



**MINISTRY OF HEALTH
BRUNEI DARUSSALAM**

HEALTH INFORMATION BOOKLET 2010

**DEPARTMENT OF POLICY AND PLANNING
MINISTRY OF HEALTH
BRUNEI DARUSSALAM**

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PREFACE

Bismillahir Rahmanirrahim.

The Department of Policy and Planning presents the Health Information Booklet 2010 as its on-going effort to provide high quality health related data and in providing information that relates to the status of the population health and health system in Brunei Darussalam.

The Health Information Booklet is an annual publication which compiles health related data and includes summary data on the achievement of health related Millennium Development Goals in Brunei Darussalam. Every effort has been made to continue the improvement of the content of the Health Information Booklet with respect to its range of data and its presentation. In this regards, the Health Information Booklet 2010 has expanded to include new reporting of data on occupational health which is of relevance to public health.

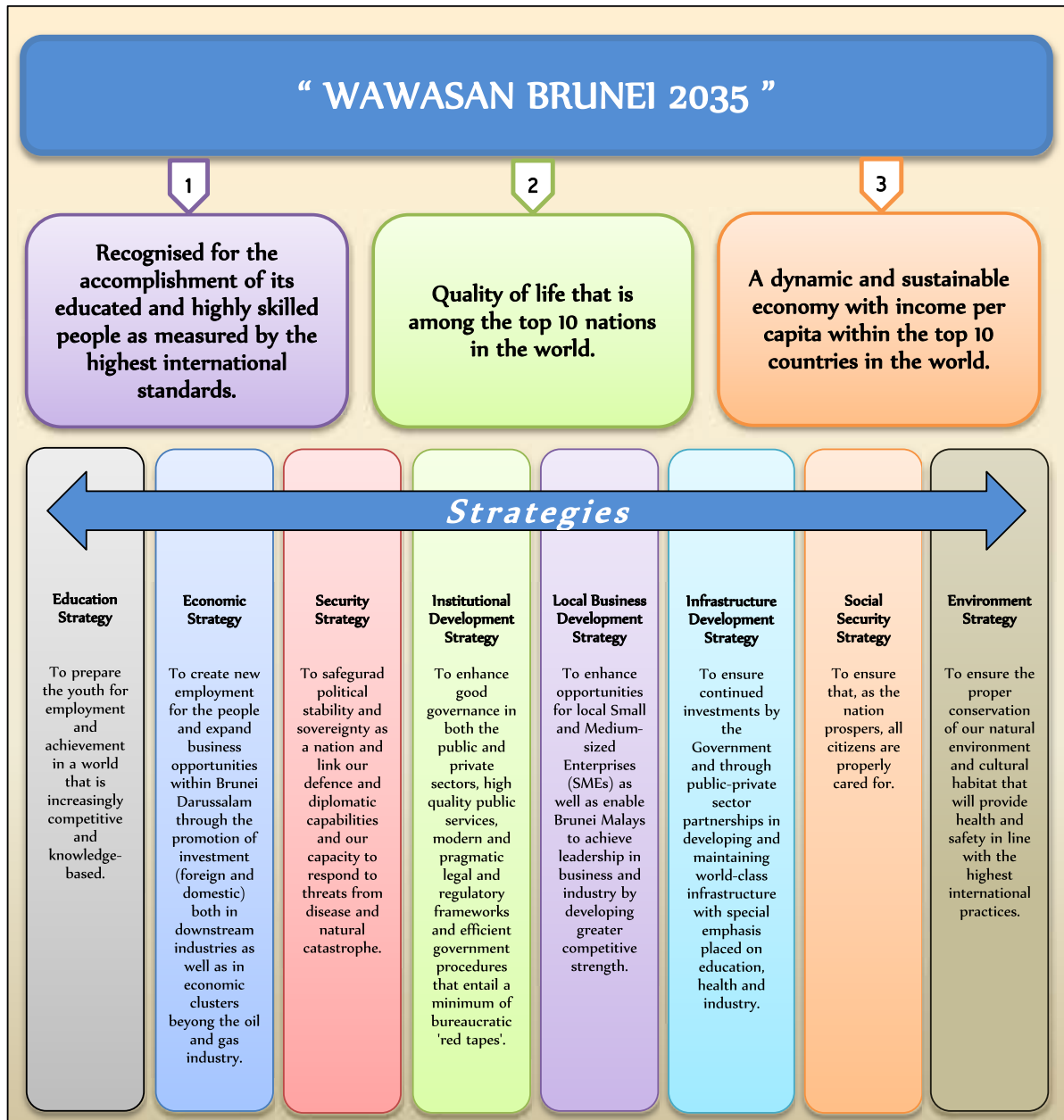
As in previous publications of Health Information Booklet, this latest publication has been made possible with the support and cooperation of relevant departments under the Prime Minister's Office, Ministry of Finance, Ministry of Communication, Ministry of Home Affairs and Ministry of Health, all of whom have provided us with important information data.

We hope this Health Information Booklet 2010 which is also available through the Ministry of Health website, continues to serve as useful reference to all, not limiting to those in the health sector but also extends to others and the general public at large.

Together Towards A Healthy Nation

HAJAH ZAHRAH DP HAJI MD HASHIM
Acting Director of Policy and Planning
Ministry of Health
Brunei Darussalam

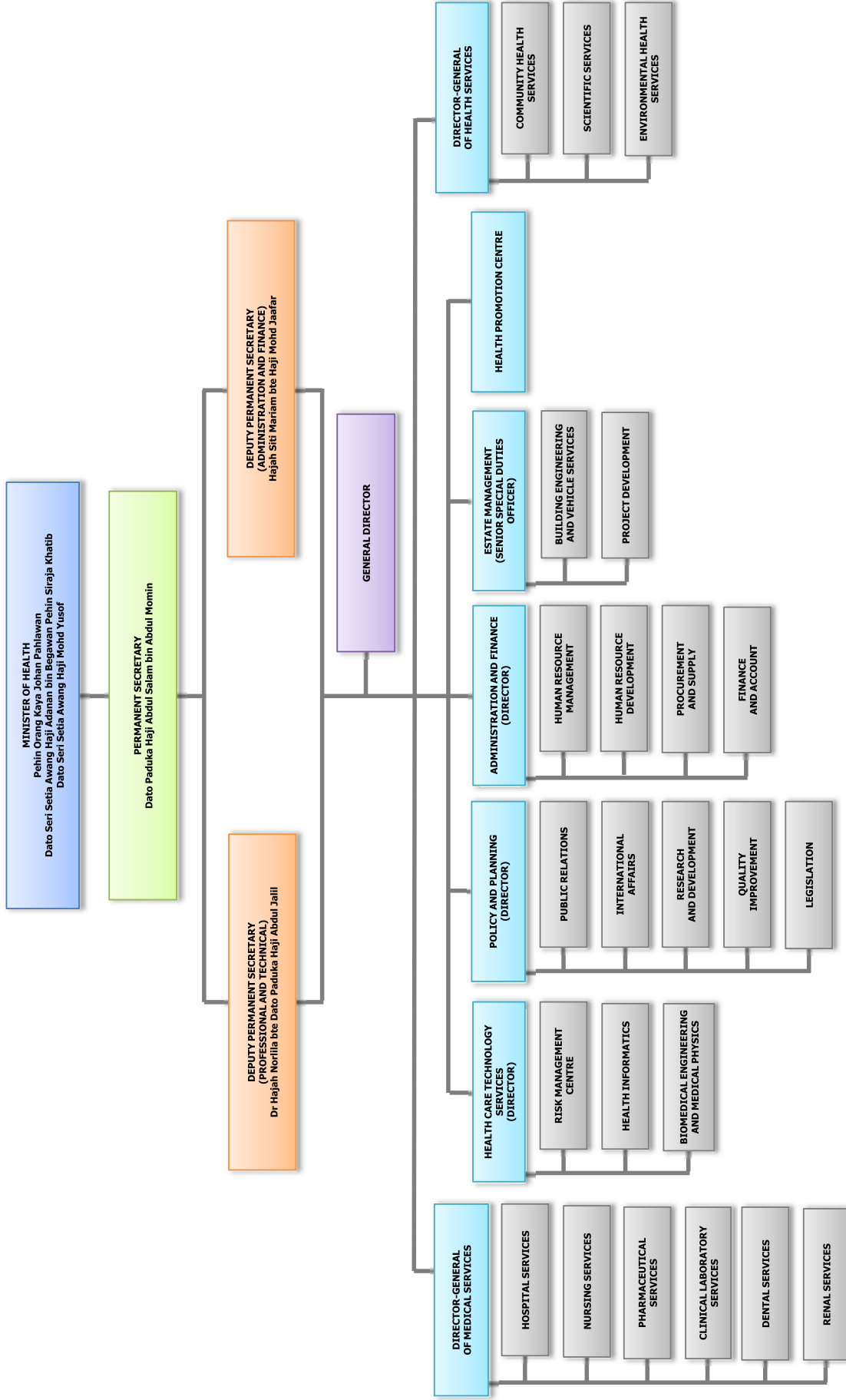
Brunei Darussalam's Vision and Strategies



Ministry of Health's Vision and Strategies



Organisation Structure



Geography

Brunei Darussalam lies on the northwest coast of Borneo island facing the South China Sea and about 443km north of the equator.

With a land area of 5,765 square kilometres, Brunei Darussalam shares a common border with Sarawak, an East Malaysia State, which splits Brunei into two parts; the western part consisting of Brunei-Muara, Tutong and Belait districts while the eastern part is the Temburong district.

CAPITAL
~ **BANDAR SERI BEGAWAN**

AREA
~ **5,765 sq. km**

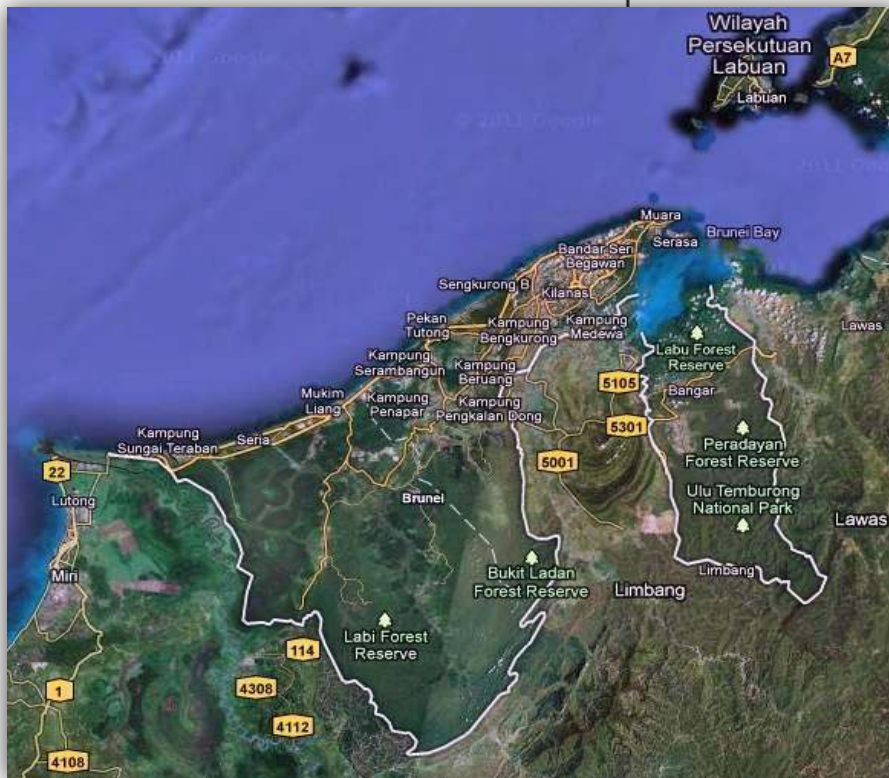
DISTRICTS
~ **4**

MUKIMS
~ **39**

KAMPONGS / LOCALITY
~ **430**

HOUSEHOLDS
~ **55,696 (2001 Census)**

AV. NO. PERSONS
PER HOUSEHOLD
~ **6.0**



Demography

Brunei Darussalam conducted the first population census in 1971. The fifth decennial 2011 census of population and housing is currently being carried out by the Department of Economic Planning and Development, Prime Minister's Office.

The main purpose of the census was to collect, process, analyse and disseminate information on the demographic, socio-economic and other related characteristics of the the country's population. The data collected through the census will provide the new benchmark for the purpose of review, planning and policy formulation by the Government.

<u>Estimated Population</u>		<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>
Total	(in thousands) :	390.0	398.0	406.2	414.4
Male	(in thousands) :	206.9	211.0	215.0	219.1
Female	(in thousands) :	183.1	187.0	191.2	195.3
Sex Ratio	(M / 100F) :	113	113	112	112
Persons / sq.km	:	68	69	70	72
Annual rate of increase	:	1.8%	2.1%	2.1%	2.0%
<u>Age Structure (in thousands)</u>					
0 - 4	:	34.9 (8.9%)	35.2 (8.8%)	34.7 (8.5%)	35.4 (8.5%)
5 - 19	:	103.7 (26.6%)	105.3 (26.5%)	106.4 (26.2%)	106.5 (25.7%)
20 - 54	:	223.1 (57.2%)	227.1 (57.1%)	232.5 (57.2%)	237.8 (57.4%)
55 - 64	:	15.8 (4.1%)	17.2 (4.3%)	18.8 (4.6%)	20.3 (4.9%)
65 & Over	:	12.5 (3.2%)	13.2 (3.3%)	13.8 (3.4%)	14.4 (3.5%)
<u>Race (in thousands)</u>					
Malay *	:	259.6 (66.6%)	265.1 (66.6%)	269.4 (66.3%)	273.6 (66.0%)
Chinese	:	43.1 (11.0%)	43.7 (11.0%)	44.6 (11.0%)	45.4 (11.0%)
Others	:	87.3 (22.4%)	89.2 (22.4%)	92.2 (22.7%)	95.4 (23.0%)
<u>District (in thousands)</u>					
Brunei-Muara	:	270.3 (69.3%)	276.6 (69.5%)	283.3 (69.7%)	290.1 (70.0%)
Belait	:	64.9 (16.6%)	66.0 (16.6%)	67.1 (16.5%)	68.3 (16.5%)
Tutong	:	44.8 (11.5%)	45.3 (11.4%)	45.7 (11.3%)	45.8 (11.1%)
Temburong	:	10.0 (2.6%)	10.1 (2.5%)	10.1 (2.5%)	10.2 (2.5%)

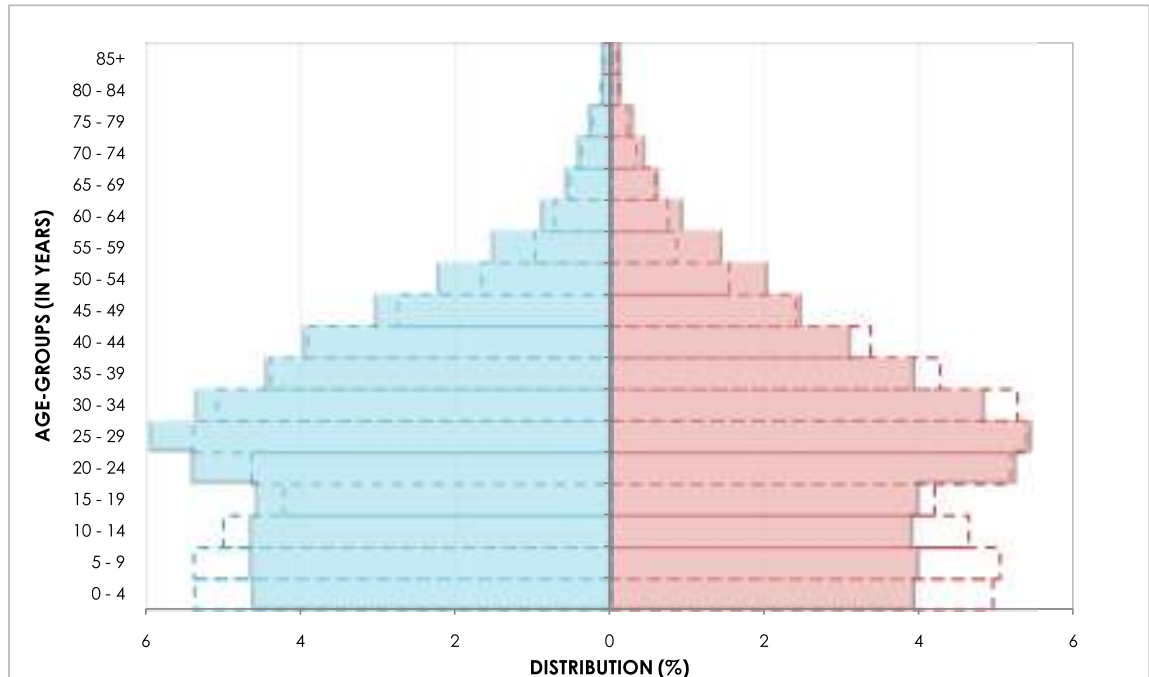
Note :

* - Including Other Indigenous Groups of the Malay race namely Belait, Bisaya, Brunei, Dusun, Kedayan, Murut or Tutong.

