18th Edition



MINISTRY OF HEALTH BRUNEI DARUSSALAM

HEALTH INFORMATION BOOKLET 2013

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

Contents

Preface	4
Brunei Darussalam's Vision and Strategies	5
Ministry of Health's Vision and Health Strategies	6
Organisational Structure	7
Geography	8
Demography	9
Economy	9
Health Status	10
Healthcare Delivery System	10
Population	11
Population Pyramid	12
Vital Statistics	14
Health Indicators	16
Millennium Development Goals (MDGs)	17
Millennium Development Goals (MDGs) Indicators	19
Health Facilities	22
Distribution Map of Health Care Facilities	23
Human Resource	24
Government Health Expenditure	27
Hospital Services	28
Leading Causes of Death	32
Health Services	35
Maternal and Child Health Services	36
General Outpatient Attendances	39
Notifiable Infectious Diseases	41
Cancer	44
Cardiovascular Diseases	46
Age Standardised Mortality Rate (Noncommunicable Diseases)	48
Renal Services	52
Dental Health Services	53
Nutritional Status	54
Occupational Health Services	56
Tobacco Control	58
Pharmacy	59
Road Traffic Accidents	61
Definitions	62
Formulae	63
Contacts	64
Acknowledgements	65

Bismillah Hirrahman Nirrahim.

The Ministry of Health through the Department of Policy and Planning is pleased to share the Health Information Booklet 2013 publication which marks the eighteenth edition.

The department continues to enhance efforts in ensuring the provision of accurate, timely and reliable health statistical information that serves as useful reference to policy makers, planners, healthcare providers, researchers and to the public at large. This is also in meeting the needs for monitoring of our health indicators which aligns with the Millennium Development Goals and in providing health data that are regularly reported to international organisations particularly the World Health Organisation (WHO).

This 2013 publication has incorporated additional information such as relating to Pharmacy Services, Maternal and Child Health Services, Hospital Specialist Services Attendances, and Age Standardised Mortality Rate of Noncommunicable Diseases.

The implementation of the Brunei Darussalam Healthcare Information Management System (Bru-HIMS) also contributes to enhancing the efficiency of data collection process and that health information can be easily and timely accessed, hence also improving the quality of health information publication in the future.

Our sincere gratitude and appreciation to all the departments that continue to assist and give us their full cooperation in providing the relevant information in the Health Information Booklet.

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

" WAWASAN BRUNEI 2035"

Recognised for the accomplishment of its educated and highly skilled people as measured by the highest international standards.

Quality of life that is among the top 10 nations in the world.

A dynamic and sustainable economy with income per capita within the top 10 countries in the world.

To ensure that,

Strategies

Education Strategy

To prepare the youth for employment and achievement in a world that is increasingly competitive and knowledgebased. Economic Strategy

To create new employment for the people and expand business opportunities within Brunei Darussalam through the promotion of investment (foreign and domestic) both in downstream industries as well as in economic clusters beyond the oil and gas industry.

Security Strategy

To safegurad political stability and sovereignty as a nation and link our defence and diplomatic capabilities and our capacity to respond to threats from disease and natural catastrophe.

Institutional Development Strategy

To enhance good governance in both the public and private sectors, high quality public services, modern and pragmatic legal and regulatory frameworks and efficient government procedures that entail a minimum of bureaucratic 'red tapes'.

Local Business Development Strategy

To enhance opportunities for local Small and Medium-sized Enterprises (SMEs) as well as enable Brunei Malays to achieve leadership in business and industry by developing greater competitive strength.

Infrastructure Development Strategy

To ensure

continued investments by the Government and through public-private sector partnerships in developing and maintaining world-class infrastructure with special emphasis placed on education.

health and

industry.

Social Security Environment Strategy

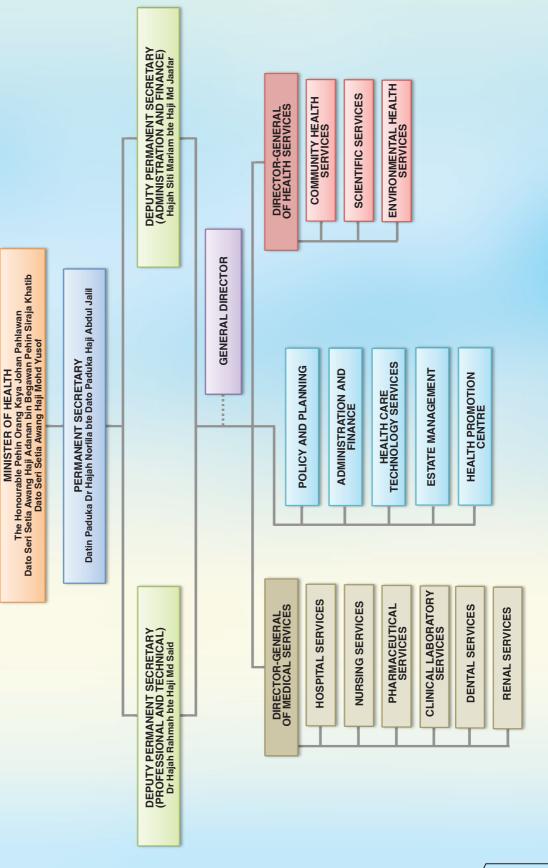
as the nation To ensure prospers, all the proper citizens are conservation properly cared of our natural environment and cultural habitat that will provide health and safety in line with the highest international practices.

Ministry of Health's Vision and Strategies

VISION 2035 "Together Towards a Healthy Nation"



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

 $\sim 5,765$ sq. km

DISTRICTS

~ 4

MUKIMS

~ 39

KAMPONGS / LOCALITY

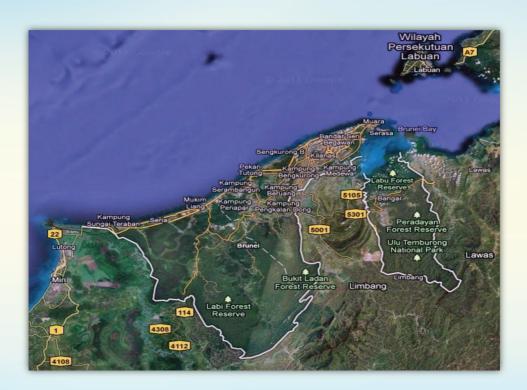
~ 430

HOUSEHOLDS

~ 68,208 (2011 Census)

AVERAGE NUMBER OF PERSONS PER HOUSEHOLD

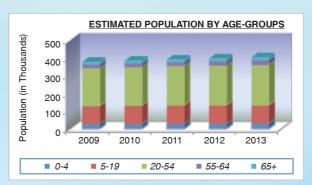
~ 5.8



Demography

The population of Brunei Darussalam is estimated to have been 406,200 in 2013 comprising of 51.8% males and 48.2% 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.

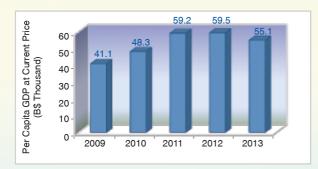
From the 2001 and 2013 population pyramids, a thicker distribution of temporary residents and others in the working age range of 25-49 years old was observed.



The demographic structure is essentially that of a young population; about 7.9% are under five years of age, 24.5% are under 15 years, and only 3.8% are 65 years or over. Brunei Darussalam has a multi-ethnic population, with Malays, comprising 65.8%, the predominant ethnic community, and Chinese, with 10.2%, 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 and reducing reliance on hydrocarbon resources. Government policies increasingly emphasize economic and commercial viability in supporting development spending. Accelerated structural reforms and 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 7.8 per 1000 live births in 2013. 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 9.7 per 1000 live births in 2013. Data analysis from 2004-2013 showed over two thirds of deaths occurred during early and late neonatal periods, mainly due to perinatal conditions and congenital abnormalities. In 2013, deaths occurring at infant period (less than 1 year) account for 80% of total deaths in U5MR.

Brunei Darussalam has a consistently very low maternal mortality ratio (MMR). In 2013, the MMR was calculated at 15.0 per 100,000 live births which is equivalent to 1 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), 16 health and maternal and child health clinics, four 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 community-based 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.

Note:

Writeup based on 'ASEAN Country Health Profile'

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.

