hanover performed the largest number of extractions (3,253) (Table 2.10).

2.4.2.2. Primary Health Care (PHC) Services

Table 2.11 Primary Health Care Visits by Year: Jamaica, WRHA and Parishes 2002-2004

YEAR	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Base Year 2000	1,684,222	337,446	*	*	*	*
2001	1,610,959	309,753	63,567	112,786	62,559	70,841
2002	1,543,905	289,655	60,795	103,724	54,399	70,735
2003	1,586,630	279,896	56,196	99,984	50,490	73,226
2004	1,535,530	265,969	52,690	96,880	48,816	67,583

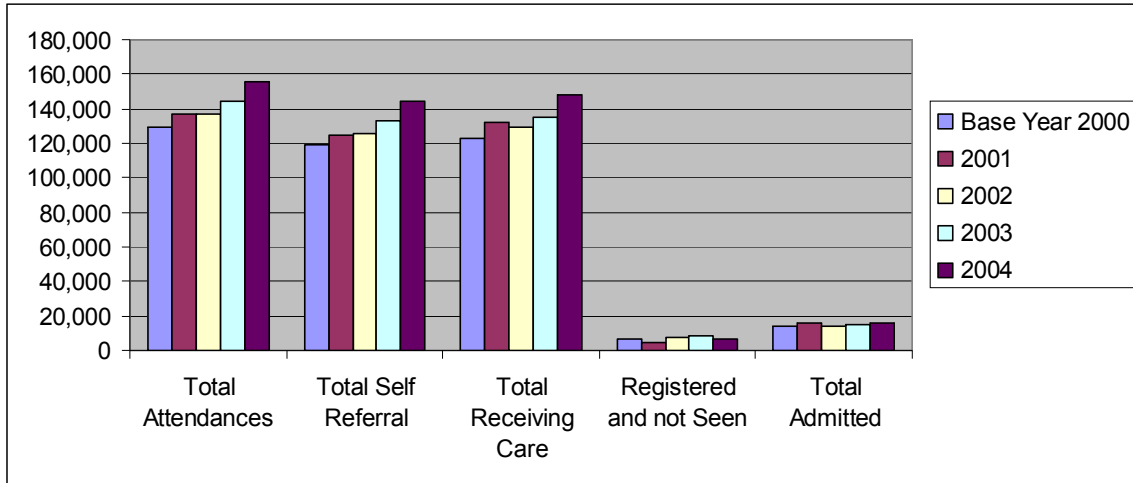
Source: MOH: MCSR 2000-2004, MOH – Jamaica Annual Report 2001-2005

*DNA

Year 2004 data revealed that there were declines in the primary health care visits nationally as well as at the WRHA and all its parishes. While St. James experienced the smallest percentage decline (3.2%)(3,104), Westmoreland had the largest (5,643) decline in visits (Table 2.11).

2.4.2.3. Hospital Accident and Emergency (A&E) Services

Figure 2.1 Utilization of Accident and Emergency (A&E) Services: WRHA 2000-2004



Source: MOH HMSR 2000-2004

The WRHA 2004 data indicated that all the utilization variables except “registered and not seen” (6,870) were at their highest levels when compared to the base year (Figure 2.1) (TABLE A1).

There was an additional 11,291 persons attending WRHA’s A&E facilities and a 9.8% (13,284) increase among those receiving care (Figure 2.1) (TABLE A1).

Table 2.12 Utilization of Accident and Emergency (A&E) Services: Jamaica, WRHA and Parishes 2004

Accident & Emergency	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total Attendance	775,727	155,259	18,405	70,792	21,679	44,383
Total Self-Referral	638,392	144,494	16,658	65,276	20,786	41,774
Total Receiving Care	758,838	148,389	17,859	67,811	21,125	41,599
Registered & Not Seen	16,892	6,870	551	2,981	554	2,784
Total Admitted	101,432	16,153	2,194	8,650	523	4,786

Source: MOH: HMSR 2004

The WRHA 2004 parish data highlighted the lowest utilization of A&E services in the parish of Trelawny when compared to other parishes in the region (Table 2.12).

2.4.2.3 Hospital Services – Inpatient

Table 2.13 Provision and Utilization of Inpatient Services: WRHA 2000-2004

VARIABLES	Base Year 2000	2001	2002	2003	2004
Bed Complement	596	553	595	592	576
Bed Occupancy Rate	78.0	86.1	73.4	79.1	79.6
Discharges Including Deaths	29,775	31,395	29,952	30,776	31,520
Average Length of Stay	5 days	5.5 days	5.5 days	5.8 days	5.6 days
Turnover Rate	48.7	56.0	49.8	51.2	53.9

Source: MOH: HMSR 2000-2004

The 2004 WRHA data identified 16 less beds in the region than in 2003 (when it was 592) and an occupancy rate of 79.6%. The average length of stay was 5.6 days and the Turnover rate 53.9%, both above base year figures (Table 2.13).

Table 2.14 Provision and Utilization of Inpatient Services: Jamaica, WRHA and Parishes 2004

Inpatient Services	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Bed Complement	4,736	576	60	340	38	138
Bed Occupancy Rate	61.4	79.6	95.3	75.6	64.5	86.8
Discharges Including Deaths	181,193	31,520	3,447	17,388	1,307	9,078
Average Length of Stay	6.8	5.6	5.3	6.0	6.6	5.0
Turnover Rate	38.4	53.9	62.5	50.1	34.0	65.0

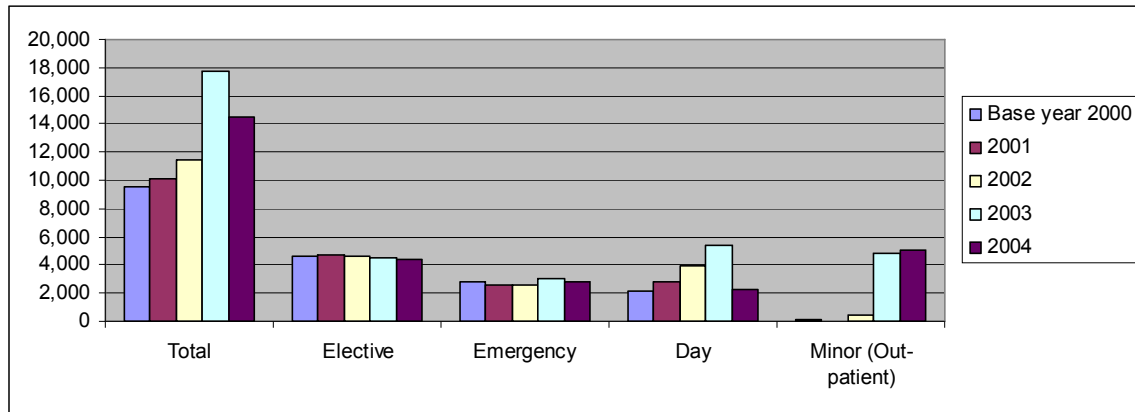
Source: MOH: HMSR 2004

The parish of Trelawny exceeded national bed occupancy rates by 33.9% and 15.7% for national and regional rates respectively, while the parish of Westmoreland had an average length of stay of 5.0 – 1.8 days below the national average (Table 2.14).

The turnover rate for Hanover (34.0) was 4.4% below that of the national rate (Table 2.14).

2.4.2.3 Hospital Services – Surgery

Figure 2.2 Utilization of Surgical Services: WRHA 2000-2004



Source: MOH HMSR 2000-2004

An eighteen point two percent (18.2%) (3,230) decline was recorded in total surgery done in WRHA in 2004 as well as an approximate 3,132 less Day Surgery (Figure 2.2) (TABLE A2).

Table 2.15 Utilization of Surgical Services: Jamaica, WRHA and Parishes 2004

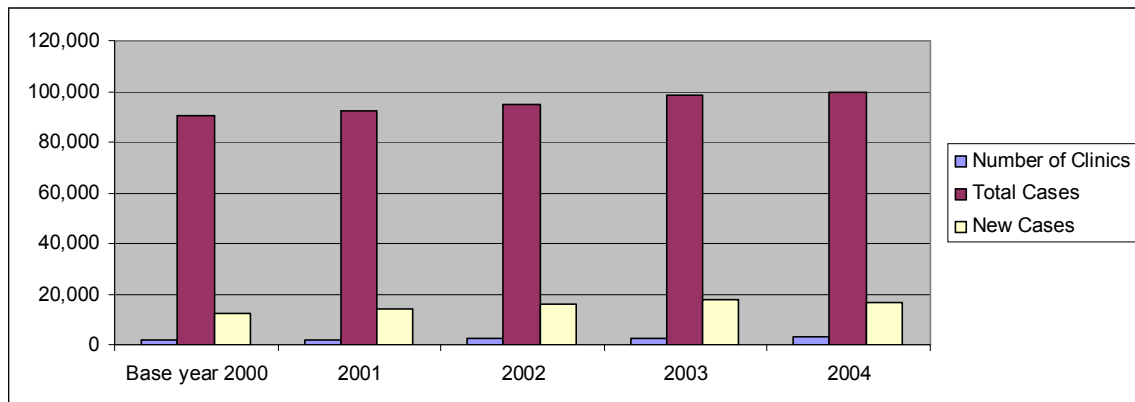
Surgery	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total	65,837	14,466	1,360	10,632	89	2,385
Type - Elective	21,295	4,351	858	2,262	89	1,142
- Emergency	16,808	2,803	318	1,996	-	489
- Day	12,135	2,245	184	1,307	-	754
- Minor (Out-patient)	15,599	5,067	-	5,067	-	-

Source: MOH: HMSR 2004

Year 2004 data demonstrated that just about 22% (14,466) of all Surgeries done in public facilities were done in WRHA. The parish of St. James with its Type A Hospital, performed the major portion (10,632) of all surgeries done in the region (Table 2.15).

2.4.2.3 Hospital Services – Outpatient Specialist Clinics

Figure 2.3 Utilization of Outpatient Specialist Clinics: WRHA 2000-2004



Source MOH HMSR 2000-2004

The data revealed that the largest number of cases was seen in year 2004 when compared to previous years. New cases (16,622) represented (16.6%) of all cases seen in outpatient specialist clinics held in WRHA (Figure 2.3) (TABLE A3).

Table 2.16 Utilization of Outpatient Specialist Clinics: Jamaica, WRHA and Parishes 2004

Variables	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Number of Clinics	17,154	2,805	122	2,082	70	531
Number of Cases						
- Total	594,709	99,761	2,510	78,845	829	17,577
- New	100,429	16,622	740	13,429	251	2,202

Source: MOH HMSR 2004

Year 2004 data revealed that for every 5.9 cases seen nationally, there was one new case. The WRHA saw one new case for every six cases seen (Table 2.16).

The number of cases seen in each parish varied – 829 in Hanover, 2,510 in Trelawny, 17,577 in Westmorerland and 78,845 in St. James (Table 2.16).

2.4.2.4 Diagnostic Services – Laboratory

2.17 Utilization of Laboratory Services: WRHA 2000-2004

Variables	Base Year 2000	2001	2002	2003	2004
Total No. of Clients	106,521	515,460	545,414	556,482	592,276
Examination/Test Total	386,753	515,354	550,866	576,482	592,276
- Cytology	2,899	229	333	401	578
- Haematology	140,710	162,579	192,505	186,673	216,869
- Chemistry	202,075	301,151	307,795	334,504	326,921
- Urinalysis	2,621	3,596	4,286	4,897	4,402
- Histology	2,269	1,989	1,913	2,792	2,410
Microbiology					
- Serology	7,095	7,241	4,883	4,427	3,547
- Tuberculosis (TB)	* 418	752	943	1,061	1,250
- Others		11,223	12,129	16,082	14,938
Immunology	11,357	4,787	4,236	6,200	4,578
Blood Bank	15,578	20,852	21,798	19,290	17,923
Others	1,731	1,011	46	154	110

Source: MOH, HMSR 2000-2004

*DNA

As in previous years, blood chemistry and haematology formed the bulk of laboratory work in the region's public sector in 2004 (Table 2.17).

Investigations for Tuberculosis have shown a steady increase since year 2001 (Table 2.17).

Table 2.18 Utilization of Laboratory Services: Jamaica, WRHA and Parishes 2004

VARIABLES	Jamaica	WRHA	Parishes			
			Trelawny	St. James	Hanover	Westmoreland
Total No. of Clients	1,808,919	592,276	15,902	511,951	-	64,423
Examination/Test Total	1,892,526	592,276	15,902	511,951		64,423
- Cytology	12,540	578	-	578	N	-
- Haematology	954,040	216,869	12,812	150,261	O	53,796
- Chemistry	805,751	326,921	981	317,158		8,792
- Urinalysis	16,746	4,402	188	3,970		244
- Histology	5,173	2,410	-	2,410		-
Microbiology					S	
- Serology	10,810	3,547	809	2,738	E	-
- Tuberculosis (TB)	1,427	1,250	-	1,250	R	-
- Others	17,300	14,938	809	13,618	V	-
Immunology	20,018	4,578	820	3,778		-
Blood Bank	45,829	17,923	200	16,192	I	1,531
Other	2,892	110	110	-	C	-
					E	

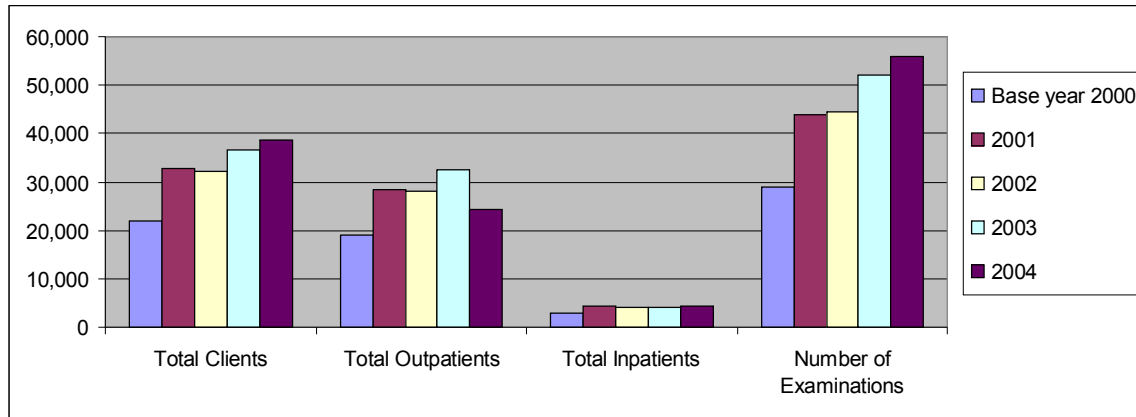
Source: MOH: HMSR 2004

The number of clients using WRHA Laboratory services represented 32.7% (592,270) of all clients using public laboratory services in 2004 (Table 2.18)

The region performed approximately 40.1% (326,921) of blood Chemistry tests done in public laboratories (Table 2.18)

2.4.2.4 Diagnostic Services – Radiography

Figure 2.4 Utilization of Radiography Services: WRHA 2000-2004



Source: MOH HMSR 2000-2004

The WRHA data demonstrated annual increases in utilization of radiography services since the base year with year 2004, recording 38,516 clients (Figure 2.4)(TABLE A4).