Source :

Department of Economic Planning and Development, Prime Minister's Office

Population Pyramid (2010)



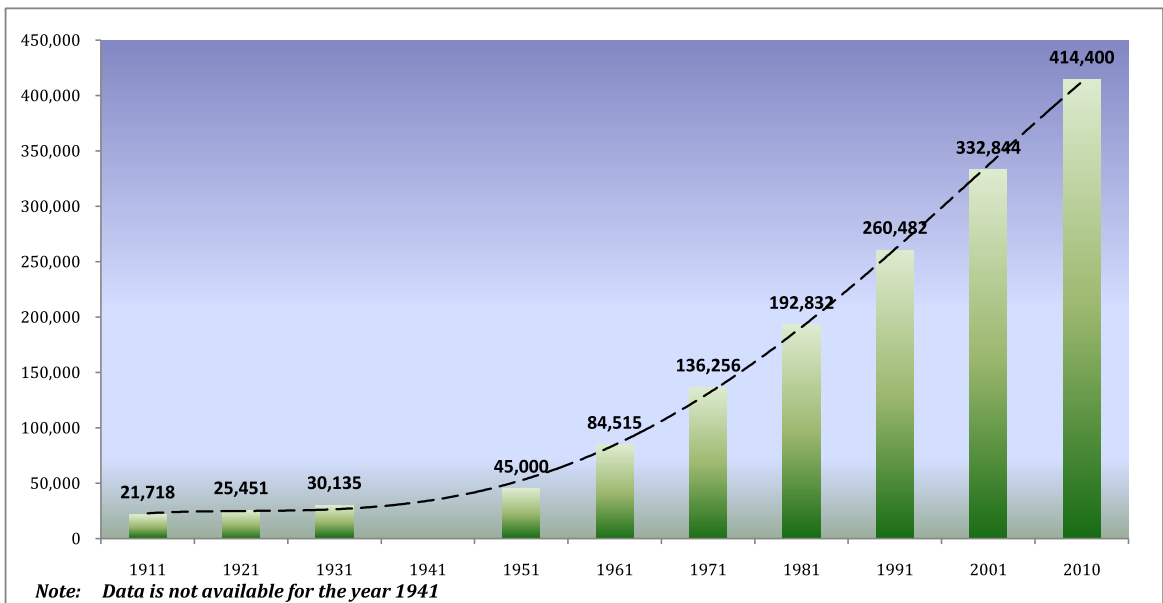
Total population in 2001 -----
Total population in 2010 —————

Note:

Population pyramid shows percentage distribution of population by gender and age-groups.

For example, (0 - 4) age-group for the year 2010 is represented with 8.5% of total population in which 4.6% and 3.9% are made up of male and female population respectively.

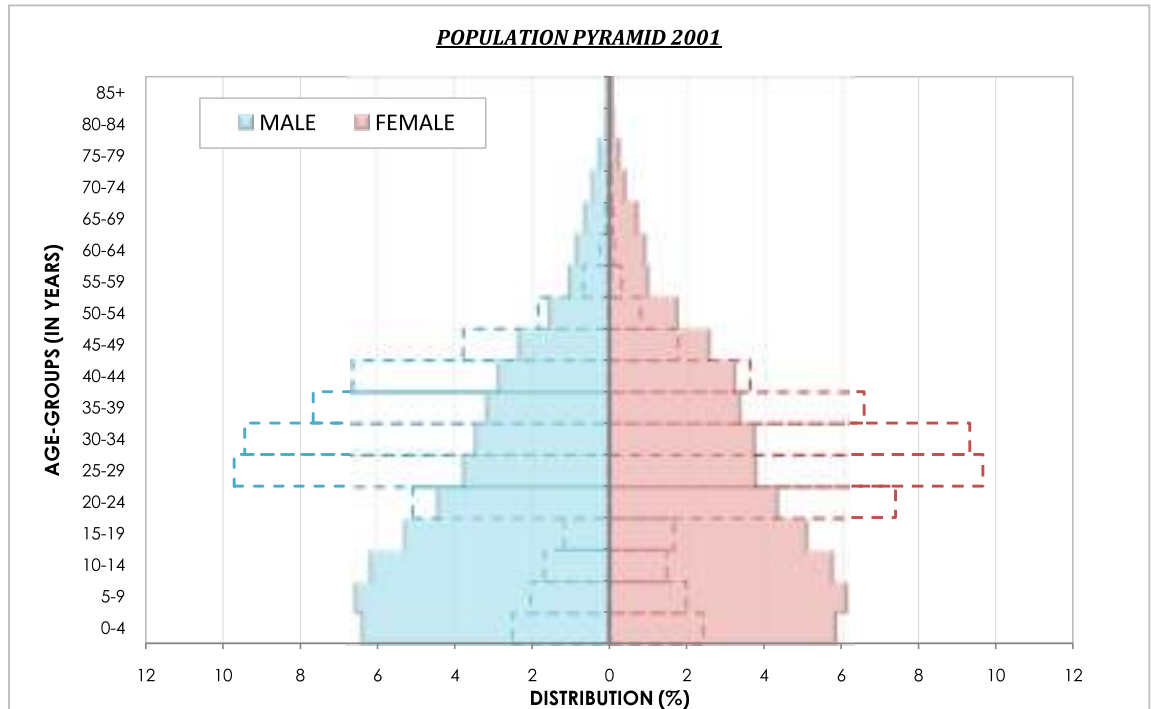
Population Trend of Brunei Darussalam (1911 - 2010)



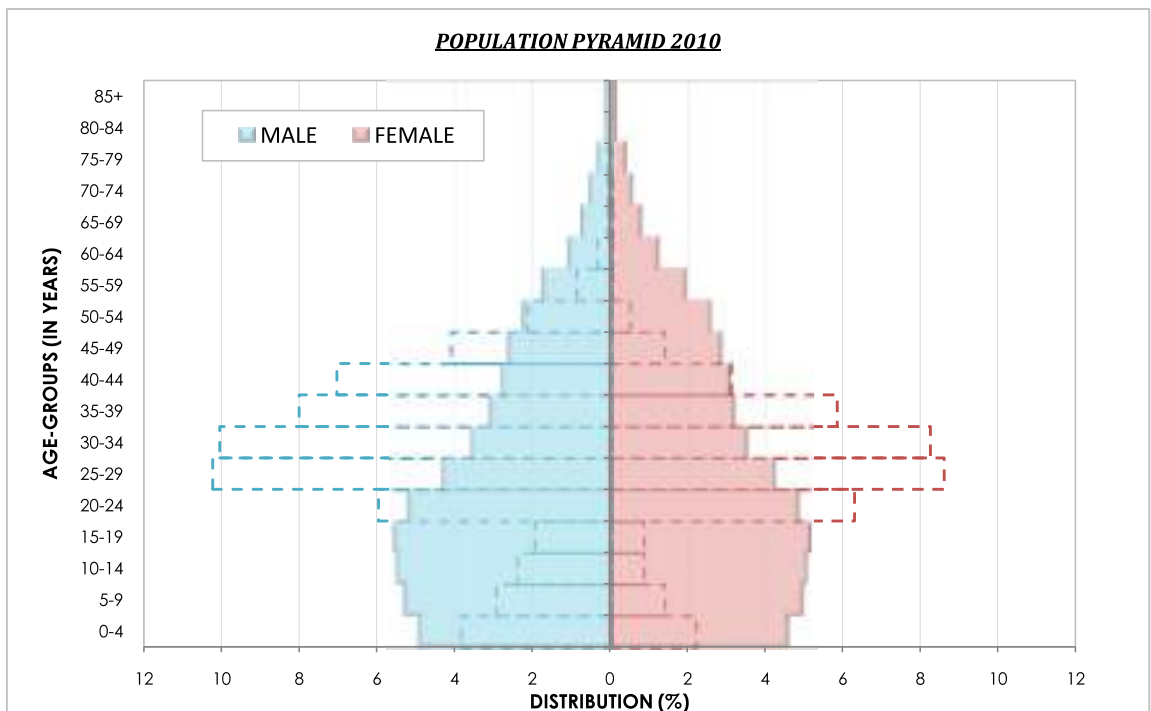
Source :

Department of Economic Planning and Development, Prime Minister's Office

Population Pyramid by Age-Group, Gender and Residential Status (2001 and 2010)



Brunei Citizens and Permanent Residents
 Temporary Residents and Others



Source : Department of Economic Planning and Development, Prime Minister's Office

Vital Statistics

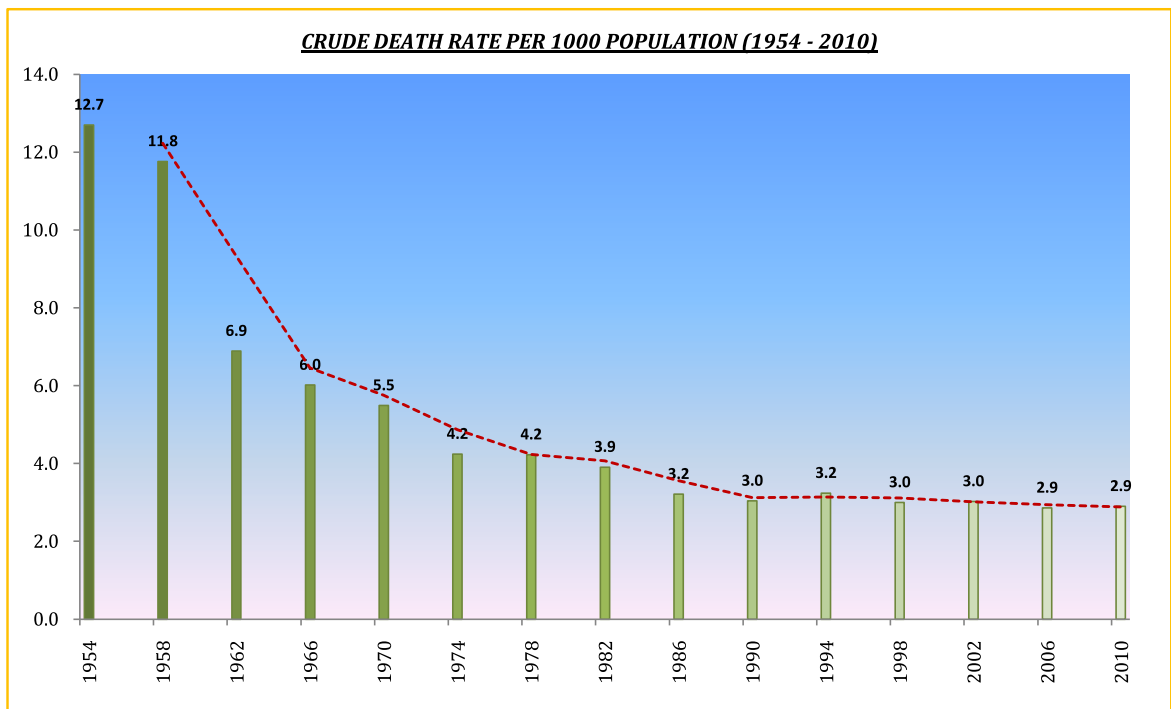
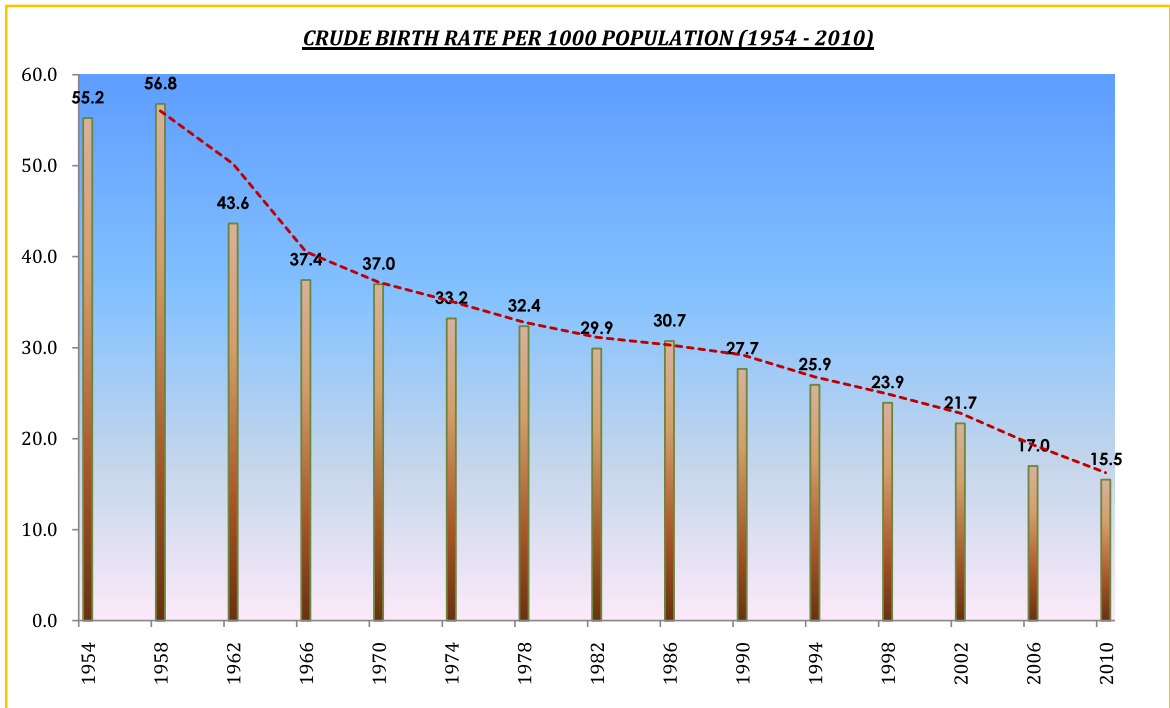
	2006	2007	2008	2009	2010
Crude Birth Rate (per 1,000 Popn.) :	17.0	16.2	16.1	16.3	15.5
General Fertility Rate (per 1,000 Women (15-49)) :	58.7	55.6	55.8	56.2	53.3
Total Fertility Rate (per Women (15-49)) :	1.8	1.7	1.7	1.7	1.6
Crude Death Rate (per 1,000 Popn.) :	2.9	3.0	2.7	2.9	2.9
Infant Mortality Rate (per 1,000 LBs.) :	6.6	7.6	7.0	7.4	6.1
Late Fetal Death Ratio (per 1,000 LBs.) :	4.6	6.3	6.4	4.8	5.5
Perinatal Mortality Ratio (per 1,000 LBs.) :	7.5	10.0	10.0	8.9	7.8
Early Neonatal Mortality Rate (per 1,000 LBs.) :	2.9	3.6	3.6	4.1	2.3
Late Neonatal Mortality Rate (per 1,000 LBs.) :	1.8	0.8	1.2	1.2	1.7
Neonatal Mortality Rate (per 1,000 LBs.) :	4.8	4.4	4.8	5.3	4.1
Post Neonatal Mortality Rate (per 1,000 LBs.) :	1.8	3.2	2.2	2.1	2.0
Under 5 Mortality Rate (per 1,000 LBs.) :	9.2	9.5	9.5	8.2	7.3
Number of Maternal Deaths * :	1	1	0	1	1
Maternal Mortality Ratio (per 100,000 LBs.) :	15.3	15.8	0.0	15.1	15.6
Life Expectancy At Birth - Male :	75.9	75.2	76.6	77.1	77.1 (2009)
- Female :	77.5	77.8	79.8	78.3	78.3 (2009)
Percentage of Newborns Weighing At Least 2500g At Birth :	89.0	88.5	88.9	88.8	89.3
Percentage of Deliveries by Trained Health Personnel :	99.7	99.9	99.7	99.9	99.8
Literacy Rate (%) (Age 9 yrs +) - Male :	(#) 95.8	(#) 95.8	(#) 95.8	(#) 95.8	(#) 95.8
- Female :	(#) 91.5	(#) 91.5	(#) 91.5	(#) 91.5	(#) 91.5
Per Capita GDP at current prices (B\$) Thousand :	47.6	47.3	51.3	38.4	40.7

Note :

- Popn. - Population
- LBs - Live-births
- (#) - Census in 2001
- Red text - Millennium Development Goals (MDGs) Indicators
- * - as per registered by Birth and Death Section, Immigration Department and amended for coding misclassifications by the Statistics Unit, Ministry of Health.

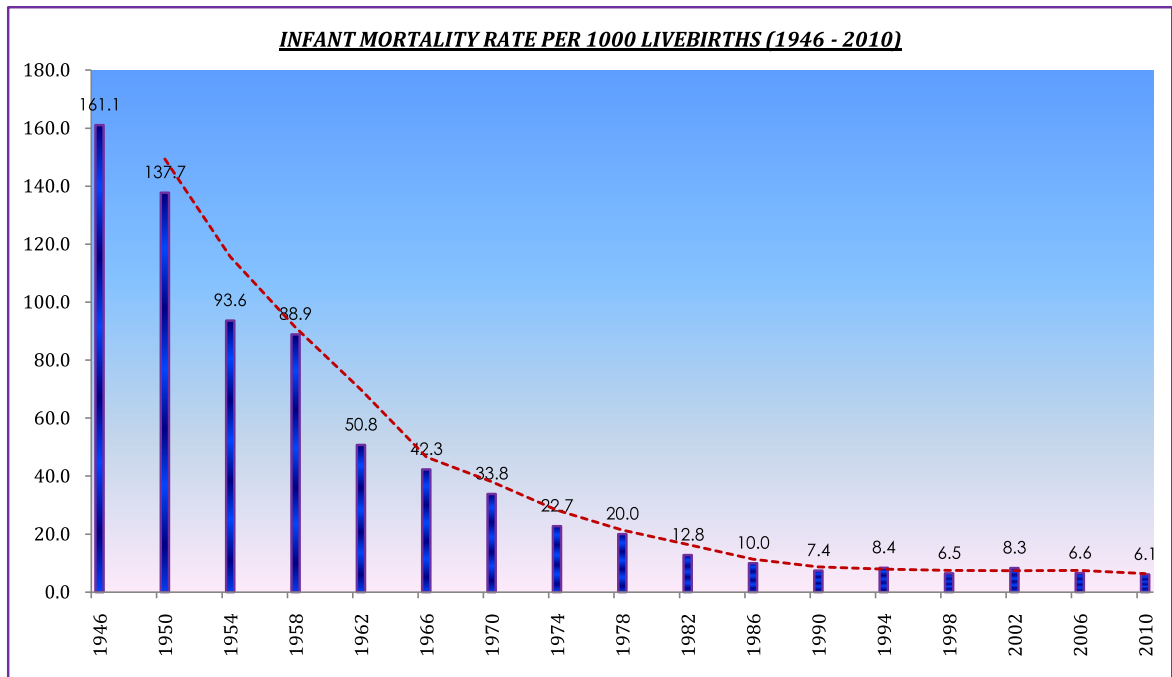
Health Indicators

The crude birth rate of Brunei Darussalam has declined from 17.0 in 2006 to 15.5 per 1000 population in 2010 and the crude death rate remained at 2.9 per 1000 population in 2010.

