

HEALTH INFORMATION BOOKLET

2012

STATISTICS UNIT
RESEARCH AND DEVELOPMENT SECTION
DEPARTMENT OF POLICY AND PLANNING
MINISTRY OF HEALTH
BRUNEI DARUSSALAM

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PREFACE

Bismillah Hivrahman Nivrahim.

Health Information Booklet publication is annual compilation of health related data for the country which includes indicators that provides summary of the status of health and health care system.

The Department of Policy and Planning through the Statistics Unit under the Research and Development Section will continue to improve the booklet both on the outlook as well as on its contents. This continuous effort is in support of our commitment to provide reliable and useful information to meet the needs of health planners, policy makers, researchers and academicians as well as for the purpose of reporting to the national and international agencies such as the World Health Organisation (WHO).

We are pleased to present the Health Information Booklet 2012 publication which has been expanded in its content with the inclusion of the trend in leading causes of hospital inpatient and outpatient morbidities, the hospital inpatient morbidity due to cancer and cardiovascular disease and the outpatient attendances of travelling and flying medical services to reflect health service coverage. The International Statistical Classification of Diseases and Related Health Problems, Tenth Revision (ICD10) in morbidity and mortality statistics continue to be applied as to ensure the comparability of health data internationally.

I would like to acknowledge the continuous support and co-operation of relevant departments under the Prime Minister's Office, Ministry of Finance, Ministry of Communication, Ministry of Home Affairs and Ministry of Health, without whom HIB 2012 publication would have not been made possible.

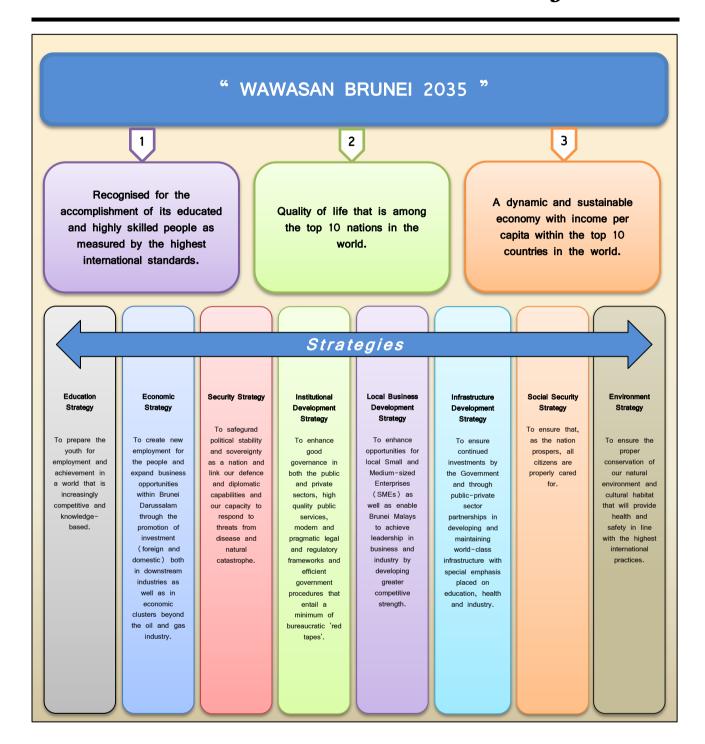
HIB 2012, which can also be accessed through the Ministry of Health website (http://www.moh.gov.bn/satisticshealthguidelines/indicators.htm), is hoped to continue to serve as a useful reference to both health and non-health sectors including the general public.

Together Towards A Healthy Nation

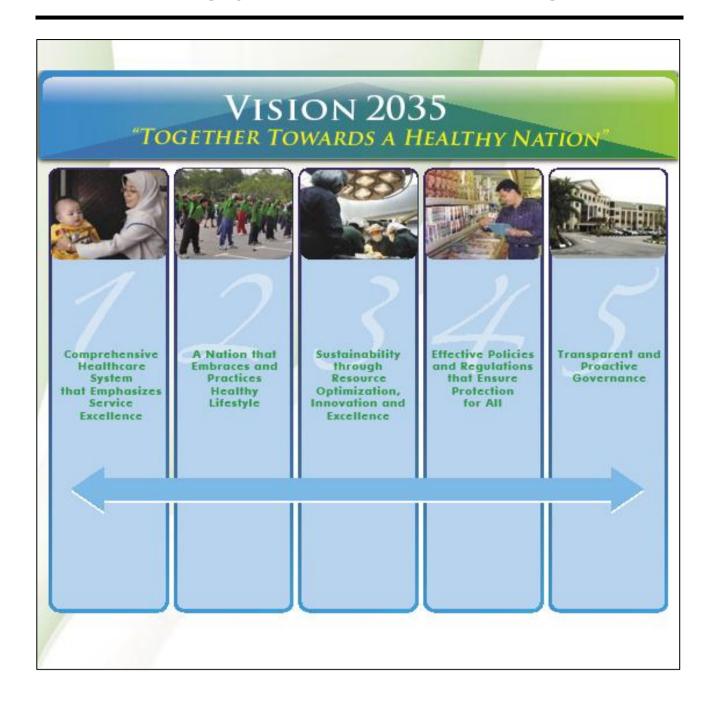
HAJAH ZAHRAH DP HAJI MD HASHIM

Director of Policy and Planning Ministry of Health Brunei Darussalam

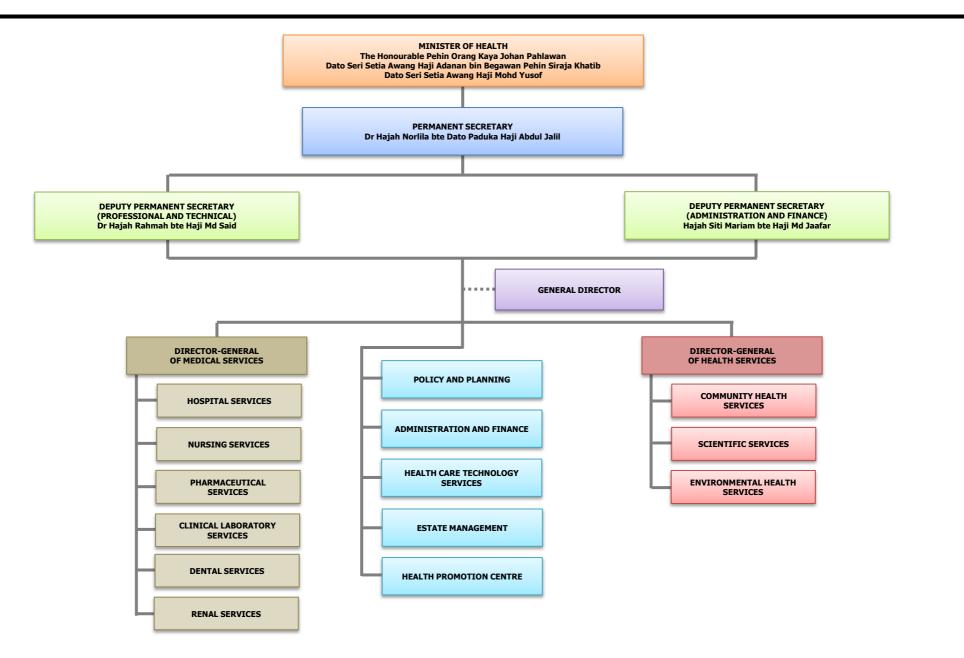
Brunei Darussalam's Vision and Strategies



Ministry of Health's Vision and Strategies



Organisational Structure



Geography

Brunei Darussalam lies on the northwest coast of Borneo island facing the South China Sea and is 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 3 districts namely Brunei-Muara, Belait and Tutong while the eastern part is the Temburong district. The largest district is Belait District whilst the capital, Bandar Seri Begawan is situated in the smallest district i.e. Brunei Muara.

CAPITAL ~ BANDAR SERI BEGAWAN

AREA

~ 5,765 sq. km

DISTRICTS

MUKIMS

~ 39

KAMPONGS / LOCALITY

~ 430

HOUSEHOLDS ~ 68,208 (2011 Census)

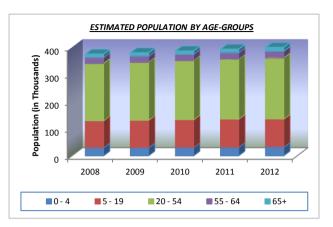
AVERAGE NUMBER OF PERSONS PER HOUSEHOLD



Demography

The population of Brunei Darussalam is estimated to have been 399,800 in 2012 comprising of 51.7% males and 48.3% females with a gender ratio of 107. The average growth rate was recorded at 1.6% per annum. Despite the slowing growth rate since 2001, the total population is still showing an increase.

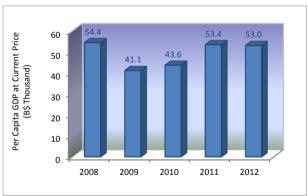
From the 2001 and 2012 population pyramids, a thicker distribution of temporary residents and others in the working age range of 25-49 years old was observed.



The demographic structure is essentially that of a young population; about 7.8% are under five years of age, 24.9% are under 15 years, and only 3.7% are 65 years or over. Brunei Darussalam has a multi-ethnic population, with Malays, comprising 65.7%, the predominant ethnic community, and Chinese, with 10.3%, the next major group. Other races and expatriates make up the rest of the population with 24.0%.

Economy

Brunei's economy is dominated by the oil and gas sector, which contributes nearly two thirds of the nominal income. Oil and gas exports made up about 95 percent of Brunei's export revenues, and generated about 90 percent of government revenue. Per capita GDP is one of the highest in the world, estimated at US\$32,000 in 2010. The economy has remained stable over the past 20 years with an average inflation rate of 1.5%. The Government's flexible and prudent fiscal policy has also enabled fiscal and economic sustainability over the years.



Source: Oxford Business Group - The Report: Brunei Darussalam 2009 Economic diversification is a major agenda in the Government's drive for economic sustainability reducing reliance on hydrocarbon resources. Government policies increasingly emphasize economic and commercial viability in supporting development spending. Accelerated reforms and structural successful implementation of the various economic diversification initiatives could increase growth further.

The Government spending continues to include matters such as payroll and subsidies for basic necessities such as rice and housing and seen as important in driving domestic demands.

Health Status

Brunei Darussalam has achieved most of the health related targets set in the Millennium Development Goals. These include significant reductions in under 5 mortality rate (U5MR) and infant mortality rate (IMR). IMR has declined from 42.3 per 1000 live births in 1966 to 9.3 per 1000 live births in 2012. Figures from the last two decades have shown only slight fluctuations to the current level, which is on par with the standard set in developed nations.

The U5MR has also declined from 22.7 per 1000 live births in 1980 to 10.3 per 1000 live births in 2012. Data analysis from 2004-2012 showed over two thirds of deaths occurred during early and late neonatal periods, mainly due to perinatal conditions and congenital abnormalities. In 2012, deaths occurring at infant period (less than 1 year) account for 90% of total deaths in U5MR.

Brunei Darussalam has a consistently very low maternal mortality ratio (MMR). In 2012, the MMR was calculated at 43.4 per 100,000 live births which is equivalent to 3 maternal deaths. It must be noted that Brunei's small population and relatively low live births (around 7,000 annually) makes calculation of MMR sensitive to small changes and any small fluctuations will result in significant jump in MMR. The very low value of MMR can be attributed to the high access to reproductive health care, immunisation programmes as well as high percentage deliveries in hospitals by skilled health personnel.

The prevalence of HIV/AIDS in Brunei Darussalam remains at a very low level despite an increase in the number of cases since 2006. Brunei Darussalam attained the status of 'Malaria Free' in 1987 by World Health Organisation and since then has continued its surveillance through the Malaria Vigilance and Vector Control Unit in the Ministry of Health. In 2000, Brunei was also declared Polio Free.

Healthcare Delivery System

The Ministry of Health is responsible for the provision, management, delivery and regulatory functions of health in Brunei Darussalam. The delivery of health care services is mainly distributed through two main areas. The Department of Medical Services is responsible for hospital, nursing, clinical laboratory, pharmaceutical, dental and renal services, while the Department of Health Services oversees community health, environmental health and scientific services.

The Government of Brunei Darussalam provides free medical and health care to the citizens via government hospitals, health centres and clinics. A large network of health centres and clinics, located throughout the country, provides primary health care services, including those for mothers and children. In remote areas that are not accessible or are difficult to access by land or water, primary health care is provided by Flying Medical Services. The decentralisation of primary health care services in 2000 was initiated to enhance the accessibility of care to all in the country. To date, there are four government general hospitals, 17 health centres (including Panaga Health Centre), 15 health and maternal and child health clinics, five travelling health clinics and two Flying Medical Services teams for remote areas.

The main referral government hospital in the country is Raja Isteri Pengiran Anak Saleha (RIPAS) Hospital; located at the capital city. RIPAS Hospital offers a very wide and comprehensive range of medical and surgical services covering almost 30 different specialties and subspecialties.

Public Health Services is the main division in the Ministry of Health responsible for providing communitybased preventive and promotive primary health care services as well as environmental health services in the country. As a result of its monitoring and surveillance activities and preventive programmes, such as immunisation, the country is free from major communicable diseases.

Population

Brunei Darussalam conducted the first population census in 1971. The fifth decennial 2011 census of population and housing has been completed 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 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.

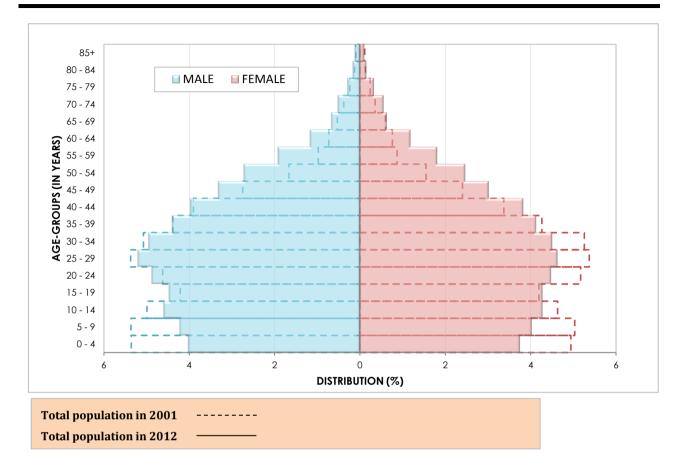
Estimated Population		<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>
Total (in tho	usands) :	375.0	380.1	386.8	393.372	399.8
Male (in tho	usands) :	193.7	196.3	199.8	203.149	206.7
Female (in tho	usands) :	181.3	183.8	187.0	190.223	193.1
Sex ratio (Male per 100 l	Female) :	107	107	107	107	107
Persons (per	sq. km) :	65	66	67	68	69
Annual rate of increase	:	1.4%	1.4%	1.8%	1.7%	1.6%
Population median age (yea	rs) :	26.4	26.6	27.6	27.6	28.0
Age Structure (in thousand	<u>ls)</u>					
0 - 4	:	28.9	29.3	29.8	30.331	31.
5 - 19	:	99.2	100.6	102.4	104.058	103.5
20 - 54	:	212.2	214.9	218.8	222.541	226.0
55 - 64	:	21.5	21.8	22.2	22.556	24.5
65 & Over	:	13.2	13.5	13.6	13.886	14.7
Race (in thousands)						
Malay *	:	246.4	249.7	254.1	258.465	262.8
Chinese	:	38.6	39.2	39.9	40.534	41.0
Others	:	90.0	91.2	92.8	94.373	96.0
<u>District (in thousands)</u>						
Brunei-Muara	:	266.9	270.4	275.3	279.924	285.
Belait	:	57.9	58.7	59.7	60.744	61.5
Tutong	:	41.8	42.4	43.1	43.852	44.
Temburong	:	8.4	8.6	8.7	8.852	8.9

Note:

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

^{*} Includes Other Indigenous Groups of the Malay race namely Belait, Bisaya, Brunei, Dusun, Kedayan, Murut and Tutong.