The number of examinations in 2004 was almost two-fold (55,778) of that which obtained in the base year (28,837) (Figure 2.4)(TABLE A4).

2.19 Utilization of Radiography Services: Jamaica, WRHA and Parishes 2004

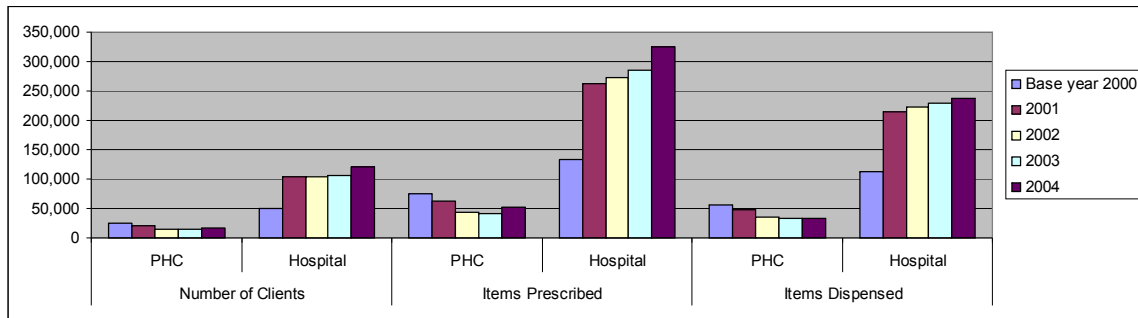
VARIABLES	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
No. of Clients						
- Total	227,896	38,516	NO SERVICE	26,845	NO SERVICE	11,671
- Outpatients	180,113	34,185		22,966		10,219
- Inpatients	4,783	4,331		2,879		1,452
No. of examinations	266,565	55,778		38,527		17,251

Source: MOH: HMSR 2004

In year 2004, the region performed 38,516 (16.9%) of all public radiographic services on the island through two of the four hospitals in the region (Table 2.19).

2.4.2.5 Therapeutic Services – Pharmaceutical

Figure 2.5 Utilization of Pharmacy Services: WRHA 2000-2004



Source: MOH, MCSR & HMSR 2000-2004

In 2004, the total number of clients using public pharmaceutical services were 137,851 and the total number of items prescribed 377,399. The region was able to dispense 72% (271,763) of all items prescribed (Figure 2.5) (TABLE A5).

Table 2.20 Utilization of Pharmacy Services: Jamaica, WRHA and Parishes 2004

VARIABLES (Pharmacy)	LOCATION	JAMAICA	WRHA	PARISHES			
				Trelawny	St. James	Hanover	Westmoreland
Total No. of clients	PHC	153,846	16,793	7,502	9,113	-	178
	Hospital	523,206	121,058	8,700	68,229	13,066	31,063
Items prescribed	PHC	446,927	51,934	24,061	27,299	-	574
	Hospital	1,409,936	325,465	20,820	166,545	40,351	97,749
Items dispensed	PHC	311,277	34,278	15,431	18,404	-	443
	Hospital	1,077,712	237,485	14,477	126,663	28,323	82,956

Source: MOH, MCSR & HMSR 2004

Hospital pharmacies in all the WRHA's parishes dispensed 62.9% of all items prescribed in the region's public sector pharmacies (Table 2.20).

2.4.2.5 Therapeutic Services – Physiotherapy

Table 2.21 Utilization of Physiotherapy Services: WRHA 2000-2004

Physiotherapy	Base Year 2000	2001	2002	2003	2004
Total Patients	4,047	4,601	4,759	4,774	4,878
- Inpatients	1,390	1,614	1,612	1,387	1,339
- Outpatients	2,657	2,987	3,147	3,387	3,539
No. of Treatments					
- Cardio-thoracic	250	20	19	2	21
- Orthopaedic	27,199	27,961	31,772	31,171	35,425
- Neurology	13,465	12,026	10,941	11,766	11,080
- Neurosurgery	189	266	89	157	191
- Medicine	5,912	7,247	4,954	6,103	4,101
- General Surgery	3,876	4,903	4,561	3,824	5,804
- Other	3,281	4,354	4,122	2,571	1,636

Source: MOH: HMSR 2000-2004

The utilization of physiotherapy services in WRHA demonstrated annual increases since the base year. Additionally the bulk of the users have been outpatients (Table 2.21).

Table 2.22 Utilization of Physiotherapy Services: Jamaica, WRHA and Parishes 2004

Physiotherapy	JAMAICA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total Patients	27,130	4,878	N	4,008	N	872
- Inpatients	10,703	1,339	O	1,209	O	130
- Outpatients	16,427	3,539		2,797		742
No. of Treatments						
- Cardio-thoracic	2,498	21	S	21	S	-
- Orthopaedic	*	35,425	E	28,714	E	6,711
- Neurology	33,672	11,080	R	8,370	R	2,210
- Neurosurgery	4,258	191	V	191	V	-
- Medicine	14,692	4,101	I	3,938	I	163
- General Surgery	18,105	5,804	C	5,408	C	396
- Other	17,680	1,636	E	1,488	E	148

Source: MOH: HMSR 2004

*DNA

Approximately 27.5% (1,339) inpatients were among the 4,878 patients who used physiotherapy services in the WRHA in 2004 (Table 2.22).

2.4.2.5 Therapeutic Services – Radiation/Oncology

**Table 2.23 Utilization of Radiation/Oncology Services: Jamaica and WRHA
2000-2004**

Year	Location	Treatment					
		Total	Cobalt	Chemotherapy	Superficial	Radium	Other
2000	Jamaica	39,315	35,788	621	2,472	93	34
	WRHA	3,398	2,905	201	49	9	234
2001	Jamaica	38,811	33,418	621	2,199	112	2,461
	WRHA	6,798	4,273	170	105	11	2,239
2002	Jamaica	39,927	37,671	634	1,385	115	122
	WRHA	9,396	9,158	100	103	10	27
2003	Jamaica	49,434	46,169	687	3,341	98	139
	WRHA	18,162	17,794	207	152	9	-
2004	Jamaica	40,400	38,218	507	1,230	106	39
	WRHA	13,682	13,400	163	99	20	-

Source: MOH: HMSR 2000-2004

There was a decline in total oncology treatments at the WRHA and national levels in 2004 (4,480 at WRHA) (Table 2.23).

The most frequently administered treatment – cobalt, declined by 24.7% (4,394) at the WRHA level (Table 2.23).

3.0 TECHNICAL AFFAIRS

3.1 Health Status

3.2 Mortality

3.1 HEALTH STATUS

3.1.1 HEALTH INDICATORS

Table 3.1 Health Indicators: Jamaica 2000-2004

INDICATORS	2000	2001	2002	2003	2004
Life Expectancy	72.0	74.0	73.0	73.0	71.2
Contraceptive Prevalence	*	66	66	68.8	69.1
Total Fertility Rate (per 1,000 women 15-49)	*	2.8	2.8	*	2.5
Crude Birth Rate (per 1,000 mean population)	20.0	21.2	19.9	19.3	17.6
Crude Death Rate (per 1,000 mean population)	5.1	6.6	6.4	6.0	6.3
Infant Mortality Rate (per 1,000 live births)	24.5	24.5	19.9	19.9	19.9
Maternal Mortality Rate (per 100,000 live births)	111.0	106.2	106.2	106.2	106.2

Source MOH Annual Reports 2000-2004

*DNA

From a development perspective three of the health indicators demonstrated continuing positive changes in 2004. Included were contraceptive prevalence rate (69.1), total fertility rate (2.5) and crude birth rate (17.6). The crude death rate showed a marginal increase (.3) (Table 3.1)

3.1.2 MORBIDITY PROFILE

The morbidity profile presents a synopsis of the illnesses and diseases that have motivated health-seeking behaviour at the public offerings of primary health care and or inpatient hospital services.

3.1.2.1 PRIMARY HEALTH CARE

Table 3.2 Health Centre Visits by Diagnosis: WRHA 2001-2004

DIAGNOSES	2001	2002	2003	2004
Diseases of the Circulatory System	28,361	26,432	27,003	24,891
- Hypertension	25,591	23,436	23,814	22,023
- Other Cardiovascular Disease	2,770	3,006	3,189	2,868
Diseases of the Respiratory System	13,495	10,808	10,957	9,992
- Upper Respiratory Tract Infection	9,931	9,172	8,318	7,784
- Lower Respiratory Tract Infection	2,021	1,636	1,357	1,276
- Asthma	1,543	1,289	1,282	932
Diseases of the Genito-Urinary System and Gynaecological Conditions	18,245	16,141	15,577	16,020
- Urinary	1,998	1,704	1,510	1,344
- STI (Except PID)	11,982	10,706	10,526	11,264
- PID	1,042	854	722	655
- Other Gynaecological Conditions	3,223	2,877	2,769	2,757
Diseases of the Skin	17,293	15,919	14,717	12,930
Diabetes & Hypertension	12,607	11,977	12,396	11,548
Diseases of the Musculoskeletal	9,219	7,995	8,801	7,889
Diabetes	6,902	5,876	5,302	3,941
- Leg Ulcers due to Diabetes	326	84	86	88
Diseases of the Digestive System	4,552	3,839	3,562	2,966
- Gastroenteritis	1,040	1,051	1,087	1,261
- Other Gastro-intestinal Disorders	3,512	2,788	2,475	1,705
Psychiatry	6,176	6,483	7,458	7,691
Accidents & Injuries	6,898	6,268	5,985	5,424
- Intentional	862	668	552	484
- Unintentional	6,037	5,600	5,433	4,940
Eye Disorders	2,115	1,977	3,282	1,540
Other Diagnoses	29,406	30,953	30,330	28,022

Source: MOH, MCSR 2004

Among the five major causes of visits to Health Centres in 2004, in WRHA were Diseases of the Circulatory System (24,891); Diseases of the Genito-Urinary System and Gynaecological Conditions (16,020); Diseases of the Skin (12,930); Diabetes and Hypertension (11,548) and Diseases of the Respiratory System (9,992)(Table 3.2).

Sexually Transmitted Infection (STI) (except PID)(11,264) continued to be the major disorder in Diseases of the Genito-Urinary System and Gynaecological Conditions (Table 3.2).

Table 3.3 Health Centre Visits by Diagnoses, Jamaica, WRHA and Parishes 2004

DIAGNOSES	Jamaica	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Diseases of the Circulatory System	129,510	24,891	4,859	9,433	5,040	5,559
- Hypertension	115,072	22,023	4,551	8,480	4,091	4,901
- Other Cardiovascular Diseases	14,438	2,868	308	953	949	658
Diseases of the Respiratory System	122,159	9,992	2,692	2,976	1,883	2,441
- Upper Respiratory Tract Infection	91,955	7,784	1,839	2,524	1,341	2,080
- Lower Respiratory Tract Infection	19,968	1,276	566	170	376	164
- Asthma	10,236	932	287	283	166	197
Diseases of the Genito-Urinary System and Gynaecological Conditions	109,212	16,020	2,168	10,734	754	2,361
- Urinary	16,554	1,344	322	608	158	256
- STI (Except PID)	64,081	11,264	1,263	8,588	139	1,274
- PID	6,300	655	98	312	103	142
- Other Gynaecological Conditions	22,277	2,757	485	1,226	354	689
Diseases of the Skin	99,087	12,930	4,080	4,157	1,886	2,807
Diabetes and Hypertension	63,617	11,548	2,295	4,108	2,384	2,761
Diseases of the Musculoskeletal System	52,507	7,889	2,660	1,915	1,483	1,831
Diabetes	28,907	3,941	860	1,330	646	1,105
- Leg Ulcers due to Diabetes	804	88	17	27	13	31
Diseases of the Digestive System	35,266	2,966	1,165	886	547	903
- Gastro-enteritis	12,592	1,261	297	379	217	368
- Other Gastro-intestinal Disorders	22,674	1,705	868	507	330	535
Psychiatry	39,878	7,691	1,078	2,583	1,651	2,369
Accidents and Injuries	24,424	5,424	1,113	2,216	1,140	1,015
- Intentional	2,852	484	201	163	94	86
- Unintentional	21,572	4,940	912	2,053	1,046	929
Eye Disorders	12,760	1,540	408	455	421	256
Other Diagnoses	151,093	28,022	5,096	14,349	3,457	5,120

Source: MOH MCSR, 2004

WRHA parish data demonstrated that the parish of Trelawny registered the largest number of visits for Asthma (287) and Diseases of the Musculo-Skeletal System (2,660) when compared to other parishes (Table 3.3)

The parish of Westmoreland had the lowest number of visits for injuries generally, but especially intentional injuries (Table 3.3).