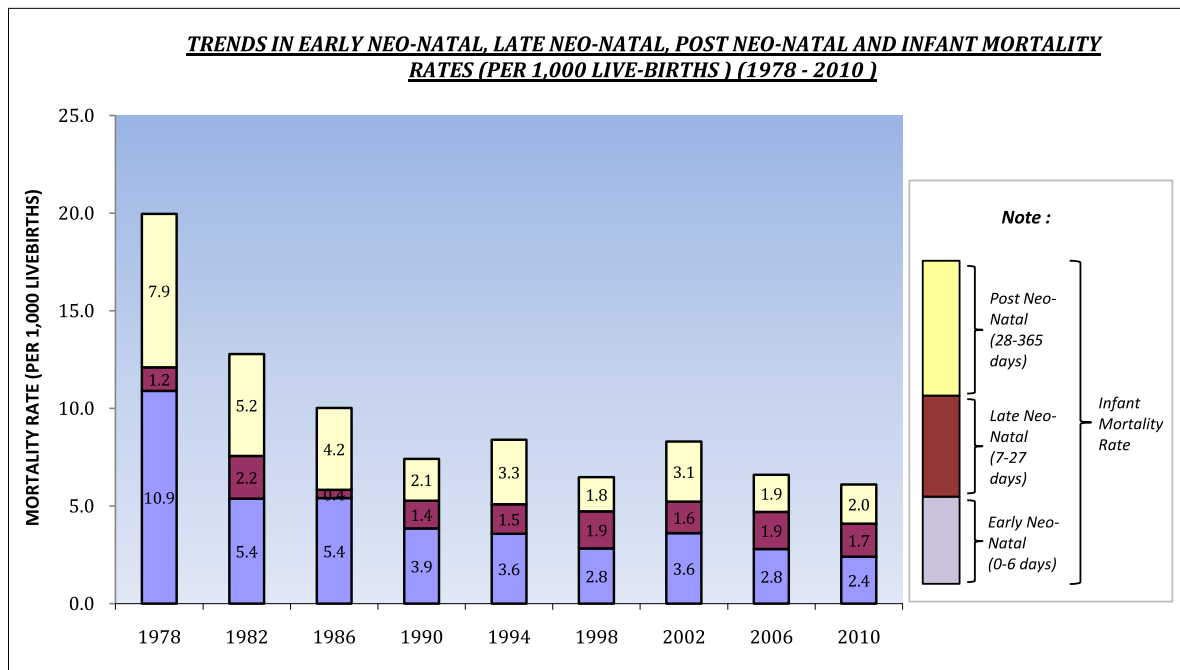


Millennium Development Goals (MDGs) Indicators

Millennium Development Goal 4 (MDG4) is concerned with reducing by two-thirds the under-five mortality rate between 1990 and 2015. Under-five mortality rate is directly attributable to two other indicators namely infant mortality rate and proportion of 1 year-old children immunised against measles.



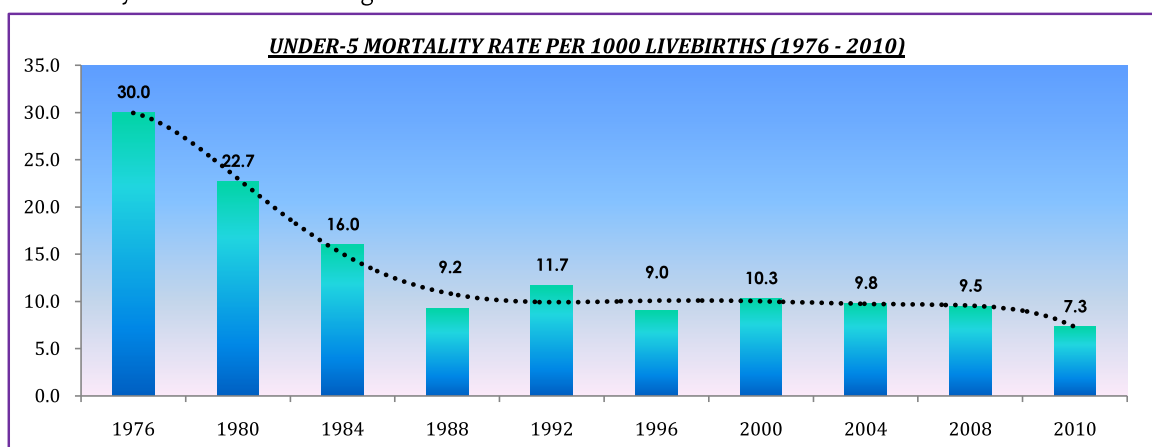
Brunei Darussalam's infant mortality rate has reached a steady state since 1990 and is on par with figures in developed nations. Infant mortality rate has declined rapidly from 50.8 per 1000 livebirths in 1962 to 6.1 per 1000 livebirths in 2010.



Millennium Development Goals (MDGs) Indicators

Under-5 mortality rate has gradually reduced from 30 deaths per 1000 livebirths in 1976 to 7.3 deaths per 1000 livebirths in 2010.

Maternal and Child Health (MCH) services in Brunei Darussalam have contributed to the reduction in under-5 mortality. The MCH Service, a major primary health care service in Brunei Darussalam, has gone through rapid expansion. It is widely distributed and easily accessible in all four districts. Remote areas are served by the flying medical team. The objective is to provide optimum health care to all children below the age of 5 and all pregnant women throughout their antenatal and postnatal periods. MCH Service includes antenatal care, postnatal care, child-health care, well-woman clinic and health education, treatment of minor ailments, domiciliary care and home nursing.



LEADING CAUSES OF UNDER 5 MORTALITY IN BRUNEI DARUSSALAM (2006 - 2010)

	2006	2007	2008	2009	2010
1	Certain Conditions Originating In The Perinatal Period 21	Congenital Malformations, Deformations and Chromosomal Abnormalities 22	Certain Conditions Originating In The Perinatal Period 20	Certain Conditions Originating In The Perinatal Period 26	Congenital Malformations, Deformations and Chromosomal Abnormalities 18
2	Congenital Malformations, Deformations and Chromosomal Abnormalities 14	Certain Conditions Originating In The Perinatal Period 18	Congenital Malformations, Deformations and Chromosomal Abnormalities 19	Congenital Malformations, Deformations and Chromosomal Abnormalities 17	Certain Conditions Originating In The Perinatal Period 16
3	Cancer 4	Cancer 1	Influenza & Pneumonia 4	Heart Diseases 2	Septicaemia 1
4	Heart Diseases 3	Anaemias 1	Accidental Drowning and Submersion 4	Septicaemia 1	Cancer 1
5	Influenza & Pneumonia 3	Heart Diseases 1	Heart Diseases 3	Acute Upper respiratory Infection 1	Heart Diseases 1
6	Transport Accidents 2	Influenza & Pneumonia 1	Septicaemia 1	Influenza & Pneumonia 1	Cerebrovascular Diseases 1
7	Septicaemia 1	Acute Bronchitis and Bronchiolitis 1	Cancer 1	Falls 1	Bronchitis, Chronic & Unspecified Emphysema & Asthma 1
8	Human Immunodeficiency Virus (HIV) Diseases 1	Diseases of Musculoskeletal System and Connective Tissue 1	Cerebrovascular Diseases 1	Accidental Drowning and Submersion 1	* 0
OTHERS**	11	14	8	4	8
TOTAL	60	60	61	54	47

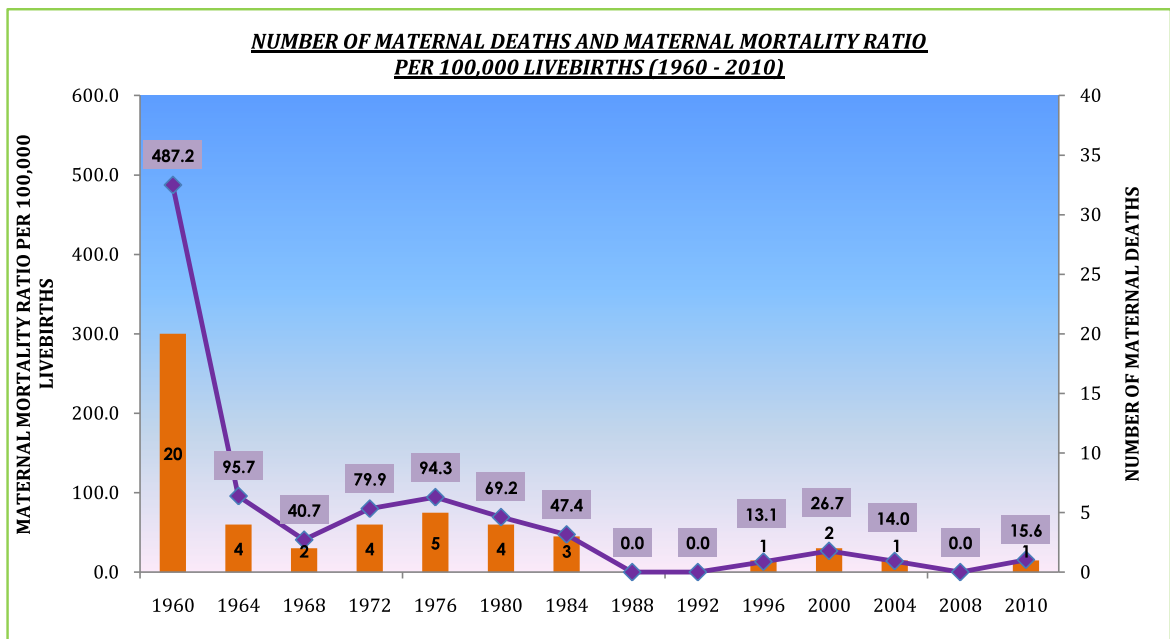
Note: * - No other single cause of death.

** - Remainders.

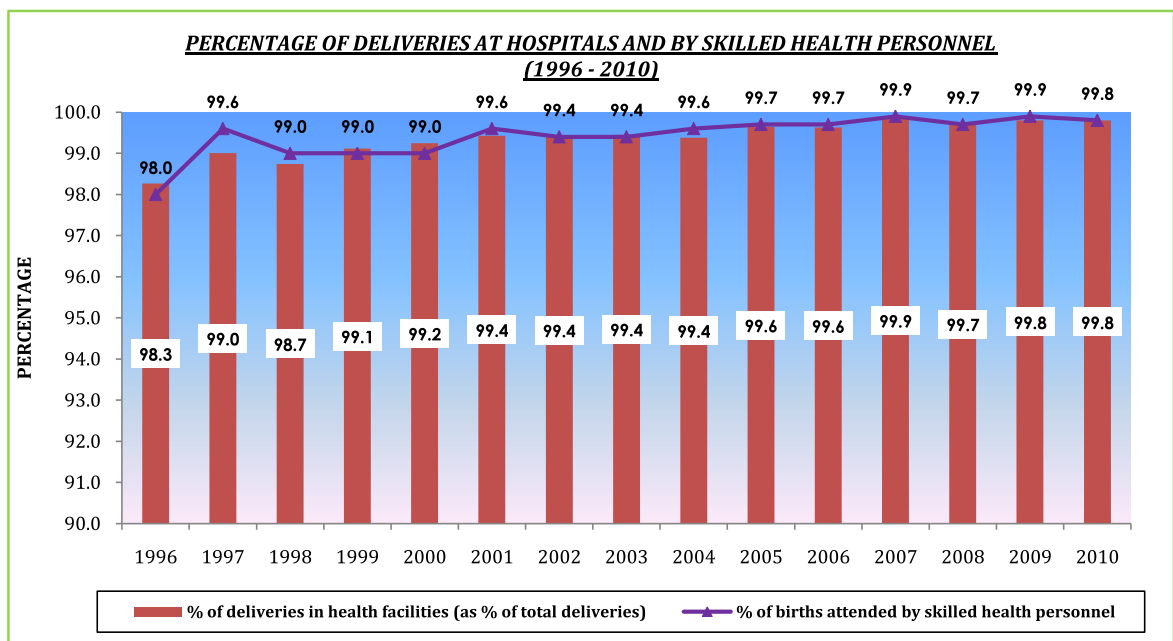
Millennium Development Goals (MDGs) Indicators

MDG5 is concerned with improving maternal health. The targets are to (i) reduce maternal mortality ratio by three quarters between 1990 and 2015 and improve health care in terms of attention during delivery; and (ii) achieve universal access to reproductive health.

Brunei Darussalam continues to provide excellent Maternal and Child Health services including antenatal care, skilled care during childbirth including emergency obstetric care and postnatal care throughout the country as to maintain low levels of maternal mortality which is comparable to other developed countries.



Almost all deliveries in Brunei Darussalam are attended by skilled health personnel who can supervise, provide care and advice to women during pregnancy, labour and the postpartum period. They also conduct deliveries and care for the newborn child.



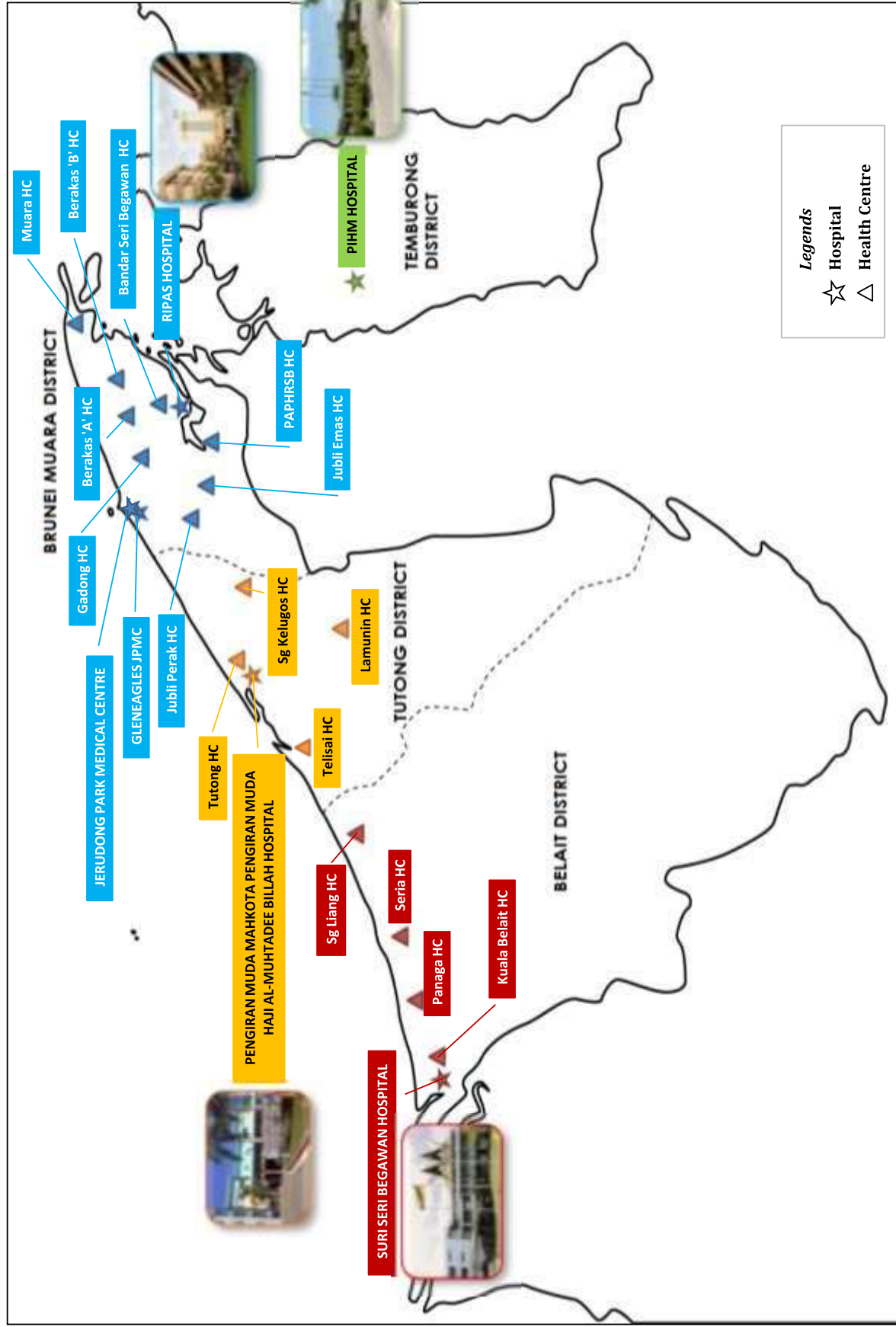
Health Facilities (2010)