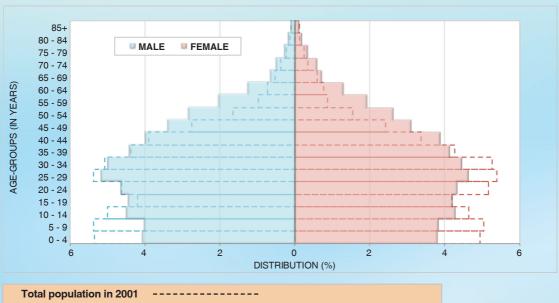
<u>Estimated</u>	Estimated Population			<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Total	(in thousands)	:	380.1	386.8	393.372	399.8	406.2
Male	(in thousands)	:	196.3	199.8	203.144	206.7	210.3
Female	(in thousands)	:	183.8	187.0	190.228	193.1	195.9
Sex ratio	(Male per 100 Female)	:	107	107	107	107	107
Persons	(per sq. km)	:	66	67	68	69	70
Annual rate	of increase	:	1.4%	1.8%	1.7%	1.6%	1.6%
Population r	median age (years)	:	26.6	27.6	27.6	28.0	28.5
Age Struct	ure (in thousands)						
0 - 4		:	29.3	29.8	30.323	31.1	32.0
5 - 19		:	100.6	102.4	104.079	103.5	102.6
20 - 54		:	214.9	218.8	222.540	226.0	229.6
55 - 64		:	21.8	22.2	22.562	24.5	26.5
65 & Over		:	13.5	13.6	13.868	14.7	15.5
Race (in th	ousands)						
Malay *		:	249.7	254.1	258.446	262.8	267.2
Chinese		:	39.2	39.9	40.534	41.0	41.6
Others		:	91.2	92.8	94.392	96.0	97.4
District (in	thousands)						
Brunei-Mua	ra	:	270.4	275.3	279.924	285.3	290.5
Belait		:	58.7	59.7	60.744	61.5	62.5
Tutong		:	42.4	43.1	43.852	44.1	44.3
Temburong		:	8.6	8.7	8.852	8.9	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 (2013)

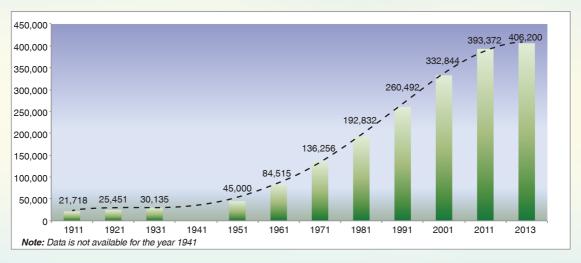


Total population in 2013

up of male and female population respectively.

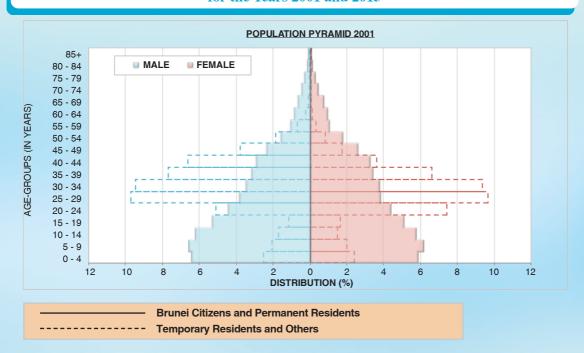
Population pyramid shows percentage distribution of population by gender and age-groups. For example, (0 - 4) age-group for the year 2013 is represented with 7.9% of total population in which 4.1% and 3.8% are made

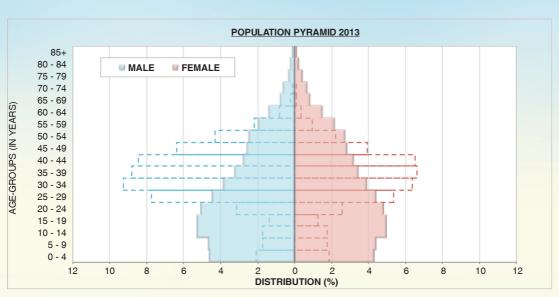
Population Trend of Brunei Darussalam (1911 - 2013)



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

Population Pyramid by Age-Group, Gender and Residential Status for the Years 2001 and 2013





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

Vital Statistics

		<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>
Crude Birth Rate						
(per 1,000 Population)	:	17.4	16.6	17.1	17.3	16.4
General Fertility Rate						
(per 1,000 Female Population Aged (15-49))	:	59.7	56.7	58.8	59.9	57.5
Total Fertility Rate		4.0	4.0	4.0	4.0	, ,
(per Female Population Aged (15-49))	:	1.9	1.8	1.9	1.9	1.9
Crude Death Rate (per 1,000 Population)		3.1	3.1	3.1	3.0	3.4
Infant Mortality Rate	•	5.1	5.1	5.1	3.0	3.4
(per 1,000 Live Births)		7.4	6.1	8.3	9.3	7.8
Late Fetal Death Ratio		7	0.1	0.0	0.0	, .0
(per 1,000 Live Births)	:	4.8	5.5	3.7	3.9	5.5
Perinatal Mortality Ratio						
(per 1,000 Live Births)	:	8.9	7.8	6.8	7.5	8.4
Early Neonatal Mortality Rate						
(per 1,000 Live Births)	:	4.1	2.3	3.1	3.6	2.8
Late Neonatal Mortality Rate						
(per 1,000 Live Births)	:	1.2	1.7	2.1	1.7	0.9
Neonatal Mortality Rate						
(per 1,000 Live Births)	:	5.3	4.1	5.2	5.4	3.7
Post Neonatal Mortality Rate						
'1 '	:	2.1	2.0	3.1	3.9	4.0
Under 5 Mortality Rate						
(per 1,000 Live Births)	:	8.2	7.3	10.0	10.3	9.7
Number of Maternal Deaths*	:	1	1	0	3	1
Maternal Mortality Ratio						
(per 100,000 Live Births)	:	15.1	15.6	0.0	43.4	15.0
Maternal Mortality Ratio						
(per 1,000 Live Births)	:	0.15	0.16	0.00	0.43	0.15
Life Expectancy At Birth - Total	:	77.6	77.7	77.1	78.1	77.1
- Male	:	77.3	77.5	75.6	76.3	75.7
- Female	:	77.9	77.8	78.5	79.9	78.4
Percentage of Newborns Weighing At Least 2500g At Birth		88.8	89.3	88.1	87.9	88.2
Percentage of Deliveries by Trained Health Personnel	:	99.9	99.8	99.7	99.8	99.7
Literacy Rate (%) - Total	:	96.1	96.0	96.4	96.8	97.2
- Male	:	97.3	97.4	97.6	97.8	98.1
- Female	:	94.6	94.6	95.2	95.8	96.3
Per Capita GDP at current prices (B\$) Thousand		41.1	48.3	59.2	59.5	55.1

Note:

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.

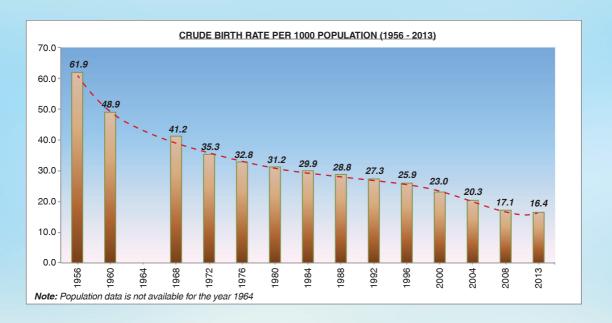
Vital Statistics

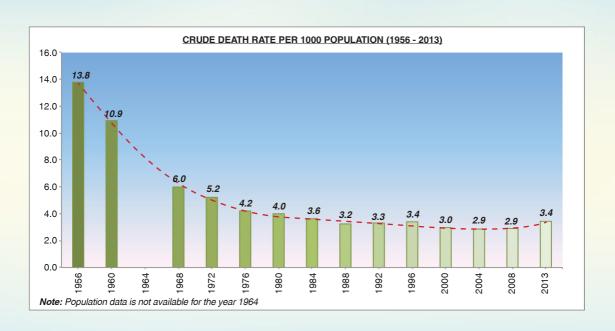
Country	Life Expectancy at Birth (MALE)	Life Expectancy at Birth (FEMALE)	Infant Mortality Rate (per 1000 livebirths)	Under-five Mortality Rate (per 1000 livebirths)	Maternal Mortality Ratio (per 100,000 livebirths)
Latest available year		20	12		2013
BRUNEI DARUSSALAM	76	78	7	8	27
MALAYSIA	72	76	7	9	29
SINGAPORE	80	85	2	3	6
AUSTRALIA	81	85	4	5	6
AUSTRIA	78	83	3	4	4
BELGIUM	78	83	3	4	6
CZECH REPUBLIC	75	81	3	4	5
DENMARK	78	82	3	4	5
FINLAND	78	84	2	3	4
FRANCE	79	85	3	4	9
GERMANY	78	83	3	4	7
GREECE	78	83	4	5	5
ICELAND	81	84	2	2	4
IRELAND	79	83	3	4	9
ITALY	80	85	3	4	4
JAPAN	80	87	2	3	6
REPUBLIC OF KOREA	78	85	3	4	27
LUXEMBOURG	80	84	2	2	11
NETHERLAND	79	83	3	4	6
NEW ZEALAND	80	84	5	6	8
NORWAY	80	84	2	3	4
OMAN	74	78	10	12	11
PORTUGAL	77	84	3	4	8
SPAIN	79	85	4	5	4
SWEDEN	80	84	2	3	4
SWITZERLAND	81	85	4	4	6
UK	79	83	4	5	8

REFERENCE WORLD HEALTH STATISTICS 2014, WHO PUBLICATION

Health Indicators

The crude birth rate of Brunei Darussalam has declined from 23.0 in 2000 to 16.4 per 1000 population in 2013 whilst the crude death rate is 3.4 per 1000 population in 2013.