3.1.2.2 HOSPITAL INPATIENT SERVICES

Table 3.4 Ten Leading Causes of Discharge from Public Hospitals by Diagnoses: WRHA 2000-2004

DIAGNOSIS	Base Year 2000	2001	2002	2003	2004
Obstetric	11,656	10,682	11,656	10,543	8,532
Accident and Injuries	2,329	2,413	2,329	2,862	2,779
Diseases of the Respiratory System	1,466	1,481	1,466	1,546	1,469
Disease of the Circulatory System	1,634	1,811	1,634	2,171	2,145
Diseases of the Digestive System	1,463	1,568	1,463	1,607	1,612
Perinatal Conditions	1,025	1,015	1,025	903	1,046
Infectious and Parasitic Diseases	948	8,632	947	1,000	1,069
Diseases of Genito-Urinary System	1,017	1,132	1,017	1,152	1,223
Neoplasm	1,037	1,107	946	1,395	1,206
Endocrine, Nutritional and Metabolic Diseases	934	983	934	1,473	1,317
Neuropsychiatric	506	419	814	742	710
Total Discharge	25,827	25,611	25,846	27,742	29,165

Source: MOH Jamaica, Annual Report 2000-2004

The WRHA data identified a continuing trend for four of the five leading causes of hospital discharges by leading diagnosis. In 2004, Accident and Injuries (2,779), Diseases of the Circulatory System (2,145), Diseases of the Digestive System (1,612), Diseases of the Respiratory System (1,469) and Nutrition and Endocrine Diseases (1,317) reflected the morbidity picture of the Region (Table 3.4).

Table 3.5 Ten Leading Causes of Discharges from Public Hospitals by Diagnosis: Jamaica and WRHA: 2004

DIAGNOSIS	Jamaica	WRHA
Obstetric	48,417	8,532
Accident and Injuries	14,609	2,779
Disease of the Circulatory System	12,365	2,145
Diseases of the Respiratory System	10,216	1,469
Diseases of the Digestive System	9,438	1,612
Perinatal Conditions	5,403	1,046
Infectious and Parasitic Diseases	6,866	1,069
Diseases of Genito-Urinary System	6,722	1,223
Neoplasm	6,387	1,206
Endocrine, Nutritional and Metabolic Diseases	8,088	1,317
Neuropsychiatric	4,490	710
Total Discharge	163,070	29,165

Source: MOH

The 2004 WRHA data reflected a similar rank order to the national level for the first five leading causes of discharge from public hospitals. Included were Obstetrics; Accidents and Injuries; Diseases of the Circulatory System; Diseases of the Respiratory System and Diseases of the Digestive System (Table 3.5).

3.1.3 NATIONAL HEALTH PRIORITIES

The National Health Priorities address those factors/diagnoses that could impinge on and or have a negative impact on population health and national development. Several variables were used to arrive at the listing, and include demographic, environmental, epidemiologic and sociological concerns.

Among the health priorities are:

- Environmental Health
- Communicable Disease Control
- Chronic Non-Communicable Diseases
- Child and Adolescent Health
- Reproductive Health
- Mental Health and Substance Abuse
- Emergency Health Services

3.1.3.1 ENVIRONMENTAL HEALTH

The thrust to maintain an environment that is sustainable to support human health and development forms part of the region's health sector activities.

Table 3.6 Food Safety: WRHA Parishes 2004

VARIABLES	WRHA PARISHES			
	Trelawny	St. James	Hanover	Westmoreland
Food Handlers Attending Clinics	2,678	7,913	3,068	4,525
New Cards/Permits Issued	2,664	7,488	2,985	3,150
Food Handling Establishments (Number)	856	755	967	728
Percentage Health Certified (%)	54.8	84.9	41.8	29
Meat Inspection – Total	12,985		13,935	26,209
Meat and Poultry (Kgms)	243,091		842,139	1,680,989
Percentage Meeting National Standard	98.7		97.8	98.6
Milk Sampling (# of dairies)				
% Milk Meeting National Standard				
No. of Inspections				
- Hotel	14	131	13	81
- Villa	30		79	
No. Certified Satisfactory				
- Hotel	7	51	12	68
- Villa	11		79	

Source: WRHA Parish Reports 2004

Efforts to maintain and improve the Food Safety certification process of Tourist and Food Handling Establishments, continued with the parishes of St. James (84.9%) and Trelawny (54.8) having the highest levels of certification (Table 3.6).

The percentage of meat within the national standards varied from 98.7 to 97.8 among the reporting parishes (Table 3.6).

Table 3.7 Water Quality: WRHA Parishes 2004

VARIABLES	WRHA PARISHES			
	Trelawny	St. James	Hanover	Westmoreland
Drinking Water	1,473	867	1,574	2,376
- No. of Visits			258	
- No. of Samples	1,436	1,285	1,765	2,723
% of Population Access to Treated Supplies	77	82	90	74.1
Waste Water				
- No. of Plants Inspected	6	15	3	3
- % Satisfactory	83.3%	53.0%	75.0%	30.0%
Other Water				
- No. of Swimming Pools Inspected	29			
- % Satisfactory	31			

Source: WRHA Parish Reports 2004

Based on parish reports, the number of samples of drinking water taken varied from 2,723 (Westmoreland) through 1,285 (St. James). While the parish of Hanover provided 90% of its population, with treated water, the parish of Westmoreland provided 74.1% (Table 3.7).

The waste water plants in Trelawny recorded the highest percentage of satisfactory performance (83.3%) (Table 3.7).

Table 3.8 Sanitation: WRHA Parishes 2004

INDICATORS	WRHA PARISHES			
	Trelawny	St. James	Hanover	Westmoreland
Household Sanitation	2,989	2,025	4,470	
- Household Inspection (No.)	82.3	85	70	
- % Household Satisfactory	206	428	240	663
- Complaints Received	97.1	91.0	98.0	80.1
- % Complaints Investigated	306		79	341
- Notices – Served	46.1		76.0	34.6
- % Notices – Obeyed	4			
- Prosecutions Secured	84	126	104	186
Institutions				
- Schools Inspected (No. of Visits)	198	249		
- % Schools Satisfactory	70.2	75.5	73.0	63.7
- Children’s Homes Inspections				
- % Children’s Satisfactory				
- Places of Safety Inspections				
- % Places of Safety Satisfactory				
- Lock-up Inspections	7			
- % Lock-up Satisfactory	28.6			
- Hospitals Inspections	1			
- % Hospitals Satisfactory	0			
- Nursing Homes/Infirmaries Inspections	1		1	
- % Nursing Homes/Infirmaries Satisfactory	100.0		100.0	
Excreta Disposal				
- Inspections	2,670		4,470	
- % Satisfactory	82.3	80.0	70	73.4
Latrines – Built	68		62	525
- Repaired	2			139
Solid Waste				
- No. of Disposal Sites Inspected		1		
- % Satisfactory		0.0		

Source: WRHA Parish Reports 2004

Household sanitation standards varied from 70% to 85% among reporting parishes.

Approximately 70% of the region’s schools were certified satisfactorily in 2004 (Table 3.8).

Six hundred and sixty five (655) latrines were built in the WRHA in 2004 with the parish of Westmoreland having 80% (525) of the buildings. There was a 76% satisfaction for excreta disposal in the region (Table 3.8).

Table 3.9 Vector Control WRHA Parishes 2004

VARIABLES	WRHA PARISHES			
	Trelawny	St. James	Hanover	Westmoreland
Vector Control – Aedes Indices	13.7	*	11.6	11.2
Barrier Zone (%)	*	1.8	*	*

Source: WRHA Parish Reports 2004

*DNA

In order to ensure that there were no indigenous cases of vector-borne illness in the region, the vector indices are constantly monitored. The Aedes indices ranged from 11.2% through 13.7% among the reporting parishes (Table 3.9).

The Fogging/Larvicidal work and rat baiting were the major interventions to alleviate any reported problem.

Table 3.10 Approval for Development/Commercial Activities WRHA: 2004

VARIABLES	WRHA PARISHES			
	Trelawny	St. James	Hanover	Westmoreland
No. of Applications Building	113		138	252
No. of Approvals Building	108		124	232
No. of Applications Quarry				
No. of Approvals Quarry License				
No. of Applications – Dairies				
No. of Approvals Dairies				
No. of Applications Butchers	31		33	43
No. of Approvals Butchers	29		28	38
No. of Applications Spirit License	114		93	419
No. of Approvals Spirit License	109		18	241
No. of Applications Barber/Hairdressers	2		18	26
No. of Approvals Barbers/Hairdressers	1		16	24

Source: WRHA Parish 2004

Environmental Health Services contribute to specific national development activities through an approval process which gives cognisance to the impact of these activities on human health.

In excess of 12% of all building applications were approved (Table 3.10).

3.1.3.2 CONTROL OF COMMUNICABLE DISEASES

Immunization Coverage

Table 3.11 Trends in Immunization Coverage for Vaccine Preventable Diseases: WRHA 2000-2004

VACCINES	% COVERAGE				
	Base Year 2000	2001	2002	2003	2004
BCG	94.2	98.8	100.0	97.4	91.3
Polio	92.3	100.0	93.7	91.2	77.8
DPT/DT	92.7	98.3	95.2	92.1	82.7
Hepatitis B	0.7	0	8.2	22.9	86.8
MMR	86.6	85.2	91.9	82.3	91.4
Hib	0.5	0.1	0	22.0	81.2

Source: Ministry of Health EPI Report 2000-2004

Immunization coverage continued to perform below targeted levels in 2004. The WRHA outputs, except for BCG (91.3%) and MMR (91.4%) were all below 90% (Table 3.11).

Table 3.12 Trends in Immunization Coverage for Vaccine Preventable Diseases: Jamaica, WRHA and Parishes 2004

VACCINES	JA	WRHA	% COVERAGE			
			Trelawny	St. James	Hanover	Westmoreland
BCG	84.8	91.3	100.0	90.3	62.0	93.9
Polio	74.6	77.8	90.8	68.2	74.5	73.8
DPT/DT	78.8	82.7	90.1	86.4	80.7	75.6
Hepatitis B	82.8	86.8	95.2	89.7	76.6	81.6
MMR	80.4	91.4	93.9	92.2	100.0	84.8
Hib	77.3	81.2	93.9	89.3	78.1	79.0

Source: EPI Report 2004

The WRHA's immunization data indicated that the region achieved levels of immunization coverage above the national average (Table 3.12). The parish of Trelawny achieved coverage above the national and regional averages (Table 3.12).

The newly introduced vaccines – Hepatitis B and Hib began to “take off” nationally and at the WRHA level when the data were compared with that of year 2002 (Tables 3.11 and Table 3.12).

Notifiable Diseases

The WRHA, like other regions continued to implement surveillance activities for selected diseases using sentinel and hospital active sites from which weekly reports were forwarded in order to detect, verify and control Communicable Diseases. Other relevant strategies were also utilized.

Table 3.13 Notifiable and Other Diseases of National Interest: WRHA and Parishes 2004

NOTIFIABLE DISEASES	WRHA	PARISHES			
		Trelawny	St. James	Hanover	Westmoreland
Acute Flaccid Paralysis	2	-	2	-	-
HIV/AIDS	660	23	514	51	72
Malaria (Imported)	4	-	4	-	-
Dengue	-	-	-	-	-
Measles Confirmed	-	-	-	-	-
Meningitis	72	5	48	3	16
Meningitis H - Influenzae	3	-	2	-	1
- Meningococcal	2	-	1	-	1
Tetanus (Excluding Neonatal)	2	-	1	-	1
Typhoid	12	-	0	3	8
Tuberculosis (Confirmed)	29	1	13	10	5
Hansen's Disease	-	-	-	-	-
Hepatitis - B	29	4	15	1	9
- Viral	*	*	*	*	*
- A	*	*	*	*	*
Ophthalmia Neonatorum	44	3	14	-	27
Congenital Syphilis	38	-	32	6	-
Syphilis (All Stages)	*	*	*	*	*
Genital Ulcer Syndrome	*	*	*	*	*
Urethral Discharge Syndrome	*	*	*	*	*
Vaginal Discharge Syndrome	*	*	*	*	*
OTHER DISEASES					
Accidental Poisoning	119	22	43	3	51
Febrile Illness	*	*	*	*	*
Food Borne Illness	252	*	*	*	*
Gastroenteritis (Cumulative)	3,477	264	1,929	468	816
Conjunctivitis	*	*	*	*	*
Tinea	*	*	*	*	*
Scabies	*	*	*	*	*

Source: MOH, WRHA ERU Annual Report 2004

*DNA

- = None

(Table 3.13)

3.1.3.3 CHRONIC NON-COMMUNICABLE DISEASES

The chronic non-communicable diseases are influenced by lifestyle practices and tend to manifest with increase in age. The Region's monitoring programme seeks to decrease morbidity and mortality.

Asthma

Table 3.14 Morbidity Profile – Asthma: WRHA 2000-2004

VARIABLES	2000	2001	2002	2003	2004
PHC Visits	*	1,543	1,289	1,282	932
Cases seen at A&E	6,364	6,119	6,719	6,090	6,628
Nebulization in A&E	35,383	34,210	36,636	29,764	19,843
Outpatient Specialists Clinic (Paediatric)					
- Total cases	138	63	51	330	*
- New Cases	26	-	6	37	*

Source MOH: MCSR, HMSR, MOH Jamaica Annual Report 2000-2004

*DNA

The WRHA A&E facilities managed 6,628 cases of asthma in 2004. The ratio of patients to nebulizations was 1:2.9 (Table 3.14).