Population Pyramid (2012)

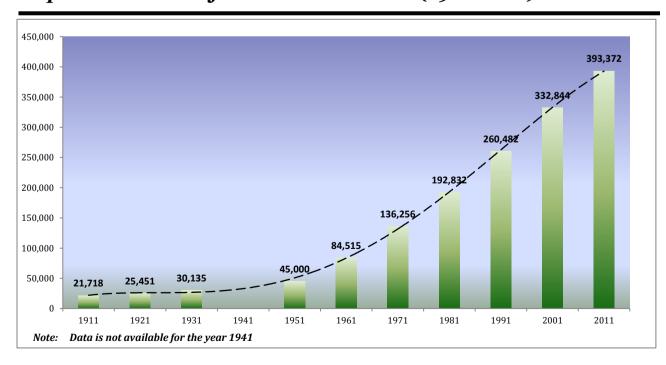


Note:

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

For example, (0 - 4) age-group for the year 2012 is represented with 7.8% of total population in which 4.0% and 3.8% are made up of male and female population respectively.

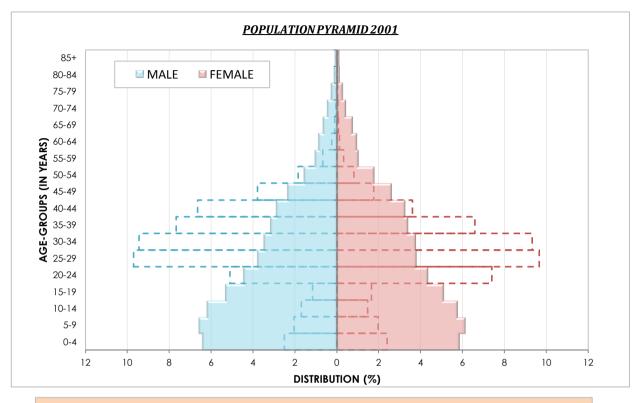
Population Trend of Brunei Darussalam (1911 - 2011)

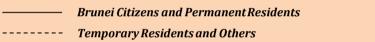


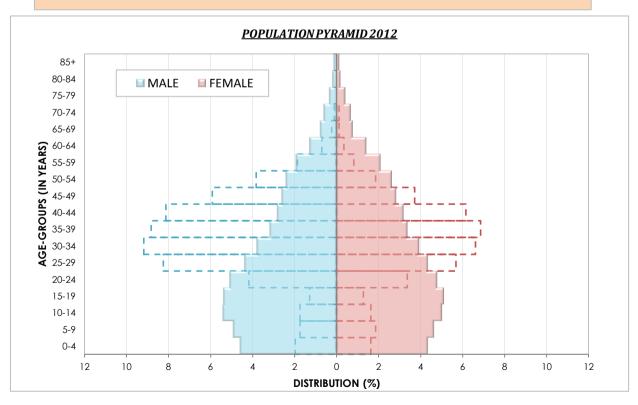
Source:

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

Population Pyramid by Age-Group, Gender and Residential Status for the Years 2001 and 2012







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

Vital Statistics

	2008	2009	2010	<u>2011</u>	2012
Crude Birth Rate : (per 1,000 Population)	17.1	17.4	16.6	17.1	17.3
General Fertility Rate (per 1,000 Female Population Aged (15-49))	58.7	59.7	56.7	58.8	59.9
Total Fertility Rate (per Female Population Aged (15-49))	1.9	1.9	1.8	1.9	1.9
Crude Death Rate : (per 1,000 Population)	2.9	3.1	3.1	3.1	3.0
Infant Mortality Rate (per 1,000 Live Births)	7.0	7.4	6.1	8.3	9.3
Late Fetal Death Ratio : (per 1,000 Live Births)	6.4	4.8	5.5	3.7	3.9
Perinatal Mortality Ratio : (per 1,000 Live Births)	10.0	8.9	7.8	6.8	7-5
Early Neonatal Mortality Rate : (per 1,000 Live Births)	3.6	4.1	2.3	3.1	3.6
Late Neonatal Mortality Rate : (per 1,000 Live Births)	1.2	1.2	1.7	2.1	1.7
Neonatal Mortality Rate (per 1,000 Live Births) Post Neonatal Mortality Rate	4.8	5.3	4.1	5.2	5.4
(per 1,000 Live Births) Under 5 Mortality Rate	2.2	2.1	2.0	3.1	3.9
(per 1,000 Live Births)	9.5	8.2	7.3	10.0	10.3
Number of Maternal Deaths * : Maternal Mortality Ratio	0	1	1	0	3
(per 100,000 Live Births) Maternal Mortality Ratio	0.0	15.1	15.6	0.0	43.4
(per 1,000 Live Births)	0.00	0.15	0.16	0.00	0.43
Life Expectancy At Birth - Total :	78.2	77.6	77.7	77.1	78.1
- Male :	76.6	77.3	77.5	75.6	76.3
- Female : Percentage of Newborns Weighing At Least .	79.8 88.9	77.9 88.8	77.8 89.3	78.5 88.1	79.9 87.9
2500g At Birth Percentage of Deliveries by Trained Health	99.7	99.9	99.8	99.7	99.8
Personnel . Literacy Rate (%) - Total :	(#) 93.7	96.1	96.4	96.7	96.7 ⁽²⁰¹¹⁾
- Male :	(#) 95.8	97.3	97.5	97.7	97·7 ⁽²⁰¹¹⁾
- Female :	(#) 91.5	94.6	95.0	95.4	95·4 ⁽²⁰¹¹⁾
Per Capita GDP at current prices : (B\$) Thousand	54.4	41.1	43.6	53.4	53.0

Note:

(#) - Census in 2001

Red text - Millennium Development Goals (MDGs) Indicators

- as per registered by Birth, Death and Adoption Section, Immigration and National Registration Department and amended for coding misclassifications by the Statistics Unit, Ministry of Health.

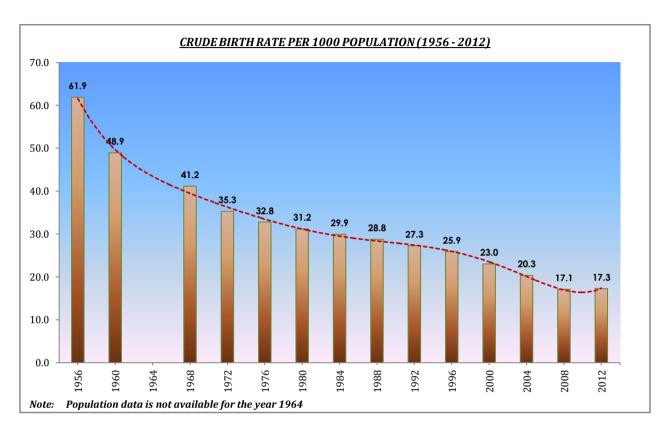
Vital Statistics

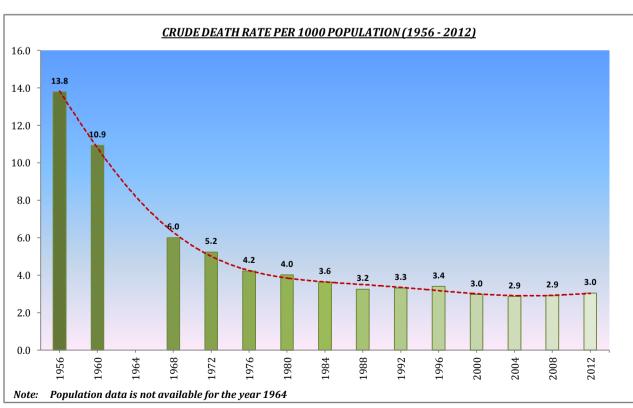
Country	Life Expectancy at Birth (MALE)	Life Expectancy at Birth (FEMALE)	Infant Mortality Rate (per 1000 livebirths)	Under-five Mortality Rate (per 1000 livebirths)	Maternal Mortality Ratio (per 100,000 livebirths)
BRUNEI DARUSSALAM	76	78	6	7	24
MALAYSIA	72	76	6	7	29
SINGAPORE	80	85	2	3	3
AUSTRALIA	80	84	4	5	7
AUSTRIA	78	84	4	4	4
BELGIUM	78	83	4	4	8
CZECH REPUBLIC	75	81	3	4	5
DENMARK	77	82	3	4	12
FINLAND	78	84	2	3	5
FRANCE	78	85	3	4	8
GERMANY	78	83	3	4	7
GREECE	78	84	4	4	3
ICELAND	81	84	2	3	5
IRELAND	79	83	3	4	6
ITALY	80	85	3	4	4
JAPAN	79	86	2	3	5
REPUBLIC OF KOREA	77	84	4	5	16
LUXEMBOURG	79	84	2	3	20
NETHERLAND	79	83	3	4	6
NEW ZEALAND	79	83	5	6	15
NORWAY	79	83	3	3	7
OMAN	70	76	7	9	32
PORTUGAL	77	83	3	3	8
SPAIN	79	85	4	4	6
SWEDEN	80	84	2	3	4
SWITZERLAND	80	85	4	4	8
UK	79	82	4	5	12

REFERENCE WORLD HEALTH STATISTICS 2013, WHO PUBLICATION

Health Indicators

The crude birth rate of Brunei Darussalam has declined from 23.0 in 2000 to 17.3 per 1000 population in 2012 whilst the crude death rate remains constant at 3.0 per 1000 population between 2000 and 2012.





The United Nations Millennium Development Goals are eight goals that all 191 UN member states have agreed to try to achieve by the year 2015. The United Nations Millennium Declaration, signed in September 2000 commits world leaders to combat poverty, hunger, disease, illiteracy, environmental degradation, and discrimination against women. The MDGs are derived from this Declaration, and all have specific targets and indicators. (http://www.who.int/topics/millennium_development_goals/en/)

The eight MDGs listed below guide the efforts of virtually all organisations working in development and have been

commonly accepted as a framework for measuring development progress:

Millennium Development Goals (MDGs)						
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring progress	Brunei Darussalam's Current Status Related to Health (2012 data)				
Goal 1: Eradicate Extreme Poverty and	Hunger					
Target 1.A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day. Target 1.B:	 1.1 Proportion of population below \$1 (PPP) per day 1.2 Poverty gap ratio 1.3 Share of poorest quintile in national consumption 1.4 Growth rate of GDP per person employed. 					
Achieve full and productive employment and decent work for all, including women and young people.	1.5 Employment-to-population ratio. 1.6 Proportion of employed people living below \$1 (PPP) per day. 1.7 Proportion of own-account and contributing family workers in total employment	na				
Target 1.C: Halve, between 1990 and 2015, the	1.8 Prevalence of underweight children underfive years of age (%)	9.6 *				
proportion of people who suffer from hunger Goal 2 : Achieve Universal Primary Educ	1.9 Proportion of population below minimum level of dietary energy consumption					
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	 2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men 					
Goal 3: Promote Gender Equality and E		na				
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.2 Share of women in wage employment in					
Goal 4: Reduce Child Mortality						
Target 4.A: Reduce by two-thirds, between 1990	4.1 Under-five mortality rate (per 1,000 live births)	10.3				
and 2015, the under-five mortality rate	4.2 Infant mortality rate (per 1,000 live births)	9.3				
	4.3 Proportion of 1 year-old children immunised against measles (%)	98.6				
Note:	minumoca agamot medoles (70)					

Note:

^{* - 2}nd National Health and Nutritional Status Survey 2009 na - not applicable

M	lillennium Development Goals (MDGs)	
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring progress	Brunei Darussalam's Current Status Related to Health (2012 data)
Goal 5: Improve Maternal Health		
Target 5.A: Reduce by three quarters, between		43.4
1990 and 2015, the maternal mortality	5.2 Proportion of births attended by skilled health personnel (%)	99.8
Target 5.B:	5.3 Contraceptive prevalence rate (%)	
Achieve, by 2015, universal access to reproductive	5.4 Adolescent birth rate (per 1,000 female population aged (15-19) years)	15.7
	5.5 Antenatal care coverage (at least one visit and at least four visits) (%)	93.2 *
	5.6 Unmet need for family planning (%)	
Goal 6: Combat HIV/AIDS, Malaria and G	Other Diseases	
Target 6.A: Have halted by 2015 and begun to	6.1 HIV prevalence among population aged 15- 24 years (%)	< 0.1
reverse the spread of HIV/AIDS	6.2 Condom use at last high-risk sex (among population aged 15-24 years) (%)	
	6.3 Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV/AIDS (%)	
	6.4 Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years	
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it		100.0
Target 6.C:	6.6 Incidence and death rates associated with malaria (per 100,000 population)	
Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases		Death Rate (o.o)
other major diseases	6.8 Proportion of children under 5 with fever who are treated with appropriate antimalarial drugs (%)	
	6.9 Incidence, prevalence and death rates associated with tuberculosis (per 100,000 population)	
	6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course (%)	