Millennium Development Goals (MDGs)

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 (2013 data)					
Goal 1 : Eradicate Extreme Poverty								
Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger.		Prevalence of underweight children under-five years of age (%)	9.6 *					
Goal 2 : Achieve Universal Primary	Goal 2 : Achieve Universal Primary Education							
Goal 3: Promote Gender Equality a	Goal 3: Promote Gender Equality and Empower Women							
Goal 4: Reduce Child Mortality								
Target 4.A:	4.1	Under-five mortality rate (per 1,000 live births)	9.7					
Reduce by two-thirds, between 1990 and 2015, the under-five	4.2	Infant mortality rate (per 1,000 live births)	7.8					
mortality rate	4.3	Proportion of 1 year-old children immunised against measles (%)	96.0					
Goal 5: Improve Maternal Health								
Target 5.A:	5.1	Maternal mortality ratio (per 100,000 live births)	15.0					
Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.2	Proportion of births attended by skilled health personnel (%)	99.7					
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)	13.0					
	5.5	Antenatal care coverage (at least one visit and at least four visits) (%)						
	5.6	Unmet need for family planning (%)						

Note

^{* - 2}nd National Health and Nutritional Status Survey 2009

^{... -} not available

Millennium Development Goals (MDGs)

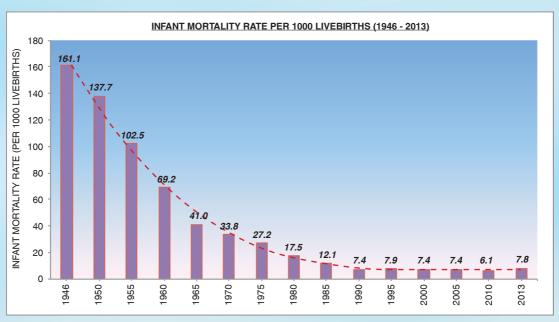
Millennium Development Goals (MDGs)							
Goals and Targets (from the Millennium Declaration)	Indicators for Monitoring progress	Brunei Darussalam's Current Status Related to Health (2013 data)					
Goal 6: Combat HIV/AIDS, Malaria	nd Other Diseases						
Target 6.A: Have halted by 2015 and begun to	6.1 HIV prevalence among population aged 15-24 years (%)	1.3					
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 (%)						
Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it	6.5 Proportion of population with advanced HIV infection with access to anti-retroviral drugs (%	100.0					
Target 6.C: Have halted by 2015 and begun to	6.6 Incidence and death rates associated with malaria (per 100,000 population)	Incidence Rate (1.9) Death Rate (0.0)					
reverse the incidence of malaria and other major diseases	6.7 Proportion of children under 5 sleeping under insecticide-treated bednets (%)						
	6.8 Proportion of children under 5 with fever who a treated with appropriate anti-malarial drugs (%)						
	6.9 Incidence, prevalence and death rates associated with tuberculosis (per 100,000 population)	Incidence Rate (53.0) Prevalence Rate (73.8) Death Rate (3.8)					
	6.10 Proportion of tuberculosis cases detected and cured under directly observed treatment short course (%)	100.0					
Goal 7: Ensure Environmental Sus	ainability						
Goal 8: Develop A Global Partners	ip For Development						

Note:

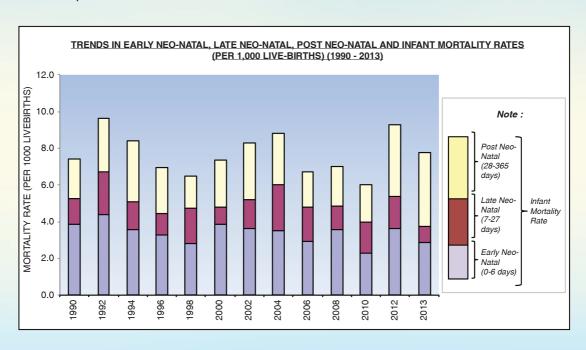
... - not available

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.



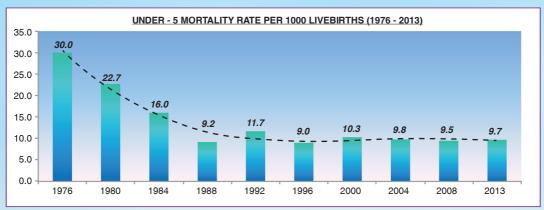
Brunei Darussalam's infant mortality rate has reached a steady state since 1990 and is on par with figures in developed nations. Infant mortality rate has declined rapidly from 50.8 per 1000 livebirths in 1962 to 7.8 per 1000 livebirths in 2013.



Millennium Development Goals (MDGs) Indicators

Under-5 mortality rate has gradually reduced from 30 deaths per 1000 livebirths in 1976 to 9.7 deaths per 1000 livebirths in 2013.

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.



LEADII	LEADING CAUSES OF UNDER 5 MORTALITY IN BRUNEI DARUSSALAM (2009 - 2013)								
	2009	2010	2011	2012	2013				
1	Certain Conditions Originating In The Perinatal Period	Congenital Malformations, Deformations and Chromosomal Abnormalities	Certain Conditions Originating In The Perinatal Period	Certain Conditions Originating In The Perinatal Period 38	Certain Conditions Originating In The Perinatal Period 26				
2	Congenital Malformations, Deformations and Chromosomal Abnormalities	Certain Conditions Originating In The Perinatal Period	Congenital Malformations, Deformations and Chromosomal Abnormalities 23	Congenital Malformations, Deformations and Chromosomal Abnormalities 9	Congenital Malformations, Deformations and Chromosomal Abnormalities				
3	Heart Diseases	Septicaemia 1	Heart Diseases	Septicaemia 2	Cancer 3				
4	Septicaemia	Cancer	Accidental Drowning and Submersion	Cancer	Transport Accidents				
	1 Acute Upper respiratory Infection	1 Heart Diseases	2 Meningococcal Infection	2 Heart Diseases	3 Heart Diseases				
5	1	1	1	2	2				
	Influenza & Pneumonia	Cerebrovascular Diseases	Septicaemia	Influenza & Pneumonia	Septicaemia				
6	1	1	1	2	1				
7	Falls	Bronchitis, Chronic & Unspecified Emphysema & Asthma	Cancer	Bronchitis, Chronic & Unspecified Emphysema & Asthma	Influenza & Pneumonia				
	1	1	1	1	1				
С	Accidental Drowning and Submersion		Influenza & Pneumonia	Assault	Unspecified Acute Lower Respiratory Infection				
	1	0	1	1	1				
OTHERS **	4	8	12	14	13				
TOTAL	54	47	67	71	65				

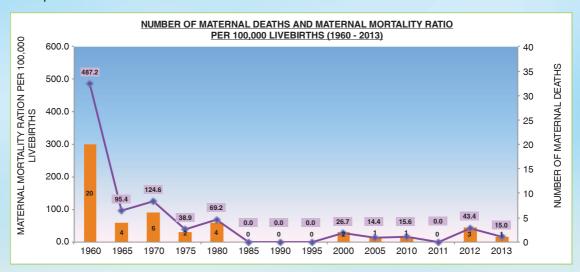
Note:

- * No other single cause of death.
- ** Remainders.

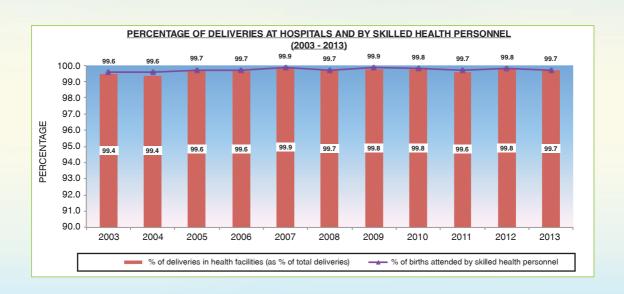
Millennium Development Goals (MDGs) Indicators

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 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.



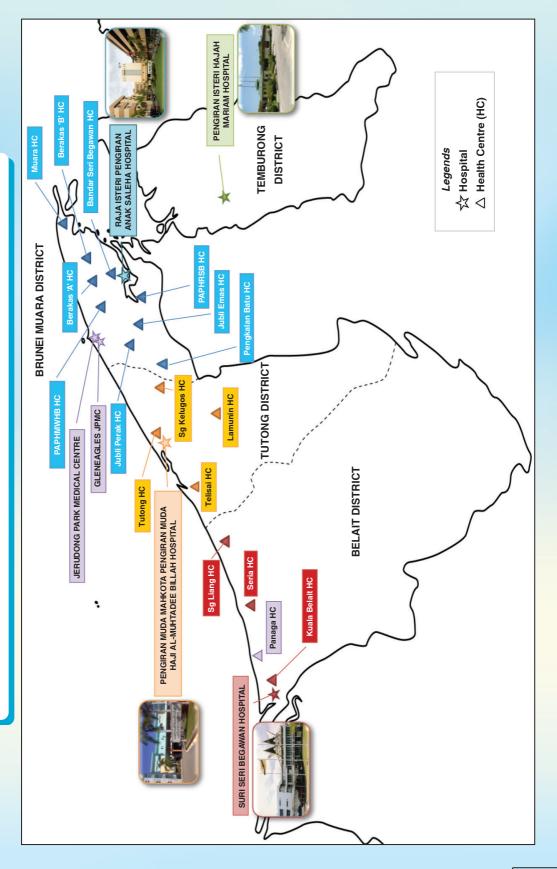
Health Facilities (2013)