Table 3.15 Morbidity Profile – Asthma: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
PHC Visits	10,236	932	287	282	166	197
Cases seen at A&E	39,978	6,628	433	3,919	878	1,398
Nebulization in A&E	120,044	19,843	1,937	3,215	3,349	11,342
Outpatient Specialist Clinic (Paediatric)						
- Total Cases	1,320	*	-	*	-	-
- New Cases	158	*	-	*	-	-

Source: MOH MCSR, HMSR; MOH Jamaica Annual Report 2004

*DNA

Just about 9% (932) of all visits to public PHC facilities for Asthma were made in the WRHA in 2004 (Table 3.15).

The parish of St. James managed 59% of all A&E cases. Asthma cases in the region and Westmoreland delivered 57.1% of all nebulizations in the region (Table 3.15).

Cancer

Table 3.16 Morbidity Profile – Cancer: WRHA 2000-2004

VARIABLES	2000	2001	2002	2003	2004
No. screened in PHC:					
- Breast	*	10,811	12,470	12,219	11,395
- Cervix	*	4,353	5,188	5,104	5,438
- Prostate	*	185	116	100	105
No. Referred for Abnormal Smears:		340	518	490	514
- <25 years	*	119	193	172	190
- 25-54 years	*	214	367	290	299
- 55 years and over	*	7	18	28	25
Treatments AT CRH	3,398	6,793	9,396	18,162	13,682
- Chemotherapy	201	170	100	207	163
- Cobalt	2,905	4,273	9,156	17,794	13,400
- Superficial	49	105	103	152	99
- Radium/Caesium	9	11	10	9	20
- Other	234	2,239	27	-	-
Radiotherapy Outpatient Clinic:					
- Total Cases	706	3,368	3,144	3,730	*
- New Cases	-	-	641	308	*

Source: MOH MCSR, HMSR 2000-2004

*DNA

The WRHA cancer prevention and control strategies continued with screening in PHC facilities. The 25-54 age group continued to have the highest number (58%) of referrals for abnormal smears (Table 3.16).

WRHA cancer registry data revealed that there were 33 cases of cervical cancer, 38 cases of prostate cancer and 39 cases of breast cancer in 2004.

Table 3.17 Morbidity Profile – Cancer: Jamaica, WRHA and Parishes 2004

INDICATORS	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
No. screened in PHC: - Breast	76,896	11,395	3,367	3,897	1,057	3,074
- Cervix	26,571	5,438	1,461	3,387	266	324
- Prostate	1,103	105	23	44	27	11
No. Referred for Abnormal Smears:	2,674	514	191	270	12	41
- <25 years	860	190	72	109	1	8
- 25-54 years	1,698	299	115	150	9	25
- 55 years and over	116	25	4	11	2	8
Treatments at CRH	40,100	13,682	-	13,682	-	-
- Chemotherapy	507	163	-	163	-	-
- Cobalt	38,218	13,400	-	13,400	-	-
- Superficial	1,230	99	-	99	-	-
- Radium/Caesium	106	20	-	20	-	-
- Other	30	-	-	-	-	-
Radiotherapy Outpatient Clinic:						
- Total Cases	*	*	-	*	-	-
- New Cases	*	*	-	*	-	-

Source: MOH MCSR, HMSR 2004

*DNA

All areas of WRHA primary health care cancer screening activities recorded low numbers in the parish of Hanover in 2004 (Table 3.17).

Thirty-four percent (34%) of all cancer treatments delivered from public sites were in the WRHA (St. James) (Table 3.17).

Diseases of the Circulatory System

Table 3.18 Morbidity Profile – Diseases of the Circulatory System: WRHA 2000-2004

Variables	2000	2001	2002	2003	2004
PHC Visit					
- Hypertension	25,816	25,591	23,436	23,814	22,023
- Other C.V. Disease	2,672	2,770	3,006	3,189	2,868
- Chronic Rheumatic Diseases	1,043	1,100	984	814	754

Source: MOH MCSR, 2001; MOH Jamaica Report 2000-2004

Primary Health Care visits in WRHA facilities for Hypertension numbered 22,023, approximately 1,791 less than in 2003 (Table 3.18).

There were 2,674 discharges for Hypertension in 2004, 747 more than the previous year (2003) (WRHA Non-communicable Disease Report, 2004).

Table 3.19 Morbidity Profile – Diseases of the Circulatory System: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
PHC Visit						
Hypertension	115,072	22,023	4,551	8,480	4,091	4,901
Other C.V. Disease	14,438	2,868	308	953	949	658
Chronic	4,034	754	332	118	272	32

Source: MOH MCSR 2001, MOH Jamaica Annual Report 2004

While the bulk of PHC visits for Hypertension were made in the Parish of St. James (8,480), each of the other parishes in the WRHA (Except Hanover (18.6%) registered visits in excess of twenty percent (20%) (Table 3.19).

Diabetes

Table 3.20 Morbidity Profile – Diabetes: WRHA 2000-2004

VARIABLES	2000	2001	2002	2003	2004
Visits to PHC	7,163	6,902	5,876	5,302	3,941
Leg Ulcer due to	*	326	84	86	88

Source: MOH MCSR, HMSR 2000-2004

*DNA

When compared to year 2003, there were 1,361 less visits to WRHA PHC facilities for Diabetes (Table 3.20).

There were 186 more discharges for Diabetes in 2004 when compared to 2003 (1,635) (WRHA Non-Communicable Disease Report 2004).

Table 3.21 Morbidity Profile – Diabetes: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Visits to PHC	28,907	3,941	860	1,330	645	1,105
Leg Ulcer due to diabetes	804	88	17	27	13	31

Source: MOH MCSR, 2000-2004

The WRHA managed 13.6% (3,941) of all PHC visits for Diabetes on the island in 2004. In that year the parish of St. James had 33.7% (1,330) of all the visits, while Westmoreland had 35.2% (31) of the region's leg ulcers due to diabetes (Table 3.21).

Other Monitored Diseases

Table 3.22 Morbidity Profile - Other Monitored Diseases: WRHA 2001-2004

DISORDERS	VISITS TO PHC			
	2001	2002	2003	2004
Respiratory Tract Infection (Excluding Asthma)	11,952	10,808	9,675	9,060
Skin Disease	17,293	15,919	14,717	12,930
Musculo-Skeletal Disorders	9,216	7,985	8,801	7,889
Other Gastro-intestinal Disorders	3,512	2,788	2,475	2,240
Diabetes and Hypertension	12,607	11,977	12,396	11,548

Source MOH MCSR; 2001-2004

WRHA 2004 PHC data revealed that though registering declines in visits, Skin Disease continued to be the major cause among other monitored diseases (Table 3.22).

**Table 3.23 Morbidity Profile based on Primary Health Care Visits
- Other Monitored Diseases: Jamaica, WRHA and Parishes 2004**

DISORDERS	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Respiratory Tract Infections (Excluding Asthma)	111,923	9,060	2,405	2,694	1,717	2,244
Skin Diseases	99,087	12,930	4,080	4,157	1,886	2,807
Musculo-Skeletal Diseases	52,507	7,889	2,660	1,915	1,483	1,831
Other Gastro-intestinal Disorders	22,674	2,240	868	507	330	535
Diabetes and Hypertension	63,617	11,548	2,295	4,108	2,384	2,761

Source: MOH MCSR, 2004

Among the Other Monitored Diseases, WRHA PHC data identified the parish of Trelawny as having the largest number of visits for Musculo-Skeletal Disorders (33,7%) and Other Gastro-intestinal Disorders in the region (Table 3.23).

3.1.3.4 CHILD AND ADOLESCENT HEALTH

Child Health Profile

Table 3.24 Status of Child Health – Several Variables: WRHA 2000-2004

VARIABLES	Base Year 2000	2001	2002	2003	2004
No. of Live Births – Community	494	378	101	190	106
- Hospital	8,874	8,593	8,103	7,969	7,743
No. of Still Births – Community	3	2	2	2	1
- Hospital	160	144	153	119	121
Low Birth Weight – Community	43	28	18	19	9
- Hospital	1,038	992	822	695	674
Exclusive Breastfeeding – 6 weeks	2,505	4,781	4,513	4,316	3,772
- 12 weeks	*	3,348	3,244	2,899	2,534
% Immunization Coverage (< 1)					
- BCG	94.0	98.6	100.0	97.1	91.2
- Polio	90.6	98.1	90.6	89.4	73.9
- DPT/DT	91.1	96.0	92.0	89.7	80.5
- HIB	0.3	0.1	0	21.9	81.2
- Hepatitis B	0.4	*	8.1	22.5	81.6
- MMR (12 – 23 months)	86.6	85.2	91.9	82.3	91.4
Nutrition Status (0-35 months)					
- Above Normal	3,953	3,836	3,780	3,282	3,212
- Normal	44,771	48,414	45,352	43,825	41,470
- Moderate	1,616	1,485	1,201	1,051	874
- Below Normal	68	39	41	27	23
% Receiving Home Visits	41.4	44.0	42.0	40.6	39.8
Child Health Clinic Visits	*	68,943	63,229	62,683	63,507
Child Guidance Cases – Total	309	375	763	513	*
- New	*	140	320	215	*
Total Accident & Emergency Cases	18,988	22,775	20,783	19,807	19,108

Source: MOH MCSR, EPI & HMSR 2000-2004

* DNA

Live births declined at both PHC (84) and hospital (226) levels in WRHA in 2004 (Table 3.24).

Breast feeding at six weeks (3,772) and twelve weeks (2,534) continued to decline based on previous year's data (Table 3.24).

**Table 3.25 Status of Child Health – Several Variables: Jamaica WRHA
And Parishes 2004**

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
No. of Live Births – Community	791	106	31	31	1	43
- Hospital	41,114	7,743	716	4,099	470	2,456
No. of Still Births – Community	5	1	1	-	-	-
- Hospital	701	121	9	60	3	49
Low Birth Weight – Community	39	9	4	2	-	3
- Hospital	4,120	674	54	390	39	191
Exclusive Breastfeeding – 6 weeks	15,778	3,772	761	1,210	620	1,181
- 12 weeks	9,611	2,534	520	752	417	845
% Immunization Coverage (<1)						
- BCG	84.7	91.2	100.0	90.3	61.9	93.8
- Polio	71.3	73.9	90.4	67.7	73.5	73.4
- DPT/DT	76.7	80.5	89.4	83.7	77.7	73.2
- HIB	77.3	81.2	89.9	83.1	78.1	75.5
- Hepatitis B	76.8	81.6	91.2	83.5	78.1	76.0
- MMR (12 – 23 months)	80.4	91.4	93.9	92.2	100.0	84.8
Nutrition Status (0-35 months)						
- Above Normal	14,574	3,212	639	1,276	355	942
- Normal	195,485	41,470	7,697	15,159	7,996	10,618
- Moderate	8,090	874	170	287	114	303
- Below Normal	141	23	-	12	1	10
% Receiving Home Visits	46.3	39.8	42.0	30.8	48.1	38.1
Child Health Clinic Visits	286,198	63,507	11,439	22,973	11,978	17,117
Child Guidance Cases – Total	*	*	*	*	*	*
- New	*	*	*	*	*	*
Total Accident & Emergency Cases	126,241	19,108	2,278	9,629	2,701	4,500

Source: MOH MCSR, EPI, HMSR 2004

The largest number of live births in the community was in the parish of Westmoreland. Exclusive breastfeeding at 12 weeks was 37.8% (458) less than at 6 weeks in St. James. Trelawny's immunization coverage was above both regional and national levels (Table 3.25).

Child Morbidity Profile

**Table 3.26 Provision and Utilization of Hospital Services (Children):
WRHA 2001-2004**

VARIABLES	2001	2002	2003	2004
Bed Complement	86	103	102	88
Bed Occupancy	86.3	59.6	61.9	76.7
Average Length of Stay	6.2	6.3	5.9	6.1
Outpatient Cases – Total	5,376	6,504	6,076	6,059
- New	506	584	661	611

Source: MOH HMSR 2001-2004

The region's bed complement fell by fourteen in 2004 and the bed occupancy was 76.7% (Table 3.26).

**Table 3.27 Provision and Utilization of Hospital Services (Children): Jamaica,
WRHA and Parishes 2004**

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Bed Complement	688	8	11	47	6	24
Bed Occupancy Rate	67.0	76.7	71.5	81.0	16.4	85.6
Average Length of Stay	4.9	6.1	5.0	6.5	6.2	5.9
Outpatient Cases – Total	60,992	6,059	-	3,842	-	2,217
- New	12,092	611	-	505	-	106

Source: MOH HMSR 2004

The WRHA recorded above national levels for bed occupancy (76.7 and average length of stay (6.1). All the parishes of the region recorded above national level for the latter variable (Table 3.27).

Child Morbidity

The child morbidity status represents the national level. There were 26,266 hospital discharges among the under one population of 45,833 persons on the island. The leading causes were Perinatal Conditions (18.7%), Diseases of the Respiratory System (6.4%) and Infectious and Parasitic Diseases (4.2%) (MOH Jamaica, Annual Report 2004).

The 1-4 age groups had 197,759 persons and the leading causes of the 8,600 public hospital discharges were Diseases of the Respiratory System (28.8%), Infectious and Parasitic Diseases (24.3%) as well as Accident and Injuries (15.2%) (MOH Jamaica, Annual Report 2004).

Among the 278,775 children ages 5-9 in the Jamaica population in 2004, 4,460 were discharged from all public hospitals. The prevailing conditions included Accidents and Injuries (22.2%), Diseases of the Respiratory System (21.6%), Infectious and Parasitic Diseases (11.5%) (MOH Jamaica, Annual Report 2004).