MEDICAL CARE	NUMBER
- HOSPITALS (4 GOVERNMENTS + 2 PRIVATES ⁽¹⁾)	6
- MEDICAL CENTRES (Ministry of Defence)	9 ⁽²⁾
- DIALYSIS CENTRES	5
- DENTAL CLINICS:	
GOVERNMENTS	20
ARMY	7
PRIVATES	10
HEALTH SERVICES	
- HEALTH CENTRES (15 GOVERNMENTS + 1 PRIVATE ⁽⁴⁾)	16
- HEALTH/MATERNAL AND CHILD HEALTH CLINICS	15
- TRAVELLING HEALTH CLINICS	4
- FLYING MEDICAL SERVICES	4
DENTAL SERVICES	
- DENTAL SERVICES AT:	
HOSPITALS / NATIONAL DENTAL CENTRE	5
HEALTH CENTRES	11
HEALTH CLINICS	7
STATIC SCHOOL CLINICS	39
MOBILE SQUAD	11
TRAVELLING (FLYING TEAM)	4

Note :

- (1) - Jerudong Park Medical Centre and Gleneagles Park Centre
- (2) - Including Air Forces Medical Clinic
- (3) - Panaga Health Centre

Distribution Map of Health Care Facilities

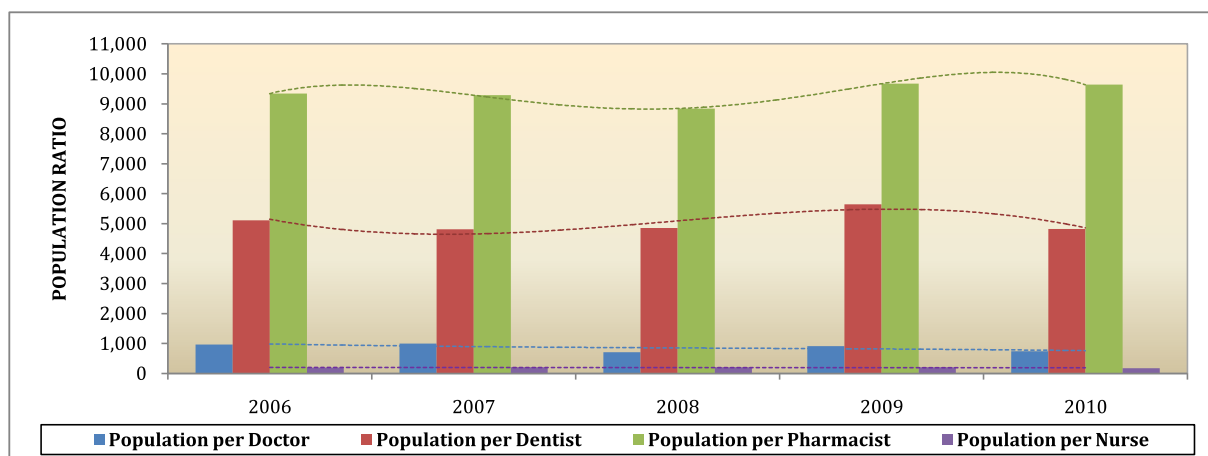


Human Resource in Health

Human Resources for Health for 2010			Government	Private	Total	
Doctors ⁽¹⁾	Male	Local	61	11	72	328
		Foreign	226	30	256	
	Female	Local	94	9	103	235
		Foreign	114	18	132	
	TOTAL			495	68	563
Population per Doctor					736	
Dentists ⁽¹⁾	Male	Local	8	6	14	44
		Foreign	22	8	30	
	Female	Local	29	1	30	42
		Foreign	11	1	12	
	TOTAL			70	16	86
Population per Dentist					4,819	
Pharmacists ⁽²⁾	Male	Local	4	1	5	6
		Foreign	1	0	1	
	Female	Local	24	7	31	37
		Foreign	0	6	6	
	TOTAL			29	14	43
Population per Pharmacist					9,637	
Nurses ⁽³⁾ (including Dental Nurses and Midwives)		Male	419	54	2,399	
		Female	1,717	209		
		TOTAL	2,136	263		
Population per Nurse					173	
Midwives		Male	0	0	508	
		Female	502	6		
		TOTAL	502	6		
Population per Midwife					816	

Sources:

- (1) - Brunei Medical Board
- (2) - Pharmacy Department
- (3) - Nursing Board



Government Health Expenditure

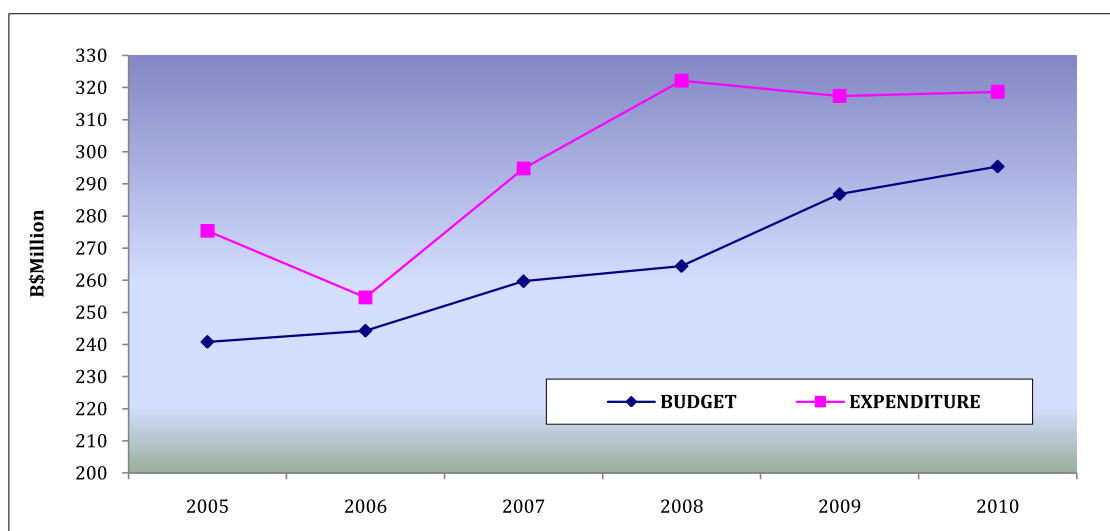
	2008/09	2009/10	2010/11
Total Health Budget (B\$ Millions)	264.44	286.82	295.41
Health Budget as % of National Budget	7.08	7.29	7.48
Per Capita Health Budget (B\$)	664	706	713
Health Budget as % of GDP	1.30	1.84	1.75
Total Health Expenditure (B\$ Millions)	322.13	317.40	318.7
Health Expenditure as % of Government Expenditure	8.41	7.07	...
Per Capita Health Expenditure (B\$)	809	781	769
Health Expenditure as % of GDP	1.58	2.03	1.89

Note:

- GDP - Gross Domestic Product
- ... - Not available

Source:

- (Budget) - Budget Section, Ministry of Finance
- (Expenditure) - Ledger Section, Treasury Department



Leading Causes of Deaths for the Year 2010

(Based on ICD-10)

The four leading causes of deaths which accounted for 50 percent of the total deaths were comprised of Non-Communicable Diseases namely Cancer, Heart Diseases, Diabetes Mellitus and Cerebrovascular Diseases.

No.	ICD-10	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%	RATE PER 100,000 POPN.
1	C00 - C97	Cancer (Malignant Neoplasms)	134	118	252	20.9	60.8
2	I00 - I09, I20 - I52	Heart Diseases (Including Acute Rheumatic Fever)	121	65	186	15.4	44.9
3	E10 - E14	Diabetes Mellitus	59	41	100	8.3	24.1
4	I60 - I69	Cerebrovascular Diseases	45	54	99	8.2	23.9
5	J40 - J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	24	23	47	3.9	11.3
6	A40 - A41	Septicaemia	26	13	39	3.2	9.4
7	I10 - I15	Hypertensive Diseases	19	19	38	3.1	9.2
8	J10 - J18	Influenza and Pneumonia	15	13	28	2.3	6.8
9	V01 - V99	Transport Accidents	20	5	25	2.1	6.0
10	Q00 - Q99	Congenital Malformations, Deformations and Chromosomal Abnormalities	11	10	21	1.7	5.1
Others			196	177	373	30.9	90.0
ALL DEATHS			670	538	1,208	100.0	291.5

Leading Causes of Deaths (2006 - 2010)

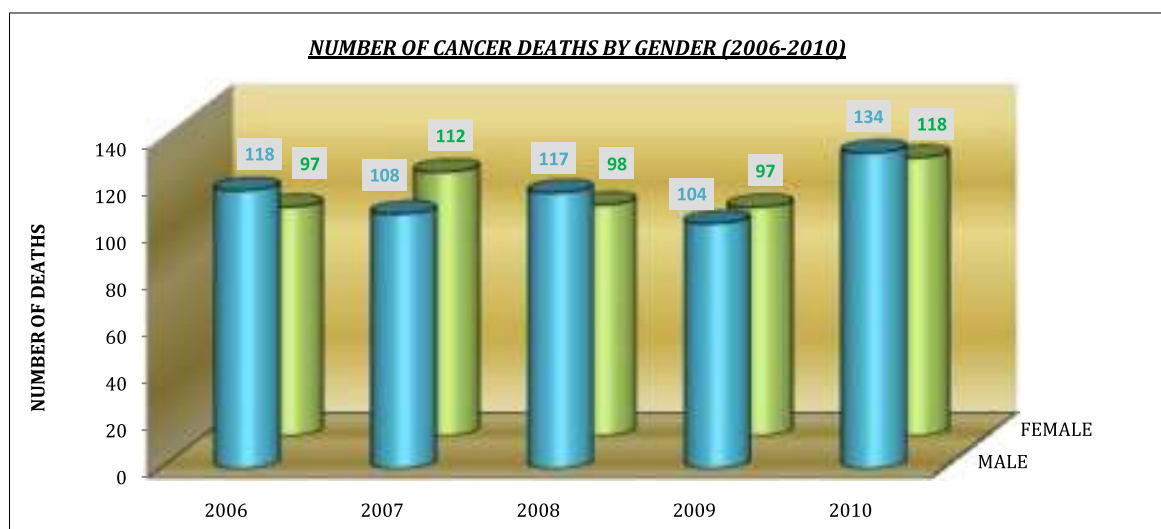
No.	2006	2007	2008	2009	2010
1	Cancer (Malignant Neoplasms) 220 (20.1%)	Cancer (Malignant Neoplasms) 215 (18.3%)	Heart Diseases (Including Acute Rheumatic Fever) 211 (19.3%)	Cancer (Malignant Neoplasms) 215 (18.4%)	Cancer (Malignant Neoplasms) 252 (20.9%)
2	Heart Diseases (Including Acute Rheumatic Fever) 188 (17.2%)	Heart Diseases (Including Acute Rheumatic Fever) 177 (15.1%)	Cancer (Malignant Neoplasms) 201 (18.4%)	Heart Diseases (Including Acute Rheumatic Fever) 185 (15.8%)	Heart Diseases (Including Acute Rheumatic Fever) 186 (15.4%)
3	Diabetes Mellitus 116 (10.6%)	Diabetes Mellitus 140 (11.9%)	Diabetes Mellitus 97 (8.9%)	Diabetes Mellitus 100 (8.5%)	Diabetes Mellitus 100 (8.3%)
4	Cerebrovascular Diseases 102 (9.3%)	Cerebrovascular Diseases 87 (7.4%)	Cerebrovascular Diseases 93 (8.5%)	Cerebrovascular Diseases 97 (8.3%)	Cerebrovascular Diseases 99 (8.2%)
5	Hypertensive Diseases 52 (4.7%)	Hypertensive Diseases 57 (4.9%)	Influenza and Pneumonia 53 (4.9%)	Septicaemia 52 (4.4%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 47 (3.9%)
6	Bronchitis, Chronic and Unspecified Emphysema & Asthma 48 (4.4%)	Transport Accidents 55 (4.7%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 39 (3.6%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 43 (3.7%)	Septicaemia 39 (3.2%)
7	Transport Accidents 39 (3.6%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 51 (4.3%)	Transport Accidents 33 (3.0%)	Hypertensive Diseases 41 (3.5%)	Hypertensive Diseases 38 (3.1%)
8	Influenza and Pneumonia 37 (3.4%)	Influenza and Pneumonia 35 (3.0%)	Septicaemia 32 (2.9%)	Transport Accidents 37 (3.2%)	Influenza and Pneumonia 28 (2.3%)
9	Certain Conditions Originating In The Perinatal Period 21 (1.9%)	Septicaemia 25 (2.1%)	Hypertensive Diseases 24 (2.2%)	Certain Conditions Originating In The Perinatal Period 26 (2.2%)	Transport Accidents 25 (2.1%)
10	Congenital Malformations, Deformations and Chromosomal Abnormalities 17 (1.6%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 23 (2.0%)	Certain Conditions Originating In The Perinatal Period 20 (1.8%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 25 (2.1%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 21 (1.7%)
OTHERS	255 (23.3%)	309 (26.3%)	288 (26.4%)	350 (29.9%)	373 (30.9%)
GRAND TOTAL	1,095 (100.0%)	1,174 (100.0%)	1,091 (100.0%)	1,171 (100.0%)	1,208 (100.0%)

Mortality due to Cancer for the Year 2010

The top three causes of cancers among male in Brunei Darussalam for 2010 were Trachea, Bronchus and Lung; Liver and Intrahepatic Bile Ducts; and Lip, Oral cavity and Pharynx and for female cancer deaths were Breast; Trachea, Bronchus and Lung; and Liver and Intrahepatic Bile Ducts.

TYPE OF CANCER	MALE	FEMALE	TOTAL
Trachea, Bronchus and Lung	27	18	45
Liver and Intrahepatic Bile Ducts	18	8	26
Breast	1	21	22
Lip, Oral Cavity and Pharynx	13	7	20
Rectum and Anus	12	6	18
Colon	11	4	15
Meninges, Brain and Other Parts of Central Nervous System	7	2	9
Multiple Myeloma and Malignant Plasma Cell Neoplasms	5	4	9
Non-Hodgkin's Lymphoma	2	7	9
Stomach	5	3	8
Prostate	7		7
Cervix Uteri		7	7
Pancreas	4	2	6
Oesophagus	2	3	5
Other and Unspecified Parts of Uterus	0	5	5
Ovary		5	5
Leukaemia	2	2	4
Remainder	18	14	32
TOTAL	134	118	252