^{* -} coverage for public health facilities only. na - not applicable

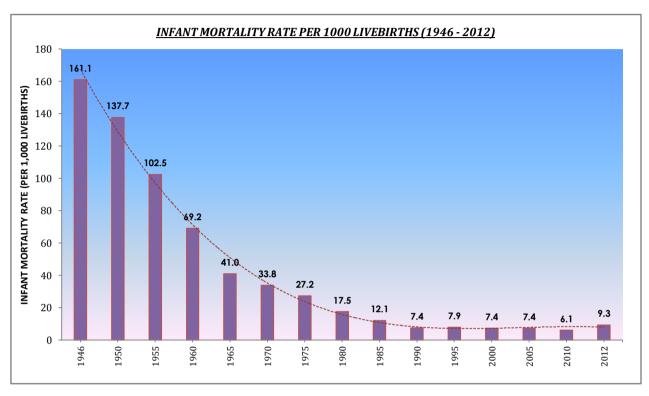
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Millennium Development Goals (MDGs)					
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring progress				
Goal 7: Ensure Environmental Sustainability					
Target 7.A:	7.1 Proportion of land area covered by forest				
Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	7.2 CO2 emissions, total, per capita and per \$1 GDP (PPP)				
and reverse the loss of environmental resources	7.3 Consumption of ozone-depleting substances				
Target 7.B: Reduce biodiversity loss, achieving, by 2010, a	7.4 Proportion of fish stocks within safe biological limits				
significant reduction in the rate of loss	7.5 Proportion of total water resources used				
	7.6 Proportion of terrestrial and marine areas protected				
	7.7 Proportion of species threatened with extinction				
Target 7.C: Halve, by 2015, the proportion of people without	7.8 Proportion of population using an improved drinking water source				
sustainable access to safe drinking water and basic sanitation	7.9 Proportion of population using an improved sanitation facility				
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums				
Goal 8: Develop A Global Partnership For Developm	ent				
Target 8.A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system	Some of the indicators listed below are monitored separately for the least developed countries (LDCs), Africa, landlocked developing countries and small island developing States.				
Includes a commitment to good governance,	Official development assistance (ODA)				
development and poverty reduction – both nationally and internationally	8.1 Net ODA, total and to the least developed countries, as percentage of OECD/DAC donors' gross national income				
Target 8.B: Address the special needs of the least developed countries	8.2 Proportion of total bilateral, sector-allocable ODA of OECD/DAC donors to basic social services (basic education, primary health care, nutrition, safe water and sanitation)				
Includes: tariff and quota free access for the least developed countries' exports; enhanced programme of debt relief for heavily indebted poor countries (HIPC) and cancellation of official bilateral	8.3 Proportion of bilateral official development assistance of OECD/DAC donors that is untied				
debt; and more generous ODA for countries committed to poverty reduction					
	8.5 ODA received in small island developing States as a proportion of their gross national incomes				

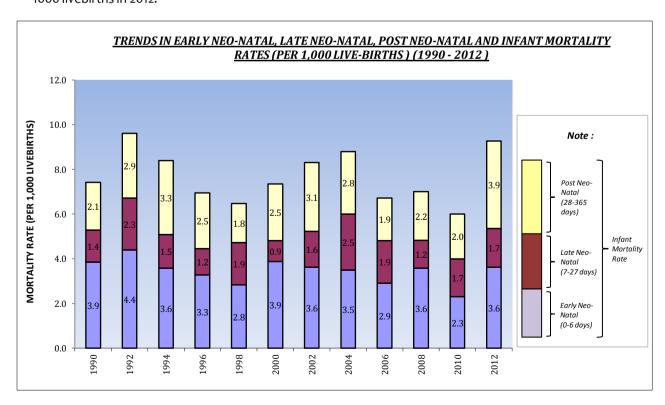
Millennium Development Goals (MDGs)					
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring progress				
Goal 8: Develop A Global Partnership For Developm	ent (cont'd)				
Target 8.C:	Market Access				
Address the special needs of landlocked developing countries and small island developing States (through the Programme of Action for the Sustainable Development of Small Island Developing States and the outcome of the twenty-second special session of the General Assembly) Target 8.D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term	value and excluding arms) from developing countries and least developed countries, admitted free of duty				
	8.8 Agricultural support estimate for OECD countries as a percentage of their gross domestic product				
	8.9 Proportion of ODA provided to help build trade capacity				
	<u>Debt Sustainability</u>				
	8.10 Total number of countries that have reached their HIPC decision points and number that have reached their HIPC completion points (cumulative)				
	8.11 Debt relief committed under HIPC and MDRI Initiatives				
	8.12 Debt service as a percentage of exports of goods and services				
Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential drugs in developing countries	_				
Target 8.F:	8.14 Telephone lines per 100 population				
In cooperation with the private sector, make available the benefits of new technologies,	8.15 Cellular subscribers per 100 population				
especially information and communications	8.16 Internet users per 100 population				

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.



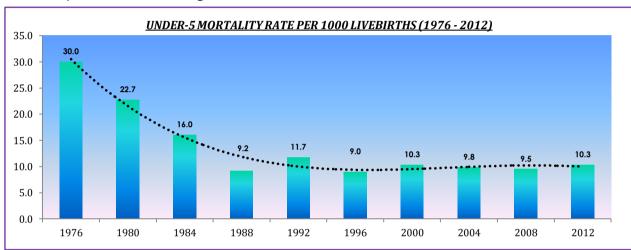
Brunei Darussalam's infant mortality rate has reached a steady state since 1990 and is on par with figures in developed nations. Infant mortality rate has declined rapidly from 50.8 per 1000 livebirths in 1962 to 9.3 per 1000 livebirths in 2012.



Millennium Development Goals (MDGs) Indicators

Under-5 mortality rate has gradually reduced from 30 deaths per 1000 livebirths in 1976 to 10.3 deaths per 1000 livebirths in 2012.

Maternal and Child Health (MCH) Service in Brunei Darussalam has 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 (2008 - 2012)							
	2008	2009	2010	2011	2012			
1	Certain Conditions Originating In The Perinatal Period Period Period 20 26		Congenital Malformations, Deformations and Chromosomal Abnormalities 18	Certain Conditions Originating In The Perinatal Period 24	Certain Conditions Originating In The Perinatal Period 38			
2	Congenital Malformations, Deformations and Chromosomal Abnormalities	Congenital Malformations, Deformations and Chromosomal Abnormalities	Certain Conditions Originating In The Perinatal Period	Congenital Malformations, Deformations and Chromosomal Abnormalities	Congenital Malformations, Deformations and Chromosomal Abnormalities			
	Influenza & Pneumonia	Heart Diseases	Septicaemia	Heart Diseases	Septicaemia			
3	4	2	1	2	2			
4	Accidental Drowning andSubmersion	Septicaemia	Cancer	Accidental Drowning andSubmersion	Cancer			
	4	1	1	2	2			
5	Heart Diseases	Acute Upper respiratory Infection	Heart Diseases	Meningococcal Infection	Heart Diseases			
,	3	1	1	1	2			
_	Septicaemia	Influenza & Pneumonia	Cerebrovascular Diseases	Septicaemia	Influenza & Pneumonia			
6	1	1	1	1	2			
7	Cancer	Falls	Bronchitis, Chronic & Unspecified Emphysema &	Cancer	Bronchitis, Chronic & Unspecified Emphysema & Asthma			
	1	1	1	1	1			
8	Cerebrovascular Diseases	Accidental Drowning and Submersion	*	Influenza & Pneumonia	Assault			
	1	1	0	1	1			
OTHERS **	8	4	8	12	14			
TOTAL	61	54	47	67	71			

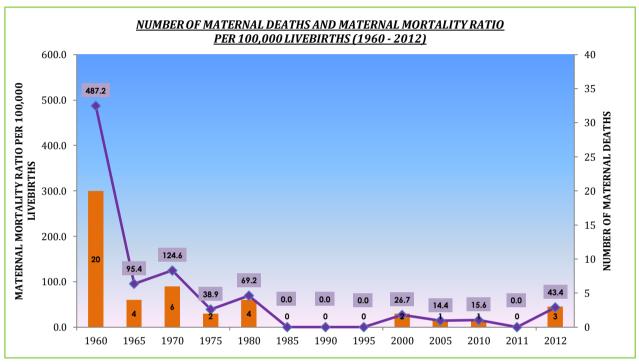
* - No other single cause of death. Note:

^{** -} Remainders.

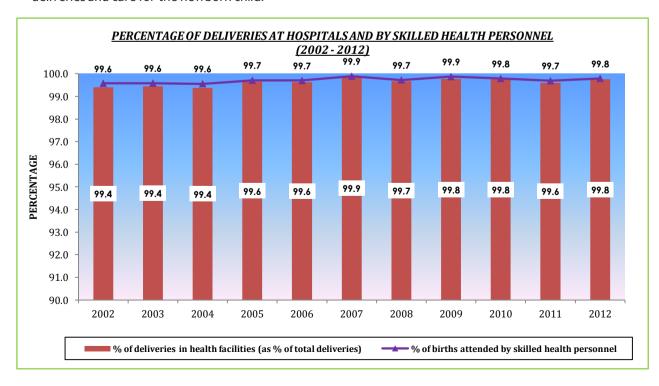
Millennium Development Goals (MDGs) Indicators

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 so 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 (2012)

MEDICAL CARE	NUMBER
- HOSPITALS (4 GOVERNMENTS + 2 PRIVATES (1))	6
- MEDICAL CLINICS (Ministry of Defence)	9 (2)
- DIALYSIS CENTRES	7
- DENTAL CLINICS:	
GOVERNMENTS	22
ARMY	6
PRIVATES	11
EALTH SERVICES	
- HEALTH CENTRES (16 GOVERNMENTS + 1 PRIVATE ⁽³⁾)	17
- HEALTH/MATERNAL AND CHILD HEALTH CLINICS	15
- TRAVELLING HEALTH CLINICS	5
- FLYING MEDICAL SERVICES	2
DENTAL SERVICES	
- DENTAL SERVICES AT:	
HOSPITALS	4
HEALTH CENTRES	9
HEALTH CLINICS	8
STATIC SCHOOL CLINICS	62
	02
MOBILE SQUAD	50

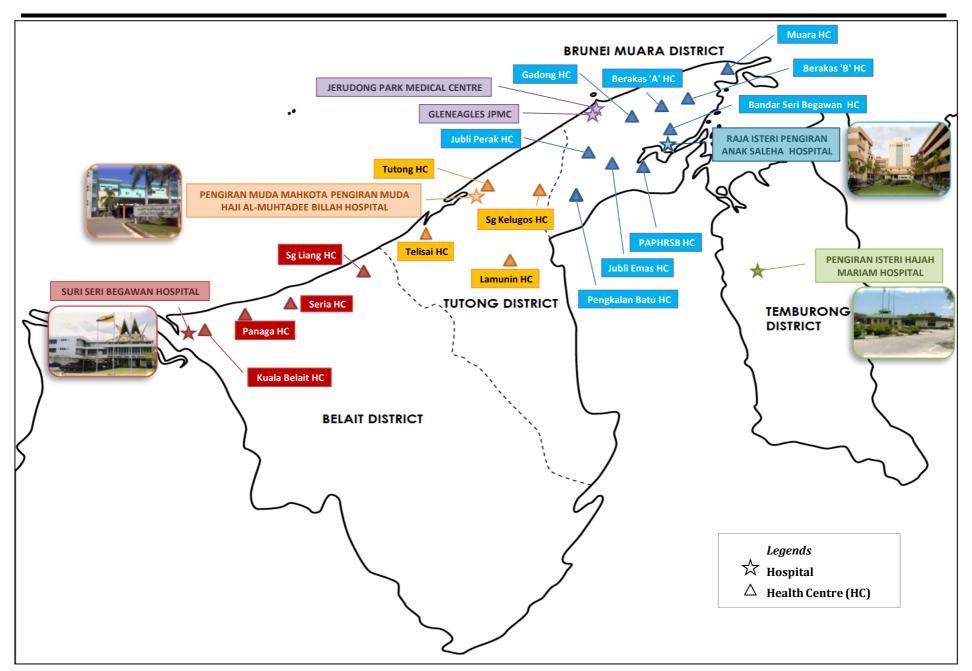
Note:

(1) Jerudong Park Medical Centre and Gleneagles Park Centre

(2) Including (SAF) Air Forces Medical Clinic

(3) Panaga Health Centre

Distribution Map of Health Care Facilites (2012)

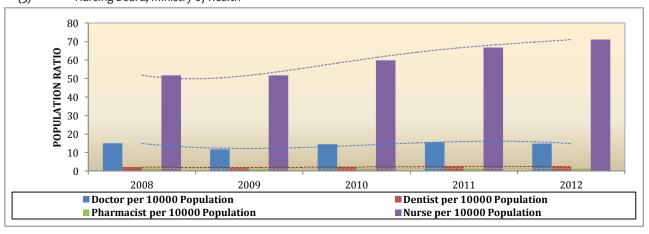


Human Resource in Health

Human Resources for Health for 2012		th for 2012	Government	Army	Private	To	tal
	Mala	Local	72	7	11	90	
	Male	Foreign	224	0	29	253	343
Doctors (1)	Female	Local	109	3	12	124	252
	remale	Foreign	108	0	21	129	253
	TOTAL		513	10	73	5	96
Population pe	er Doctor					6	71
Doctor per 10	,000 Populat	ion				1	5
	Male	Local	9	2	6	17	45
	Maic	Foreign	18	3	7	28	45
Dentists ⁽¹⁾	Female	Local	34	2	1	37	40
		Foreign	10	1	1	12	49
		OTAL	71	8	15	9	94
Population pe						4,:	253
Dentist per 10	,000 Popula	tion					2
	Male	Local	5	•••	1	6	15
		Foreign	1	•••	8	9	.,
Pharmacists ⁽²⁾	Female	Local	25	•••	1	26	36
		Foreign	0	•••	10	10	,,,
		DTAL	31	•••	20	51	
Population pe						7,8	339
Pharmacist p	er 10,000 Pop	oulation					1
	Male	Local	403	107	72	582	671
	Marc	Foreign	36	0	53	89	٥,٠
Nurses ⁽³⁾	Female	Local	1,720	51	113	1,884	2,169
		Foreign	97	0	188	285	2,107
		DTAL	2,256	158	426	2,8	340
Population pe						10	41
Nurse per 10,000 Population						7	71
		Male	0	0	0		
Midwive	s ⁽³⁾	Female	454	8	11	4	73
		TOTAL	454	8	11		
Population pe						8	45
Midwife per	10,000 Popul	ation				1	2

Source:

- (1) Brunei Medical Board, Ministry of Health
- (2) Pharmacy Department, Ministry of Health
- (3) Nursing Board, Ministry of Health



Human Resource in Health

Country	Physicians per 10 000 population	Nursing and Midwifery Personnel per 10 000 population	Dentistry Personnel per 10 000 population	Pharmaceutical Personnel per 10 000 population			
BRUNEI DARUSSALAM	13.6	70.2	2.1	1.0			
MALAYSIA	12.0	32.8	1.4	3.1			
SINGAPORE	19.2	63.9	3.3	3.9			
AUSTRALIA	38.5	95.9	6.9	11.7			
AUSTRIA	48.6	79.7	5.6	6.8			
BELGIUM	37.8	222.1	7.9	15.6			
CZECH REPUBLIC	37.1	87.9	7.2	7.6			
DENMARK	34.2	160.9	8.1	4.6			
FINLAND	29.1	239.6	7.6	11.0			
FRANCE	33.8	93.0	6.4	11.5			
GERMANY	36.9	113.8	7.9	9.5			
GREECE							
ICELAND	34.6		9.7	11.7			
IRELAND				10.6			
ITALY	38.0						
JAPAN	21.4	41.4	7.4	21.5			
REPUBLIC OF KOREA	20.2	52.9	5.0	12.6			
LUXEMBOURG	27.8	171.0	8.1	7.6			
NETHERLAND				3.1			
NEW ZEALAND	27.4	108.7	4.6	10.1			
NORWAY	41.6	319.3	9.1				
OMAN	20.5	44.9	2.3	4.4			
PORTUGAL				7.2			
SPAIN	39.6			9.2			
SWEDEN	38.7		8.2	7.6			
SWITZERLAND	40.8	174.9	5.6	5.8			
UK	27.7	94.7	5.3	6.7			