CHILD MORTALITY

Table 3.28 Under One Child Mortality: WRHA 2000-2004

Mortality	2000	2001	2002	2003	2004
Perinatal Mortality Rate/1000 live births	25.8	27.9	25.7	22.6	23.8
Early Neonatal Mortality Rate/1000 live births	8.2	11.6	7.3	8.0	8.5
Foetal Death Rate/1000 live births	17.7	16.5	18.5	14.7	15.4

Source: MOH HMSR 2000-2004

All of the under one child mortality variables increased in year 2004 (Table 3.28).

Table 3.29 Under One Child Mortality: Jamaica, WRHA and Parishes 2004

Mortality	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Perinatal Mortality Rate/1000 live births	27.4	23.8	19.3	26.9	10.6	22.4
Early Neonatal Mortality Rate/1000 live births	10.9	8.5	7.0	12.7	4.3	2.9
Foetal Death Rate/1000 live births	16.8	15.4	12.4	14.4	6.3	19.6

Source: MOH HMSR 2000-2004

Although St. James perinatal mortality rate was just about .5 below the national figure, all the child mortality variables were also less than those of the national level (Table 3.29).

Adolescent Health

**Table 3.30 Status of Adolescent Health – Several Variables
WRHA 2001-2004**

VARIABLES	2001	2002	2003	2004
Rheumatic Fever				
- No. with Rheumatic Heart Disease	1,100	984	814	754
- No. receiving Prophylaxis	2,513	2,290	2,328	2,201
Reproductive Health				
- Total Antenatal Visits	7,391	6,813	6,252	6,271
- 0 – 15 weeks	502	542	447	533
- 16 – 28 weeks	1,093	958	931	944
- 29 weeks and over	175	146	138	109
No. with Hb<10gms/dcl	201	198	176	218
- No. Treated	145	131	95	70
- No. SC/SS	17	16	11	17
No. Syphilis Positive	24	18	19	9
- No. Treated	7	8	11	5
No. with Pre-eclampsia (PHC)	33	14	26	11
% Postnatal Coverage	21.9	21.2	21.0	21.0
Post Natal Family Planning Acceptors	1,303	1,180	1,153	1,131
Contraceptive Accepted				
- Pill	590	518	459	421
- Injection	441	394	428	455
- IUD	3	6	6	3
- Condom	269	262	260	252
- Dual Method	428	433	454	435

Source: MOH MCS 2001-2004

The WRHA had 18.7% (754) of all persons visiting public PHC facilities for Rheumatic Heart Disease and 2,201 (23.8%) of all prophylactic treatments administered were in that region (Table 3.30).

Table 3.31 Status of Adolescent Health – Several Variables: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Rheumatic Fever						
- No. with Rheumatic Heart Disease	4,034	754	332	118	272	32
- No. receiving Prophylaxis	9,878	2,201	372	1,167	257	405
Reproductive Health						
- Total Antenatal Visits	33,593	6,271	1,513	1,469	1,107	2,182
- 0 – 15 weeks	2,275	533	111	181	80	161
- 16 – 28 weeks	4,900	944	176	263	164	339
- 29 weeks and over	709	109	18	38	15	38
No. with Hb<10gms/dcl	940	218	57	57	46	58
- No. Treated	494	70	6	20	11	33
- No. SC/SS	119	17	5	3	1	8
No. Syphilis Positive	37	9	1	1	3	4
- No. Treated	23	5	1	-	1	3
No. with Pre-eclampsia (PHC)	113	11	-	1	3	7
% Postnatal Coverage	20.7	21.0	22.1	19.6	18.9	23.1
Post Natal Family Planning Acceptors	5,299	1,131	227	449	164	291
Contraceptive Accepted						
- Pill	1,748	421	75	154	68	124
- Injection	2,424	455	115	153	60	127
- IUD	14	3	2	-	-	1
- Condom	1,113	252	35	142	36	39
- Dual Method	2,717	435	111	174	60	90

Source: MOH MCSR 2004

The parish of Westmoreland recorded the largest total antenatal visit (2,182) as well as visits at 16-28 weeks (339) in year 2004 for adolescents (Table 3.31).

The WRHA data revealed that although postnatal coverage among adolescents was slightly higher at the region (21.0%) than what obtained nationally the parishes of Westmoreland (23.1%) and Trelawny (22.1%) has higher than regional and national coverage (Table 3.31).

Adolescent Morbidity

Among the 2,648,224 persons in Jamaica in 2004, 534,147 were in the 10-19 age group. Sixteen thousand, one hundred and ninety-five (16,195) among this group were discharged from all public hospitals in 2004 for Obstetric Conditions (55.0%), Accidents and Injuries (14.3%) and Diseases of the Digestive System (4.9%) (MOH Jamaica Annual Report 2004).

3.1.3.5 REPRODUCTIVE HEALTH

Table 3.32 Status of Reproductive Health – Several Variables: WRHA 2000-2004

SEVERAL VARIABLES	2000	2001	2002	2003	2004
Total Antenatal (ANC) Visits	33,973	30,080	27,492	25,640	24,736
Total Anaemia (Hb<10gms/dcl)	*	16.1	17.6	18.6	17.6
% Treated	*	72.6	60.5	46.1	37.8
No. S.C/SS	*	60	48	42	73
% Syphilis Positive	*	3.2	2.5	2.9	1.4
% Treated	*	45.9	44.4	57.9	33.9
No. HIV Positive	*	*	*	*	*
Eclampsia (Hospital & PHC)	35	167	126	119	79
Antepartum Haemorrhage	23	33	41	28	31
Postpartum Haemorrhage	287	298	392	426	394
Mothers' Delivered - Hospital	8,921	8,643	8,092	7,998	7,784
- PHC	*	378	162	192	107
Deliveries by Trained Persons - Hospital	8,921	8,643	8,092	7,998	7,789
- PHC	*	354	151	182	94
C. Section	986	929	1,072	1,161	932
Home Visits	*	5,622	4,927	4,859	4,508
Postnatal Visits (Mothers)	*	8,505	7,973	7,807	7,320
Postnatal Family Planning Acceptors	5,546	5,499	5,065	5,151	4,885
Contraceptive Acceptors (Selected)					
- Pill	2,142	2,765	2,286	1,644	1,577
- Injection	1,847	3,132	2,923	1,904	1,874
- IUD	12	163	156	27	26
- Condom	1,545	1,855	1,657	1,576	1,408
- Dual Method	1,584	2,078	2,108	1,649	1,676
Tubal Ligation (Hospital)	672	583	695	689	549

Source: MOH MCSR, HMSR. MOH Jamaica Annual Report 2000-2004

*DNA

WRHA 2004 data indicated that there was a decline in total antenatal visits and also the percentage of persons treated for anaemia. There was also a decrease in the number of deliveries as well as C-Sections (Table 3.32).

Table 3.33 Status of Reproductive Health – Several Variables: Jamaica WRHA and Parishes 2004

SEVERAL VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total Antenatal (ANC) Visits	133,839	24,736	5,962	6,112	4,643	8,019
Total Anaemia (Hb<10gms/dcl)	13.5	17.6	15.6	16.6	30.7	16.6
% Treated	51.5	37.8	13.7	34.9	26.0	68.0
No. SC/SS	444	73	13	12	9	39
% Syphilis Positive	0.9	1.4	1.3	1.6	3.1	0.6
% Treated	57.8	33.9	61.5	20.0	16.7	62.5
No. HIV Positive	437	*	*	*	*	*
Eclampsia (Hospital & PHC)	768	79	1	26	15	37
Antepartum Haemorrhage	161	31	1	12	5	13
Postpartum Haemorrhage	1,145	394	10	224	6	154
Mothers' Delivered - Hospital	40,771	7,784	725	4,112	472	2,475
- PHC	796	107	32	31	1	43
Deliveries by Trained Persons - Hospital	40,771	7,784	726	4,112	472	2,475
- PHC	726	94	21	30	1	42
C. Section	5,800	932	106	707	-	216
Home Visits (Mothers)	27,301	4,508	804	801	1,048	1,855
Postnatal Visits (Mothers)	34,364	7,320	1,204	2,795	1,154	2,167
Postnatal Family Planning Acceptors	23,779	4,885	927	2,028	804	1,125
Contraceptive Acceptors (Selected)						
- Pill	6,952	1,577	238	662	264	413
- Injection	10,094	1,874	455	627	276	514
- IUD	66	26	24	-	-	2
- Condom	6,665	1,408	210	740	262	196
- Dual Method	10,909	1,676	384	742	235	315
Tubal Ligation (Hospital)	2,774	549	100	303	-	146

Source: MOH MCSR, HMSR, MOH Jamaica Annual Report 2000-2004

*DNA

While the parish of Westmoreland recorded the largest utilization of Antenatal Services (8,109 visits, Hanover recorded the largest percentage of persons with anaemia (30.7) and syphilis (3.1) (Table 3.33).

The region's population in the reproductive age group experienced a 98.7% delivery by trained persons (Table 3.33)

**Table 3.34 Provision and Utilisation of Hospital Services – Reproductive Health:
WRHA 2000-2004**

VARIABLES	2000	2001	2002	2003	2004
Bed Complement (Obstetric)	83	86	85	83	99
Bed Occupancy (%) (Obstetric)	131.6	123.1	99.8	106.3	87.0
Average Length of Stay (Obstetric)	2.6	2.7	2.7	2.9	2.8
Hospital Discharges					
- Obstetric	11,656	10,682	11,656	10,543	8,530
- Genitourinary System	1,017	1,132	1,017	1,152	1,123
Outpatient Clinic Cases					
- Obstetric - Total	12,413	13,395	13,656	11,530	12,221
- New	1,788	2,160	2,147	2,032	1,907
- Gynaecology - Total	4,893	5,077	6,439	6,511	5,926
- New	707	805	1,050	1,207	914
- Urology - Total	2,719	3,114	3,179	3,552	3,747
- New	491	699	481	675	441

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2004

The region's 99 obstetric beds recorded an occupancy level of 87% in 2004. For every 7.6 discharge for obstetric conditions, there was one for Genito-Urinary disorders (Table 3.34).

Table 3.35 Provision and Utilization of Hospital Services – Reproductive Health: Jamaica, WRHA and Parishes 2004

SERVICES	JA	WHRA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Bed Complement (Obstetric)	690	99	7	62	12	18
Bed Occupancy (%) (Obstetric)	58.0	87.0	63.3	79.1	39.5	155.3
Average Length of Stay (Obstetric)(days)	2.7	2.8	2.1	2.9	2.4	3.0
Hospital Discharges						
- Obstetric	48,417	8,530	*	*	*	*
- Genitourinary System	6,722	1,123	*	*	*	*
Outpatient Clinic Cases						
- Obstetric - Total	60,066	12,221	38	10,513	193	1,477
- New	14,300	1,907	-	1,617	53	237
- Gynaecology - Total	30,579	5,926	-	4,485	-	1,441
- New	5,953	914	-	671	-	243
- Urology - Total	19,434	3,747	-	-	-	-
- New	2,843	441	-	-	-	-

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2004

*DNA

In year 2004, the WRHA had just about 14.3% of all public sector obstetric beds and except for the parish of Hanover, the bed occupancy levels exceeded that of the national figure (Table 3.35).

Table 3.36 Morbidity Profile – Reproductive Health: WRHA 2000-2004

VARIABLES	2000	2001	2002	2003	2004
PHC Visits for:					
Diseases of the Genitourinary System & Gynaecological Conditions:					
- Total	*	18,245	16,141	15,577	16,020
- Urinary	*	1,988	1,704	1,510	1,344
- STI (Except PID)	*	11,982	10,706	10,526	11,264
- PID	*	1,042	854	722	655
- Other Gynaecological Conditions	*	3,223	2,877	2,769	2,757
Accident & Emergency Cases:					
- Obstetric/Gynaecology	7,468	9,011	8,764	8,633	6,293
- Genito-Urinary	2,683	3,000	2,881	3,334	3,517
Surgical Interventions:					
- Obstetric: - Total	2,404	2,091	2,677	2,681	3,062
- Emergency	1,350	1,092	1,290	1,497	1,239
- Elective	1,054	999	1,387	1,184	1,060
749 - Other Gynaecological:					
- Total	589	717	692	786	749
- Emergency	136	164	98	136	108
- Elective	453	553	594	650	588
- Urology - Total	176	191	150	130	1,104
- Emergency	15	9	12	13	11
- Elective	161	182	138	117	149

Source: MOH Jamaica Annual Report 2000-2003

*DNA

WRHA 2004 data revealed that while 16,020 visits were made to PHC facilities for the management of reproductive health disorders, 12,471 cases were managed in A&E departments (Table 3.36).

Table 3.37 Morbidity Profile – Reproductive Health: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
PHC Visits for:						
- Diseases of the Genitourinary System & Gynaecological Conditions:						
- Total	109,212	16,020	2,171	10,734	754	2,361
- Urinary	16,554	1,344	322	608	158	256
- STI (Except PID)	64,081	11,264	1,263	8,588	139	1,274
- PID	6,300	655	98	312	103	142
- Other Gynaecological Conditions	22,277	2,757	488	1,226	354	689
Accident & Emergency Cases:						
- Obstetric/Gynaecology	30,125	8,954	475	5,024	1,099	2,356
- Genito-Urinary	23,224	3,517	187	1,840	744	746
Surgical Interventions:						
- Obstetric:						
- Total	10,092	3,062	87	1,947	89	939
- Emergency	4,992	1,239	60	905	-	274
- Elective	3,740	1,060	16	340	89	615
- Other Gynaecological:						
- Total	7,449	749	146	392	-	211
- Emergency	2,022	108	48	52	-	8
- Elective	3,803	588	98	340	-	150
- Urology:						
- Total	5,401	1,104	17	1,087	-	-
- Emergency	233	11	1	10	-	-
- Elective	671	149	16	133	-	-

Source: MOH Jamaica Annual Report 2004

Of the 16,020 visits made to the WRHA's PHC facilities for Diseases of the Genito-Urinary System and Gynaecological Conditions, the parish of Hanover recorded the lowest number of visits (754) (Table 3.36).