YEAR	2006	2007	2008	2009	2010
TOTAL NO. OF CANCER DEATHS	220	215	201	215	252



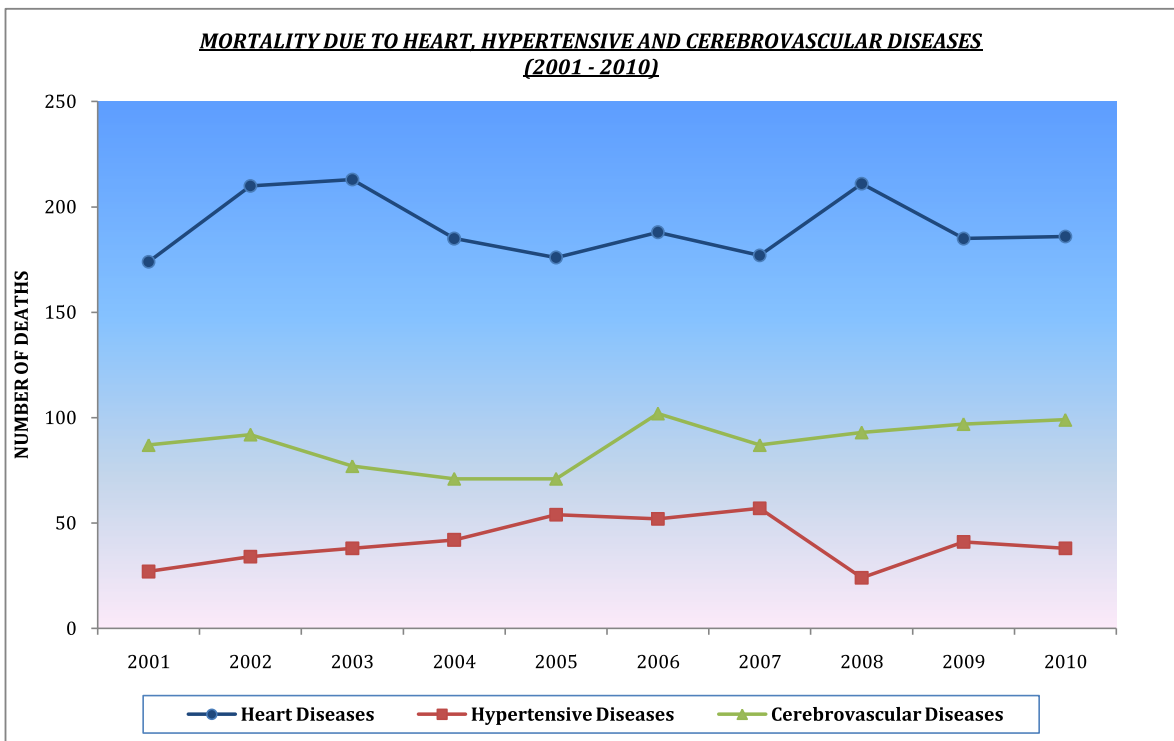
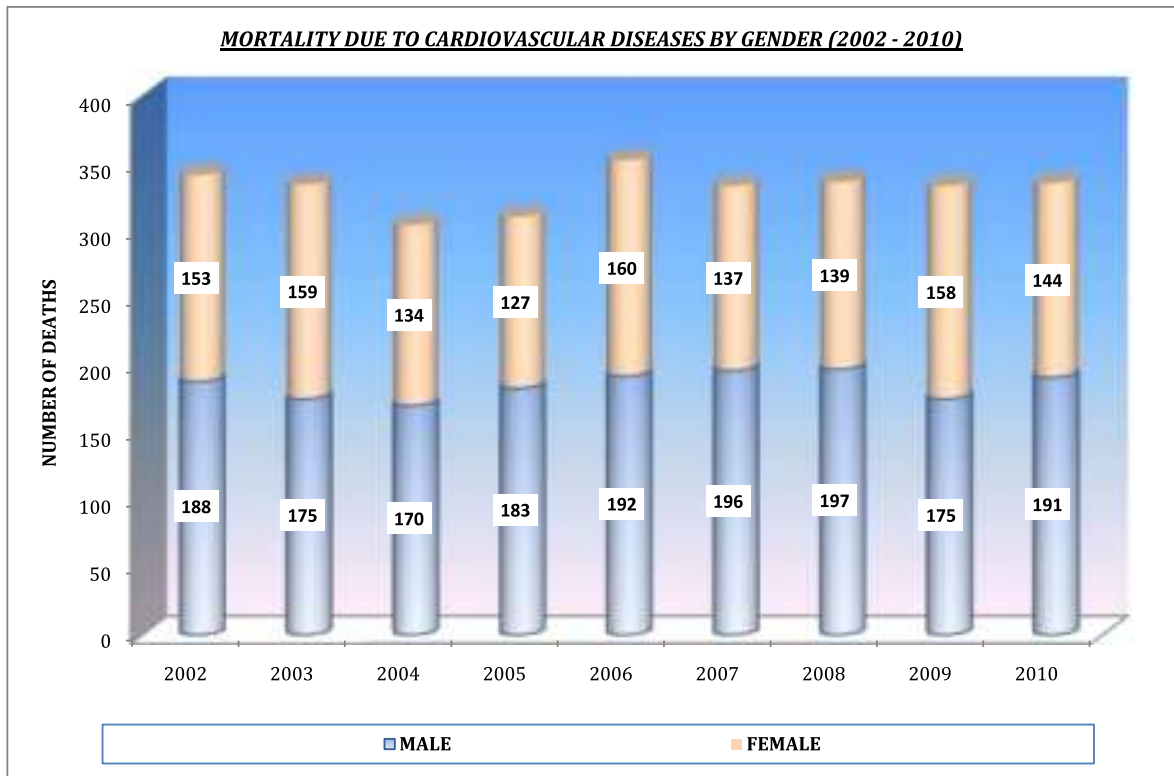
Trend in Leading Cancer Deaths in Brunei Darussalam (2006 - 2010)

No.	2006	2007	2008	2009	2010
1	Trachea, Bronchus and Lung 39 (17.7%)	Trachea, Bronchus and Lung 50 (23.3%)	Trachea, Bronchus and Lung 50 (24.9%)	Trachea, Bronchus and Lung 37 (17.2%)	Trachea, Bronchus and Lung 45 (17.9%)
2	Breast 20 (9.1%)	Rectum and Anus 21 (9.8%)	Liver and Intrahepatic Bile Duct 14 (7.0%)	Liver and Intrahepatic Bile Duct 24 (11.2%)	Liver and Intrahepatic Bile Duct 26 (10.3%)
3	Lip, Oral Cavity and Pharynx 16 (7.3%)	Stomach 20 (9.3%)	Cervix Uteri 13 (6.5%)	Cervix Uteri 14 (6.5%)	Breast 22 (8.7%)
4	Rectum and Anus 16 (7.3%)	Liver and Intrahepatic Bile Duct 16 (7.4%)	Stomach 12 (6.0%)	Colon 13 (6.0%)	Lip, Oral Cavity and Pharynx 20 (7.9%)
5	Colon 13 (5.9%)	Breast 13 (6.0%)	Colon 11 (5.5%)	Stomach 10 (4.7%)	Rectum and Anus 18 (7.1%)
6	Liver and Intrahepatic Bile Duct 12 (5.5%)	Cervix Uteri 10 (4.7%)	Rectum and Anus 11 (5.5%)	Prostate 9 (4.2%)	Colon 15 (6.0%)
7	Stomach 11 (5.0%)	Colon 8 (3.7%)	Breast 8 (4.0%)	Non-Hodgkin's Lymphoma 9 (4.2%)	Meninges, Brain and Other Parts of Central Nervous System 9 (3.6%)
8	Ovary 10 (4.5%)	Pancreas 8 (3.7%)	Leukaemia 7 (3.5%)	Rectum and Anus 9 (4.2%)	Multiple Myeloma and Malignant Plasma Cell Neoplasms 9 (3.6%)
9	Pancreas 9 (4.1%)	Meninges, Brain and Other Parts of Central Nervous System 8 (3.7%)	Pancreas 6 (3.0%)	Leukaemia 8 (3.7%)	Non-Hodgkin's Lymphoma 9 (3.6%)
10	Cervix Uteri 9 (4.1%)	Lip, Oral Cavity and Pharynx 7 (3.3%)	Meninges, Brain and Other Parts of Central Nervous System 6 (3.0%)	Breast 8 (3.7%)	Stomach 8 (3.2%)
OTHERS	65 (29.5%)	54 (25.1%)	63 (31.3%)	74 (34.4%)	71 (28.2%)
GRAND TOTAL	220 (100.0%)	215 (100.0%)	201 (100.0%)	215 (100.0%)	252 (100.0%)

*Mortality due to Cardiovascular Diseases for the Year 2010
(Based on ICD-10)*

ICD-10 CODE	TYPE OF DISEASES	AGE-GROUP IN YEARS														TOTAL		
		<35		35 - 44		45 - 54		55 - 64		65 - 74		75+		M	F	T		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	T		
1	100 - 109, 120 - 152	6	5	14	2	15	2	32	7	20	24	34	25	121	65	186		
	Heart Diseases																	
	i	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1		
	Acute Rheumatic Fever & Chronic Rheumatic Heart Diseases																	
	ii	3	2	10	2	15	0	27	5	15	17	27	14	97	40	137		
	Ischaemic Heart Diseases																	
	121	1	2	8	2	13	0	20	4	10	13	15	7	67	28	95		
	Acute Myocardial Infarction																	
	120, 122 - 125	2	0	2	0	2	0	7	1	5	4	12	7	30	12	42		
	Other Ischaemic Diseases																	
	iii	3	3	4	0	0	2	5	2	5	7	7	10	24	24	48		
	Diseases of Pulmonary Circulation & Other Forms of Heart Diseases																	
2	110 - 115	0	0	2	3	5	2	6	2	1	2	5	10	19	19	38		
	Hypertensive Diseases																	
3	160 - 169	2	2	3	5	4	2	9	9	11	5	16	31	45	54	99		
	Cerebrovascular Diseases																	
4	170 - 198	0	1	1	0	1	0	0	1	1	0	3	4	6	6	12		
	Other Diseases of the Circulatory System																	
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	Atherosclerosis																	
	171 - 198	0	1	1	0	1	0	0	1	1	0	3	4	6	6	12		
	Others																	
1 to 4	100 - 198	8	8	20	10	25	6	47	19	33	31	58	70	191	144	335		
	All Cardiovascular Diseases																	
	All Causes of Mortality	90	56	55	34	76	43	118	74	127	112	204	219	670	538	1,208		

Mortality Trend of Cardiovascular Diseases

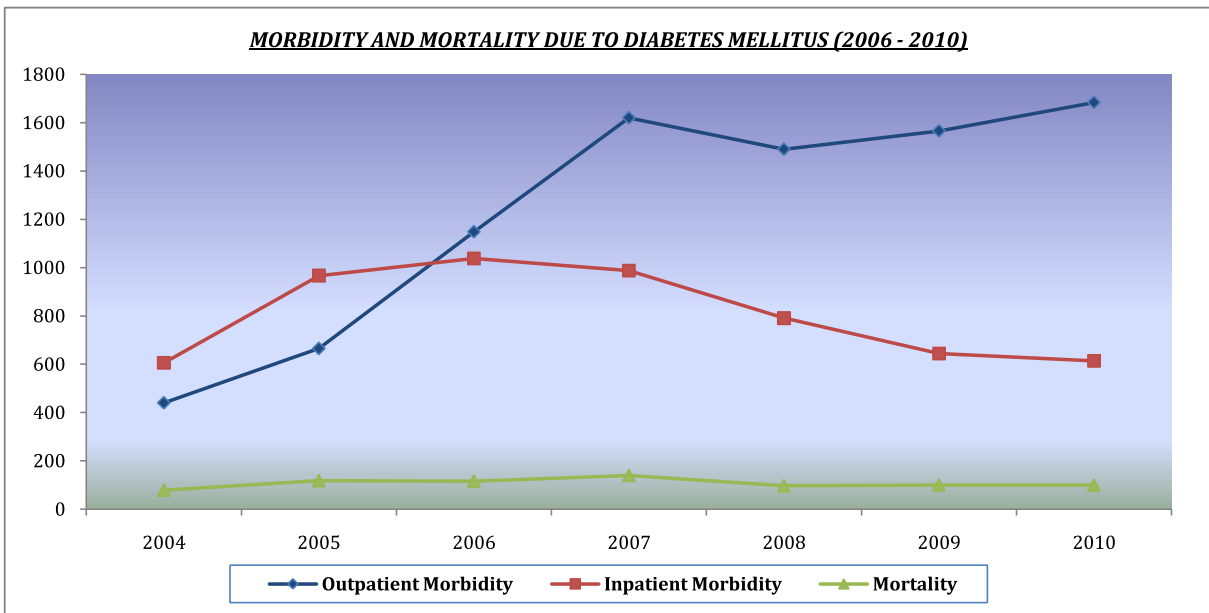


Morbidity and Mortality due to Diabetes Mellitus for the Year 2010

	AGE-GROUP IN YEARS												
	0-14		15-44		45-64		65+		Unknown Age		TOTAL		
	M	F	M	F	M	F	M	F	M	F	M	F	TOTAL
OUTPATIENT MORBIDITY *	5	9	193	252	368	522	176	159	0	0	742	942	1,684
INPATIENT MORBIDITY *	3	8	61	86	133	138	89	96	0	0	286	328	614
MORTALITY	0	0	1	2	30	11	28	28	0	0	59	41	100

Note:

* - Hospital Morbidity only



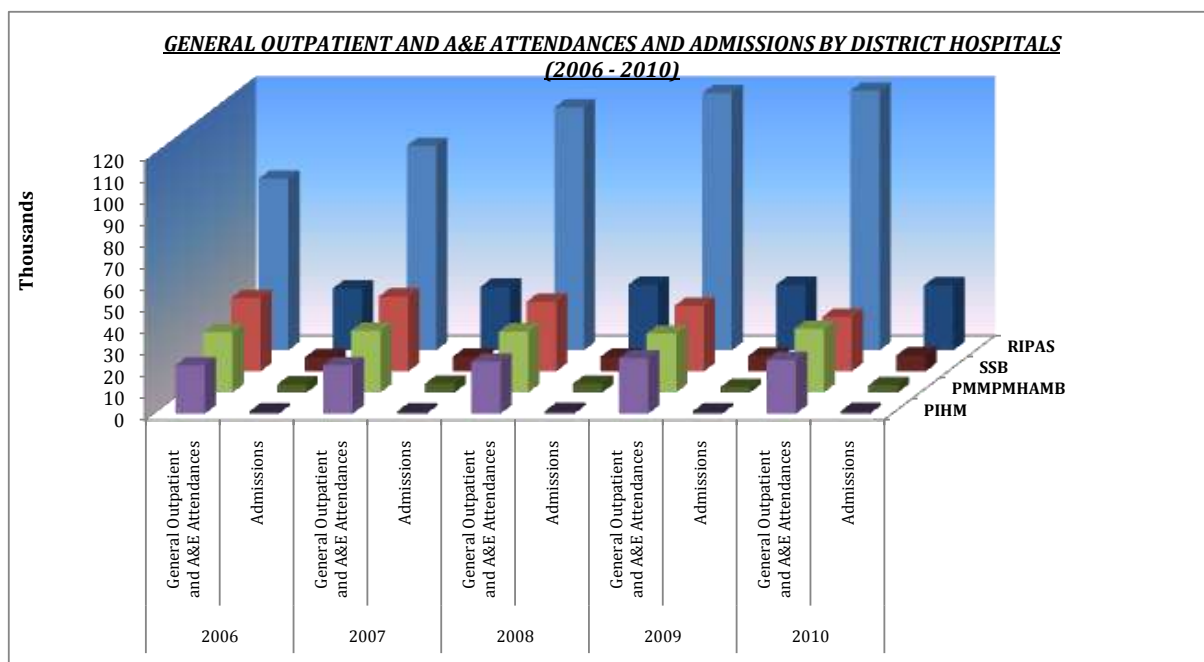
Hospital Services

The Department of Medical Services is responsible for the delivery of hospital services in all four districts.

ACTIVITIES FOR THE YEAR 2010	RIPAS	SSB	PMPMHAMB	PIHM	TOTAL
OUTPATIENT ACTIVITIES					
General Outpatient Attendances	19,915	19,915
Accident & Emergency Outpatient Attendances	129,452	25,175	29,440	4,915	188,982
Specialist Outpatient Attendances	274,060	89,007	49,188	8,967	421,222
INPATIENT ACTIVITIES					
Available Beds	591	222	106	32	951
Admissions	30,027	7,346	3,318	1,102	41,793
Discharges & Deaths	30,020	7,101	3,168	945	41,234
Patient Days	144,552	40,253	12,325	2,461	199,591
Day Patients	55,124	7,133	N/A	253	62,510
PERFORMANCE INDICES					
Average Number of Inpatients / Day	396	110	34	7	547
% Occupancy	67	50	32	21	57
Average Duration of Stay (Days)	4.8	5.7	3.9	2.6	4.8
Average Turnover of Patients / Bed	51	32	30	30	43
Average Turnover Interval (Days)	2.4	5.7	8.3	9.8	3.6

Note:

N/A - Not Available



Hospital Outpatient Morbidity for the Year 2010

(A & E + G O P D)

No.	ICD-10	DISEASES	MALE	FEMALE	TOTAL	%
1	J00-J06	Acute Upper Respiratory Infection	28,976	28,842	57,818	23.3
2	A09	Gastroenteritis/ Diarrhoea	7,496	6,649	14,145	5.7
3	J40-J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	5,704	4,685	10,389	4.2
4	L00-L99	Diseases of Skin & Subcutaneous Tissue	4,131	4,336	8,467	3.4
5	W00-W19	Falls	4,106	2,899	7,005	2.8
6	R10	Abdominal and Pelvic Pain	2,811	3,841	6,652	2.7
7	H10	Conjunctivitis	2,554	2,150	4,704	1.9
8	I10-I15	Hypertensive Diseases	1,867	2,348	4,215	1.7
9	V01-V99	Transport Accident	2,203	1,167	3,370	1.4
10	J10-J11	Influenza	1,064	907	1,971	0.8
11	E10-E14	Diabetes Mellitus	742	942	1,684	0.7
12	M10	Gout	1,337	188	1,525	0.6
13	B01	Chickenpox	667	647	1,314	0.5
14	K00-K08	Diseases of Teeth & Supporting Structures	735	509	1,244	0.5
15	T78.4	Allergy, Unspecified	580	660	1,240	0.5
Others			65,224	57,165	122,389	49.3
GRAND TOTAL			130,197	117,935	248,132	100.0

Note:

A & E - Accident & Emergency

GOPD - General Outpatient Department

Leading Causes of Hospital Outpatient Morbidity (2006 - 2010)