REFERENCE WORLD HEALTH STATISTICS 2013, WHO PUBLICATION

Note:

... - not available

Human Resource in Health

Allied Health Professionals for 2012	Local	Non-Local	TOTAL
Audiologist	4	0	4
Biomedical Engineer	10	O	10
Cardiac Technologist / Technician	3	18	21
Clinical Psychologist	9	О	9
Dental Hygienist / Therapist	69	3	72
Dental Technologist	8	О	8
Dietician / Nutritionist	19	5	24
Health Education Officer	10	0	10
Health Inspector	33	2	35
Maxillofacial Prosthetist & Technologist	1	0	1
Medical Laboratory Technicians	174	0	174
Medical Record Officer	6	0	6
Medical Social Worker	8	0	8
Neurophysiology Technologist	3	2	5
Occupational Therapist	20	3	23
Optometrist	6	0	6
Orthoptist	2	0	2
Paramedic	21	0	21
Pharmacy Technician	83	33	116
Physiotherapist	14	5	19
Podiatrist	6	0	6
Prosthetist and Orthotist	0	1	1
Public Health Officer	13	0	13
Radiographer	26	2	28
Scientific Officer in Scientific / Diagnostic Laboratory	90	0	90
Speech Language Therapist	4	0	4
Teacher for the Hearing Impaired	2	0	2

Reference: Careers in Healthcare 2012, Ministry of Health Brunei Darussalam

Government Health Expenditure

	2010/11	2011/12	<u>2012/13</u>
Total Health Budget (B\$ Millions)	295.41	306.85	347.76
Health Budget as % of National Budget	7.48	7.52	8.32
Per Capita Health Budget (B\$)	764	780	870
Health Budget as % of GDP	1.75	1.46	1.64
Total Health Expenditure (B\$ Millions)	332.63	339.96	
Health Expenditure as % of Government Expenditure	8.12	7.87	
Per Capita Health Expenditure (B\$)	860	864	
Health Expenditure as % of GDP	1.97	1.62	

Note:

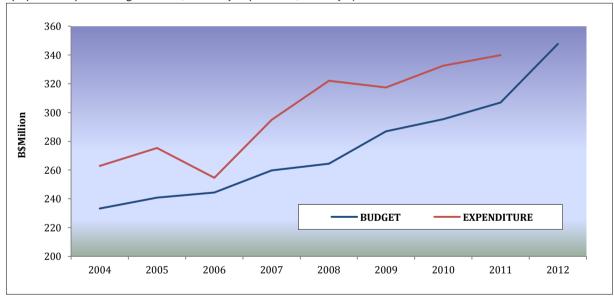
GDP - Gross Domestic Product

- Not available

Source:

- Budget Section, Ministry of Finance

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



Leading Causes of Deaths for the Year 2012 (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 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%	RATE PER 100,000 POPULATION
1	Coo - C97	Cancer (Malignant Neoplasms)	152	128	280	23.0	70.0
2	100 - 109 , 120 - 152	Heart Diseases (Including Acute Rheumatic Fever)	103	49	152	12.5	38.0
3	E10 - E14	Diabetes Mellitus	65	58	123	10.1	30.8
4	160 - 169	Cerebrovascular Diseases	39	31	70	5.8	17.5
5	l10 - l15	Hypertensive Diseases	21	24	45	3.7	11.3
6	Vo1 - V99	Transport Accidents	36	9	45	3.7	11.3
7	J10 - J18	Influenza and Pneumonia	24	17	41	3.4	10.3
8	J40 - J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	23	16	39	3.2	9.8
9	Poo - P96	Certain Conditions Originating In The Perinatal Period	28	10	38	3.1	9.5
10	A40 - A41	Septicaemia	13	14	27	2.2	6.8
		Others	191	165	356	29.3	89.0
		TOTAL DEATHS	695	521	1,216	100.0	304.2

Leading Causes of Deaths (2008 - 2012)

No.	2008	2009	2010	2011	2012
1	Heart Diseases (Including Acute Rheumatic Fever)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)
	211 (19.3%)	215 (18.4%)	252 (20.9%)	256 (20.7%)	280 (23.0%)
2	Cancer (Malignant Neoplasms)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)
	201 (18.4%)	185 (15.8%)	186 (15.4%)	183 (14.8%)	152 (12.5%)
3	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
	97 (8.9%)	100 (8.5%)	100 (8.3%)	116 (9.4%)	123 (10.1%)
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases
	93 (8.5%)	97 (8.3%)	99 (8.2%)	86 (7.0%)	70 (5.8%)
5	Influenza and Pneumonia	Septicaemia	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Hypertensive Diseases
	53 (4.9%)	52 (4.4%)	47 (3.9%)	50 (4.0%)	45 (3.7%)
Bronchitis, Chronic 6 and Unspecified		Bronchitis, Chronic and Unspecified Emphysema & Asthma	Septicaemia	Hypertensive Diseases	Transport Accidents
	39 (3.6%)	43 (3.7%)	39 (3.2%)	49 (4.0%)	45 (3.7%)
7	Transport Accidents	Hypertensive Diseases	Hypertensive Diseases	Transport Accidents	Influenza and Pneumonia
	33 (3.0%)	41 (3.5%)	38 (3.1%)	42 (3.4%)	41 (3.4%)
8	Septicaemia	Transport Accidents	Influenza and Pneumonia	Congenital Malformations, Deformations and Chromosomal Abnormalities	Bronchitis, Chronic and Unspecified Emphysema & Asthma
	32 (2.9%)	37 (3.2%)	28 (2.3%)	35 (2.8%)	39 (3.2%)
9	Hypertensive Diseases	Certain Conditions Originating In The Perinatal Period	Transport Accidents	Septicaemia	Certain Conditions Originating In The Perinatal Period
	24 (2.2%)	26 (2.2%)	25 (2.1%)	29 (2.3%)	38 (3.1%)
10	Certain Conditions Originating In The Perinatal Period	Congenital Malformations, Deformations and Chromosomal Abnormalities	Congenital Malformations, Deformations and Chromosomal Abnormalities	Certain Conditions Originating In The Perinatal Period	Septicaemia
	20 (1.8%)	25 (2.1%)	21 (1.7%)	24 (1.9%)	27 (2.2%)
OTHERS	288 (26.4%)	350 (29.9%)	373 (30.9%)	365 (29.6%)	356 (29.3%)
GRAND TOTAL	1,091 (100.0%)	1,171 (100.0%)	1,208 (100.0%)	1,235 (100.0%)	1,216 (100.0%)

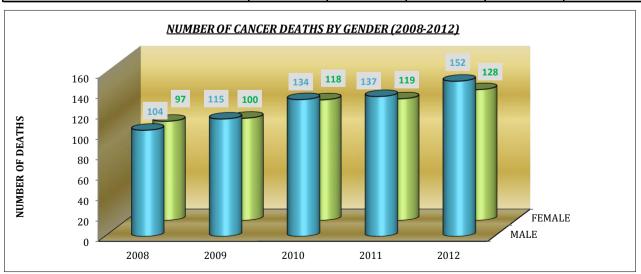
Mortality due to Cancer for the Year 2012

The top three causes of cancer deaths among male in Brunei Darussalam for 2012 were Trachea, Bronchus and Lung; Liver and Intrahepatic Bile Ducts; and Rectum and Anus; and for female cancer deaths were Trachea, Bronchus and Lung; Breast; and Rectum and Anus.

TYPE OF CANCER	MALE	FEMALE	TOTAL
Trachea, Bronchus and Lung	24	20	44
Rectum and Anus	21	9	30
Liver and Intrahepatic Bile Ducts	19	3	22
Stomach	15	4	19
Breast	0	19	19
Colon	12	5	17
Pancreas	6	7	13
Prostate	12		12
Lip, Oral Cavity and Pharynx	7	4	11
Cervix Uteri		8	8
Ovary		8	8
Non-Hodgkin's Lymphoma	6	1	7
Leukaemia	3	4	7
Other and Unspecified Parts of Uterus		6	6
Oesophagus	4	1	5
Bladder	3	2	5
Meninges, Brain and Other Parts of Central Nervous System	2	3	5
Skin	2	1	3
Multiple Myeloma and Malignant Plasma Cell Neoplasms	2	1	3
Larynx	1	1	2
Remainder	13	21	34
TOTAL	152	128	280

- top three leading causes of cancer death for male / female

YEAR	2008	2009	2010	2011	2012
TOTAL NUMBER OF CANCER DEATHS	201	215	252	256	280



Trend in Leading Cancer Deaths in Brunei Darussalam (2008 - 2012)

No.	2008	2009	2010	2011	2012
1	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung
	50 (24.9%)	37 (17.2%)	45 (17.9%)	50 (19.5%)	44 (15.7%)
2	Liver and Intrahepatic Bile Duct	Liver and Intrahepatic Bile Duct	Liver and Intrahepatic Bile Duct	Rectum and Anus	Rectum and Anus
	14 (7.0%)	24 (11.2%)	26 (10.3%)	28 (10.9%)	30 (10.7%)
3	Cervix Uteri	Cervix Uteri	Breast	Breast	Liver and Intrahepatic Bile Duct
	13 (6.5%)	14 (6.5%)	22 (8.7%)	23 (9.0%)	22 (7.9%)
4	Stomach	Colon	Lip, Oral Cavity and Pharynx	Stomach	Stomach
	12 (6.0%)	13 (6.0%)	20 (7.9%)	18 (7.0%)	19 (6.8%)
5	Colon	Stomach	Rectum and Anus	Lip, Oral Cavity and Pharynx	Breast
	11 (5.5%)	10 (4.7%)	18 (7.1%)	13 (5.1%)	19 (6.8%)
6	Rectum and Anus	Rectum and Anus	Colon	Prostate	Colon
	11 (5.5%)	9 (4.2%)	15 (6.0%)	13 (5.1%)	17 (6.1%)
7	Breast	Prostate	Meninges, Brain and Other Parts of Central Nervous System	Liver and Intrahepatic Bile Duct	Pancreas
	8 (4.0%)	9 (4.2%)	9 (3.6%)	12 (4.7%)	13 (4.6%)
8	Leukaemia	Non-Hodgkin's Lymphoma	Non-Hodgkin's Lymphoma	Colon	Prostate
	7 (3.5%)	9 (4.2%)	9 (3.6%)	10 (3.9%)	12 (4.3%)
9	Pancreas	Breast	Multiple Myeloma and Malignant Plasma Cell Neoplasms	Non-Hoddyln's	Lip, Oral Cavity and Pharynx
	6 (3.0%)	8 (3.7%)	9 (3.6%)	9 (3.5%)	11 (3.9%)
10	Meninges, Brain and Other Parts of Central Nervous System		Stomach	Leukaemia	Cervix Uteri
	6 (3.0%)	8 (3.7%)	8 (3.2%)	9 (3.5%)	8 (2.9%)
OTHERS	63 (31.3%)	74 (34.4%)	71 (28.2%)	71 (27.7%)	85 (30.4%)
GRAND TOTAL		215 (100.0%)	252 (100.0%)	256 (100.0%)	280 (100.0%)

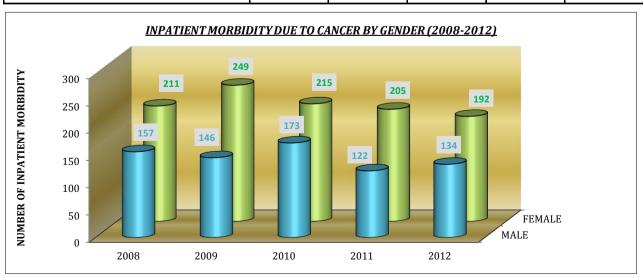
Hospital Inpatient Morbidity due to Cancer for the Year 2012

The top causes of cancers inpatient morbidity among male in Brunei Darussalam for 2012 were Trachea, Bronchus and Lung; Stomach; Liver and Intrahepatic Bile Ducts; and Prostate; and for female inpatient morbidity were Cervix Uteri; Other and Unspecified Parts of Uterus; Ovary and Breast

TYPE OF CANCER	MALE	FEMALE	TOTAL
Cervix Uteri		49	49
Trachea, Bronchus and Lung	25	13	38
Other and Unspecified Parts of Uterus		26	26
Stomach	14	3	17
Rectum and Anus	8	9	17
Liver and Intrahepatic Bile Ducts	14	2	16
Lip, Oral Cavity and Pharynx	9	7	16
Ovary		16	16
Prostate	14		14
Breast	0	12	12
Colon	3	8	11
Pancreas	4	4	8
Skin	4	2	6
Non-Hodgkin's Lymphoma	4	1	5
Leukaemia	2	3	5
Bladder	3	1	4
Multiple Myeloma and Malignant Plasma Cell Neoplasms	1	О	1
Larynx	1	О	1
Remainder	28	36	64
TOTAL	134	192	326

Note: • top leading causes of cancer inaptient morbidity for male / female

YEAR	2008	2009	2010	2011	2012
TOTAL NUMBER OF CANCER INPATIENT MORBIDITY	368	395	388	327	326



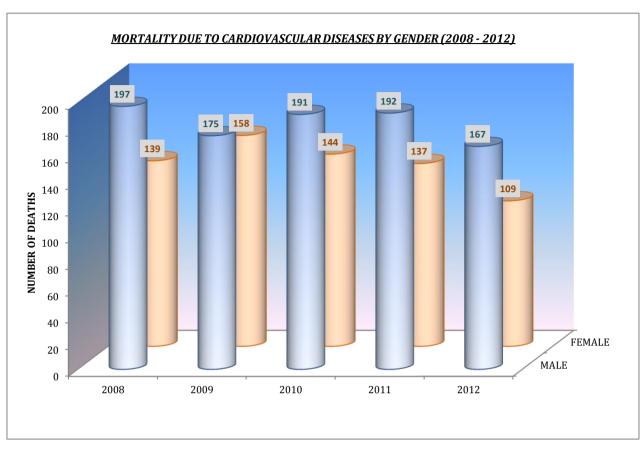
Trend in Leading Hospital Inpatient Morbidity due to Cancer in Brunei Darussalam (2008 - 2012)