3.1.3.6 MENTAL HEALTH

Table 3.38 Status of Mental Health – Several Variables: WRHA 2000-2004

VARIABLES	Base Year 2000	2001	2002	2003	2004
Total Visits to PHC	*	6,176	6,483	7,458	7,691
Total cases seen in A&E	1,535	1,671	1,544	1,581	1,476
Total Hospital Discharges	506	419	814	742	710
Average Length of Stay	9.5	16.7	19.0	20.3	35.9
Total CMH Clinic Cases	2,863	4,125	*	*	*
CMH Admissions to Hospital	*	46	33	258	305
Home Visits					
- Total Cases	*	1,745	1,297	*	1,962
- Emergency	*	141	102	*	172
Outpatient Clinic					
- Total	5,310	6,756	6,794	7,649	*
- New Cases	297	232	386	582	*
Child Guidance Clinic					
- Total Cases	309	375	673	513	*
- New	0	140	320	215	*
Attempted Suicide Seen in A&E:					
10 – 19 age group[5	16	10	4	9
20 – 29 -do-	5	4	2	1	4
30 – 44 -do-	15	1	2	4	5
45 – 64 -do-	4	1	*	1	2
65 & over -do-	3	0	*	*	*
Age Unknown	0	1	*	*	*

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2000-2004, WRHA CMH Reports 2004
*DNA

The WRHA 2004 data identified continuing increase in the annual number of PHC visits for mental health care (Table 3.38).

Average length of stay increased by 15.6 days when compared to year 2003 and in 2004 it was the longest stay since the base year (Table 3.38).

Table 3.39 Status of Mental Health – Several Variables: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total Visits to PHC	39,878	7,691	1,078	2,583	1,651	2,369
Total cases seen in A&E	3,961	1,476	70	998	150	258
Total Hospital Discharges	4,490	710	*	*	*	*
Average Length of Stay	*	35.9	4.5	17.4	4.6	9.4
Total CMH Clinic Cases	13,068	*	*	*	*	*
CMH Admissions to Hospital	1,363	305	*	*	*	*
Home Visits - Total Cases	*	1,962	533	270	478	681
- Emergency	*	172	22	115	18	17
Outpatient Clinic - Total	*	*	*	*	*	*
- New Cases	*	*	*	*	*	*
Child Guidance Clinic - Total Cases	*	*	*	*	*	*
- New	*	*	*	*	*	*
Attempted Suicide Seen in A&E:	199	20	7	1	7	5
10 – 19	77	9	3	–	3	3
20 – 29	60	4	2	–	2	–
30 – 44	42	5	2	–	2	–
45 – 64	7	2	–	1	*	1
65 & over	5	–	–	–	–	–
Age Unknown	3	–	–	–	–	–

Source: MOH MCSR, HMSR, MOH Jamaica Annual Reports 2004, WRHA CMH 2004 Reports
*DNA

Approximately 37.2% (1,476) of all cases of mental health problems seen in A&E were in the WRHA.

The parish of Westmoreland had 30.8% (2,369) of all WRHA's visits to primary health care for mental health problems. Home visits in the parish represented 34.7% (681) of the Region's total (Table 3.39).

Table 3.40 Morbidity Profile – Community Mental Health: WRHA 2000-2004

CONDITIONS	2000	2001	2002	2003	2004
Psychotic Disorders					
- On Register	1,500	1,679	1,913	*	2,105
- % Receiving Consistent Care	*	73.3	84.0	*	78.0
Mood Disorders	500	525	74	*	112
Organic Mental Disorder/Anxiety	*	*	*	*	*
Disorders of Childhood & Adolescence	147	866	*	*	*
Post Traumatic Disorders	*	*	*	*	*
Other Disorders	*	*	*	*	*
Substance Abuse Cases	150	150	44	820	69
- Rehabilitation					
- No. Screened	*	44	*	*	*
- No. Admitted	*	30	*	*	*
- No. Drop Out	*	21	*	*	*
- No. Graduating	*	3	*	*	*
- Recidivism	*	*	*	*	*

Source: WRHA CMH Report; MOH Jamaica, Annual Report 2000-2004

*DNA

Despite the absence of year 2003 data there was an increasing trend in the number of clients with psychotic disorders on register. Of the 2,105 of the WRHA's clients with psychotic disorders, 78.0% received consistent care (Table 3.40).

Table 3.41 Morbidity Profile – Community Mental Health: Jamaica, WRHA and Parishes 2004

CONDITIONS	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Psychotic Disorders						
- On Register	7,703	2,105	288	871	343	643
- % Receiving Consistent Care	*	78.0	62.0	92.0	86.2	72.1
Mood Disorders	3,493	112	*	*	*	48
Organic Mental Disorder/Anxiety	498	*	*	*	*	7
Disorders of Childhood & Adolescence	566	*	*	*	*	21
Post Traumatic Disorders	*	*	*	*	*	3
Other Disorders	*	*	*	*	4	37
Substance Abuse Cases	808	69				13
- Rehabilitation						
- No. Screened	78	*	*	*	*	*
- No. Admitted	53	*	*	*	*	*
- No. Drop Out	28	*	*	*	*	*
- No. Graduating	30	*	*	*	*	*
- Recidivism	*	*	*	*	*	*

Source: WRHA CMH Report; MOH Jamaica, Annual Report 2000-2004

Note: Jamaica Data = preliminary

*DNA

In 2004, the WRHA had 27.3% (2,105) of the 7,703 registered psychotics in the Island (Table 3.41).

The parish of St. James (with the major hospital) achieved a high level (92.0%) of consistent care for its 871 psychotic patients on register in 2004 (Table 3.41).

3.1.3.7 EMERGENCY HEALTH SERVICES

**Table 3.42 Status of Emergency Health Services – Several Variables: WRHA
2000-2004**

VARIABLES	Base Year 2000	2001	2002	2003	2004
Primary Health Care Visits for Injuries	9,529	6,898	6,268	5,985	5,424
Casualty/A&E Attendance Total	129,289	137,163	136,649	143,968	155,259
- % Receiving Care	94.7	96.5	94.6	93.8	95.6
- Admitted	14,213	15,805	13,948	15,048	16,153
Treatments Given in Casualty					
- Total	193,957	212,469	220,598	256,271	209,998
- Sutures	6,726	7,524	6,550	7,105	7,054
- Dressing	11,393	13,799	11,239	12,127	13,289
- Injection	59,447	66,566	62,403	64,698	60,831
- Nebulization	35,383	34,210	36,636	29,764	19,843
- Other	76,116	84,984	98,784	137,130	103,809
Leading Emergency Surgeries					
- Total Cases	2,761	2,542	2,533	3,057	2803
- General Surgery	907	819	761	919	899
- Specialist:					
- Obstetric	1,350	1,092	1,290	1,497	1,239
- Emergency Tubal Ligation	58	79	3	76	131
- Other Gynaecological	136	164	98	136	108
- Urology	15	9	12	13	11
- Orthopaedic	137	198	193	212	194
- Dental	16	33	3	6	106
- ENT	99	98	109	120	-
- Eye	36	45	51	48	56
- Plastic	7	3	2	-	-
- Other	-	2	10	23	58
Minor Operations (Casualty)	4,892	5,422	4,886	5,547	5,172

Source: MOH MCSR, HMSR, WRHA CMH 2004 Report

In year 2004, of the 155,259 persons attending A&E in the WRHA, 95.6% received care and 10.4% (16,153) were admitted to hospital (Table 3.42).

The Region delivered 209,998 treatments and performed 4,332 emergency surgical interventions (Table 3.42).

Table 3.43 Status of Emergency Health Services –Several Variables Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Primary Health Care Visits for Injuries	24,424	5,424	1,113	2,216	1,140	1,015
Casualty/A&E Attendance Total	775,727	155,259	18,405	70,792	21,679	44,383
- % Receiving Care	97.8	95.6	97.0	95.8	97.4	93.7
- Admitted	101,432	16,153	2,194	8,650	523	4,786
Treatments Given in Casualty						
- Total	630,994	209,998	12,682	120,169	14,537	62,610
- Sutures	25,503	7,074	1,241	2,723	1,069	2,021
- Dressing	74,307	13,289	2,614	2,371	5,412	2,892
- Injection	214,140	60,831	3,644	33,751	4,209	19,224
- Nebulization	120,044	19,843	1,937	3,215	3,349	11,342
- Other	181,710	103,809	3,150	74,980	-	25,679
Leading Emergency Surgeries						
- Total Cases	26,702	4,332	318	1,996	-	489
- General Surgery	5,874	899	140	594	-	155
- Specialist:						
- Obstetric	4,992	1,239	60	905	-	274
- Emergency Tubal Ligation	891	131	9	122	-	-
- Other Gynaecological	2,022	108	48	52	-	8
- Urology	233	11	1	10	-	-
- Orthopaedic	1,505	194	3	149	-	42
- Dental	20	-	-	-	-	-
- ENT	634	106	-	106	-	-
- Eye	245	56	-	56	-	-
- Plastic	-	-	-	-	-	-
- Other	227	58	57	1	-	-
Minor Operations (Casualty)	15,290	5,172	96	3,126	498	1,4

Source: MOH MCSR, HMSR, WRHA CMH Report 2004

Twenty percent (20%) (155,259) of those seeking emergency care in public facilities were from the WRHA which delivered 209,998 (33.3%) of emergency treatments in public A&E facilities (Table 3.43).

The plans to assess and strengthen emergency services in St. James and Westmoreland are yet to be operationalised.

**Table 3.44 Morbidity Profile in Public Hospital A&E Departments:
WRHA 2000-2004**

CONDITION TREATED BY CASES	Base Year 2000	2001	2002	2003	2004
Gastroenteritis	4,202	3,137	4,360	5,743	4,547
URTI	5,887	6,919	5,579	5,396	7,318
LRTI	1,606	1,676	1,667	1,313	1,413
Asthma	6,364	6,119	6,719	6,090	6,628
Medical Conditions	37,489	42,689	39,850	44,175	50,883
Surgical Conditions	15,433	16,691	14,762	19,624	20,111
Ob/Gyn. Conditions	7,468	9,011	8,764	8,633	8,954
GU Conditions	2,468	3,000	2,881	3,334	3,517
Paediatric	2,683	22,775	20,783	19,807	19,108
Psychiatric Conditions	1,535	1,671	1,544	1,587	1,476
Psychiatric Crisis Intervention	-	141	*	*	*
Intentional - PHC	1,299	862	668	552	484
Total - Casualty	6,372	6,720	6,808	7,283	7,601
Unintentional - PHC	8,230	6,036	5,600	5,433	4,940
Total Casualty	10,275	12,148	10,505	11,489	12,069

Source: MOH: MCSR, HMSR 2000-2004

*DNA

In 2004, the main visits to WRHA emergency facilities included the management of: Medical (50,882); Surgical (20,111); and Paediatric cases (19,108), as well as Unintentional Injuries (12,069) (Table 3.44).

Table 3.45 Morbidity Profile in Public Hospital A&E Departments: Jamaica, WRHA and Parishes 2004

CONDITION TREATED BY CASES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Gastroenteritis	37,475	4,547	592	4,066	922	2,967
URTI	35,012	7,318	600	2,477	1,760	2,473
LRTI	8,535	1,413	301	464	130	518
Asthma	39,896	6,628	433	3,919	878	1,398
Medical Conditions	264,656	50,883	8,834	18,848	8,965	14,239
Surgical Conditions	52,287	20,111	753	12,984	117	6,257
Ob/Gyn. Conditions	30,125	8,954	475	5,024	1,099	2,356
GU Conditions	23,224	3,517	187	1,840	744	746
Paediatric	126,241	19,108	2,278	9,629	2,701	4,500
Psychiatric Conditions	3,961	1,476	70	996	150	258
Psychiatric Crisis Intervention	*	*	*	*	*	*
Injuries:						
- Intentional - PHC	2,852	484	141	163	94	86
- Total - Casualty	32,184	7,601	1,938	2,479	1,490	1,694
- Unintentional - PHC	21,571	4,940	912	2,053	1,046	929
- Total Casualty	32,184	12,069	1,391	5,059	2,122	3,497

Source: MOH: MCSR, HMSR 2004

*DNA

The WRHA provided approximately 38.5% of all emergency surgical services delivered in public facilities in 2004 (Table 3.45). The parish of Westmoreland while managing 36.7% (518) cases of LRTI, treated just about 17.8% (86) of the Region's cases of intentional injuries (Table 3.45).

**Table 3.46 Profile of Injuries Treated in Public A&E Departments:
WRHA 2000-2004**

Injuries by Type	Base Year 2000	2001	2002	2003	2004
Intentional					
- Stab Wound	480	610	513	559	683
- Gunshot	117	135	171	171	206
- Blunt Injury	2,639	2,716	2,844	3,300	3,501
- Sexual Assault	252	283	250	405	412
- Laceration	*	2,262	2,044	1,887	1,741
- Bite (Human)	122	99	93	125	142
- Burns	13	14	54	3	5
- Attempted Suicide	34	23	17	10	22
- Other	369	608	864	823	888
Unintentional					
- MVA	2,547	3,002	2,702	2,984	3,128
- Lacerations	4,713	4,692	2,726	2,865	3,134
- Bites	680	832	944	938	1,026
- Burns	332	390	298	327	374
- Poisoning	255	285	271	305	384
- Falls	*	2,940	3,562	4,067	4,020
- Near Drowning	*	8	2	3	3

Source: MOH: HMSR 2000-2004

*DNA

The 2004 data revealed that blunt injuries continued to be the major cause of intentional injuries (Table 3.46).

Falls (4,020) in the WRHA though unintentional is the major cause of injuries in the region (Table 3.46).