MEDICAL CARE	<u>NUMBER</u>
- HOSPITALS (4 GOVERNMENTS + 2 PRIVATES (1))	6
- MEDICAL CLINICS (Ministry of Defence)	9 (2)
- DIALYSIS CENTRES	7
- DENTAL CLINICS:	
GOVERNMENTS	20
ARMY	7
PRIVATES	10
HEALTH SERVICES	
- HEALTH CENTRES (16 GOVERNMENTS + 1 PRIVATE (3))	17
- HEALTH/MATERNAL AND CHILD HEALTH CLINICS	16
- TRAVELLING HEALTH CLINICS	4
- FLYING MEDICAL SERVICES	2
DENTAL SERVICES	
- DENTAL SERVICES AT:	
HOSPITALS	4
HEALTH CENTRES	1
HEALTH CLINICS	20
STATIC SCHOOL CLINICS	43
MOBILE SQUAD	12
TRAVELLING (FLYING TEAM)	0

Note:

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

Distribution Map of Health Care Facilites (2013)

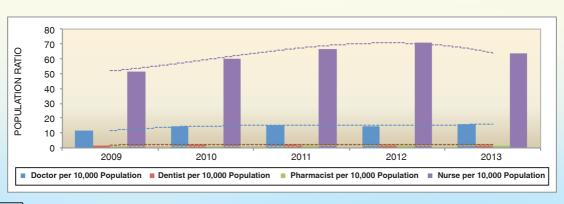


Human Resource in Health

Human Resources for Health for 2013		Government	Army	Private	То	tal		
	Male	Local	75	6	13	94	369	
	IVIAIC	Foreign	242	0	33	275	309	
Doctors (1)	Female	Local	127	4	14	145	287	
	I emale	Foreign	116	0	26	142	201	
		Total	560	10	86	65	6	
Population per D	octor		61	9				
Doctor per 10,00	0 Populatio	n				1	6	
	Male	Local	14	2	6	22	50	
	IVIAIC	Foreign	18	3	7	28	30	
Dentists (1)	Female	Local	40	1	1	42	57	
	Tomaic	Foreign	11	2	2	15	<i>3,</i>	
		Total	83	8	16	10	7	
Population per D	entist					37	96	
Dentist per 10,00	0 Populatio	n				3		
	Male	Local	6		0	6	8	
		Foreign	1		1	2		
Pharmacists (2)	Female	Local	37		9	46	54	
		Foreign	0		8	8		
		Total	44		18	62		
Population per P	harmacist					65	52	
Pharmacist per 1	0,000 Popu	lation				2	!	
	Male	Local	413	10	30	453	520	
		Foreign	33	0	34	67		
Nurses (3)	Female	Local	1,640	15	81	1,736	2,076	
		Foreign	171	0	169	340		
		Total	2,257	25	314	2,5	96	
Population per N						15		
Nurse per 10,000	Nurse per 10,000 Population						4	
		Male						
Midwives	(3)	Female	434	8	8	450		
	Total 434 8 8							
	Population per Midwife					90		
Midwife per 10,0	00 Populatio	on				1		

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	Psychiatrists per 10 000 population
Latest available year		(2006	- 2013)		(2006 - 2010)
BRUNEI DARUSSALAM	15.0	77.3	2.3	1.2	< 0.05
MALAYSIA	12.0	32.8	3.6	4.3	0.1
SINGAPORE	19.2	63.9	3.3	3.9	0.3
AUSTRALIA	32.7	106.5	5.4	10.2	1.3
AUSTRIA	48.3	79.1	5.7	6.9	2.0
BELGIUM	29.9	157.8	7.2	11.9	
CZECH REPUBLIC	36.2	84.3	7.1	7.6	1.2
DENMARK	34.2	160.9	8.1		1.4
FINLAND	29.1	108.3	8.0	11.2	2.8
FRANCE	31.8	93.0	6.6	11.0	2.2
GERMANY	38.1	114.9	8.0	6.2	
GREECE					1.3
ICELAND	34.8	155.9	8.2	10.9	2.0
IRELAND	27.2			11.7	0.6
ITALY	40.9				0.8
JAPAN	23.0	114.9	7.9	21.5	1.0
REPUBLIC OF KOREA	21.4	50.1	4.5	6.7	0.5
LUXEMBOURG	28.2	124.7	8.4	7.3	2.1
NETHERLAND		83.8		2.0	1.9
NEW ZEALAND	27.4	108.7	4.6	10.1	1.0
NORWAY	37.4	134.0	8.6	2.6	3.1
OMAN	22.2	50.0	2.6	10.7	0.2
PORTUGAL				7.4	
SPAIN	37.0	50.8		10.3	0.9
SWEDEN	32.7	110.5	8.3		0.4
SWITZERLAND	39.4	173.6	5.4	5.5	4.1
UK	27.9	88.3	5.4	6.7	1.5

REFERENCE WORLD HEALTH STATISTICS 2014, WHO PUBLICATION Note:

... - not available or not applicable

Human Resource in Health

Allied Health Professionals for 2013	Local	Non-Local	TOTAL
Audiologist	5	0	5
Biomedical Engineer	14	0	14
Cardiac Technologist / Technician	1	0	1
Clinical Psychologist	15	0	15
Dental Hygienist / Therapist	4	0	4
Dietician / Nutritionist	19	5	24
Health Education Officer	8	0	8
Health Inspector	59	1	60
Maxillofacial Prosthetist & Technologist	1	0	1
Medical Laboratory Technicians	29	0	29
Medical Record Officer	75	0	75
Medical Social Worker	16	0	16
Neurophysiology Technologist	14	0	14
Occupational Therapist	20	3	23
Optometrist	8	0	8
Orthoptist	1	1	2
Paramedic	77	0	77
Physiotherapist	15	4	19
Podiatrist	6	0	6
Prosthetist and Orthotist	1	0	1
Public Health Officer	12	0	12
Radiographer	31	1	32
Speech Language Therapist	4	0	4
Teacher for the Hearing Impaired	2	0	2

Source:

Department of Administration and Finance, Ministry of Health

Government Health Expenditure

	2011/12	2012/13	2013/14
Total Health Budget (B\$ Millions)	306.85	347.76	366.48
Health Budget as % of National Budget	7.52	8.32	8.37
Per Capita Health Budget (B\$)	780	870	902
Health Budget as % of GDP	1.32	1.46	1.64
Total Health Expenditure (B\$ Millions)	339.96	351.54	
Health Expenditure as % of Government Expenditure	8.24	8.32	
Per Capita Health Expenditure (B\$)	864	879	
Health Expenditure as % of GDP	1.46	1.48	

Note:

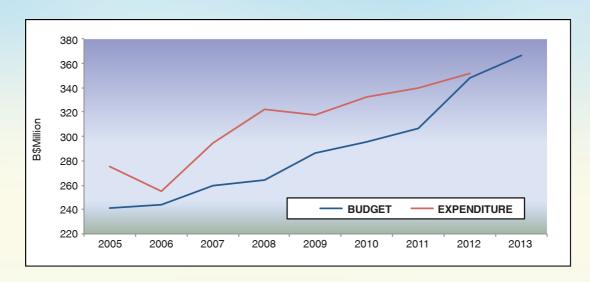
GDP - Gross Domestic Product

Not available

Source:

(Budget) - Budget Section, Ministry of Finance

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

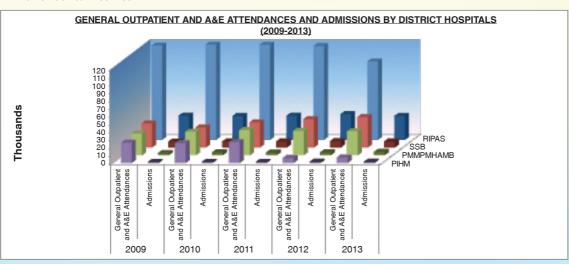


The Department of Medical Services is responsible for the delivery of hospital services in all four districts.