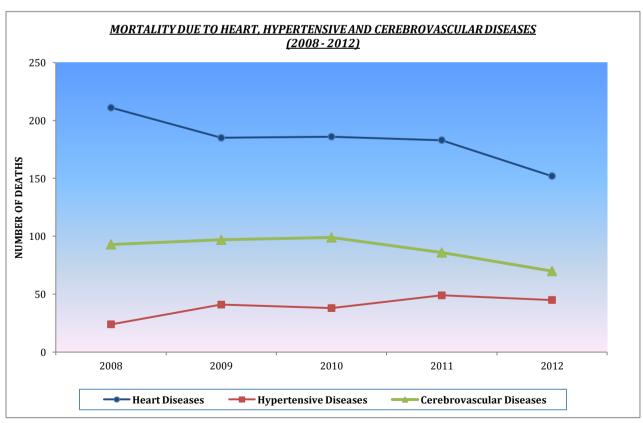
No.	2008	2009	2010	2011	2012
1	Cervix Uteri	Cervix Uteri	Cervix Uteri	Cervix Uteri	Cervix Uteri
	61 (16.6%)	80 (20.3%)	41 (10.6%)	33 (10.1%)	49 (15.0%)
2	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Breast	Rectum and Anus	Trachea, Bronchus and Lung
	35 (9.5%)	36 (9.1%)	35 (9.0%)	26 (8.0%)	38 (11.7%)
3	Other and Unspecified Parts of Uterus	Breast	Trachea, Bronchus and Lung	Other and Unspecified Parts of Uterus	Other and Unspecified Parts of Uterus
	25 (6.8%)	33 (8.4%)	31 (8.0%)	25 (7.6%)	26 (8.0%)
4	Stomach	Stomach	Ovary	Trachea, Bronchus and Lung	Stomach
	22 (6.0.%)	23 (5.8.%)	27 (7.0.%)	24 (7.3%)	17 (5.2%)
5	Colon	Other and Unspecified Parts of Uterus	Rectum and Anus	Breast	Rectum and Anus
	22 (6.0%)	22 (5.6%)	21 (5.4%)	21 (6.4%)	17 (5.2%)
6	Rectum and Anus	Liver and Intrahepatic Bile Duct	Colon	Ovary	Lip, Oral Cavity and Pharynx
	18 (4.9%)	21 (5.3%)	19 (4.9%)	19 (5.8%)	16 (4.9%)
7	Breast	Colon	Prostate	Lip, Oral Cavity and Pharynx	Liver and Intrahepatic Bile Duct
	16 (4.3%)	18 (4.6%)	17 (4.4%)	15 (4.6%)	16 (4.9%)
8	Liver and Intrahepatic Bile Duct	Prostate	Liver and Intrahepatic Bile Duct	Prostate	Ovary
	12 (3.3%)	16 (4.1%)	16 (4.1%)	15 (4.6%)	16 (4.9%)
9	Prostate	Lip, Oral Cavity and Pharynx	Stomach	Stomach	Prostate
	10 (2.7%)	13 (3.3%)	13 (3.4%)	12 (3.7%)	14 (4.3%)
10	Meninges, Brain and Other Parts of Nervous System	Rectum and Anus	Lip, Oral Cavity and Pharynx	Colon	Breast
	10 (2.7%)	11 (2.8%)	11 (2.8%)	9 (2.8%)	12 (3.7%)
OTHERS	137 (37.2%)	122 (30.9%)	157 (40.5%)	128 (39.1%)	105 (32.2%)
GRAND TOTAL		395 (100.0%)	388 (100.0%)	327 (100.0%)	326 (100.0%)

Mortality due to Cardiovascular Diseases for the Year 2012 (Based on ICD-10)

										AGE-GI	ROUP IN	YEARS						
	IC	D-10 CODE	TYPE OF DISEASE	<	35	35	44	45	- 54	55	· 64	65	- 74	7!	5+		TOTAL	
				M	F	M	F	M	F	M	F	M	F	M	F	М	F	T
1	1 100 - 109, 120 - 152		Heart Diseases	10	1	15	5	23	6	14	6	13	12	28	19	103	49	152
	i	100 - 109	Acute Rheumatic Fever & Chronic Rheumatic Heart Diseases	1	0	0	2	0	1	0	0	2	0	0	0	3	3	6
	ii	120 - 125	Ischaemic Heart Diseases	5	0	10	2	22	4	14	5	10	7	19	15	80	33	113
		l21	Acute Myocardial Infarction	1	О	5	2	18	1	12	3	4	5	11	5	51	16	67
		120, 122 - 125	Other Ischaemic Diseases	4	0	5	0	4	3	2	2	6	2	8	10	29	17	46
	iii	l26 - l52	Diseases of Pulmonary Circulation & Other Forms of Heart Diseases	4	1	5	1	1	1	0	1	1	5	9	4	20	13	33
2		l10 - l15	Hypertensive Diseases	1	1	0	1	2	0	6	4	6	4	6	14	21	24	45
3		160 - 169	Cerebrovascular Diseases	1	1	3	3	6	7	9	2	6	4	14	14	39	31	70
4		170 - 198	Other Diseases of the Circulatory System	0	1	0	0	0	0	1	1	2	1	1	2	4	5	9
		170	Atherosclerosis	0	О	O	0	o	0	0	0	0	O	О	О	0	0	0
		l71 - l98	Others	O	1	O	0	О	O	1	1	2	1	1	2	4	5	9
1 to	0 4	100 - 198	All Cardiovascular Diseases	12	4	18	9	31	13	30	13	27	21	49	49	167	109	276

Mortality Trend of Cardiovascular Diseases





Hospital Inpatient Morbidity due to Cardiovascular Diseases for the Year 2012 (Based on ICD-10)

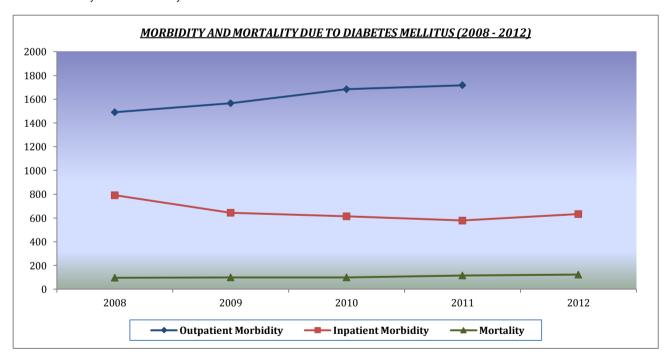
											AGE-GI	ROUP IN	YEARS							
	ICD-10 CODE		TYPE OF DISEASE	V	35	35	- 44	45	- 54	55	- 64	65	- 74	75	5+	Unkno	wn Age		TOTAL	
				M	F	M	F	M	F	М	F	M	F	M	F	М	F	M	F	T
1	Ic	00 - 109, 120 - 152	Heart Diseases	42	16	57	10	77	44	61	55	74	47	68	56	0	0	379	228	607
	i	100 - 109	Acute Rheumatic Fever & Chronic Rheumatic Heart Diseases	4	1	0	1	0	2	0	1	0	3	0	0	0	0	4	8	12
	ii	l20 - l25	Ischaemic Heart Diseases	5	2	20	0	32	16	26	8	21	11	19	8	0	0	123	45	168
		l21	Acute Myocardial Infarction	4	0	12	0	12	0	4	2	4	0	5	1	0	0	41	3	44
		120, 122 - 125	Other Ischaemic Diseases	1	2	8	0	20	16	22	6	17	11	14	7	0	0	82	42	124
	iii	l26 - l52	Diseases of Pulmonary Circulation & Other Forms of Heart Diseases	33	13	37	9	45	26	35	46	53	33	49	48	0	0	252	175	427
2		l10 - l15	Hypertensive Diseases	31	35	63	40	88	71	58	88	55	86	65	93	1	0	361	413	774
3		160 - 169	Cerebrovascular Diseases	7	3	15	11	23	9	13	5	6	8	8	12	0	0	72	48	120
4		170 - 198	Other Diseases of the Circulatory System	36	33	25	20	20	19	15	11	15	11	13	9	0	0	124	103	227
		170	Atherosclerosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		l71 - I98	Others	36	33	25	20	20	19	15	11	15	11	13	9	0	0	124	103	227
1 t	0 4	100 - 198	All Cardiovascular Diseases	116	87	160	81	208	143	147	159	150	152	154	170	1	0	936	792	1728

Morbidity and Mortality due to Diabetes Mellitus for the Year 2012

AGE-GROUP IN YEARS													
	0-14		15-44		45-64		65+		unknown age		TOTAL		
	M	F	M	F	M	F	M	F	М	F	M	F	TOTAL
HOSPITAL OUTPATIENT MORBIDITY *	3	2	138	164	211	309	89	116	3	5	444	596	1,040
HOSPITAL INPATIENT MORBIDITY	8	4	67	82	126	156	76	113	1	0	278	355	633
MORTALITY	0	0	3	4	25	14	37	40	0	0	65	58	123

Note:

January to June 2012 only



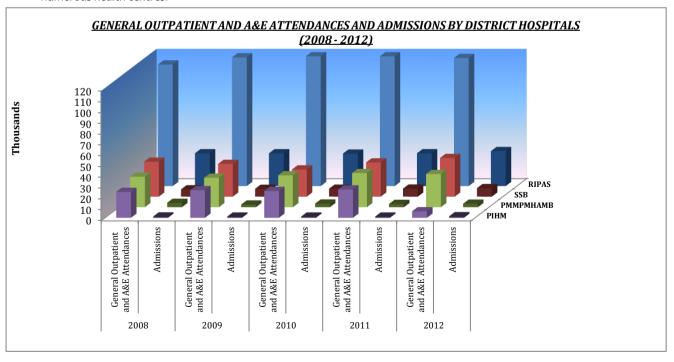
Hospital Services

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

ACTIVITIES FOR THE YEAR 2012	RIPAS	SSB	РММРМНАМВ	PIHM	TOTAL
OUTPATIENT ACTIVITIES					
General Outpatient Attendances	•••	•••	•••	18,474	18,474
Accident & Emergency (A&E) Outpatient Attendances	118,397	35,739	30,690	6,013	190,839
Specialist Outpatient Attendances	257,814	121,482	47,239	9,412	435,947
INPATIENT ACTIVITIES					
Available Beds	607	222	108	39	976
Admissions	32,292	7,895	3,194	1,395	44,776
Discharges & Deaths	32,201	7,794	2,748	1,106	43,849
Patient Days	163,913	46,354	10,082	1,762	222,111
Day Patients	69,845	9,765	16,573	600	96,783
PERFORMANCE INDICES					
Average Number of Inpatients per Day	448	127	28	5	607
Bed Occupancy Rate	74	57	26	12	62
Average Duration of Stay (Days)	5.1	5.9	3.7	1.6	5.1
Average Turnover of Patients per Bed	53	35	25	28	45
Average Turnover Interval (Days)	1.8	4.5	10.7	11.3	3.1

Note:

Since the decentralisation of primary healthcare services in 2000, hospital outpatient services are now provided at numerous health centres.



Bed Capacity and Bed Occupancy Rates (2008 - 2012)

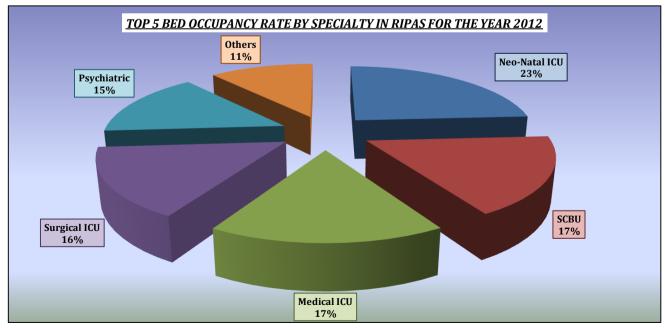
	20	008	20	009	20	010	20	011	20	012
HOSPITAL	Bed Capacity	Bed Occupancy Rate (%)								
RIPAS	555	72%	571	70%	591	67%	607	68%	607	74%
SSB	210	40%	212		222	50%	222	53%	222	57%
РММРМНАМВ	129	35%	129	21%	106	31%	107	27%	108	26%
PIHM	25	34%	25	29%	32	21%	32	10%	39	12%
TOTAL	919	59%	937		951	57%	968	58%	976	62%

Note:

... - incomplete data

Top 5 Bed Occupancy Rate by Specialty in RIPAS Hospital for the Year 2012

SPECIALTIES	BED CAPACITY	ADMISSIONS	PATIENT-DAYS	DAY-PATIENTS	BED OCCUPANCY RATE
Neo-Natal ICU	8	159	4,379	6	150
SCBU	16	315	6,408	257	109
Medical ICU	5	47	1,897	0	104
Surgical ICU	12	186	4,275	0	97
Psychiatric	24	183	8,154	4	93
Others	542	31,402	138,800	11,026	70



RIPAS Hospital Monitoring Services

Leading Causes of Hospital Outpatient Morbidity (A&E and GOPD) for the Year 2012 (January - June)

No.	ICD-10 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%
1	Joo-Jo6	Acute Upper Respiratory Infection	18,154	17,524	35,678	29.2
2	A09	Gastroenteritis/ Diarrhoea	3,394	3,111	6,505	5.3
3	J4o-J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	2,469	2,043	4,512	3.7
4	Loo-L99	Diseases of Skin & Subcutaneous Tissue	1,883	1,762	3,645	3.0
5	R10	Abdominal and Pelvic Pain	1,302	1,633	2,935	2.4
6	W00-W19	Falls	1,726	1,108	2,834	2.3
7	l10-l15	Hypertensive Diseases	958	1,258	2,216	1.8
8	H10	Conjunctivitis	1,085	959	2,044	1.7
9	Vo1-V99	Transport Accident	738	415	1,153	0.9
10	E10-E14	Diabetes Mellitus	444	596	1,040	0.9
11	M10	Gout	652	81	733	0.6
12	T78.4	Allergy, Unspecified	335	380	715	0.6
13	Bo1	Chickenpox	311	314	625	0.5
14	J10-J11	Influenza	312	310	622	0.5
15	K25-K27	Gastric, Duodenal and Peptic Ulcer	268	291	559	0.5
		Others	29,969	26,251	56,220	46.1
		GRAND TOTAL	64,000	58,036	122,036	100.0

Note:

A & E - Accident & Emergency

GOPD - General Outpatient Department

Leading Causes of Hospital Outpatient Morbidity (2008 - June 2012)