**Table 3.47 Profile of Injuries Treated in Public A&E Departments:
Jamaica, WRHA and Parishes 2004**

Intentional Injuries	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Intentional						
- Stab Wound	3,109	683	205	359	42	77
- Gunshot	1,169	206	7	144	19	36
- Blunt Injury	12,203	3,501	979	950	630	942
- Sexual Assault	1,509	412	80	151	49	132
- Laceration	7,867	1,741	461	582	337	361
- Bite (Human)	594	142	45	52	22	23
- Burns	46	5	4	-	-	1
- Attempted Suicide	198	22	9	1	7	5
- Other	4,909	888	148	240	384	117
Unintentional						
- MVA	14,046	3,128	291	1,528	378	931
- Lacerations	16,404	3,134	540	717	851	1,026
- Bites	4,818	1,026	159	425	164	278
- Burns	1,912	374	80	145	65	84
- Poisoning	1,372	384	33	201	35	15
- Falls	13,062	4,020	288	2,043	626	1,061
- Near Drowning	28	3	-	-	1	2

Source: MOH: HMSR 2004

Approximately 28.7% of all cases of blunt injury managed in public sector facilities were in WRHA.

The parish of Trelawny recorded the largest number of blunt injuries (979) as well as attempted suicides (9) (Table 3.47).

3.2 MORTALITY

3.2.1 MORTALITY PROFILE

Table 3.48 Mortality Profile: WRHA 2000-2004

VARIABLES	Base Year 2000	2001	2002	2003	2004
Total Inpatient Deaths	858	953	*	1,406	793
Casualty Deaths	134	133	164	163	185
Anaesthetic Deaths	0	0	0	0	0
Still Births - Total	163	146	155	121	122
- Hospital	160	144	153	119	121
- Community	3	2	2	2	1
Foetal Death Rate/1,000 live births	17.7	16.5	18.5	14.7	15.4
Early Neonatal Death Rate/1,000 live births	8.2	11.6	7.3	8.0	8.5
Perinatal Death Rate/1,000 live births	25.8	27.9	25.7	22.6	23.8
Infant Death Rate/1,000 live births	*	*	*	*	*
Maternal Deaths (Total)	10	5	8	7	6
- in Community	2	0	0	0	2
- in Hospital	8	5	8	7	4
Maternal Death Rate/100,000 live births	90.0	57.9	98.9	87.5	51.4

Source: MCSR, HMSR 2004

*DNA

Community births and deaths represent those events monitored by public sector health professionals.

WRHA 2004 data revealed that except in the year under review, inpatient deaths have shown continuous increases since the base year. Casualty deaths have also shown increases over the same period (except 2001).

There were six maternal deaths in the Region during 2004 (Table 3.48).

Table 3.49 Mortality Profile: Jamaica, WRHA and Parishes 2004

VARIABLES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Inpatient Deaths	5,027	793	113	680	99	337
Casualty Deaths	1,070	185	3	115	31	36
Anaesthetic Deaths	3	-	-	-	-	-
Still Births - Total	706	122	10	60	3	49
- Hospital	701	121	9	60	3	49
- Community	5	1	1	-	-	-
Foetal Death Rate/1,000 live births	16.8	15.4	12.4	14.4	6.3	19.6
Early Neonatal Death Rate/1,000 live births	10.9	8.5	7.0	12.7	4.3	2.9
Perinatal Death Rate/1,000 live births	27.4	23.8	19.3	26.9	10.6	22.4
Infant Death Rate/1,000 live births	19.9	*	*	*	*	*
Maternal Deaths (Total)	13	6	-	3	2	1
- in Community	29	2	-	-	2	-
- in Hospital		4	-	3	-	1
Maternal Death Rate/100,000 live births	68.7	51.4	-	73.0	-	40.4

Source: MOH: MCSR, HMSR 2004

*DNA

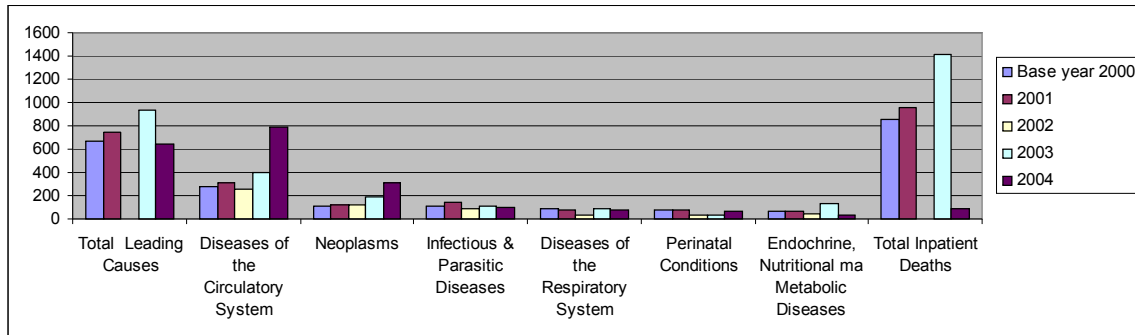
Community births and deaths represent those events monitored by public sector health professionals.

In year 2004, although the WRHA maintained its record of zero (0) anaesthetic deaths, hospital still births were 17.2% (121) of the national figure.

Hanover had the lowest number of hospital still births (3) as well as the two maternal deaths at the community level (Table 3.49).

3.2.2 INPATIENT MORTALITY

Figure 3.1 Inpatient Deaths in Public Hospitals by Five Leading Diagnoses – WRHA 2001-2004



Source: MOH – HIS 2000-2004

Year 2004 WRHA data revealed that Diseases of the Circulatory System (308), Neoplasms (102), as well as Endocrine, Nutritional and Metabolic Diseases (89) continued to be the leading causes of inpatient deaths (as in 2003) (Figure 3.1) (TABLE B1).

All the inpatient deaths by five leading diagnoses, except Diseases of the Circulatory System (308) and Endocrine, Nutritional and Metabolic Diseases (89) showed decline when compared to the base year data (Figure 3.1) (TABLE B1).

Table 3.50 Inpatient Deaths in Public Hospital by Five Leading Diagnoses, Jamaica, WRHA and Parishes 2004

DIAGNOSES	JA	WRHA	PARISHES			
			Trelawny	St. James	Hanover	Westmoreland
Total Inpatient Deaths	5,027	793	110	284	96	303
Total Inpatient Deaths based on 5 Leading Diagnoses	3,965	648	97	241	84	226
Diseases of the Circulatory System	1,621	308	51	103	49	105
Neoplasms	704	102	10	52	8	32
Infectious and Parasitic Diseases	720	77	17	29	10	21
Diseases of the Respiratory System	490	71	9	27	11	24
Perinatal Conditions	194	37	-	14	1	22
Endocrine, Nutritional and Metabolic Diseases	430	89	10	30	6	43

Source: MOH, HMSR 2004

In 2004, the two leading causes of inpatient deaths were Diseases of the Circulatory System (1,621) and Infectious and Parasitic Diseases (720) at the national level. WRHA, however, listed Diseases of the Circulatory System (308) and Neoplasms (102) as the two major causes of inpatient deaths.

Westmoreland experienced the largest number of deaths due to Diseases of the Circulatory System (105) and Endocrine, Nutritional and Metabolic Diseases (43) (Table 3.50).

4.0 PERFORMANCE

4.0 PERFORMANCE/ACHIEVEMENT BASED ON SERVICE LEVEL AGREEMENT (SLA)

The WRHA signed a Service Level Agreement with the Ministry of Health to achieve the objectives outlined below:

OBJECTIVES

1. Provide quality preventive, curative, rehabilitative care that is accessible, reliable and affordable through:-
 - Improvements in:-
 - Environmental health
 - Dental health
 - The control of communicable disease
 - The control of sexually transmitted infections
 - The control of chronic non-communicable diseases
 - Reproductive health family and planning
 - Mental health care.
 - Decrease in morbidity and mortality among children, adolescents and women.

The accompanying tables represent the performance matrix which is a mix of the specific SLA's and other achievements.

Table 4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2004

4.1A MANAGEMENT

INDICATORS	Base Year 2000	Target 2005	ACHIEVEMENTS			
			2001	2002	2003	2004
No. of Internal Audits	*	*	*	*	24	*
Finance (FAA Act)						
- No. of Audit Queries	*	*	*	12	27	12
- No. of Audit Queries satisfactorily resolved	*	*	*	9	21	12
- No. of Audit Queries pending/outstanding	*	*	*	7	3	-
Cost Containment						
- Administrative cost as a % of budget	*	6.0	5.0	4.0		3.0
- Staff cost as a % of total service delivery cost	*	73.0	85.0	86.0		
- Annual costs \$'000 (Actual)	*	*	*			
- Rental	*	*	1,683	2,247		3,711
- Utilities	*	*	46,156	65,415		87,610
- Petrol	*	*	*	2,312		
- Fee collection as a % of expenses	*	<55.0	72.0	65.0		
- Billing as a % of services rendered	*	<95.0	97.0	94.0		
- X-Ray films	*	*	8,802	8,395		
Human Resource (%)						
- Human Resource Planning Career Path	*	50.0	25.0	*		
- Succession Planning	*	*	*	*		
- Training Plan	*	*	*	*		
- Maintain/improve recruitment, Selection, Promotion, Transfer Standards	100.0	*	100.0	*		
- Personnel files to be current on appropriate database	80.0	*	60.0	*		
- Health and Safety	80.0 Compliance		50.0	*		
- Performance Incentive Scheme	50.0 Compliance		-	*		
- Consistent Attendance	100.0	*	60.0	*		
- Absenteeism excluding approved leave	3.0	*	*	*		
- Ensure compliance for professional registration/re-certification	100.0	*	100.0	*		
- Annual performance appraisal	75.0	*	-	81.5		
Industrial Relations (%)						
- Management and Supervisory personnel on point with grievance procedures and its implementation	*	100.0	100.0	*		
- Maintain harmonious employee relations to minimise disruption of services	*	*	*	*		
- Compensation and benefits implemented in accordance with government standards and statutory bodies	*	100.0	100.0	*		

Source: MOH, SLA Data – 2001, 2002; WRHA Reports 2004

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4.1A MANAGEMENT (Cont'd)

INDICATORS	Base Year 2000	Target 2005	ACHIEVEMENTS			
			2001	2002	2003	2004
The Infrastructure						
Maintenance - Plan	*	*	100.0	32.1	*	*
- All activities	*	*	2,486	2,989	2,958	3,744
PPM Programme - % Vehicles	*	*	40.0	*	*	*
- % Critical equipment	*	*	*	*	60.0	60.0
PPM Activities - Critical equipment	*	*	487		594	720
% Downtime (Annual)	*	*			*	*
- Standby Generators	*	*	4.0	10.0	15.0	5.0
- Elevators	*	*	15.0	17.5	17.5	17.2
- Boilers	*	*	3.0	6.5	6.5	6.5
- Laboratory Equipment	*	*	8.0	7.5	6.6	6.6
- X-ray Equipment	*	*	4.0	5.0	5.0	5.0
- Anaesthetic Equipment	*	*	5.0	5.0	5.0	5.0
- Autoclave/Sterilizer	*	*	14.0	18.7	20.0	20.0
- Operating Table	*	*	9.0	6.6	6.6	6.6
- Operating Theatre:						
- Lights	*	*	9.0	8.3	8.3	10.6
- Equipment	*	*	5.0	*	8.3	8.3
- Laundry Equipment	*	*	23.0	30	27.3	27.5
- Central Air Conditioning	*	*	21.0	28.3	35.0	38.0
- Incinerator	*	*	14.0	12.5	10.0	13.3
Average annual downtime – vehicles (days)	*	*	22.0	32.1	*	*
Quality Assurance						
- Clients Charter	*	*	*	*	*	*
- Developed	*	*	*	*	*	*
- Operational	*	*	*	*	*	*
- Development of Benchmarks	*	*	*	*	*	*
Average waiting time - Health Centre	*	*	*	*	*	*
- Hospital A&E	*	*	*	*	*	*
- OPD	*	*	*	*	*	*
- For specialist care:	*	*	*	*	*	*
- Consultation	*	*	*	*	*	*
- Surgery	*	*	*	*	*	*
- % satisfied patients	*	*	*	*	*	*
Risk Management						
- Total no. of complaints	*	*	98	*	66	*
- No. of complaints acknowledged within 7 working days	*	*		*	*	*
- No. of complaints satisfactorily resolved	*	*	75	*	56	*
- No. of complaints pending	*	*	23	*	*	*
- No. of complaints resulting in litigation	*	*	*	*	*	*
No. of:						
- Falls	*	*	*	*	*	*
- Wound Infection (Post operative)	15	*	22	17	*	33
- Prescription errors	*	*	*	*	*	*
- Dispensing errors	*	*	*	*	*	*
- Medication (Administration) errors	*	*	*	*	*	*
- Bedsores	*	*	*	*	*	*
- Medical record without summaries	6,576	*	7,341	9,199	8,267	13,578

Source: MOH, HMSR; WRHA Reports 2000-2004

*DNA

4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2004

4.1B SERVICE DELIVERY

INDICATORS	Base Year 2002	Target 2005	YEAR			
			2001	2002	2003	2004
Visits	*	*	*	*	*	*
- Health Centre Referrals to A&E	92	*	87.0	91.8		52.1
- % Self Referral to A&E	*	*	*	*	*	*
- Ratio of PHC Referrals to A&E	*	*	*	*	*	*
- Attendance for - Asthma (All) A&E	6,364	*	6,119	6,719	6,090	6,628
- Dressing (All) A&E	11,393	*	13,799	11,239	12,127	13,289
% Availability Critical Drugs – PHC	*	60.0	*	*	*	*
- IV Fluids	*	*	*	*	*	*
- Antibiotics	*	*	*	*	*	*
- % VEN List Drugs Available (PHC)	*	*	*	*	*	*
- Average Stock Out Rte (PHC)	*	*	*	*	*	*
- For Chronic Diseases	*	*	*	*	*	*
- Asthma/RTI	*	*	*	*	*	*
- Cancer	*	*	*	*	*	*
- Cardiovascular	*	*	*	*	*	*
- Diabetes	*	*	*	*	*	*
Surgery						
- Total	9,560	*	10,108	11,452	17,698	14,466
- Elective	4,633	*	4,767	4,555	4,450	4,351
- Day	2,088	> 5%	2,781	3,910	5,377	2,245
- No. of eye operations	*	*	514	427	546	501
- % Abstract completed in x days	*	*	*	*	*	*
- Discharge	*	*	*	*	*	*
- Deaths	100.0	100.0	*	*	*	*