No.	2006	2007	2008	2009	2010
1	Acute Upper Respiratory Infections 56,709 (31.2%)	Acute Upper Respiratory Infections 61,701 (30.7%)	Acute Upper Respiratory Infections 62,547 (30.1%)	Acute Upper Respiratory Infections 68,249 (31.8%)	Acute Upper Respiratory Infections 57,818 (23.3%)
2	Bronchitis, Chronic & Unspecified Empysema & Asthma 9,269 (5.1%)	Gastroenteritis and Diarrhoea 10,084 (5.0%)	Bronchitis, Chronic & Unspecified Empysema & Asthma 9,722 (4.7%)	Gastroenteritis and Diarrhoea 9,339 (4.4%)	Gastroenteritis and Diarrhoea 14,145 (5.7%)
3	Gastroenteritis and Diarrhoea 7,987 (4.4%)	Bronchitis, Chronic & Unspecified Empysema & Asthma 9,656 (4.8%)	Gastroenteritis and Diarrhoea 8,455 (4.1%)	Bronchitis, Chronic & Unspecified Empysema & Asthma 9,177 (4.3%)	Bronchitis, Chronic & Unspecified Empysema & Asthma 10,389 (4.2%)
4	Diseases of Skin & Subcutaneous Tissue 6,281 (3.5%)	Diseases of Skin & Subcutaneous Tissue 6,921 (3.4%)	Diseases of Skin & Subcutaneous Tissue 7,101 (3.4%)	Diseases of Skin & Subcutaneous Tissue 6,448 (3.0%)	Diseases of Skin & Subcutaneous Tissue 8,467 (3.4%)
5	Abnominal and Pelvic Pain 5,287 (2.9%)	Abnominal and Pelvic Pain 5,595 (2.8%)	Falls 5,518 (2.7%)	Falls 5,139 (2.4%)	Falls 7,005 (2.8%)
6	Conjunctivitis 4,440 (2.4%)	Falls 4,536 (2.3%)	Abnominal and Pelvic Pain 5,088 (2.4%)	Abnominal and Pelvic Pain 4,287 (2.0%)	Abnominal and Pelvic Pain 6,652 (2.7%)
7	Falls 3,801 (2.1%)	Hypertensive Diseases 4,007 (2.0%)	Hypertensive Diseases 4,309 (2.1%)	Hypertensive Diseases 4,258 (2.0%)	Conjunctivitis 4,704 (1.9%)
8	Hypertensive Diseases 3,173 (1.7%)	Conjunctivitis 3,555 (1.8%)	Conjunctivitis 3,251 (1.6%)	Conjunctivitis 3,582 (1.7%)	Hypertensive Diseases 4,215 (1.7%)
9	Transport Accidents 1,593 (0.9%)	Influenza 1,916 (1.0%)	Transport Accidents 1,972 (0.9%)	Influenza 2,718 (1.3%)	Transport Accidents 3,370 (1.4%)
10	Influenza 1,471 (0.8%)	Transport Accidents 1,803 (0.9%)	Influenza 1,576 (0.8%)	Transport Accidents 2,361 (1.1%)	Influenza 1,971 (0.8%)
OTHERS	81,593 (44.9%)	91,288 (45.4%)	98,388 (47.3%)	99,072 (46.2%)	129,396 (52.1%)
GRAND TOTAL	181,604 (100.0%)	201,062 (100.0%)	207,927 (100.0%)	214,630 (100.0%)	248,132 (100.0%)

Hospital Inpatient Morbidity for the Year 2010

NO	ICD-10	TYPE OF DISEASES	MALE	FEMALE	TOTAL	%
1	A09	Diarrhoea and Gastroenteritis of Presumed Infectious Origin	749	612	1,361	3.7
2	J00-J06	Acute Upper Respiratory Infections	627	602	1,229	3.3
3	J10-J22	Acute Lower Respiratory Infections	637	538	1,175	3.2
4	O00-O08	Pregnancy With Abortive Outcome		1,113	1,113	3.0
5	N80-N98	Non-Inflammatory Disorders of Female Genital Tract		1,111	1,111	3.0
6	J45-J46	Asthma	505	413	918	2.5
7	O98-O99	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)		787	787	2.1
8	I10-I15	Hypertensive Diseases	369	402	771	2.1
9	R50	Fever of Unknown Origin	447	320	767	2.1
10	E10-E14	Diabetes Mellitus	286	328	614	1.7
11	R10	Abdominal and Pelvic Pain	207	338	545	1.5
12	S02, S12, S22, S32, S42, S52, S72, S82, S92, T02, T08, T10, T12	Fractures Of Specified and Multiple Body Regions	306	154	460	1.3
13	I00-I09, I20-I52	Heart Diseases	284	174	458	1.2
14	W00-W19	Falls	267	171	438	1.2
15	D50-D64	Iron Deficiency Anaemias	172	179	351	1.0
Others			8,250	16,371	24,621	67.1
GRAND TOTAL			13,106	23,613	36,719	100.0

Leading Causes of Hospital Inpatient Morbidity (2006 - 2010)

No.	2006	2007	2008	2009	2010
1	Asthma 1,051 (2.8%)	Acute Lower Respiratory Infections 1,226 (3.2%)	Acute Lower Respiratory Infections 1,201 (3.2%)	Acute Lower Respiratory Infections 1,227 (3.4%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,361 (3.7%)
2	Diabetes Mellitus 1,038 (2.8%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,151 (3.0%)	Pregnancy With Abortive Outcome 1,067 (2.8%)	Pregnancy With Abortive Outcome 1,065 (3.0%)	Acute Upper Respiratory Infections 1,229 (3.3%)
3	Acute Lower Respiratory Infections 958 (2.6%)	Asthma 1,122 (3.0%)	Asthma 1,055 (2.8%)	Non-Inflammatory Disorders of Female Genital Tract 1,039 (2.9%)	Acute Lower Respiratory Infections 1,175 (3.2%)
4	Pregnancy With Abortive Outcome 942 (2.6%)	Acute Upper Respiratory Infections 1,071 (2.8%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,026 (2.7%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,032 (2.9%)	Pregnancy With Abortive Outcome 1,113 (3.0%)
5	Acute Upper Respiratory Infections 903 (2.4%)	Diabetes Mellitus 988 (2.6%)	Acute Upper Respiratory Infections 1,016 (2.7%)	Asthma 953 (2.6%)	Non-inflammatory Disorders of Female Genital Tract 1,111 (3.0%)
6	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 900 (2.4%)	Pregnancy With Abortive Outcome 937 (2.5%)	Non-Inflammatory Disorders of Female Genital Tract 984 (2.6%)	Acute Upper Respiratory Infections 893 (2.5%)	Asthma 918 (2.5%)
7	Non-Inflammatory Disorders of Female Genital Tract 890 (2.4%)	Non-Inflammatory Disorders of Female Genital Tract 933 (2.5%)	Diabetes Mellitus 791 (2.1%)	Fever of Unknown Origin 759 (2.1%)	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes) 787 (2.1%)
8	Hypertensive Diseases 801 (2.2%)	Hypertensive Diseases 758 (2.0%)	Hypertensive Diseases 745 (2.0%)	Hypertensive Diseases 664 (1.8%)	Hypertensive Diseases 771 (2.1%)
9	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes) 612 (1.7%)	Fever of Unknown Origin 676 (1.8%)	Fever of Unknown Origin 737 (2.0%)	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes) 661 (1.8%)	Fever of Unknown Origin 767 (2.1%)
10	Heart Diseases 561 (1.5%)	Heart Diseases 633 (1.7%)	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes) 660 (1.8%)	Diabetes Mellitus 644 (1.8%)	Diabetes Mellitus 614 (1.7%)
OTHERS	28,227 (76.5%)	28,325 (74.9%)	28,120 (74.9%)	27,040 (75.2%)	26,873 (73.2%)
GRAND TOTAL	36,883 (100.0%)	37,820 (100.0%)	37,538 (100.0%)	35,977 (100.0%)	36,719 (100.0%)

Health Services

The Department of Health Services, Ministry of Health is responsible for providing public health services in the country. The mission of the department is to promote well-being and prevent ill health, whereby various activities and programmes have been developed and established under three main services: Community Health Services, Environmental Health Services, and Scientific Services.

WORKLOAD INDICATORS	2008	2009	2010
1. Ante Natal attendances	46,419	48,323	44,068
2. Post Natal attendances	8,396	9,340	12,169
3. Child (<5) attendances	122,229	124,785	111,199
4. General O/P attendances in Health Centres / Clinics	469,033	538,999	465,448
- Extended Hours Services	71,526	74,809	79,794
5. No. of students medically examined (Primary I, IV & Form II)	21,984	21,149	20,091
6. No. of students screened (Primary I, III, IV, VI & Form II)	37,174	73,696	28,548

A comprehensive National Immunisation Programme is in place to protect children against vaccine preventable diseases. This successful programme is delivered through the extensive network of MCH Services and by School Health Services.

Over the years, immunisation coverage has consistently been above 95.0 percent for all vaccinations in the programme which met the targets set by the WHO. The success of this programme is one of the factors that contributed to the progression of Brunei Darussalam in achieving one of the health objectives under the United Nations Millennium Development Goal for reduction in child mortality.

IMMUNISATION COVERAGE	2008	2009	2010
% of infants immunised against			
- Tuberculosis (at birth)	99.7	100.0	95.4
- Diphtheria/Tetanus/Whooping Cough (Tetract-HIB) ₃	97.6	99.4	95.4
- Poliomyelitis (OPV) ₃	100.0	99.5	99.0
- Hepatitis B ₃	96.1	100.0	95.8
- Measles, Mumps and Rubella 1 (MMR1)	99.7	100.0	94.4
% of pregnant women immunised against Primigravida			
- Tetanus (TT ₂)	75.0	75.0	75.6

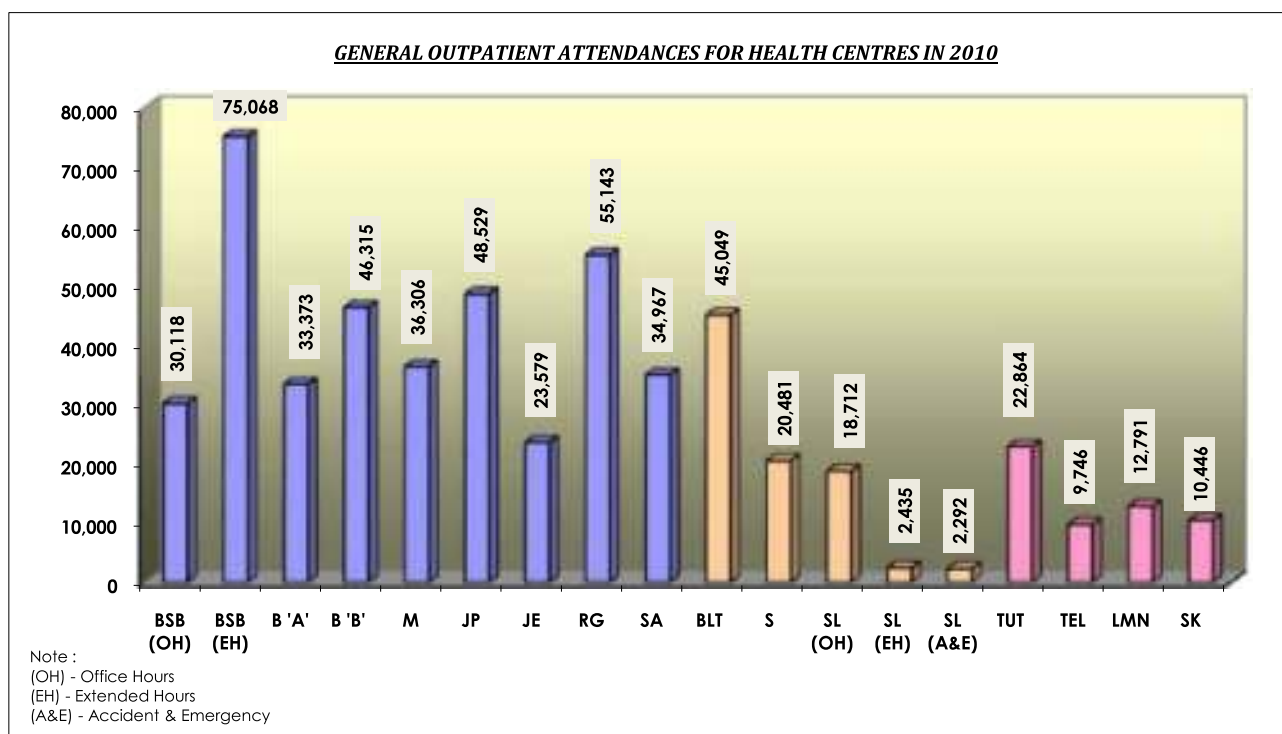
Note:

Red text - Millennium Development Goals (MDGs) Indicators

Source:

Maternal and Child Health (MCH) Clinic Data

General Outpatient Attendances for Health Centres (2010)



BRUNEI MUARA HEALTH CENTRES

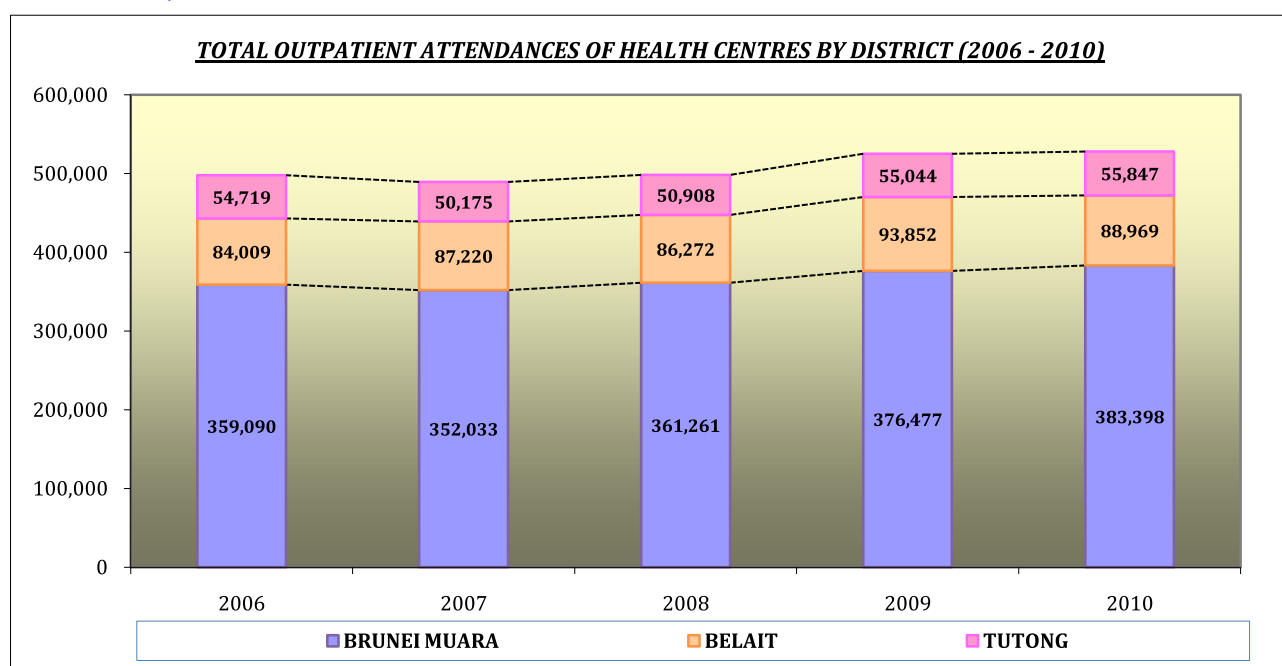
- BSB : BSB Health Centre
- B 'A' : Berakas 'A' Health Centre
- B 'B' : Berakas 'B' Health Centre
- M : Muara Health Centre
- JP : Jubli Perak Health Centre
- JE : Jubli Emas Health Centre
- RG : Rimba Gadong Health Centre
- SA : PAP Hjh Rashidah Sa'adatul Bolkiah Health Centre

BELAIT HEALTH CENTRES

- BLT : Belait Health Centre
- S : Seria Health Centre
- SL : Sungai Liang Health Centre

TUTONG HEALTH CENTRES

- TUT : Tutong Health Centre
- TEL : Telisai Health Centre
- LMN : Lamunin Health Centre
- SK : Sungai Kelugos Health Centre



Health Centres Outpatient Morbidity (2010)

No.	ICD-10	DISEASES	MALE	FEMALE	TOTAL	%
1	J00-J06	Acute Upper Respiratory Infection	107,800	114,841	222,641	34.8
2	I10-I15	Hypertensive Diseases	18,774	26,573	45,347	7.1
3	L00-L99	Diseases of Skin & Subcutaneous Tissue	16,639	19,248	35,887	5.6
4	J10-J11	Influenza	15,985	17,328	33,313	5.2
5	H10	Conjunctivitis	9,937	10,232	20,169	3.2
6	A09	Gastroenteritis/Diarrhoea	10,071	9,281	19,352	3.0
7	E70-E90	Metabolic Disorders	7,784	10,524	18,308	2.9
8	E10-E14	Diabetes	6,182	8,821	15,003	2.3
9	J40-J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	5,411	5,501	10,912	1.7
10	R10	Abdominal and Pelvic Pain	3,482	5,098	8,580	1.3
11	H65-H66	Otitis Media	2,577	3,104	5,681	0.9
12	K25-K27	Gastric, Duodenal and Peptic Ulcer	2,234	3,292	5,526	0.9
13	K00-K08	Diseases of Teeth & Supporting Structures	1,584	1,864	3,448	0.5
14	M10	Gout	2,458	377	2,835	0.4
15	B01	Chickenpox	1,374	1,287	2,661	0.4
Others			80,586	109,604	190,190	29.7
GRAND TOTAL			292,878	346,975	639,853	100.0

Note:

Rimba Health Centre (January - November 2010 only)

Berakas 'B' Health Centre (January - August 2010 only)

Leading Causes of Primary Health Care Outpatient Morbidity by District (2010)