No.	2008	2009	2010	2011	January-June 2012
1	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections
	62,547 (30.1%)	68,249 (31.8%)	57,818 (23.3%)	60,942 (26.7%)	35,678 (29.2%)
2	Bronchitis, Chronic & Unspecified Emphysema & Asthma	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea
	9,722 (4.7%)	9,339 (4.4%)	14,145 (5.7%)	13,562 (5.9%)	6,505 (5.3%)
3	Gastroenteritis and Diarrhoea	Bronchitis, Chronic & Unspecified	Bronchitis, Chronic & Unspecified Emphysema & Asthma	Bronchitis, Chronic & Unspecified	Bronchitis, Chronic & Unspecified
	8,455 (4.1%)	9,177 (4.3%)	10,389 (4.2%)	8,965 (3.9%)	4,512 (3.7%)
4	Diseases of Skin & Subcutaneous Tissue	Diseases of Skin &	Diseases of Skin & Subcutaneous Tissue	Diseases of Skin & Subcutaneous Tissue	Diseases of Skin &
	7,101 (3.4%)	6,448 (3.0%)	8,467 (3.4%)	7,438 (3.3%)	3,645 (3.0%)
5	Falls	Falls	Falls	Abnominal and Pelvic Pain	Abnominal and Pelvic Pain
	5,518 (2.7%)	5,139 (2.4%)	7,005 (2.8%)	6,484 (2.8%)	2,935 (2.4%)
6	Abnominal and Pelvic Pain	Abnominal and Pelvic Pain	Abnominal and Pelvic Pain	Falls	Falls
	5,088 (2.4%)	4,287 (2.0%)	6,652 (2.7%)	5,627 (2.5%)	2,834 (2.3%)
7	Hypertensive Diseases	Hypertensive Diseases	Conjunctivitis	Conjunctivitis	Hypertensive Diseases
	4,309 (2.1%)	4,258 (2.0%)	4,704 (1.9%)	4,427 (1.9%)	2,216 (1.8%)
8	Conjunctivitis	Conjunctivitis	Hypertensive Diseases	Hypertensive Diseases	Conjunctivitis
	3,251 (1.6%)	3,582 (1.7%)	4,215 (1.7%)	4,287 (1.9%)	2,044 (1.7%)
9	Transport Accidents	Influenza	Transport Accidents	Transport Accidents	Transport Accidents
	1,972 (0.9%)	2,718 (1.3%)	3,370 (1.4%)	3,006 (1.3%)	1,153 (0.9%)
10	Influenza	Transport Accidents	Influenza	Diabetes	Diabetes
	1,576 (0.8%)	2,361 (1.1%)	1,971 (0.8%)	1,718 (0.8%)	1,040 (0.9%)
OTHERS	98,388 (47.3%)	99,072 (46.2%)	129,396 (52.1%)	111,809 (49.0%)	59,474 (53.1%)
GRAND TOTAL	207,927 (100.0%)	214,630 (100.0%)	248,132 (100.0%)	228,265 (100.0%)	112,036 (100.0%)

Leading Causes of Hospital Outpatient Morbidity by Hospital for the Year 2012

		HOSP	ITALS	
No.	RIPAS	SSB	РММРМНАМВ *	РІНМ *
1	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections
	25,650 (19.1%)	18,316 (47.5%)	6,688 (37.2%)	4,565 (31.3%)
2	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea	Hypertensive Diseases
	8,449 (6.3%)	2,077 (5.4%)	1,224 (6.8%)	1,546 (10.6%)
3	Falls	Bronchitis Chronic & Unspecified Emphysema & Asthma	Bronchitis Chronic & Unspecified Emphysema & Asthma	Diabetes
	5,183 (3.9%)	1,731 (4.5%)	981 (5.5%)	874 (6.0%)
4	Bronchitis Chronic & Unspecified Emphysema & Asthma	Diseases of Skin & Subcutaneous Tissue	Diseases of Skin & Subcutaneous Tissue	Abnominal and Pelvic Pain
	4,713 (3.5%)	1,360 (3.5%)	637 (3.5%)	411 (2.8%)
5	Abnominal and Pelvic Pain	Conjunctivitis	Conjunctivitis	Diseases of Skin & Subcutaneous Tissue
	3,983 (3.0%)	1,086 (2.8%)	324 (1.8%)	396 (2.7%)
6	Diseases of Skin & Subcutaneous Tissue	Gastric, Duodenal & Peptic Ulcer	Abnominal and Pelvic Pain	Gastroenteritis and Diarrhoea
	3,980 (3.0%)	828 (2.1%)	293 (1.6%)	281 (1.9%)
7	Conjunctivitis	Abnominal and Pelvic Pain	Allergy, Unspecified	Conjunctivitis
	1,823 (1.4%)	704 (1.8%)	209 (1.2%)	189 (1.3%)
8	Transport Accidents	Hypertrophy of Tonsils and Adenoids	Transport Accidents	Bronchitis Chronic & Unspecified Emphysema & Asthma
	1,683 (1.3%)	563 (1.5%)	158 (0.9%)	173 (1.2%)
9	Gout	Hypertensive Diseases	Chickenpox	Intracranial Ijury & Injury of Other Internal organs
	868 (0.6%)	460 (1.2%)	119 (0.7%)	146 (1.0%)
10	Influenza	Influenza	Gout	Gastric, Duodenal & Peptic Ulcer
	813 (0.6%)	380 (1.0%)	119 (0.7%)	79 (0.5%)
OTHERS	39,308 (57.5%)	11,085 (28.7%)	7,217 (40.2%)	5,924 (40.6%)
GRAND TOTAL	134,487 (100.0%)	38,590 (100.0%)	17,969 (100.0%)	14,584 (100.0%)
Note:				

Note:

RIPAS - Raja Isteri Pengiran Anak Saleha

SSB - Suri Seri Begawan

PMMPMHAMB - Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah

PIHM - Pengiran Isteri Hajah Mariam

^{* -} Data from January to June only

Hospital Inpatient Morbidity for the Year 2012

NO	ICD-10 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%
1	A09	Diarrhoea and Gastroenteritis of Presumed Infectious Origin	925	739	1,664	4.0
2	J10-J22	Acute Lower Respiratory Infections	813	659	1,472	3.6
3	O00-O08	Pregnancy With Abortive Outcome	na	1,264	1,264	3.1
4	N8o-N98	Non-Inflammatory Disorders of Female Genital Tract	na	1,246	1,246	3.0
5	Joo-Jo6	Acute Upper Respiratory Infections	644	508	1,152	2.8
6	J45-J46	Asthma	476	429	905	2.2
7	l10-l15	Hypertensive Diseases	361	413	774	1.9
8	098-099	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	na	774	774	1.9
9	R50	Fever of Unknown Origin	389	344	733	1.8
10	R10	Abdominal and Pelvic Pain	299	432	731	1.8
11	E10-E14	Diabetes Mellitus	278	355	633	1.5
12	W00-W19	Falls	401	228	629	1.5
13	So2, S12, S22, S32, S42, S52, S72, S82, S92, To2, To8, T10, T12	Fractures Of Specified and Multiple Body Regions	422	199	621	1.5
14	100-109, 120-152	Heart Diseases	379	228	607	1.5
15	Loo-Lo8	Infections of the Skin and Subcutaneous Tissue	293	214	507	1.2
		Others	9,401	18,163	27,564	66.8
		GRAND TOTAL	15,081	26,195	41,276	100.0

na - not applicable

Leading Causes of Hospital Inpatient Morbidity (2008 - 2012)

No.	2008	2009	2010	2011	2012
			Diarrhoea and	Diarrhoea and	Diarrhoea and
1	Acute Lower	Acute Lower	Gastroenteritis of	Gastroenteritis of	Gastroenteritis of
	Respiratory Infections	Respiratory Infections	Presumed Infectious Origin	Presumed Infectious Origin	Presumed Infectious Origin
	1,201 (3.2%)	1,227 (3.4%)	1,361 (3.7%)	1,594 (4.0%)	1,664 (4.0%)
2	Pregnancy With	Pregnancy With	Acute Upper	Acute Lower	Acute Lower
2	Abortive Outcome	Abortive Outcome	Respiratory Infections	Respiratory Infections	Respiratory Infections
	1,067 (2.8%)	1,065 (3.0%)	1,229 (3.3%)	1,259 (3.2%)	1,472 (3.6%)
3	Asthma	Non-Inflammatory Disorders of Female Genital Tract	Acute Lower Respiratory Infections	Non-Inflammatory Disorders of Female Genital Tract	Pregnancy With Abortive Outcome
	1,055 (2.8%)	1,039 (2.9%)	1,175 (3.2%)	1,215 (3.1%)	1,264 (3.1%)
	Diarrhoea and	Diarrhoea and			Non-Inflammatory
4	Gastroenteritis of Presumed Infectious Origin	Gastroenteritis of Presumed Infectious Origin	Pregnancy With Abortive Outcome	Pregnancy With Abortive Outcome	Disorders of Female Genital Tract
	1,026 (2.7%)	1,032 (2.9%)	1,113 (3.0%)	1,193 (3.0%)	1,246 (3.0%)
5	Acute Upper Respiratory Infections	Asthma	Non-Inflammatory Disorders of Female Genital Tract	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections
	1,016 (2.7%)	953 (2.6%)	1,111 (3.0%)	1,124 (2.8%)	1,152 (2.8%)
6	Non-Inflammatory Disorders of Female Genital Tract	Acute Upper Respiratory Infections	Asthma	Asthma	Asthma
	984 (2.6%)	893 (2.5%)	918 (2.5%)	1,011 (2.5%)	905 (2.2%)
7	Diabetes Mellitus	Fever of Unknown Origin	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	Hypertensive Diseases	Hypertensive Diseases
	791 (2.1%)	759 (2.1%)	787 (2.1%)	793 (2.0%)	774 (1.9%)
8		Hypertensive Diseases		Fever of Unknown Origin	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)
	745 (2.0%)	664 (1.8%)	771 (2.1%)	754 (1.9%)	774 (1.9%)
9	Fever of Unknown Origin	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	Fever of Unknown Origin	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	Fever of Unknown Origin
	737 (2.0%)	661 (1.8%)	767 (2.1%)	683 (1.7%)	733 (1.8%)
10	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	Diabetes Mellitus	Diabetes Mellitus	Abdominal and Pelvic Pain	Abdominal and Pelvic Pain
	660 (1.8%)	644 (1.8%)	614 (1.7%)	677 (1.7%)	731 (1.8%)
OTHERS	28,120 (74.9%)	27,040 (75.2%)	26,873 (73.2%)	29,390 (74.0%)	30,561 (74.0%)
GRAND TOTAL	37,538 (100.0%)	35,977 (100.0%)	36,719 (100.0%)	39,693 (100 . 0%)	41,276 (100.0%)

Leading Causes of Hospital Inpatient Morbidity by Hospital for the Year 2012

		HOSP	ITALS		
No.	RIPAS	SSB	РММРМНАМВ	РІНМ	ALL DISTRICTS
1	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,105 (3.7%)	Hypertensive Diseases 347 (5.6%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 202 (6.0%)	Fever of Unknown Origin 235 (15.8%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,664 (4.0%)
2	Pregnancy With Abortive Outcome	Diarrhoea and Gastroenteritis of Presumed Infectious Origin	Acute Lower Respiratory Infections	Abdominal and Pelvic Pain	Acute Lower Respiratory Infections
	1,089 (3.6%)	327 (5.3%)	192 (5.7%)	133 (8.9%)	1,472 (3.6%)
3	Acute Lower Respiratory Infections	Acute Upper Respiratory Infections	Iron Deficiency Anaemias	Hypertensive Diseases	Pregnancy With Abortive Outcome
	1,075 (3.6%)	276 (4.4%)	191 (5.6%)	98 (6.6%)	1,264 (3.1%)
4	Non-Inflammatory Disorders of Female Genital Tract	Fever of Unknown Origin	Diabetes Mellitus	Diabetes Mellitus	Non-Inflammatory Disorders of Female Genital Tract
	1,008 (3.3%)	227 (3.7%)	163 (4.8%)	70 (4.7%)	1,246 (3.0%)
5	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)	Acute Lower Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections
	722 (2.4%)	203 (3.3%)	129 (3.8%)	49 (3.3%)	1,152 (2.8%)
6	Acute Upper Respiratory Infections	Abdominal and Pelvic Pain	Asthma	Diarrhoea and Gastroenteritis of Presumed Infectious Origin	Asthma
	698 (2.3%)	201 (3.2%)	125 (3.7%)	30 (2.0%)	905 (2.2%)
7	Asthma	Diabetes Mellitus	Hypertensive Diseases	Transport Accident	Hypertensive Diseases
	616 (2.0%)	187 (3.0%)	99 (2.9%)	24 (1.6%)	774 (1.9%)
8		Other Disorders of Teeth and Supporting Structures		Heart Diseases	Maternal Diseases Classifiable Elsewhere but Complicating Pregnancy, Childbirth and The Puerperium (Indirect Obstetric Causes)
	580 (1.9%)	169 (2.7%)	76 (2.3%)	23 (1.5%)	774 (1.9%)
9	Falls	Asthma	Non-Inflammatory Disorders of Female Genital Tract	Non-Inflammatory Disorders of Female Genital Tract	Fever of Unknown Origin
	528 (1.7%)	151 (2.4%)	71 (2.1%)	22 (1.5%)	733 (1.8%)
10	Heart Diseases	Non-Inflammatory Toxic Effects of Pewer of Unknown Origin Substances Chiefly Non-Inflammatory Toxic Effects of Substances Chiefly Non-Infl			Abdominal and Pelvic Pain
	457 (1.5%)	145 (2.3%)	68 (2.0%)	20 (1.3%)	731 (1.8%)
OTHERS	22,236 (73.9%)	3,971 (64.0%)	2,061 (61.0%)	787 (52.8%)	30,561 (74.0%)
GRAND TOTAL	30,204 (100.0%)	6,204 (100.0%)	3,377 (100.0%)	1,491 (100.0%)	41,276 (100.0%)

Note:

RIPAS - Raja Isteri Pengiran Anak Saleha

SSB - Suri Seri Begawan

PMMPMHAMB - Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah

PIHM - Pengiran Isteri Hajah Mariam

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, through various activities and programmes that have been developed and established under three main services: Community Health Services, Environmental Health Services, and Scientific Services.

WORKLOAD INDICATORS	2008	2009	2010	2011	2012
1. Ante Natal attendances	46,419	48,323	44,068	44,749	42,187
2. Post Natal attendances	8,396	9,340	12,169	8,698	10,312
3. Child (<5) attendances	122,229	124,785	111,199	106,377	185,379
4. General O/P attendances in Health Centres / Clinics	469,033	538,999	465,448	475,068	467,792
- Extended Hours + After Office Hours Services	71,526	74,809	79,794	78,628	75,301
5. No. of students medically examined (Year 1, 4 & 8)	21,984	21,149	20,091	13,820	12,616
6. No. of students screened (Year 1, 3, 4, 6 & 8)	37,174	73,696	28,548	29,160	33,228

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 Service 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.