ACTIVITIES FOR THE YEAR 2013	RIPAS	SSB	РММРМНАМВ	PIHM	TOTAL
OUTPATIENT ACTIVITIES					
General Outpatient Attendances				16,033	16,033
Accident & Emergency (A&E) Outpatient Attendances	98,879	38,367	30,095	6,519	173,860
Specialist Outpatient Attendances	262,035	71,124	41,813	8,766	383,738
TOTAL OUTPATIENT ATTENDANCES	360,914	109,491	71,908	31,318	573,631
INPATIENT ACTIVITIES					
INI ALIENT ACTIVITIES	7				
Available Beds	619	222	103	39	983
Admissions	30,013	7,405	3,927	1,164	42,509
Discharges & Deaths	30,006	7,338	1,280	983	39,607
Patient Days	162,430	44,176	16,937	2,926	226,469
Day Patients	75,902	14,176		375	90,453
TOTAL (ADMISSIONS + DAY PATIENTS)	105,915	21,581	3,927	1,539	132,962
PERFORMANCE INDICES					
Average Number of Inpatients per Day	445	121	46	8	620
Bed Occupancy Rate	72	55	45	21	63
Average Duration of Stay (Days)	5.4	6.0	13.2	3.0	5.7
Average Turnover of Patients per Bed	48	33	12	25	40
Average Turnover Interval (Days)	2.1	5.0	16.1	11.5	3.3

Note:

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



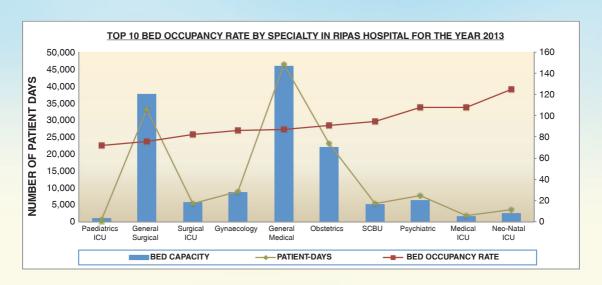
BED CAPACITY AND BED OCCUPANCY RATES (2009 - 2013)

	20	09	20	10	20	11	20	2012		2013	
HOSPITAL	Bed Capacity	Bed Occupancy Rate (%)									
RIPAS	571	70%	591	67%	607	68%	607	74%	619	72%	
SSB	212		222	50%	222	53%	222	57%	222	55%	
PMMPM- HAMB	129	21%	106	31%	107	27%	108	26%	103	45%	
PIHM	25	29%	32	21%	32	10%	39	12%	39	21%	
TOTAL	937		951	57%	968	58%	976	62%	983	63%	

Note:

... - incomplete data

The top 5 specialties in RIPAS Hospital which has the higher rates of bed occupancy for the year 2013 are Neo-Natal ICU, Medical ICU, Psychiatric, SCBU and Obstetrics.



Source:

RIPAS Hospital Monitoring Services

SPECIALIST OUTPATIENT ATTENDANCES BY CLINICAL DISCIPLINE IN RIPAS AND SSB HOSPITALS FOR THE YEAR 2013

RIPAS HOSPITAL					
CLINICAL DISCIPLINE	No. of Attendances				
Clinical Psychology	1,054				
Dental / Dental Clinic	5,380				
Diabetes & Endocrinology	8,872				
Dietition	12,763				
Eye	30,662				
Gastroenterology & Hepatology	14,819				
Gynaecology	13,544				
Haematology	11,609				
Hearing Therapy	677				
Medical	10,850				
Neuro-surgical	2,879				
Obstetrics	19,405				
Occupational Therapy	8,243				
Oral Maxillo-facial	15,822				
ORL / ENT	17,367				
Orthopaedic	17,901				
Orthotic / Prosthetic	715				
Paediatrics	7,770				
Physiotherapy	13,040				
Plaster Room	2,754				
Podiatry	3,767				
Psychiatric	7,217				
Respiratory Medicine	5,706				
Skin	17,183				
Speech Therapy	3,353				
Surgical	8,683				
TOTAL	262,035				

COR HOORITAL						
SSB HOSPITAL						
CLINICAL DISCIPLINE	No. of Attendances					
Cardiology Clinic	667					
Chest Clinic	559					
Daycare (Psychiatric)	3,448					
Dental / Dental Clinic	8,906					
Dietition	623					
Eye	7,654					
Gastro	772					
Gynaecology	3,004					
Oral Maxillo-facial	684					
Medical	8,432					
Medical Social Worker	203					
Nephropathy	410					
Neurology	55					
Neuro-surgical	222					
Nursing Personnel (Dental)	2,080					
Occupational Therapy	2,441					
Oncology	354					
ORL/ENT	3,834					
Orthopaedic	3,233					
Paediatrics	7,977					
Physiotherapy	5,896					
Podiatry	353					
Psychiatric	1,894					
Renal Unit	355					
Respiratory Medicine	342					
Skin	1,927					
Speech Therapy	475					
Surgical	4,324					
TOTAL	71 104					

SPECIALIST OUTPATIENT ATTENDANCES BY CLINICAL DISCIPLINE IN PMMPMHAMB AND PIHM HOSPITALS FOR THE YEAR 2013

	PMMPMHAMB HOSPITAL	PIHM HOSPITAL
CLINICAL DISCIPLINE	No. of Att	endances
Cardiology Clinic		42
Daycare (Psychiatric)	1,343	
Dental / Dental Clinic	10,164	4,503
Diabetes & Endocrinology		805
Dietition	376	89
Eye	6,687	913
Gynaecology	2,996	1,113
Handicapped Playgroup		148
Medical	7,542	443
Occupational Therapy	811	
Oral Maxillo-facial	325	63
ORL/ENT	2,139	
Orthopaedic	344	151
Paediatrics	2,744	
Physiotherapy	3,587	225
Podiatry		37
Psychiatric	611	66
Renal Unit		168
Respiratory Medicine	384	
Skin	754	
Surgical	1,006	
TOTAL	41,813	8,766

Note:

... - not available

Leading Causes of Deaths for the Year 2013 (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	C00 - C97	Cancer (Malignant Neoplasms)	152	143	295	21.1	72.6
2	100 - 109, 120 - 152	Heart Diseases (Including Acute Rheumatic Fever)	130	53	183	13.1	45.1
3	E10 - E14	Diabetes Mellitus	68	63	131	9.4	32.3
4	160 - 169	Cerebrovascular Diseases	34	48	82	5.9	20.2
5	l10 - l15	Hypertensive Diseases	34	37	71	5.1	17.5
6	J40 - J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	35	19	54	3.9	13.3
7	J10 - J18	Influenza and Pneumonia	27	21	48	3.4	11.8
8	A40 - A41	Septicaemia	19	16	35	2.5	8.6
9	V01 - V99	Transport Accidents	22	8	30	2.1	7.4
10	P00 - P96	Certain Conditions Originating In The Perinatal Period	16	10	26	1.9	6.4
	Others		242	203	445	31.8	109.6
	тот	AL DEATHS	779	621	1,400	100.0	344.7

Leading Causes of Deaths (2009 - 2013)

No.	2009	2010	2011	2012	2013
1	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)	Cancer (Malignant Neoplasms)
	215 (18.4%)	252 (20.9%)	256 (20.7%)	280 (23.0%)	295 (21.1%)
2	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)	Heart Diseases (Including Acute Rheumatic Fever)
	185 (15.8%)	186 (15.4%)	183 (14.8%)	152 (12.5%)	183 (13.1%)
3	Diabetes Mellitus 100 (8.5%)	Diabetes Mellitus 100 (8.3%)	Diabetes Mellitus 116 (9.4%)	Diabetes Mellitus 123 (10.1%)	Diabetes Mellitus 131 (9.4%)
4	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases	Cerebrovascular Diseases
	97 (8.3%)	99 (8.2%)	86 (7.0%)	70 (5.8%)	82 (5.9%)
5	Septicaemia	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Hypertensive Diseases	Hypertensive Diseases
	52 (4.4%)	47 (3.9%)	50 (4.0%)	45 (3.7%)	71 (5.1%)
6	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Septicaemia	Hypertensive Diseases	Transport Accidents	Bronchitis, Chronic and Unspecified Emphysema & Asthma
	43 (3.7%)	39 (3.2%)	49 (4.0%)	45 (3.7%)	54 (3.9%)
7	Hypertensive Diseases	Hypertensive Diseases	Transport Accidents	Influenza and Pneumonia	Influenza and Pneumonia
	41 (3.5%)	38 (3.1%)	42 (3.4%)	41 (3.4%)	48 (3.4%)
8	Transport Accidents	Influenza and Pneumonia	Congenital Malformations, Deformations and Chromosomal Abnormalities	Bronchitis, Chronic and Unspecified Emphysema & Asthma	Septicaemia
	37 (3.2%)	28 (2.3%)	35 (2.8%)	39 (3.2%)	35 (2.5%)
9	Certain Conditions Originating In The Perinatal Period	Transport Accidents	Septicaemia	Certain Conditions Originating In The Perinatal Period	Transport Accidents
	26 (2.2%)	25 (2.1%)	29 (2.3%)	38 (3.1%)	30 (2.1%)
10	Congenital Malformations, Deformations and Chromosomal Abnormalities 25 (2.1%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 21 (1.7%)	Certain Conditions Originating In The Perinatal Period 24 (1.9%)	Septicaemia 27 (2.2%)	Certain Conditions Originating In The Perinatal Period 26 (1.9%)
Others	350 (29.9%)	373 (30.9%)	365 (29.6%)	356 (29.3%)	445 (31.8%)
GRAND TOTAL	1,171 (100.0%)	1,208 (100.0%)	1,235 (100.0%)	1,216 (100.0%)	1,400 (100.0%)

Leading Causes of Deaths for Population Below 20 years (2013)