No.	HEALTH CENTRES			
	BRUNEI MUARA	BELAIT	TUTONG	ALL DISTRICTS
1	Acute Upper Respiratory Infections 167,291 (34.8%)	Acute Upper Respiratory Infections 34,765 (38.2%)	Acute Upper Respiratory Infections 20,585 (29.9%)	Acute Upper Respiratory Infections 222,641 (34.8%)
2	Hypertensive Diseases 35,672 (7.4%)	Diseases of Skin & Subcutaneous Tissue 6,558 (7.2%)	Hypertensive Diseases 7,645 (11.1%)	Hypertensive Diseases 45,347 (7.1%)
3	Influenza 33,305 (6.9%)	Gastroenteritis and Diarrhoea 3,185 (3.5%)	Diseases of Skin & Subcutaneous Tissue 4,375 (6.4%)	Diseases of Skin & Subcutaneous Tissue 35,887 (5.6%)
4	Diseases of Skin & Subcutaneous Tissue 24,954 (5.2%)	Conjunctivitis 2,389 (2.6%)	Diabetes 1,677 (2.4%)	Influenza 33,313 (5.3%)
5	Metabolic Disorders 16,631 (3.5%)	Hypertensive Diseases 2,030 (2.2%)	Gastroenteritis and Diarrhoea 1,629 (2.4%)	Conjunctivitis 20,169 (3.2%)
6	Conjunctivitis 16,448 (3.4%)	Bronchitis Chronic & Unspecified Emphysema & Asthma 612 (0.7%)	Metabolic Disorders 1,455 (2.1%)	Gastroenteritis and Diarrhoea 19,352 (3.0%)
7	Gastroenteritis and Diarrhoea 14,538 (3.0%)	Abnominal and Pelvic Pain 583 (0.6%)	Conjunctivitis 1,332 (1.9%)	Metabolic Disorders 18,308 (2.9%)
8	Diabetes 12,958 (2.7%)	Diseases of Teeth & Supporting Structures 423 (0.5%)	Bronchitis Chronic & Unspecified Emphysema & Asthma 1,033 (1.5%)	Diabetes 15,003 (2.3%)
9	Bronchitis Chronic & Unspecified Emphysema & Asthma 9,267 (1.9%)	Diabetes 368 (0.4%)	Abnominal and Pelvic Pain 864 (1.3%)	Bronchitis Chronic & Unspecified Emphysema & Asthma 10,912 (1.7%)
10	Abnominal and Pelvic Pain 7,133 (1.5%)	Otitis Media 344 (0.4%)	Gastric, Duodenal & Peptic Ulcer 561 (0.8%)	Abnominal and Pelvic Pain 8,580 (1.3%)
OTHERS	141,851 (29.5%)	39,715 (43.7%)	27,677 (40.2%)	210,341 (32.9%)
GRAND TOTAL	480,048 (100.0%)	90,972 (100.0%)	68,833 (100.0%)	640,794 (100.0%)

Note:

Rimba Health Centre (January - November 2010 only)

Berakas 'B' Health Centre (January - August 2010 only)

Leading Causes of Primary Health Care Outpatient Morbidity (2008 - 2010)

No.	2008	2009	2010
1	Acute Upper Respiratory Infections 197,348 (32.5%)	Acute Upper Respiratory Infections 229,878 (35.8%)	Acute Upper Respiratory Infections 222,641 (34.8%)
2	Diseases of Skin & Subcutaneous Tissue 42,253 (7.0%)	Hypertensive Diseases 41,921 (6.5%)	Hypertensive Diseases 45,347 (7.1%)
3	Hypertensive Diseases 40,433 (6.7%)	Diseases of Skin & Subcutaneous Tissue 38,538 (6.0%)	Diseases of Skin & Subcutaneous Tissue 35,887 (5.6%)
4	Influenza 18,367 (3.0%)	Influenza 21,235 (3.3%)	Influenza 33,313 (5.3%)
5	Bronchitis Chronic & Unspecified Emphysema & Asthma 16,915 (2.8%)	Conjunctivitis 17,566 (2.7%)	Conjunctivitis 20,169 (3.2%)
6	Conjunctivitis 15,767 (2.6%)	Gastroenteritis and Diarrhoea 16,998 (2.6%)	Gastroenteritis and Diarrhoea 19,352 (3.0%)
7	Gastroenteritis and Diarrhoea 15,555 (2.6%)	Metabolic Disorders 16,451 (2.6%)	Metabolic Disorders 18,308 (2.9%)
8	Diabetes 14,428 (2.4%)	Diabetes 14,405 (2.2%)	Diabetes 15,003 (2.3%)
9	Metabolic Disorders 10,644 (1.8%)	Bronchitis Chronic & Unspecified Emphysema & Asthma 14,107 (2.2%)	Bronchitis Chronic & Unspecified Emphysema & Asthma 10,912 (1.7%)
10	Abnominal and Pelvic Pain 10,495 (1.7%)	Abnominal and Pelvic Pain 9,944 (1.5%)	Abnominal and Pelvic Pain 8,580 (1.3%)
OTHERS	224,828 (37.0%)	221,432 (34.5%)	210,341 (32.9%)
GRAND TOTAL	607,033 (100.0%)	642,475 (100.0%)	639,853 (100.0%)

Note:

Rimba Health Centre (January - November 2010 only)

Berakas 'B' Health Centre (January - August 2010 only)

Notifiable Diseases (2010)

Notification of infectious diseases is required by law under the 'Infectious Diseases Order 2003'. A total of 57 infectious diseases are listed as notifiable in the country. All notifications must be reported to the Disease Control Division at the Department of Health.

DISEASES	BM	KB	TUT	TEM	TOTAL
FOOD AND WATER BORNE DISEASES					
Cholera	0	0	0	0	0
Dysentery (Shigella)	1	1	0	0	2
Food Poisoning	43	13	0	0	56
Gastroenteritis	172	116	3	6	297
Hepatitis A	0	2	0	0	2
Para/Typhoid Fever	4	0	0	0	4
Salmonella Infection	90	1	5	0	96
Total	310	133	8	6	457
PERSON TO PERSON TRANSMITTED DISEASES					
Chicken Pox	1,706	404	487	98	2,695
Ebola Fever	0	0	0	0	0
Hand, Foot & Mouth Disease	579	79	32	6	696
Influenza A	1954	195	31	34	2,214
Influenza B	0	0	0	0	0
Influenza Others	0	0	0	0	0
Leprosy	3	0	0	0	3
Meningitis	1	0	0	0	1
Scarlet Fever	0	0	0	0	0
Severe Acute Respiratory Syndrome	0	0	0	0	0
Total	4,243	678	550	138	5,609
VACCINE PREVENTABLE DISEASES					
Diphtheria	0	0	0	0	0
Hepatitis B	0	0	0	0	0
Measles	0	0	0	0	0
Mumps	16	5	9	0	30
Pertussis	0	0	0	0	0
Acute Flaccid Paralysis (AFP)	1	1	0	0	2
Rubella	1	0	0	1	2
Smallpox	0	0	0	0	0
Tetanus	0	0	0	0	0
Tetanus Neonatorum	0	0	0	0	0
Tuberculosis (data from TB Clinics)	156	47	30	4	237
Total	174	53	39	5	271

Notifiable Diseases (2010)

DISEASES	BM	KB	TUT	TEM	TOTAL
SEXUALLY TRANSMITTED DISEASES					
AIDS	0	0	0	0	0
Chancroid	1	0	0	0	1
Chlamydial Infection	27	0	1	1	29
Genital Herpes	2	1	0	0	3
Gonorrhoea Infections	265	21	18	8	312
Hepatitis C	0	1	0	0	1
HIV * (Local only)	2	0	2	1	5
Non Gonococcal Urethritis	0	3	0	0	3
Ophthalmia Neonatorum	0	0	0	0	0
Syphilis (All forms)	6	1	0	0	7
Other STI - Genital Warts	2	0	0	0	2
Total	305	27	21	10	363
VECTOR BORNE DISEASES					
Dengue Fever	262	9	18	9	298
Dengue Haemorrhagic Fever	0	0	1	0	1
Filariasis	0	0	2	0	2
Leptospirosis	0	0	0	0	0
Malaria	9	4	3	5	21
Plague	0	0	0	0	0
Typhus	0	0	0	0	0
West Nile Fever	0	0	0	0	0
Yellow Fever	0	0	0	0	0
Total	271	13	24	14	322
ZOONOTIC DISEASES					
Anthrax	0	0	0	0	0
Bovine Spongiform Encephalitis	0	0	0	0	0
Nipah Virus	0	0	0	0	0
Rabies	0	0	0	0	0
Total	0	0	0	0	0
OTHER INFECTIOUS DISEASES					
Conjunctivitis (Chlamydia)	4	0	1	0	5
Encephalitis	0	0	0	0	0
Legionellosis	0	0	0	0	0
Puerperal Infection	0	0	0	0	0
Viral Encephalitis	0	0	0	0	0
Viral Hepatitis	0	0	0	0	0
Total	4	0	1	0	5
GRAND TOTAL	5,307	904	643	173	7,027

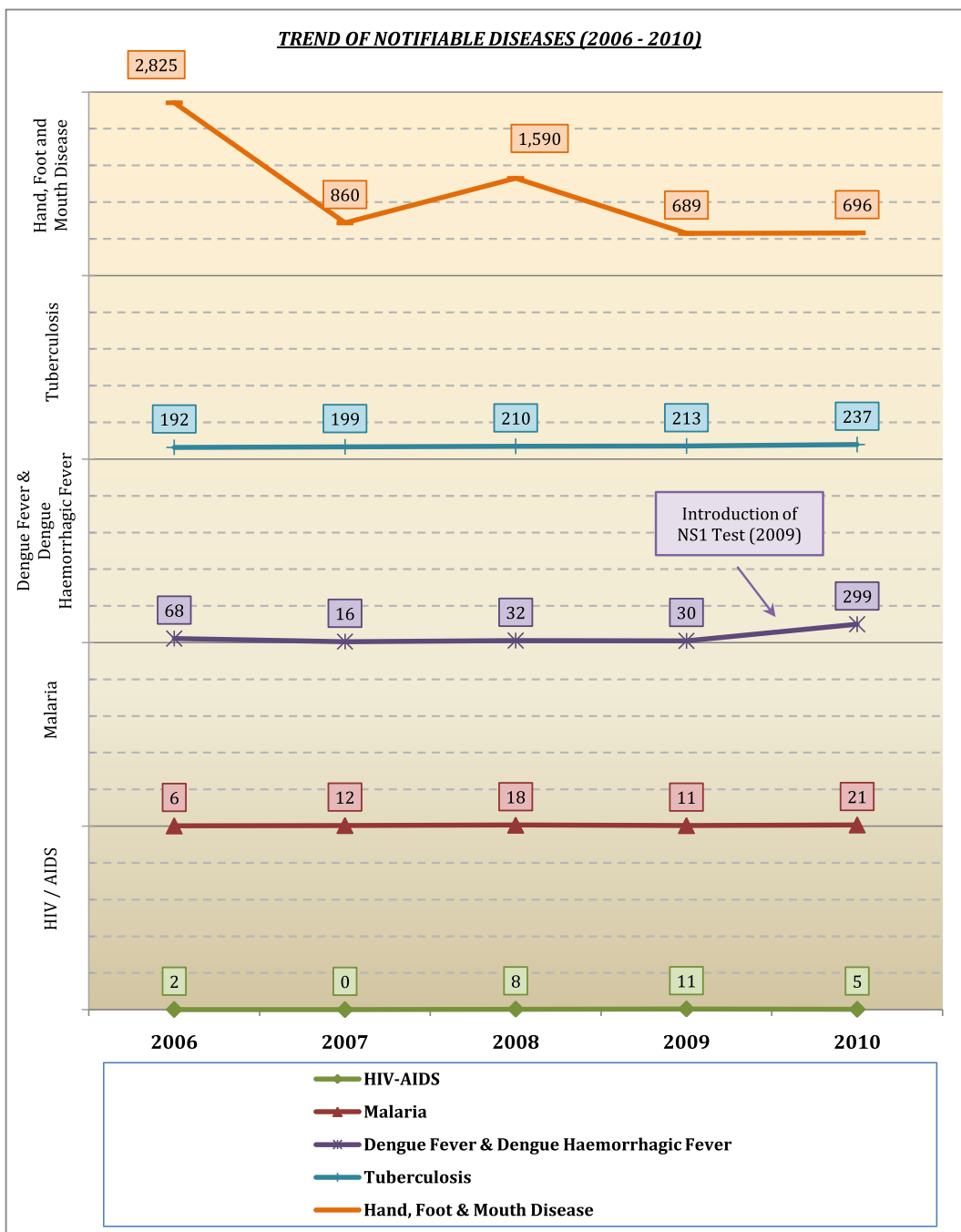
Note:

* Indicate incidence of AIDS/HIV cases among local only.

Source:

Disease Control Division, MOH

Notifiable Diseases

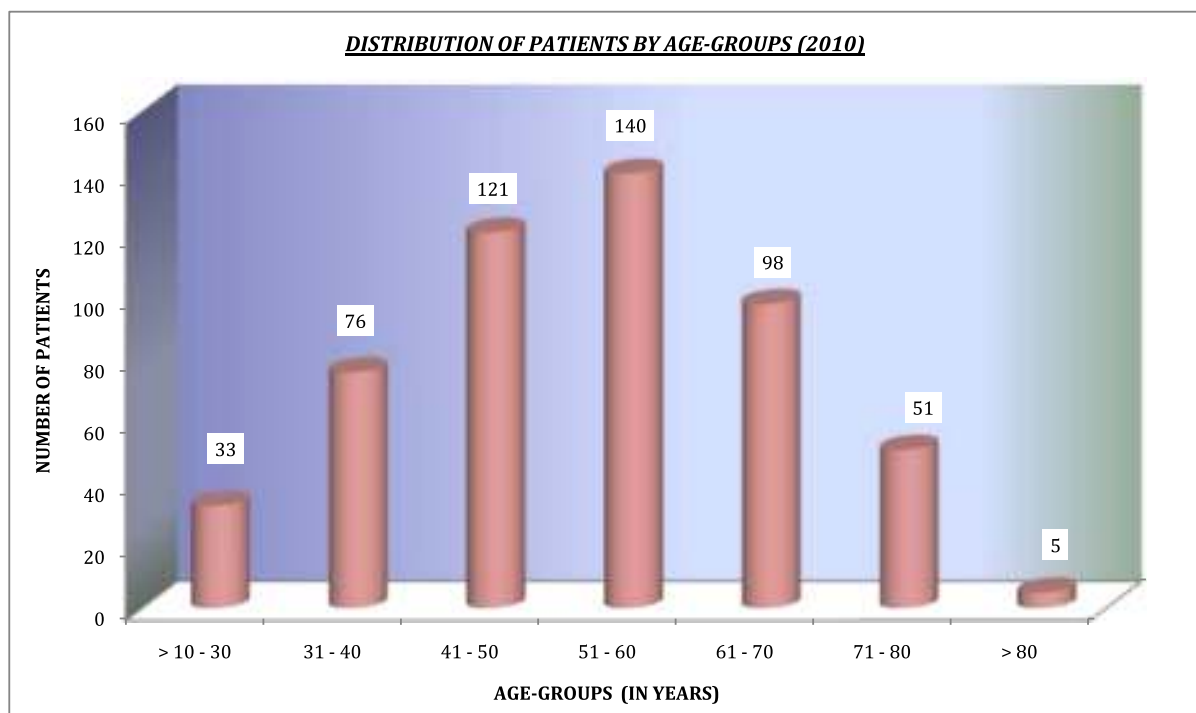


Renal Services

DIALYSIS CENTRE / UNIT	NO. OF PATIENTS								
	2008			2009			2010		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Rimba Dialysis Centre	97	116	213	111	106	217	98	109	207
Kiarong Dialysis Centre	26	34	60	26	31	57	23	34	57
Dialysis Centre RIPAS Hospital	28	42	70	32	26	58	29	35	64
Dialysis Centre SSB Hospital, Belait	19	27	46	32	34	66	39	37	76
Continuous Ambulatory Peritoneal Dialysis	36	29	65	37	22	59	36	27	63
Transplant Unit	19	12	31	10	23	33	19	12	31
Dialysis Centre PIHM Hospital, Temburong	10	7	17	11	9	20	13	13	26
TOTAL	235	267	502	259	251	510	257	267	524

Source:

Renal Health Promotion Unit, Department of Renal Services, MOH



Source:

Renal Health Promotion Unit, Department of Renal Services, MOH

Dental Health Services

ORAL HEALTH CARE COVERAGE OF THE POPULATION

YEAR	New Patients	Population	Oral Health Care Coverage
2006	75,399	383,000	19.7%
2007	87,820	390,000	22.5%
2008	83,748	398,000	21.0%
2009	78,453	406,200	19.3%
2010	82,644	414,400	19.9%

COVERAGE AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2010

COVERAGE	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
New Patients	10,579	27,378	8,272	32,110	4,305	82,644
Ante Natal	0	3	76	2,032	27	2,138
Edentulous	0	0	0	16	29	45

ATTENDANCES AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2010

TYPES OF ATTENDANCES	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
Outpatients	8,693	20,848	11,591	45,532	6,950	93,614
Prosthetics	5,491	20,812	8,102	22,421	3,822	60,648
TOTAL	14,184	41,660	19,693	67,953	10,772	154,262

TREATMENT AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2010

TYPES OF TREATMENT	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
Conservative	3,770	9,133	3,882	13,466	1,437	31,688
Periodontic	2,351	9,487	3,566	10,947	1,051	27,402
Endodontic	31	65	458	2,618	264	3,436
F Pros	28	8	34	891	339	1,300
R Pros	4	55	239	2,124	1,595	4,017
Orthodontic	2	651	3,952	3,250	15	7,870
OS	1,237	6,275	1,692	13,183	2,796	25,183
Implantologist	0	0	0	275	247	522
PV	4,376	14,219	3,117	2,055	289	24,056
Others	2,008	3,736	2,210	7,723	1,191	16,868
TOTAL	13,807	43,629	19,150	56,532	9,224	142,342

Source:

Research and Development Division, Department of Dental Services, MOH

Nutritional Status

SCHOOL HEALTH (Primary I, IV & VI and Form 2 only)	PERCENTAGE (%)				
	2006	2007	2008	2009	2010
1. Normal weight	70.0	64.8	69.8	68.9	67.1
2. Overweight	13.7	16.0	13.3	14.0	14.7
3. Obese	11.9	14.1	12.3	12.4	13.4
4. Underweight	4.4	5.1	4.5	4.7	4.8

Note :

In 2010, the Total Number of School Target Population is **28,231** for Primary I, III, IV & VI and **7,468** for Form 2

Source :

School Health Services.