Source: MOH; MCSR; HMSR; MOH Jamaica, Annual Report 2000-2004

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4.1C DENTAL HEALTH

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
DMF Index						
- Restorative procedures			27,179	24,604	24,935	23,381
- Extractions			13,403	9,320	10,532	9,740

Source: MOH MCSR 2000-2004

4.1 PERFORMANCE/ACHIEVEMENTS – WRHA 2000-2004

4.1D ENVIRONMENTAL HEALTH

INDICATORS	Base Year 2000	Target 2005	ACHIEVEMENTS			
			2001	2002	2003	2004
% Access to potable water	79.0	*	77.0	77.0	82.0	81.0
% Waste water plants inspected and sampled	*	*		*	*	100.0
% Tourist Establishments Health Certified	*	70.0	31.5	*	50.0	66.7
% Food Handling Establishments Certified	*	70.0	*	68.5	32.4	52.6
% New Applicants issued with Food Handlers Permit within 3 weeks	*	*	*	*	*	89.2
% Food Borne illnesses investigated within 2 weeks	*	*	*	*	*	100.0
% Institution Satisfactory						
- School	*	*	53.8	71.0	69.4	70.6
- Children's Home	*	*	*	75.0	*	*
- Places of Safety	*	*	1.0	*	*	*
- Lock-Ups	*	*	14.0	50.0	*	*
- Hospital	*	*	12.0	33.0	*	*
- Nursing Home	*	*	3.0		*	*
% Compliance with Enforcement Actions	*		50.0	68.0	*	53.2
Vector Indices (Barrier Zoo)	*	0	1.75	1.8	1.8	1.8

Source: WRHA Parish Reports 2001-2004

*DNA

4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2004

4.1E COMMUNICABLE DISEASE CONTROL

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
Acute Flaccid Paralysis	*	*	*		*	*
- No. of Cases investigated within 48 hours	*	100.0	*	4	*	*
TUBERCLOSIS						
- Total cases confirmed	*	*	*	40	*	29
- % reported cases investigated within 6 weeks	*	*	*	*	*	*
- % confirmed cases completing DOTS treatment	*	*	*	100	*	*
- Tb Death Rate	*	*	*	*	*	*
- Number of Cases of Malaria	*	*	*	2	*	4
- Malaria Death Rates	*	*	*	*	*	*
STI						
- % STI Clients counselled and tested for HIV	*	*	*	*	*	*
- Syphilis (All Stages)	*	*	*	*	*	*
HIV						
- No. PLWA on ARV	*	*	*	*	*	*
- % PLWA on ARV						
No. of cases of Fever & Rash investigated within 48 hrs.	*	*	*	*	*	*

Source: WRHA Parish Reports 2004

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4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2004

4.1F CHRONIC NON-COMMUNICABLE DISEASES

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
ASTHMA						
- Visits to PHC	*	*	1,543	1,289	1,282	932
- Cases seen in A&E	6,363	*	6,119	6,719	6,090	6,628
CANCER						
No. of Population						
- Receiving pap Smears	*	*	4,653	5,188	5,104	5,438
- With Invasive Ca Cervix	*	*	*	14	60	33
- Receiving Prostate examination	*	*	185	166	100	105
- Breast Examination	*	*	10,811	12,470	12,219	11,395
CARDIOVASCULAR DISEASE						
- PHC Visits for Hypertension	25,816	*	25,591	23,436	23,814	22,023
- Other Cardiovascular Diseases	2,672	*	2,770	3,006	3,189	2,868
- Chronic Rheumatic Heart Disease	1,043	*	1,100	984	814	754
- Cases seen in A&E	*	*	34,210	*	*	*
DIABETES MELLITUS						
- Visits to PHC	7,163	*	6,902	5,876	5,302	3,941
- No. of eye operations for cataract	*	*	*	*	*	*
- No. of leg ulcers	*	*	326	84	86	88
DIABETES & HYPERTENSION						
- PHC Visits	11,952	*	12,607	11,977	12,396	11,548
OTHER MONITORED DISEASES						
- RTI (Excluding Asthma)	*	*	11,952	10,808	9,675	9,060
- Other Gastro-intestinal Disorders	*	*	3,512	2,788	2,475	2,240

Source: MOH: MCSR, HMSR, WRHA-CNCD Report 2000-2004

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4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2004

4.1G CHILD & ADOLESCENT HEALTH

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
Cases of Ophthalmia Neonatorum	*	*	*	31		
Cases of Congenital Syphilis	*	<25.0	*	3	*	
% HIV Exposed Infants	*	*	*	*	*	
% HIV Exposed Infants receiving ARV	*	78.0	*	*	*	
% Low Birth Weight (community + hospital)	1,081	*	1,020	840	714	683
Nutritional Status 0 – 35 months (Below Normal)	68	*	39	41	27	23
% Exclusive Breastfeeding at:						
- 6 weeks	2,505	60.0	4,781	4,513	4,316	3,772
- 12 weeks	*	*	3,348	3,244	2,899	2,534
Immunization Coverage %						
- BCG	94.0	95.0	98.6	100.0	97.1	91.2
- DPT	91.1	95.0	98.1	92.0	89.7	80.5
- OPV	90.6	95.0	96.0	90.6	89.4	73.9
- MMR	86.6	95.0	85.2	91.9	82.3	91.4
- Hepatitis B	0.4	85.2	0.1	8.1	22.5	81.6
- Haemophiles Influenzae B	0.3	*	*	0	21.9	81.2
No. of A&E visits for Asthma in the <5 yr. old	1,554	*	1,203	1,421	1,476	1,415
Hospital Discharge for GE						
Still Births - Hospital	160	<10.0	144	153	119	121
- Community	3	*	2	2	2	1
Perinatal Death Rate/1,000 live births	25.8	22	27.9	25.7	22.6	23.8
Case fatality rate for GE	*	*	*	*	*	*
Mortality Rates - Infant Death	*	*	*	*	*	*
- under 5 years	*	*	*	*	*	*
No. of Children Orphaned by HIV/AIDS	*	*	*	*	*	*
No. for Secondary Coverage for Rheumatic Fever	*	*	2,513	2,290	2,328	2,201

Source: MOH MCSR: HMSR 2000-2004

*DNA

4.1 PERFORMANCES/ACHIEVEMENT – WRHA 2000-2004

4.1H Reproductive Health

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
% Anaemic pregnant women adequately treated	*	*	72.6	60.5	46.1	37.8
% Syphilis positive pregnant women adequately treated	*	*	45.9	44.4	57.9	33.9
% Antenatal women tested for HIV	*	<10%	*	*	*	*
- Total	*	*	*	*	*	*
- %	*	*	*	*	*	*
- 15-25 years	*	*	*	*	*	*
% HIV positive pregnant women receiving ARV for pMTCT	*	78%	*	*	*	*
No. of cases of Pre-Eclampsia (Hospital & PHC)	35	*	1,160	126	119	79
- Ante partum Haemorrhage (Hospital)	23	*	33	41	28	31
- Postpartum Haemorrhage (Hospital)	287	*	298	392	426	394
% Deliveries Attended by Trained Personnel (Hospital & PHC)	*	99.7%	99.7%	99.9%	99.9%	99.8%
C-Section	986	1,072	1,161	1,072	1,161	932
No. of Postnatal Women Accepting Family Planning Method	28,136	70%	5,499	5,065	5,151	4,885
% increase in Number of:						
- Long Term Method Users - Depo Provera Injection	*	10%	3,132	2,923	1,904	1,874
- IUD	*	15%	163	156	27	26
(Hospital) – Tubal Ligation	672	*	583	695	689	549
Condom Use	1,545	*	1,855	1,656	1,576	1,408
% Maternal deaths investigated within x weeks	*	100%	*	*	*	*
% Maternal Deaths (Hospital (+ Community))	8 (+ 2)	<80%	5 (+ 0)	8(+0)	7(+0)	4(+2)

Source: MOH MCSR; HMSR; 2000-2004

*DNA

4.1 PERFORMANCE/ACHIEVEMENT – WRHA 2000-2004

4.1 I MENTAL HEALTH

INDICATORS	Base Year 2000	Target 2005	2001	2002	2003	2004
% of Schizophrenic patients receiving consistent treatment	*	75.0	73.3	84.0		78.0
Average length of stay for psychotic patients	9.5	14 days	16.7	*		35.9
No. of patients with chronic illness screened for depression	*	75.0	*	*		*
No. of patients diagnosed and treated for depression	*	*	*	*		*
No. of new patients treated for substance abuse	150	*	150	44		69

Source: MOH HMSR 2000-2004, WRHA CMH Report 2004

APPENDICES

**TABLE A1: Utilization of Accident and Emergency (A&E) Services:
WRHA 2000-2004**

Hospital Services Accident & Emergency	Base Year 2000	2001	2002	2003	2004
Total Attendance	129,289	137,163	136,649	143,968	155,259
Total Self-Referral	118,921	124,622	125,527	132,869	144,494
Total Receiving Care	122,388	132,426	129,242	135,105	148,389
Registered & Not Seen	6,900	4,737	7,407	8,863	6,870
Total Admitted	14,213	15,805	13,948	15,048	16,153

Source: MOH: HMSR 2000-2004

TABLE A2: Utilization of Surgical Services WRHA 2000-2004

Surgery	Base Year 2000	2001	2002	2003	2004
Total	9,560	10,108	11,452	17,698	14,466
Type - Elective	4,633	4,767	4,555	4,450	4,351
- Emergency	2,761	2,542	2,533	3,057	2,803
- Day	2,088	2,781	3,910	5,377	2,245
- Minor (Out-patient)	78	18	454	4,814	5,067

Source: MOH: HMSR

TABLE A3: Utilization of Outpatient Specialist Clinics WRHA 2000-2004

Variables	Base Year 2000	2001	2002	2003	2004
Number of Clinics	2,076	1,968	2,428	2,715	2,805
Number of Cases:					
- Total	90,751	92,172	94,492	98,522	99,761
- New	12,435	14,167	15,753	17,949	16,622

Source: MOH: HMSR 2000-2004

TABLE A4: Utilization of Radiography Services: WRHA 2000-2004

Variables	Base Year 2000	2001	2002	2003	2004
Number of Clients					
- Total	22,076	32,777	32,079	36,687	38,516
- Outpatients	19,169	28,381	27,980	32,618	24,185
- Inpatients	2,907	4,396	4,009	4,069	4,331
Number of examinations	28,837	44,021	44,619	52,008	55,778

Source: MOH: HMSR

TABLE A5: Utilization of Pharmacy Services: WRHA 2000-2004

VARIABLES		Base Year 2000	2001	2002	2003	2004
Pharmacy - Total number of clients	PHC	25,036	21,603	15,287	14,480	16,793
	Hospital	48,984	103,975	104,744	106,089	121,058
- Items prescribed	PHC	75,712	61,525	43,632	42,264	51,934
	Hospital	133,061	261,834	273,347	285,783	325,465
- Items dispensed	PHC	56,130	48,231	34,510	34,132	34,278
	Hospital	112,535	215,439	221,878	229,059	237,485

Source: MOH: MCSR; HMSR 2000-2004

TABLE B1: Inpatient Deaths in Public Hospitals by Five Leading Diagnoses: WRHA 2000-2004

DIAGNOSES	Base Year 2000	2001	2002	2003	2004
Total Inpatient Deaths	858	953	*	1,406	793
Total inpatient Deaths based on 5 Leading Causes	668	743	*	930	648
Diseases of the Circulatory System	278	312	257	405	308
Neoplasms	110	126	123	193	102
Infectious and Parasitic Diseases	114	146	93	116	77
Diseases of the Respiratory System	91	83	60	85	71
Perinatal Conditions	75	76	28	30	37
Endocrine, Nutritional and Metabolic Diseases	63	69	45	131	89

Source: MOH - HIS

*DNA

GLOSSARY

A&E	Accident and Emergency
AFP	Acute Flaccid Paralysis
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Clinic
ARV	Anti-Retroviral (Drugs)
BCG	Bacille Calmette Guerin
CMH	Community Mental Health
C-Section	Caesarean Section
CVD	Cardiovascular Disease
DMF	Decayed, Missing, Filled (Teeth)
DNA	Data Not Available
DPT/DT	Diphtheria, Pertussis, Tetanus/Diphtheria, Tetanus
EPI	Expanded Programme for Immunization
GU	Genito-urinary
Hib	Haemophilus Influenza Type B
HIV	Human Immuno-deficiency Virus
HMSR	Hospital Monthly Statistical Report
IUD	Inter Uterine Device
JA	Jamaica
MCSR	Monthly Clinical Statistical Report
MMR	Measles, Mumps, Rubella
MOH	Ministry of Health

MO(H)	Medical Officer (Health)
MVA	Motor Vehicle Accident
NGO	Non Governmental Organization
OB/GYN	Obstetrics/Gynaecology
PID	Pelvic Inflammatory Disease
PTA	Parent Teachers Association
RD	Regional Director
RTD	Regional Technical Director
SLA	Service Level Agreement
STI	Sexually Transmitted Infection
Tb	Tuberculosis
WRHA	Western Regional Health Authority

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 - Mental Health
 - Parishes
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 - St. James
 - Trelawny
 - Westmoreland