No.	Under 1 year	1 - 4 years	5 - 9 years	10 - 14 years	15 - 19 years	< 20 years
1	Certain Conditions Originating In The Perinatal Period	Congenital Malformations, Deformations and Chromosomal Abnormalities	Asphyxiation / Suffocation	Epilepsy	Cancer (Malignant Neoplasms)	Certain Conditions Originating In The Perinatal Period
	26 (50.0%)	2 (15.4%)	1 (12.5%)	2 (16.7%)	3 (23.1%)	26 (26.5%)
2	Congenital Malformations, Deformations and Chromosomal Abnormalities	Unspecified Viral Encephalitis	Contact With Blunt Object	Cerebral Palsy	Transport Accidents	Congenital Malformations, Deformations and Chromosomal Abnormalities
	13 (25.0%)	2 (15.4%)	1 (12.5%)	2 (16.7%)	3 (23.1%)	16 (16.3%)
3	Sudden Infant Death Syndrome	Cancer (Malignant Neoplasms)	Viral Infection	Cancer (Malignant Neoplasms)	Cerebral Palsy	Cancer (Malignant Neoplasms)
	3 (5.8%)	2 (15.4%)	1 (12.5%)	2 (16.7%)	2 (15.4%)	8 (8.2%)
4	Heart Diseases (Including Acute Rheumatic Fever)	Encephalitis, Myelitis and Encephalo -myelitis	Aspiration Pneumonia	Haemophago -cytic Lympho- histiocytosis	Heart Diseases (Including Acute Rheumatic Fever)	Transport Accidents
	2 (3.8%)	1 (7.7%)	1 (12.5%)	1 (8.3%)	1 (7.7%)	7 (7.1%)
5	Transport Accidents	Cerebral Palsy	Diseases of Musculoskeletal System	Other Mucopoly -saccharidoses	Chronic Liver Diseases and Cirrhosis	Cerebral Palsy
	2 (3.8%)	1 (7.7%)	1 (12.5%)	1 (8.3%)	1 (7.7%)	5 (5.1%)
6	Septicaemia	Influenza and Pneumonia	III-Defined and Unspecified Causes of Mortality	Spinal Muscular Atrophy	End Stage Renal Disease	Sudden Infant Death Syndrome
	1 (1.9%)	1 (7.7%)	1 (12.5%)	1 (8.3%)	1 (7.7%)	3 (3.1%)
7	Cancer (Malignant Neoplasms)	Gastro- oesophageal Reflux Disease	Transport Accidents	Spastic Tetraplegia	Other Direct Obstetric Deaths	Heart Diseases (Including Acute Rheumatic Fever)
	1 (1.9%)	1 (7.7%)	1 (12.5%)	1 (8.3%)	1 (7.7%)	3 (3.1%)
8	Myoneural Disorder, Unspecified	Diseases of Skin and Subcutaneous Tissue	Accidental Drowning and Submersion	Diseases of Musculoskeletal System	Congenital Malformations, Deformations and Chromosomal Abnormalities	Accidental Drowning and Submersion
	1 (1.9%)	1 (7.7%)	1 (12.5%)	1 (8.3%)	1 (7.7%)	3 (3.1%)
9	Unspecified Acute Lower Respiratory Infection	Transport Accidents	-	Accidental Drowning and Submersion	-	Epilepsy
	1 (1.9%)	1 (7.7%)		1 (8.3%)		2 (2.0%)
10	Aspiration Pneumonia	Accidental Drowning and Submersion 1 (7.7%)	-	-	-	Diseases of Musculoskeletal System 2 (2.0%)
Other	1 (1.9%)	1 (1.170)				23 (23.5%)
Diseases	1 (1.9%)	-	-	-	-	` '
GRAND TOTAL		13 (100.0%)	8 (100.0%)	12 (100.0%)	13 (100.0%)	98 (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, 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	2009	2010	2011	2012	2013
Ante Natal attendances	48,323	44,068	44,749	42,187	44,418
2. Post Natal attendances	9,340	12,169	8,698	10,312	10,167
3. Child (<5) attendances	124,785	111,199	106,377	185,379	94,501
4. General O/P attendances in Health Centres / Clinics	538,999	465,448	475,068	467,792	445,127
-Extended Hours + After Office Hours Services	74,809	79,794	78,628	75,301	76,638
5. No. of students medically examined (Year 1, 4 & 8)	21,149	20,091	13,820	12,616	17,728
6. No. of students screened (Year 1, 3, 4, 6 & 8)	73,696	28,548	29,160	33,228	27,270

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	2009	2010	2011	2012	2013
% of infants immunised against					
- Tuberculosis (at birth)	100.0	95.4	96.0	95.4	100.0
- Diphtheria/Tetanus/Whooping Cough (Tetract-HIB)3	99.4	95.4	97.0	95.4	99.6
- Poliomyelitis IPV3	99.5	99.0	100.0	99.0	99.1
- Hepatitis B3	100.0	95.8	93.0	95.8	97.9
- Measles, Mumps and Rubella 1 (MMR1)	100.0	94.4	91.0	98.6	96.0
% of pregnant women (primigravida) immunised against					
- Tetanus (TT2)	75.0	75.6	78.2	75.6	78.7

Note:

Red text - Millennium Development Goals (MDGs) Indicators

Source:

Maternal and Child Health (MCH) Clinic Data

Maternal and Child Health

ANTENATAL REGISTRATION (2013)

	MCH CLINIC (MINISTRY OF HEALTH)	MRS CLINIC (MINISTRY OF DEFENCE)	JERUDONG PARK MEDICAL CENTRE (JPMC)	TOTAL
NO. OF PREGNANT WOMEN REGISTERED	6,153	127	238	6,518

Note:

In 2013, 96.3% of pregnant women in Brunei Darussalam were registered in government health facilities; 94.4% were registered in MCH clinics under the Ministry of Health.

PREVALENCE OF ANAEMIA AMONG PREGNANT WOMEN AT FIRST ANTENATAL CLINIC PRESENTATION (2013)

	MATERNAL AND CHILD HEALTH (MCH) CLINIC DATA				
	BRUNEI MUARA	BELAIT	TUTONG	TEMBURONG	TOTAL
NO. OF WOMEN WITH DOCUMENTED RESULT	3,838	816	557	123	5,334
NORMAL [11 g/dl & above]	3,174	716	473	107	4,470
MILD ANAEMIA [10 to 10.9 g/dl]	459	75	66	7	607
MODERATE ANAEMIA [7 to 9.9 g/dl]	201	24	18	9	252
SEVERE ANAEMIA [6.9 g/dl or less]	4	1	0	0	5
TOTAL NO. OF PREGNANT WOMEN WITH ANAEMIA	664	100	84	16	864
% ANAEMIA	17.3	12.3	15.1	13.0	16.2

Note:

- All pregnant women in Brunei Darussalam are routinely screened for anaemia at the first antenatal visit.
- In 2013, 6153 pregnant women were registered in MCH clinics throughout the country.
- Of these, 5334 (86.7%) had their full blood count (FBC) results documented.
- 16.2% of these women were found to have anaemia at the first antenatal clinic presentation.
- Of 1870 (35%) women who presented for the first time in the second trimester, 274 were diagnosed to have mild anaemia. However, the correct definition of anaemia in the second trimester is an Hb level of 10.5 g/dl or less. This means that the number of women in Brunei Darussalam diagnosed to have mild anaemia in the second trimester could have been overestimated.

Source

Maternal and Child Health (MCH) Clinic Data

Maternal and Child Health

PREVALENCE OF ANAEMIA AMONG PREGNANT WOMEN AT FIRST ANTENATAL CLINIC PRESENTATION (2013)

		MRS CLINIC DATA (MINISTRY OF DEFENCE)							
	BERAKAS	LUMUT	TOTAL						
NO. OF PREGNANT WOMEN REGISTERED	49	3	39	20	16	127			
NO. OF PREGNANT WOMEN DOCUMENTED TO HAVE ANAEMIA	7	0	1	1	0	9			
% ANAEMIA	14.3	0.0	2.6	5.0	0.0	7.1			

Source:

Maternal and Child Health (MCH) Clinic Data

REGISTERED LIVEBIRTHS BY BIRTH WEIGHT (2009 - 2013)

Divide Majorlet	NUMBER OF LIVEBIRTHS							
Birth Weight	2009	2010	2011	2012	2013			
At Least 2500g	5,843	5,691	5,896	6,054	5,850			
Less Than 2500g (LOW BIRTH WEIGHT)	741	686	798	834	791			
- Less Than 1500g (VERY LOW BIRTH WEIGHT)	104	93	102	124	88			
- Less Than 1000g (EXTREMELY LOW BIRTH WEIGHT)	50	39	37	42	37			
Not Known	41	35	30	21	39			
TOTAL	6,625	6,412	6,724	6,909	6,680			
% Low Birth Weight (Less Than 2500g)	11.2	10.7	11.9	12.1	11.8			

Source:

Birth , Death and Adoption Section, Immigration and National Registration Department, Ministry of Home Affairs

Maternal and Child Health

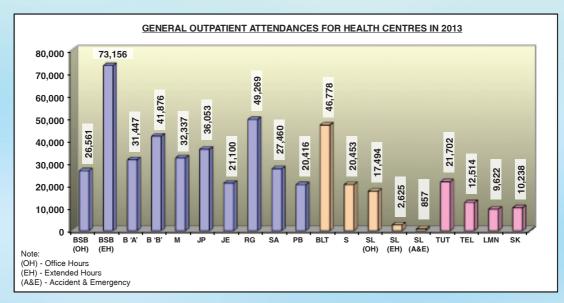
TOTAL NUMBER OF REGISTERED LIVEBIRTHS BY AGE OF MOTHER (2009 - 2013)