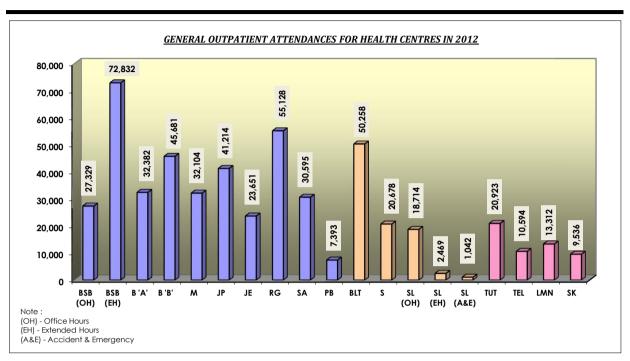
IMMUNISATION COVERAGE	2008	2009	2010	2011	2012
% of infants immunised against					
- Tuberculosis (at birth)	99.7	100.0	95.4	96.0	95.4
- Diphtheria/Tetanus/Whooping Cough (Tetract-HIB)3	97.6	99.4	95.4	97.0	95.4
- Poliomyelitis IPV3	100.0	99.5	99.0	100.0	99.0
- Hepatitis B3	96.1	100.0	95.8	93.0	95.8
- Measles, Mumps and Rubella 1 (MMR1)	99.7	100.0	94.4	91.0	98.6
% of pregnant women (primigravida) immunised against					
- Tetanus (TT2)	75.0	75.0	75.6	78.2	75.6

Red text - Millennium Development Goals (MDGs) Indicators

Source:

Maternal and Child Health (MCH) Clinic Data

General Outpatient Attendances for Health Centres (2012)



Belait Health Centre

Seria Health Centre

Sungai Liang Health Centre

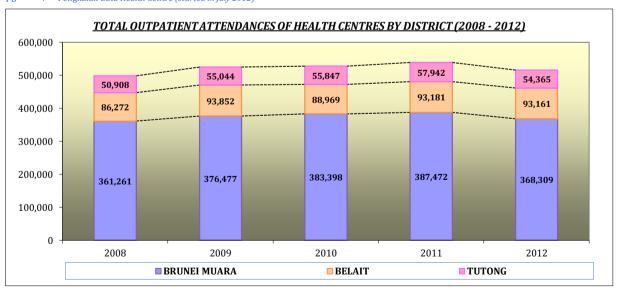
BRUNEI MUARA HEALTH CENTRES

BSB BSB Health Centre B 'A' Berakas 'A' Health Centre Berakas 'B' Health Centre Muara Health Centre Jubli Perak Health Centre JΕ Jubli Emas Health Centre RG Rimba Gadong Health Centre

PAP Hjh Rashidah Sa'adatul Bolkiah Health Centre SA Pengkalan Batu Health Centre (started in July 2012) PR

BELAIT HEALTH CENTRES TUTONG HEALTH CENTRES

Tutong Health Centre TEL Telisai Health Centre LMN Lamunin Health Centre SK Sungai Kelugos Health Centre



General Outpatient Attendances

OUTPATIENT ATTENDANCES FOR TRAVELLING CLINIC (2009 - 2012)

YEAR	Bu	ıau	Sg Mau Total			Total	_	
TEAR	Male	Female	Female Male Female		Male	Female	Total	
2009	23	33	49	38	72	71	143	
2010	35	56	54	42	89	98	187	
2011	39	58	24	57	63	115	178	
2012	43	55	44	81	87	136	223	

OUTPATIENT ATTENDANCES FOR FLYING MEDICAL SERVICE (2009 - 2012)

YEAR	Kg Sukang	Kg Supon Besar	Kg Melilas	Kg Mapol	Total
2009	337	147	211	175	870
2010	237	156	177	218	788
2011	297	189	171	235	892
2012	156	59	74	107	396

Health Centres Outpatient Morbidity for the Year 2012 (January - June)

No.	ICD-10	DISEASES	MALE	FEMALE	TOTAL	%
1	Joo-Jo6	Acute Upper Respiratory Infection	48,151	50,831	98,982	36.6
2	l10-l15	Hypertensive Diseases	7,465	10,794	18,259	6.7
3	Loo-L99	Diseases of Skin & Subcutaneous Tissue	7,385	8,376	15,761	5.8
4	Ao9	Gastroenteritis/Diarrhoea	4,580	4,128	8,708	3.2
5	H10	Conjunctivitis	3,914	4,161	8,075	3.0
6	J10-J11	Influenza	3,389	3,954	7,343	2.7
7	E70-E90	Metabolic Disorders	3,025	4,279	7,304	2.7
8	E10-E14	Diabetes	2,190	3,336	5,526	2.0
9	R10	Abdominal and Pelvic Pain	1,869	2,647	4,516	1.7
10	J40-J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	2,256	2,201	4,457	1.6
11	H65-H66	Otitis Media	1,255	1,436	2,691	1.0
12	K25-K27	Gastric, Duodenal and Peptic Ulcer	1,041	1,603	2,644	1.0
13	Koo-Ko8	Diseases of Teeth & Supporting Structures	767	867	1,634	0.6
14	M10	Gout	1,061	153	1,214	0.4
15	Во1	Chickenpox	638	566	1,204	0.4
		Others	34,825	47,372	82,197	30.4
		GRAND TOTAL	123,811	146,704	270,515	100.0

Data from Berakas 'A' Health Centre, Berakas 'B' Health Centre and Muara Health Centre are not available.

Leading Causes of Primary Health Care Outpatient Morbidity by District for the year 2012

		DISTRICT	
No.	BRUNEI MUARA (1)	BELAIT	TUTONG (2)
1	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections	Acute Upper Respiratory Infections
	107,427 (34.0%)	36,822 (37.6%)	11,930 (31.4%)
2	Hypertensive Diseases	Diseases of Skin & Subcutaneous Tissue	Hypertensive Diseases
	25,673 (8.1%)	7,164 (7.3%)	4,111 (10.8%)
3	Diseases of Skin & Subcutaneous Tissue	Gastroenteritis and Diarrhoea	Diseases of Skin & Subcutaneous Tissue
	17,241 (5.5%)	4,188 (4.3%)	2,260 (6.0%)
4	Influenza	Conjunctivitis	Diabetes
	14,669 (4.6%)	2,778 (2.8%)	1,072 (2.8%)
5	Metabolic Disorders	Hypertensive Diseases	Gastroenteritis and Diarrhoea
	12,911 (4.1%)	2,229 (2.3%)	1,008 (2.7%)
6	Gastroenteritis and Diarrhoea	Abnominal and Pelvic Pain	Abnominal and Pelvic Pain
	10,711 (3.4%)	803 (0.8%)	1,005 (2.6%)
7	Conjunctivitis	Otitis Media	Metabolic Disorders
	10,188 (3.2%)	493 (0.5%)	576 (1.5%)
8	Diabetes	Diabetes	Conjunctivitis
	8,329 (2.6%)	463 (0.5%)	517 (1.4%)
9	Bronchitis Chronic & Unspecified Emphysema & Asthma	Falls	Bronchitis Chronic & Unspecified Emphysema & Asthma
	6,897 (2.2%)	445 (0.5%)	517 (1.4%)
10	Abnominal and Pelvic Pain	Diseases of Teeth and Supporting Structures	Gastric, Duodenal & Peptic Ulcer
	5,509 (1.7%)	412 (0.4%)	434 (1.1%)
OTHERS	96,632 (30.6%)	42,253 (43.1%)	14,532 (38.3%)
GRAND TOTAL	316,187 (100.0%)	98,050 (100.0%)	37,962 (100.0%)

Note:

^{(1) 2012} data from Bandar Seri Begawan (BSB) Health Centre, Rimba Health Centre, Jubli Perak Health Centre and Pengiran Anak Puteri Hajah Rashidah Sa'adatul Bolkiah (PAPHRSB) Health Centre except Jubli Emas Health Centre (January to June 2012 data only) and data from Berakas 'A' Health Centre, Berakas 'B' Health Centre and Muara Health Centre are not available.

⁽²⁾ Only January to June 2012 data available.

Leading Causes of Primary Health Care Outpatient Morbidity (2008 - June 2012)

No.	2008	2009	2010	2011	January - June 2012
1	Acute Upper Respiratory Infections				
	197,348 (32.5%)	229,878 (35.8%)	222,641 (34.8%)	185,268 (33.4%)	98,982 (36.6%)
2	Diseases of Skin & Subcutaneous Tissue	Hypertensive Diseases	Hypertensive Diseases	Hypertensive Diseases	Hypertensive Diseases
	42,253 (7.0%)	41,921 (6.5%)	45,347 (7.1%)	37,531 (6.8%)	18,259 (6.7%)
3	Hypertensive Diseases	Diseases of Skin & Subcutaneous Tissue			
	40,433 (6.7%)	38,538 (6.0%)	35,887 (5.6%) 30,998 (5.6%)		15,761 (5.8%)
4	Influenza	Influenza	Influenza	Influenza	Gastroenteritis and Diarrhoea
	18,367 (3.0%)	21,235 (3.3%)	33,313 (5.3%)	29,577 (5.3%)	8,708 (3.2%)
5	Bronchitis Chronic & Unspecified Emphysema & Asthma	Conjunctivitis	Conjunctivitis	Gastroenteritis and Diarrhoea	Conjunctivitis
	16,915 (2.8%)	17,566 (2.7%)	20,169 (3.2%)	18,226 (3.3%)	8,075 (3.0%)
6	Conjunctivitis	Gastroenteritis and Diarrhoea	Gastroenteritis and Diarrhoea	Conjunctivitis	Influenza
	15,767 (2.6%)	16,998 (2.6%)	19,352 (3.0%)	18,042 (3.3%)	7,343 (2.7%)
7	Gastroenteritis and Diarrhoea	Metabolic Disorders	Metabolic Disorders	Metabolic Disorders	Metabolic Disorders
	15,555 (2.6%)	16,451 (2.6%)	18,308 (2.9%)	13,980 (2.5%)	7,304 (2.7%)
8	Diabetes	Diabetes	Diabetes	Diabetes	Diabetes
	14,428 (2.4%)	14,405 (2.2%)	15,003 (2.3%)	11,668 (2.1%)	5,526 (2.0%)
9	Metabolic Disorders	Bronchitis Chronic & Unspecified Emphysema & Asthma	Bronchitis Chronic & Unspecified Emphysema & Asthma	Bronchitis Chronic & Unspecified Emphysema & Asthma	Abnominal and Pelvic Pain
	10,644 (1.8%)	14,107 (2.2%)	10,912 (1.7%)	8,973 (1.6%)	4,516 (1.7%)
10	Abnominal and Pelvic Pain	Bronchitis Chronic & Unspecified Emphysema & Asthma			
	10,495 (1.7%)	9,944 (1.5%)	8,580 (1.3%)	8,441 (1.5%)	4,457 (1.6%)
OTHERS	224,828 (37.0%)	221,432 (34.5%)	210,341 (32.9%)	191,336 (34.5%)	91,079 (33.7%)
GRAND TOTAL	607,033 (100.0%)	642,475 (100.0%)	639,853 (100.0%)	554,040 (100.0%)	270,515 (100.0%)

 ${\it Data\ from\ Berakas\ 'A'\ Health\ Centre,\ Berakas\ 'B'\ Health\ Centre\ and\ Muara\ Health\ Centre\ are\ not\ available.}$

Notifiable Diseases (2012)

Notification of infectious diseases is required by Brunei 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, Ministry of Health.

DISEASES	ВМ	TUT	TEM	KB	unknown	TOTAL
FOOD AND WATER BORNE DISEASES						
Cholera	0	0	0	0	0	0
Dysentery (Shigella)	10	0	0	0	0	10
Food Poisoning	25	14	0	26	0	65
Gastroenteritis	748	4	7	237	0	996
Hepatitis A	7	0	0	0	0	7
Para/Typhoid Fever	1	0	0	0	0	1
Salmonella Infection	34	0	1	1	0	36
Total	825	18	8	264	0	1,115
PERSON TO PERSON TRANSMITTED DISEAS	SES					
Chicken Pox	2,421	349	75	324	0	3,169
Ebola Fever	0	0	0	0	0	0
Hand, Foot & Mouth Disease	1,607	282	50	403	0	2,342
Influenza A	4	0	0	0	0	4
Influenza B	0	0	0	О	0	0
Influenza Others	0	0	0	0	0	0
Leprosy	2	О	0	О	О	2
Meningitis	2	0	0	1	0	3
Scarlet Fever	2	1	О	0	0	3
Severe Acute Respiratory Syndrome	0	0	0	0	0	0
Total	4,038	632	125	728	0	5,523
VACCINE PREVENTABLE DISEASES						
Diphtheria	0	0	0	0	0	0
Hepatitis B	0	0	0	0	0	0
Measles	1	1	О	0	0	2
Mumps	11	2	0	1	0	14
Pertussis	3	1	0	0	0	4
Acute Flaccid Paralysis (AFP)	0	1	0	0	0	1
Rubella	0	0	О	1	0	1
Smallpox	0	0	0	0	0	0
Tetanus	О	О	O	1	О	1
Tetanus Neonatorum	0	0	0	0	0	0
Tuberculosis (data from TB Clinics)	146	30	11	56	0	243
Total	161	35	11	59	0	266

Note:

BM - Brunei Muara District

TUT - Tutong District

TEMB - Temburong District

KB - Belait District

Notifiable Diseases (2012) (cont'd)

DISEASES	ВМ	TUT	TEM	КВ	unknown	TOTAL
SEXUALLY TRANSMITTED DISEASES		_			_	
AIDS	0	0	0	0	6	6
Chancroid	0	0	0	0	0	0
Chlamydial Infection	218	18	6	23	1	266
Genital Herpes	4	0	0	0	0	4
Gonorrhoea Infections	195	21	4	20	1	241
Hepatitis C	0	0	0	0	0	0
HIV * (Local only)	2	0	0	7	0	9
Non Gonococcal Urethritis	1	0	0	0	0	1
Opthalmia Neonatorum	0	0	0	0	0	0
Syphilis (All forms)	6	1	0	0	0	7
Other STI - Genital Warts, Trichomonas Vaginalis	7	0	0	0	0	7
Total	433	40	10	50	8	541
VECTOR BORNE DISEASES						
Chikugunya	3	0	0	0	0	3
Dengue Fever	250	14	17	9	0	290
Dengue Haemorhagic Fever	0	0	0	0	0	0
Filariasis	0	3	0	0	0	3
Leptospirosis	0	0	0	0	0	0
Malaria	3	5	2	0	0	10
Plague	0	0	0	0	0	0
Typhus	0	0	0	0	0	0
West Nile Fever	0	0	0	0	0	0
Yellow Fever	0	0	0	0	0	0
Total	256	22	19	9	0	306
ZOONOTIC DISEASES						
Anthrax	0	0	0	0	0	0
Bovine Spongiform Encephalitis	0	0	0	0	0	0
Nipah Virus	0	0	0	0	0	0
Rabies	0	0	0	0	0	0
Total	0	0	0	0	0	0
OTHER INFECTIOUS DISEASES						
Conjunctivitis (Chlamydia)	8	1	0	0	0	9
Encephalitis	0	0	0	0	0	0
Legionellosis	0	0	0	0	0	0
Puerperal Infection	0	0	0	0	0	0
Viral Encephalitis	0	0	0	0	0	0
Viral Hepatitis	0	0	0	0	0	0
Total	8	1	0	0	0	9
GRAND TOTAL	5,721	748	173	1,110	8	7,760

 $\mbox{\ensuremath{\star}}$ Indicate incidence of AIDS/HIV cases amongst locals only.