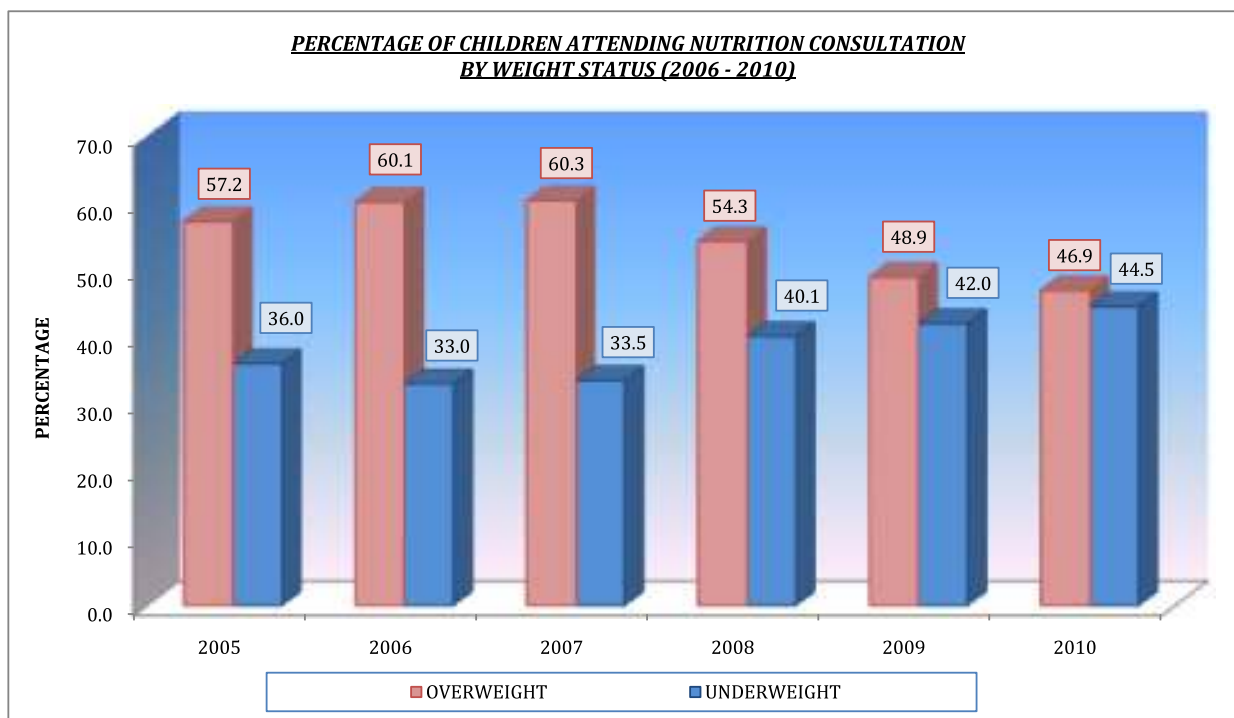
MOTHER & CHILD HEALTH CLINICS (BELOW 5 YEARS)	PERCENTAGE OF CHILDREN ATTENDING NUTRITION CONSULTATION BY WEIGHT STATUS (%)				
	2006	2007	2008	2009	2010
1. Underweight	60.1	60.3	54.3	48.9	46.9
2. Overweight	33.0	33.5	40.1	42.0	44.5
3. Others *	6.9	6.3	5.6	9.2	8.6
TOTAL NUMBER OF CASES	1,690	1,423	1,331	1,158	960

Note :

* - Others including Healthy Eating, Low Birth Weight and Premature.

Source :

Community Nutrition Unit.



Occupational Health Services

Occupational Health Division is responsible to monitor health and safety at workplace. The activities are streamlined to include worker's health surveillance, worksite surveillance and industrial hygiene, training, information and advisory functions as well as in the areas of compensation, counselling and rehabilitation.

A total of 136 work accidents were reported to the Occupational Health Division in 2010. About 73 percent were in non-health care settings. Majority of these accidents occurred at the construction sites. Within the healthcare sector, most of the injuries involved needlestick injuries.

NATURE OF INJURY (NON HEALTHCARE)	2007	2008	2009	2010
1. Construction	41	55	28	30
2. Manufacturing	17	43	20	20
3. Engineering	20	37	14	16
4. Community Service	4	-	6	11
5. Electricity	4	5	2	1
6. Agriculture	2	6	1	6
7. Transport	2	14	8	1
8. Business Activities	4	7	7	8
9. Private Households	2	5	6	6
TOTAL	96	172	92	99

TYPE OF INJURY (HEALTHCARE)	2007	2008	2009	2010
1. Needle Prick	45	39	44	28
2. Other Injuries *	9	14	6	9
TOTAL	54	53	50	37

Note

* - Other Injuries including Blood/Body Fluid Splash, Scalpel/Elevator and Glass Cut.

Source :

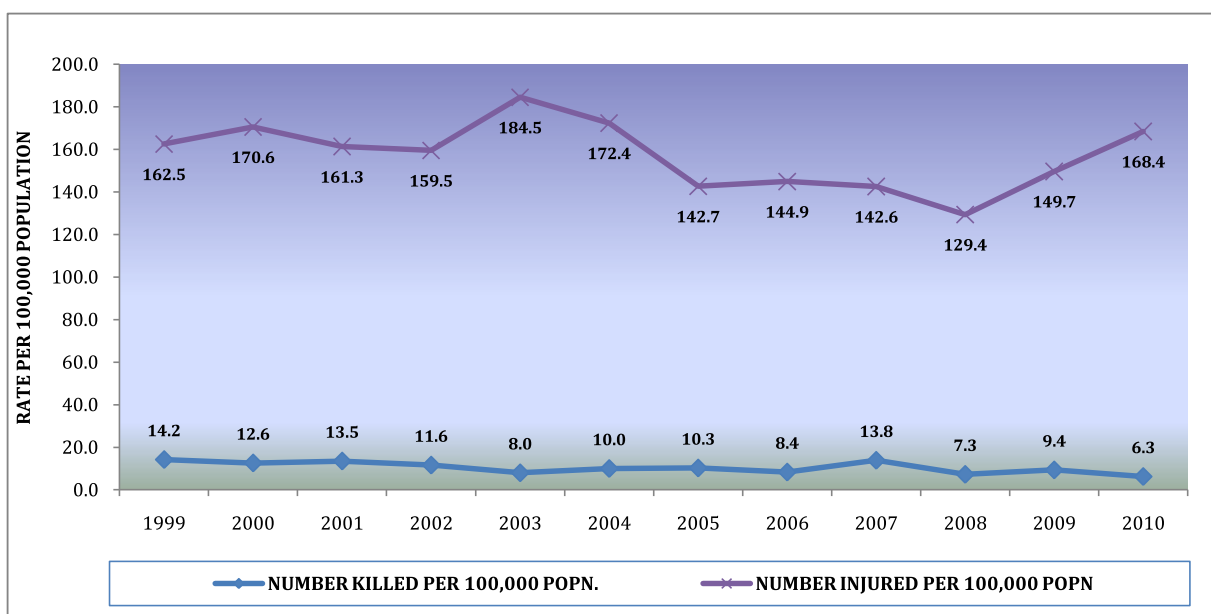
Occupational Health Division, Ministry of Health

Road Traffic Accidents

Road traffic accidents continue to be one of the leading causes of deaths in Brunei Darussalam. In 2010, Brunei Darussalam reported 3414 road accidents, an increase of 9.8% than the previous year. In the same year, road traffic accidents inflicted 698 injuries and 29 deaths.

ROAD TRAFFIC ACCIDENTS							
Y E A R	ACCIDENTS	KILLED	NUMBER KILLED PER 100,000 POPN.	INJURED	NUMBER INJURED FOR EACH PERSON KILLED	CASE FATALITY RATE % (CFR)	REGISTERED VEHICLES (revised)
1999	2,900	45	14.2	515	11.4	8.0	200,034
2000	2,861	41	12.6	554	13.5	6.9	206,994
2001	2,794	45	13.5	537	11.9	7.7	213,816
2002	2,801	40	11.6	549	13.7	6.8	225,650
2003	2,625	28	8.0	645	23.0	4.2	238,061
2004	2,625	36	10.0	620	17.2	5.5	252,428
2005	2,771	38	10.3	528	13.9	6.7	267,995
2006	2,710	32	8.4	555	17.3	5.5	281,524
2007	2,674	54	13.8	556	10.3	8.9	297,592
2008	2,775	29	7.3	515	17.8	5.3	318,816
2009	3,110	38	9.4	608	16.0	5.9	333,203
2010	3,414	26	6.3	698	26.8	3.6	348,266

Sources :
The Royal Brunei Police Force
Land Transport Department

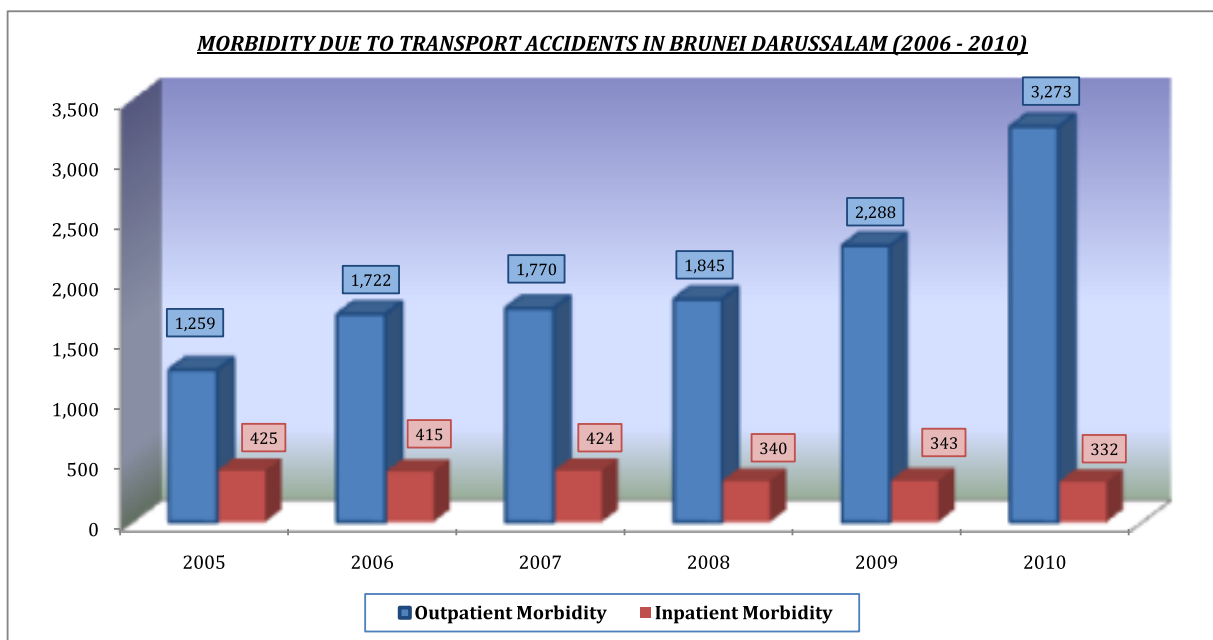


Transport Accidents

	MORBIDITY DUE TO TRANSPORT ACCIDENTS IN 2010				
	RIPASH	SSB	PMMPMHAMB	PIHM	TOTAL
OUTPATIENT *	1,873	851	532	17	3,273
INPATIENT	223	97	1	11	332

Note:

* - Newly reported cases only



Source :

Statistics Unit, Department of Policy and Planning, Ministry of Health

Notes

Definitions

- 1 **INFANT DEATHS** : Deaths aged less than 1 year
- 2 **EARLY NEONATAL DEATHS** : Deaths aged less than 7 days
- 3 **LATE NEONATAL DEATHS** : Deaths aged 7 - 28 days
- 4 **POST NEONATAL DEATHS** : Deaths aged 28 - 365 days
- 5 **NEONATAL DEATHS** : Deaths aged less than 28 days
- 6 **PERINATAL DEATHS** : Fetal Deaths + Early Neonatal Deaths
- 7 **MATERNAL DEATH** : Death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (Source: WHO ICD-10 International Statistical Classification of Diseases and Related Health Problems)
- 8 **DIRECT OBSTETRIC DEATHS** : Those resulting from obstetric complications of the pregnancy state (pregnancy, labour and puerperium), from interventions, omissions, incorrect treatment, or from a chain of events resulting from any of the above (Source: WHO ICD-10 International Statistical Classification of Diseases and Related Health Problems).
- 9 **INDIRECT OBSTETRIC DEATHS** : Those resulting from previous existing disease or disease that developed during pregnancy and which was not due to direct obstetric causes, but which was aggravated by physiologic effects of pregnancy (Source: WHO ICD-10 International Statistical Classification of Diseases and Related Health Problems).
- 10 **LIVEBIRTH** : The complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn (Source: WHO ICD-10 International Statistical Classification of Diseases and Related Health Problems).
- 11 **STILLBIRTH (ALSO REFERRED AS LATE FETAL DEATH)** : Refers to any child which has issued forth from its mother after the twenty-fourth (24th) week of pregnancy and showing NO signs of life at birth (complete expulsion from its mother).

HOSPITAL INPATIENT ACTIVITIES

- 1 **ADMISSIONS** : Patients admitted direct to the hospitals or transferred from other institutions. It includes newborn babies born outside the hospital and admitted to the hospital but excludes babies born in the hospital.
- 2 **DISCHARGES (ALIVE AND DEATHS)** : These relate to live separations from the hospital or transfers to other institutions.
- 3 **DEATHS** : These include deaths after admissions to the hospital and exclude patients brought in dead and dying before admissions.
- 4 **PATIENT DAYS** : The number of days inpatient stayed in the hospital (services received by one inpatient in one 24-hour period). Patients admitted and discharged the same day are counted as having stayed one day in the hospital. The days a patient does not use his bed because he is on leave or absence are excluded.
- 5 **DAY PATIENTS** : Patients with conditions without the need to stay in the hospital overnight.

Formulae

- 1 **CRUDE BIRTH RATE** = (LIVEBIRTHS / POP.) x 1000
- 2 **GENERAL FERTILITY RATE** = [LIVEBIRTHS / WOMEN POP. AGED (15-49)] x 1000
- 3 **CRUDE DEATH RATE** = (NO. OF DEATHS / POP.) x 1000
- 4 **UNDER 5 MORTALITY RATE** = [(0-4) DEATHS / LIVEBIRTHS] x 1000
- 5 **LATE FETAL DEATH RATIO** = (FETAL DEATHS / LIVEBIRTHS) x 1000
- 6 **PERINATAL MORTALITY RATIO** = (PERINATAL DEATHS / LIVEBIRTHS) x 1000
- 7 **EARLY NEONATAL MORTALITY RATE** = (EARLY NEONATAL DEATHS / LIVEBIRTHS) x 1000
- 8 **LATE NEONATAL MORTALITY RATE** = (LATE NEONATAL DEATHS / LIVEBIRTHS) x 1000
- 9 **NEONATAL MORTALITY RATE** = (NEONATAL DEATHS / LIVEBIRTHS) x 1000
- 10 **POST NEONATAL MORTALITY RATE** = (POST NEONATAL DEATHS / LIVEBIRTHS) x 1000
- 11 **INFANT MORTALITY RATE** = (INFANT DEATHS / LIVEBIRTHS) x 1000
- 12 **MATERNAL MORTALITY RATIO** = (MATERNAL DEATHS / LIVEBIRTHS) x 100000

HOSPITAL PERFORMANCE INDICES

- 1 **AV. INPATIENTS / DAYS** = PATIENTS DAYS / NO OF DAYS
- 2 **% OCCUPANCY** = [(AV. INPATIENTS / DAYS) / AVAILABLE BEDS] x 100
- 3 **AV. LENGTH OF STAY (days)** = PATIENT DAYS / DISCHARGES & DEATHS
- 4 **AV. TURNOVER OF PATIENTS / BED** = DISCHARGES & DEATHS / AVAILABLE BEDS
- 5 **AV. TURNOVER INTERVAL (days)** = [(AVAILABLE BEDS x 365) - PATIENT DAYS] / DISCHARGES & DEATHS
- 6 **DAY CASE PERCENTAGES (per 100 admissions)** = (DAY-PATIENTS / ADMISSIONS) x 100
- 7 **HOSPITAL DEATH RATE (per 100 discharges & deaths)** = (DEATHS / DISCHARGES & DEATHS) x 100

POPULATION BASED HOSPITAL ACTIVITIES

- 1 **OP ATTENDANCE RATE / 1000 POP.** = (GENERAL OP ATTENDANCES / POP.) x 1000
- 2 **A&E OP ATTENDANCES RATE / 1000 POP.** = (A&E OP ATTENDANCES / POP.) x 1000
- 3 **HOSPITALIZATION RATE / 1000 POP.** = (ADMISSION / POP.) x 1000
- 4 **RATE OF PATIENT DAYS / 1000 POP.** = (PATIENT DAYS / POP.) x 1000

Note:

AV. = Average

OP = Outpatient

POP. = Population

Contacts

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Ministry of Finance

Budget and Tender Section
Ledger Section, Treasury Department

Ministry of Home Affairs

Birth, Death and Adoption Section
Immigration and National Registration Department

Ministry of Communication

Land Transport Department

Ministry of Health

Department of Medical Services
Department of Health Services