Age Group of Mother	2009	2010	2011	2012	2013
Under 15	6	0	3	7	7
15-19	319	281	244	268	221
20-24	1,210	1,159	1,142	1,074	1,097
25-29	2,141	2,083	2,134	2,201	2,124
30-34	1,756	1,739	1,913	2,031	1,886
35-39	915	884	992	1,043	1,044
40-44	265	245	274	266	279
45-49	9	19	19	18	20
50 above	0	0	0	1	1
unknown	4	2	3	0	1
TOTAL	6,625	6,412	6,724	6,909	6,680
Adolescent Fertility Rate (per 1,000 female population aged (15-19))	19.6	16.9	14.3	15.7	13.0
General Fertility Rate (per 1,000 female population aged (15-49))	59.7	56.7	58.8	59.9	57.5
Total Fertility Rate (per female population aged (15-49))	1.9	1.8	1.9	1.9	1.9

Source:

Birth , Death and Adoption Section, Immigration and National Registration Department, Ministry of Home Affairs

General Outpatient Attendances for Health Centres (2013)



BRUNEI MUARA HEALTH CENTRES

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

: Pengkalan Batu Health Centre (started in July 2012)

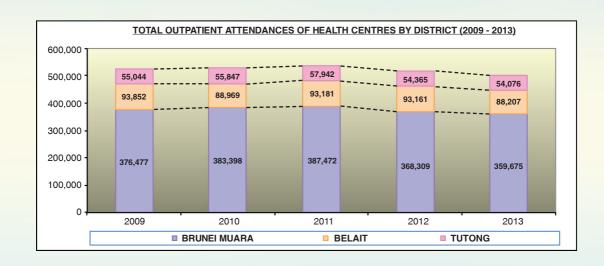
РΒ

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



General Outpatient Attendances

OUTPATIENT ATTENDANCES FOR TRAVELLING CLINIC (2009 - 2013)

YEAR	Buau			Sg Mau			Total		
ILAN	Male	Female	Total	Male	Female	Total	Male	Female	Total
2009	23	33	56	49	38	87	72	71	143
2010	35	56	91	54	42	96	89	98	187
2011	39	58	97	24	57	81	63	115	178
2012	43	55	98	44	81	125	87	136	223
2013	50	63	113	36	60	96	86	123	209

Note:

Sg Mau Health Clinic closed starting November 2013. The clinic will be used by Emergency Medical Ambulance Services (EMAS), SSB Hospital during flood season.

OUTPATIENT ATTENDANCES FOR FLYING MEDICAL SERVICE (2009 - 2013)

Flying Medical Services started its service of providing medical care to rural areas in Tutong and Belait Districts in 1964. The service was initially mainly provided by nursing staff with occasional visits by the doctors. It finally became a doctor-led service in 1998. Currently, the service is provided by doctors and nurses from the Division of Primary Healthcare Services from the Department of Health Services, Ministry of Health

YEAR	BELAIT		TUT	Total	
ILAII	Kg Sukang	Kg Melilas	Kg Supon Besar	Kg Mapol	Total
2009	337	211	147	175	870
2010	237	177	156	218	788
2011	297	171	189	235	892
2012	156	74	59	107	396
2013	207	107	-	-	314

Note:

Flying Medical Service to Tutong District at Kg Supon Besar and Kg Mapol was stopped in October 2012 because of a better road access which the provision of health services has been taken over by Tutong District Health Services.

Notifiable Infectious Diseases (2013)

Notification of infectious diseases is required by Brunei law under the 'Infectious Diseases Act'. 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	КВ	unknown	TOTAL
FOOD AND WATER BORNE DIS	SEASES					
Cholera	0	0	0	0	0	0
Dysentery (Shigella)	6	0	0	0	0	6
Food Poisoning	20	1	0	59	0	80
Gastroenteritis	277	2	0	161	0	440
Hepatitis A	3	0	0	1	0	4
Para/Typhoid Fever	0	0	0	0	0	0
Salmonella Infection	26	1	0	3	0	30
Total	332	4	0	224	0	560
PERSON TO PERSON TRANSM	/IITTED DISEA	SES				
Chicken Pox	1,788	343	71	592	0	2,794
Ebola Fever	0	0	0	0	0	0
Hand, Foot & Mouth Disease	1,472	253	43	452	0	2,220
Influenza A	0	0	0	0	0	0
Influenza B	0	0	0	0	0	0
Influenza Others	0	0	0	0	0	0
Leprosy	0	0	0	0	0	0
Meningitis	6	1	0	1	0	8
Scarlet Fever	1	0	0	2	0	3
Severe Acute Respiratory Syndrome	0	0	0	0	0	0
Total	3,267	597	114	1,047	0	5,025
VACCINE PREVENTABLE DISE	ASES					
Diphtheria	0	0	0	0	0	0
Hepatitis B	0	0	0	0	0	0
Measles	0	0	0	0	0	0
Mumps	6	2	0	2	0	10
Pertussis	1	0	0	0	0	1
Acute Flaccid Paralysis (AFP)	1	0	0	0	0	1
Rubella	0	0	0	2	0	2
Smallpox	0	0	0	0	0	0
Tetanus	0	0	0	0	0	0
Tetanus Neonatorum	0	0	0	0	0	0
Tuberculosis	133	30	12	37	0	212
Total	141	32	12	41	0	226

Note:

BM - Brunei Muara District TUT - Tutong District TEMB - Temburong District KB - Belait District

Notifiable Infectious Diseases (2013) cont'd

DISEASES	ВМ	TUT	TEM	КВ	unknown	TOTAL
SEXUALLY TRANSMITTED DIS	EASES					
AIDS	0	0	0	0	2	2
Chancroid	0	0	0	0	0	0
Chlamydial Infection	127	9	3	11	1	151
Genital Herpes	2	0	0	0	0	2
Gonorrhoea Infections	123	10	1	14	4	152
Hepatitis C	0	0	0	0	0	0
HIV * (Local only)	9	0	0	3	0	12
Non Gonococcal Urethritis	0	0	0	0	0	0
Opthalmia Neonatorum	0	0	0	0	0	0
Syphilis (All forms)	16	1	0	0	0	17
Other STI - Genital Warts, Trichomonas Vaginalis	3	0	0	0	0	3
Total	280	20	4	28	7	339
VECTOR BORNE DISEASES						
Chikugunya	9	1	1	2	0	13
Dengue Fever	300	60	26	28	0	414
Dengue Haemorhagic Fever	2	0	0	0	0	2
Filariasis	0	0	0	0	0	0
Leptospirosis	2	1	0	0	0	3
Malaria	3	1	4	1	0	9
Plague	0	0	0	0	0	0
Typhus	0	2	0	0	0	2
West Nile Fever	0	0	0	0	0	0
Yellow Fever	0	0	0	0	0	0
Total	316	65	31	31	0	443
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	3					
Conjunctivitis (Chlamydia)	2	0	0	0	0	2
Encephalitis	0	0	0	0	0	0
Japanese Encephalitis	1	0	0	17	0	18
Puerperal Infection	0	0	0	0	0	0
Viral Encephalitis	1	0	0	0	0	1
Viral Hepatitis	0	0	0	0	0	0
Total	4	0	0	17	0	21
Grand Total	4,340	718	161	1,388	7	6,614

Note

* Indicate incidence of AIDS/HIV cases amongst locals only.

BM - Brunei Muara District

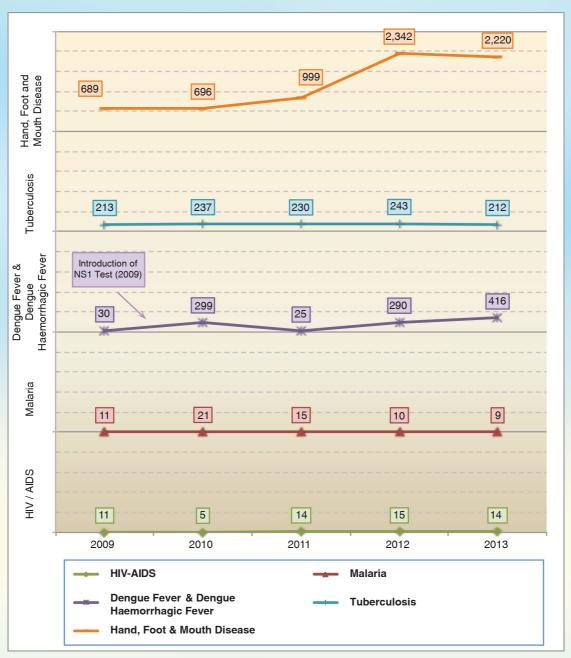
TUT - Tutong District

Source:

Disease Control Division, Ministry of Health

TEMB - Temburong District KB - Belait District

Trend of Notifiable Infectious Diseases (2009 - 2013)



Note:

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

Mortality due to Cancer for the Year 2013

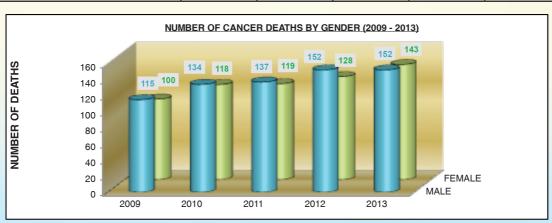
The top three causes of cancer deaths among male in Brunei Darussalam for 2013 were Trachea, Bronchus and Lung; Rectum and Anus; and Liver and Intrahepatic Bile Ducts; and for female cancer deaths were Trachea, Bronchus and Lung; Breast; and Ovary.