BM - Brunei Muara District

TUT - Tutong District

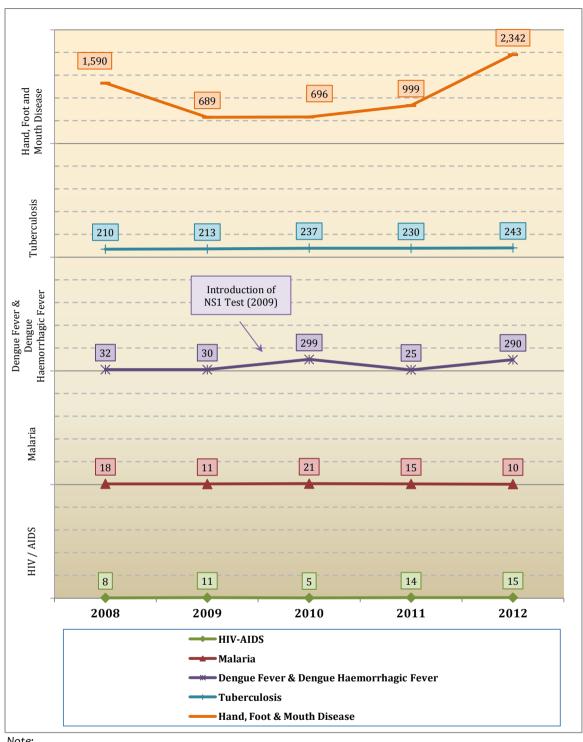
TEMB - Temburong District

KB - Belait District

Source:

Disease Control Division, Ministry of Health

Trend of Notifiable Diseases (2008 - 2012)



Possible causes of decrease in Dengue cases in 2011 are:

- The control measures done in 2010 especially in Kg Ayer might still be effective;
- There is a possibility of a relationship between dengue diseases with a three to five year cyclical pattern. This pattern was seen in neighbouring countries. Brunei may now be in low cycle

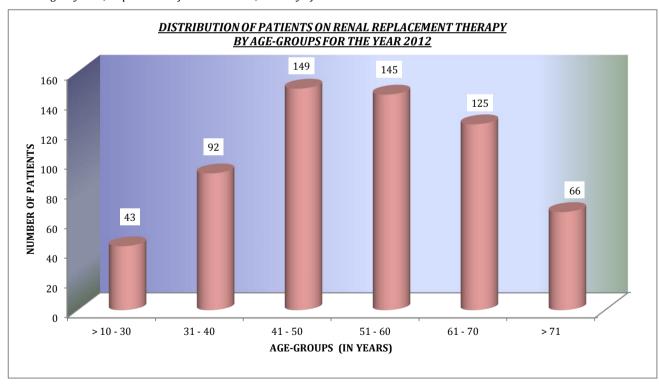
NS1 Test - Dengue NS1 Antigen Test

Renal Services

	NO. OF PATIENTS ATTENDING FOR RENAL REPLACEMENT THERAPY								
DIALYSIS CENTRE / UNIT		2010			2011		2012		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Rimba Dialysis Centre	98	109	207	106	128	234	118	138	256
Kiarong Dialysis Centre	23	34	57	25	35	60	28	30	58
Dialysis Centre RIPAS Hospital	29	35	64	32	28	60	33	37	70
Dialysis Centre SSB Hospital, Belait	39	37	76	50	37	87	46	47	93
Tutong Dialysis Centre							11	16	27
Continuous Ambulatory Peritoneal Dialysis	36	27	63	34	26	60	26	27	53
Transplant Unit	19	12	31	21	13	34	22	12	34
Dialysis Centre PIHM Hospital, Temburong	13	13	26	12	15	27	16	13	29
TOTAL	257	267	524	280	282	562	300	320	620

Note:

Source: Renal Registry Unit, Department of Renal Services, Ministry of Health



^{... -} Tutong Dialysis Centre started its operation in February 2012

Dental Health Services

ORAL HEALTH CARE COVERAGE OF THE POPULATION (2008 - 2012)

YEAR	New Patients	Catchment Population	Oral Health Care Coverage
2008	83,748	398,000	21.0%
2009	78,453	406,200	19.3%
2010	59,803	397,968	15.0%
2011	59,526	393,372	15.1%
2012	59,182	399,800	14.8%

COVERAGE AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2012

COVERAGE	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
New Patients	3,874	8,944	7,633	33,514	5,217	59,182

ATTENDANCES AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2012

TYPES OF ATTENDANCES	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
Outpatients	5,282	12,642	9,668	45,874	8,325	81,791
Appointments	1,607	3,971	8,004	23,241	4,498	41,321

COVERAGE AT SCHOOL DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2012

COVERAGE	0 - 5	6 - 12	13 - 19	TOTAL	
New Patients 2,072		18,883	57	21,012	

ATTENDANCES AT SCHOOL DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2012

COVERAGE	0 - 5	6 - 12	13 - 19	TOTAL
Outpatients	1,216	11,055	28	12,299
Appointments	1,185	12,415	29	13,629

Source:

 $Research\ and\ Development\ Division,\ Department\ of\ Dental\ Services,\ Ministry\ of\ Health$

Nutritional Status

	SCHOOL HEALTH	PEI	PERCENTAGE OF STUDENTS SCREENED FOR WEIGHT STATUS (%) (2008 - 2012)						
	(YEAR I, 4, 6 and 8 only)	2008	2008 2009 2010 2011						
1.	Normal weight	69.8	68.9	67.1	49.7	43.7			
2.	Overweight	13.3	14.0	14.7	11.5	12.1			
3.	Obese	12.3	12.4	13.4	16.9	16.9			
4.	Severe Underweight				8.2	11.3			
5.	Underweight	4.5	4.7	4.8	13.8	15.9			

Note:

In 2012, the Total Number of School Target Population is 20,614 for Year 1, 3, 4 & 6 and 13,893 for Year 8.

Source:

School Health Services, Ministry of Health

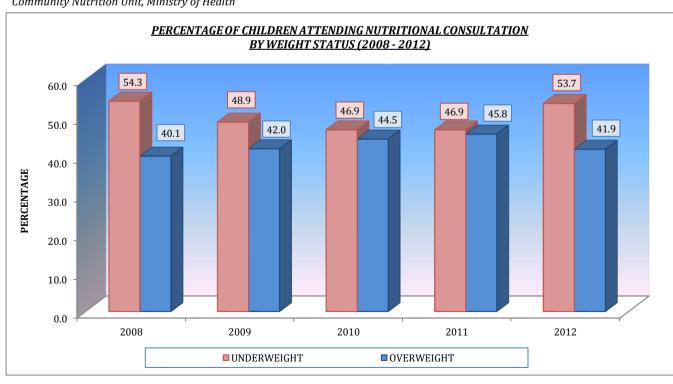
	IOTHER & CHILD HEALTH CLINICS	PERCENTAGE OF CHILDREN ATTENDING NUTRITIONAL CONSULTATION BY WEIGHT STATUS (%) (2008 - 2012)								
(I	BELOW 5 YEARS)	2008	2008 2009 2010 2011 2012							
1.	Underweight	54.3	48.9	46.9	46.9	53.7				
2.	Overweight	40.1	42.0	44.5	45.8	41.9				
3.	Others *	5.6	9.2	8.6	7.3	4.4				
T	OTAL NUMBER OF CASES	1,331 1,158 960 1,025 881								

Note:

Others * include Healthy Eating, Low Birth Weight and Premature.

Source:

Community Nutrition Unit, Ministry of Health



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 263 work accidents were reported to the Occupational Health Division in 2012. About 89 percent were in non-health care settings. Majority of these accidents occurred at the manufacturing industry and at the construction sites. Within the healthcare sector, most of the injuries involved needlestick injuries.

TYPE OF INDUSTRIES INSPECTED BY OCCUPATIONAL HEALTH DIVISION (OHD)

- A. Agriculture, Hunting and Forestry
- B. Fishing
- C. Mining and Quarrying
- D. Manufacturing
- E. Electricity, Gas and Water Supply
- F. Construction
- G. Wholesale and Retail Trade, Repair of Motor Vehicles, Motorcycles and Personal and Household Goods
- H. Hotels and Restaurants
- I. Transport, Storage and Communications
- J. Financial Intermediation
- K. Real Estate, Renting and Business Activities
- L. Public Administration and Defence, Compulsary Social Security
- M. Education
- N. Health and Social Work
- O. Other Community, Social and Personal Service Activities
- P. Private Households with Employed Persons
- O. Extra-Territorial Organisations and Bodies

Note: The classification of industries is based on the International Labour Organisation (ILO) Classification of Industries.

WORKPLACE SURVEILLANCE BY OCCUPATIONAL HEALTH DIVISION

	PURPOSE		NON HEALTHCARE				HEALTHCARE				
	PURPUSE		2009	2010	2011	2012	2008	2009	2010	2011	2012
1.	Occupational Safety and Health 1st Inspection (Comprehensive)	66	22	22	12	14	27	29	37	12	0
2.	Workplace Survey	365	37	38	158	26	0	0	0	0	0
3.	Others - Complaints, Follow-Up, Periodic Inspection, Accidents at Workplace, Occupational / Work- Related Disease Investigation, Requests	7	20	68	63	51	0	14	0	0	12
,	TOTAL	438	79	128	233	91	27	43	37	12	12

Source: Occupational Health Division, Ministry of Health

Occupational Health Services

•	TYPES OF INJURY (NON HEALTHCARE)	2008	2009	2010	2011	2012
1.	Construction	55	28	30	57	21
2.	Manufacturing	43	20	20	59	4
3.	Engineering	37	14	16	6	15
4.	Community Service	0	6	11	22	8
5.	Electricity	5	2	1	3	0
6.	Agriculture	6	1	6	3	1
7.	Transport	14	8	1	2	0
8.	Business Activities	7	7	8	15	0
9.	Private Households	5	6	6	0	0
10.	Unspecified	0	0	0	0	184
	TOTAL	172	92	99	167	233

	TYPES OF INJURY (HEALTHCARE)	2008	2009	2010	2011	2012
1.	Needle Prick	39	44	28	52	16
2	Other Injuries *	14	6	9	9	14
	TOTAL	53	50	37	61	30

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

OCCUPATIONAL AND WORK RELATED DISEASES

	DISEASES		2009	2010	2011	2012
1.	Noise Induced Deafness	32	48	50	72	37
2.	Industrial Dermatitis	4	4	4	2	1
3.	Occupational Asthma	2	0	1	0	0
	TOTAL	38	52	55	74	38

Source:

Occupational Health Division, Ministry of Health

Tobacco Control (2012)

ТҮ	PE OF LICENSE	No. of Application Received	No. of Application Approved (Approval Letter Issued)	Percentage of Application Approved
NEW	RETAIL	10	3	30.0%
NEW	IMPORT & WHOLESALE	1	1	100.0%
RENEWAL	RETAIL	236	70	29.7%
	IMPORT & WHOLESALE	2	2	100.0%

Note:

Percentage of Application Approved =

Number of Application Approved Number of Application Received

TYPE OF LICENSE	NE	:w	RENEWAL		
TIPE OF LICENSE	RECEIVED	ISSUED	RECEIVED	ISSUED	
BRUNEI MUARA	9	3	162	47	
TUTONG	o	o	39	13	
BELAIT	1	0	32	10	
TEMBURONG	0	0	3	0	
TOTAL	10	3	236	70	
IMPORT	1	1	2	2	
CHANGE OWNER / REPLACEMENT	na	na	na	0	

Note:

na - not applicable

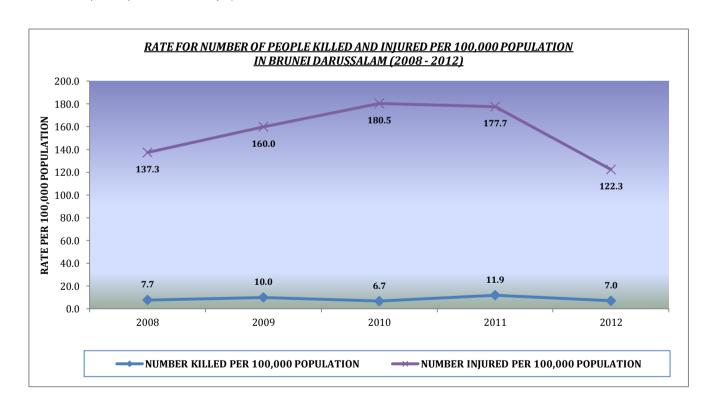
Licensing Unit, Tobacco Control Division, Ministry of Health

Road Traffic Accidents

Road traffic accidents remain as one of the top ten leading causes of deaths in Brunei Darussalam. In 2012, Brunei Darussalam reported 3310 road accidents, a decrease of 8.0% from the previous year, which had inflicted 489 injuries and caused 28 deaths.

		RO	AD TRAFFIC A	CCIDENTS (200	8 - 2012)		
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)
2008	2,775	29	7.7	515	17.8	5.3	318,816
2009	3,110	38	10.0	608	16.0	5.9	333,203
2010	3,414	26	6.7	698	26.8	3.6	348,266
2011	3,598	47	11.9	699	14.9	6.3	364,166
2012	3,310	28	7.0	489	17.5	5.4	383,478

Sources: The Royal Brunei Police Force, Prime Minister's Office Land Transport Department, Ministry of Communication



Transport Accidents

	MORBIDIT	MORBIDITY DUE TO TRANSPORT ACCIDENTS BY HOSPITALS FOR THE YEAR 2012							
	RIPAS SSB PMMPMHAMB PIHM TOTAL								
OUTPATIENT *	852	112	158	131	1,253				
INPATIENT	285 75 0 24 384								

Note:

Newly reported cases only

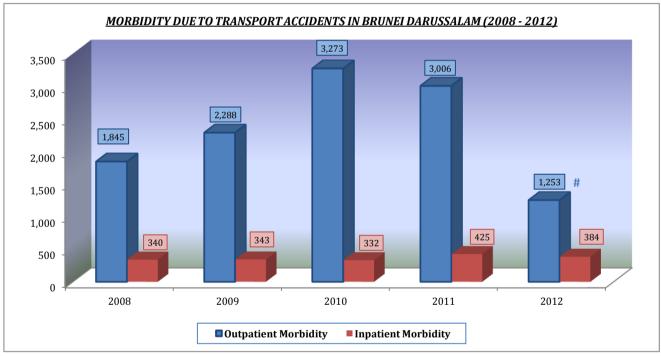
RIPAS - Raja Isteri Pengiran Anak Saleha

SSB - Suri Seri Begawan

PMMPMHAMB - Pengiran Muda Mahkota Pengiran Muda Haji Al-Muhtadee Billah

PIHM - Pengiran Isteri Hajah Mariam

Outpatient Morbidity (January - June 2012 only)



Note:

Hospital Outpatient Morbidity (January - June 2012 only)

Source:

Statistics Unit, Research and Development Section, Department of Policy and Planning, Ministry of Health

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. These include 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 BED OCCUPANCY RATE = [(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 Communication Land Transport Department

Ministry of Health

Department of Medical Services Department of Health Services