TYPE OF CANCER	MALE	FEMALE	TOTAL
Trachea, Bronchus and Lung	36	28	64
Rectum and Anus	18	12	30
Liver and Intrahepatic Bile Ducts	13	8	21
Breast	0	20	20
Colon	12	5	17
Lip, Oral Cavity and Pharynx	11	2	13
Ovary		13	13
Leukaemia	9	4	13
Cervix Uteri		11	11
Non-Hodgkin's Lymphoma	7	4	11
Stomach	5	5	10
Prostate	10		10
Meninges, Brain and Other Parts of Central Nervous System	5	3	8
Pancreas	3	3	6
Multiple Myeloma and Malignant Plasma Cell Neoplasms	3	2	5
Other and Unspecified Parts of Uterus		4	4
Bladder	4	0	4
Oesophagus	1	0	1
Larynx	1	0	1
Skin	0	1	1
Remainder	14	18	32
TOTAL	152	143	295

Note:

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

YEAR	2009	2010	2011	2012	2013
TOTAL NUMBER OF CANCER DEATHS	215	252	256	280	295



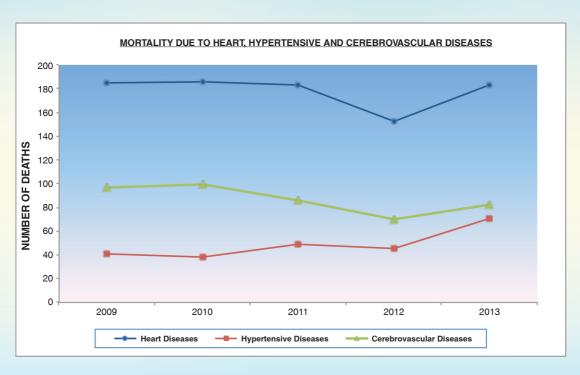
Trend in Leading Cancer Deaths in Brunei Darussalam (2009 - 2013)

No.	2009	2010	2011	2012	2013
1	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung	Trachea, Bronchus and Lung
	37 (17.2%)	45 (17.9%)	50 (19.5%)	44 (15.7%)	64 (21.7%)
2	Liver and Intrahepatic Bile Duct	Liver and Intrahepatic Bile Duct	Rectum and Anus	Rectum and Anus	Rectum and Anus
	24 (11.2%)	26 (10.3%)	28 (10.9%)	30 (10.7%)	30 (10.2%)
3	Cervix Uteri	Breast	Breast	Liver and Intrahepatic Bile Duct	Liver and Intrahepatic Bile Duct
	14 (6.5%)	22 (8.7%)	23 (9.0%)	22 (7.9%)	21 (7.1%)
4	Colon	Lip, Oral Cavity and Pharynx	Stomach	Stomach	Breast
	13 (6.0%)	20 (7.9%)	18 (7.0%)	19 (6.8%)	20 (6.8%)
5	Stomach	Rectum and Anus	Lip, Oral Cavity and Pharynx	Breast	Colon
	10 (4.7%)	18 (7.1%)	13 (5.1%)	19 (6.8%)	17 (5.8%)
6	Rectum and Anus	Colon	Prostate	Colon	Lip, Oral Cavity and Pharynx
	9 (4.2%)	15 (6.0%)	13 (5.1%)	17 (6.1%)	13 (4.4%)
7	Prostate	Meninges, Brain and Other Parts of Central Nervous System	Liver and Intrahepatic Bile Duct	Pancreas	Ovary
	9 (4.2%)	9 (3.6%)	12 (4.7%)	13 (4.6%)	13 (4.4%)
8	Non-Hodgkin's Lymphoma	Non-Hodgkin's Lymphoma	Colon	Prostate	Leukaemia
	9 (4.2%)	9 (3.6%)	10 (3.9%)	12 (4.3%)	13 (4.4%)
9	Breast	Multiple Myeloma and Malignant Plasma Cell Neoplasms	Non-Hodgkin's Lymphoma	Lip, Oral Cavity and Pharynx	Cervix Uteri
	8 (3.7%)	9 (3.6%)	9 (3.5%)	11 (3.9%)	11 (3.7%)
10	Leukaemia	Stomach	Leukaemia	Cervix Uteri	Non-Hodgkin's Lymphoma
	8 (3.7%)	8 (3.2%)	9 (3.5%)	8 (2.9%)	11 (3.7%)
Others	74 (34.4%)	71 (28.2%)	71 (27.7%)	85 (30.4%)	82 (27.8%)
GRAND TOTAL	215 (100.0%)	252 (100.0%)	256 (100.0%)	280 (100.0%)	295 (100.0%)

Mortality due to Cardiovascular Diseases for the Year 2013 (Based on ICD-10)

Mortality Trend of Cardiovascular Diseases (2009 - 2013)





Age Standardised Mortality Rate - Noncommunicable Diseases (NCDs) (2012)

AGE-GROUP	No	o. of NCDs Deat	hs	Age Standardized Mortality Rate per 100,000			
	Male	Female	Total	Male	Female	Total	
0 - 4	13	15	28	7.2	8.9	8.0	
5 - 9	1	1	2	0.5	0.5	0.5	
10 - 14	2	0	2	0.9	0.0	0.5	
15 - 19	3	4	7	1.4	2.0	1.7	
20 - 24	4	1	5	1.7	0.5	1.1	
25 - 29	5	4	9	1.9	1.7	1.8	
30 - 34	9	14	23	3.5	5.9	4.6	
35 - 39	13	13	26	5.3	5.6	5.4	
40 - 44	26	23	49	10.8	9.9	10.3	
45 - 49	40	25	65	18.2	12.5	15.5	
50 - 54	46	24	70	22.7	13.0	18.1	
55 - 59	50	31	81	29.5	19.3	24.6	
60 - 64	47	25	72	37.2	19.4	28.2	
65 - 69	43	33	76	47.1	37.6	42.4	
70 - 74	44	33	77	46.3	31.7	38.7	
75 - 79	54	57	111	68.4	61.9	64.9	
80 - 84	52	40	92	67.6	52.0	59.8	
85 +	51	42	93	64.2	52.9	58.6	
ALL AGES	503	385	888	434.3	335.2	384.6	

Note:

Noncommunicable Diseases include Malignant Neoplasms; Other Neoplasms; Diabetes Mellitus; Endocrine and Metabolic Disorders; Mental Disorders; Nervous System and Sense Organ Disorders; Cardiovascular Disease; Chronic Respiratory Disease; Diseases of the Digestive System; Genitourinary Diseases; Skin Diseases; Musculoskeletal Diseases; Congenital Anomalies; Oral Health; and Ill-defined Conditions.

Age Standardised Mortality Rate - Malignant Neoplasms (Cancer) (2012)

AGE-GROUP	No	. of Cancer Dear	ths	Age Stand	lardized Mortalit 100,000	ty Rate per
	Male	Female	Total	Male	Female	Total
0 - 4	0	2	2	0.0	1.2	0.6
5 - 9	0	1	1	0.0	0.5	0.3
10 - 14	0	0	0	0.0	0.0	0.0
15 - 19	0	2	2	0.0	1.0	0.5
20 - 24	2	0	2	0.8	0.0	0.4
25 - 29	1	2	3	0.4	0.9	0.6
30 - 34	0	7	7	0.0	3.0	1.4
35 - 39	4	2	2 6 1.6 0.9		1.3	
40 - 44	6	7	13	2.5	3.0	2.7
45 - 49	13	12	25	5.9	6.0	5.9
50 - 54	16	14	30	7.9	7.6	7.7
55 - 59	18	16	34	10.6	10.0	10.3
60 - 64	13	7	20	10.3	5.4	7.8
65 - 69	14	12	26	15.3	13.7	14.5
70 - 74	14	9	23	14.7	8.6	11.5
75 - 79	18	12	30	22.8	13.0	17.5
80 - 84	19	8	27	24.7 10.4		17.5
85 +	7	5	12	8.8	6.3	7.6
ALL AGES	145	118	263	126.4	91.4	108.3

Age Standardised Mortality Rate - Cardiovascular Disease and Diabetes Mellitus (2012)

AGE-GROUP	No. of	f CVD and DM D	eaths	Age Stand	lardized Mortalit 100,000	y Rate per
	Male	Female	Total	Male	Female	Total
0 - 4	0	1	1	0.0	0.6	0.3
5 - 9	0	0	0	0.0	0.0	0.0
10 - 14	0	0	0	0.0	0.0	0.0
15 - 19	0	0	0	0.0	0.0	0.0
20 - 24	1	0	1	0.4	0.0	0.2
25 - 29	2	0	2	0.8	0.0	0.4
30 - 34	7	2	9	2.7	0.8	1.8
35 - 39	7	5	12	2.8	2.2	2.5
40 - 44	14	7	21	5.8	3.0	4.4
45 - 49	20	9	29	9.1	4.5	6.9
50 - 54	21	8	29	10.3	4.3	7.5
55 - 59	22	10	32	13.0	6.2	9.7
60 - 64	19	9	28	15.0	7.0	11.0
65 - 69	22	13	35	24.1	14.8	19.5
70 - 74	17	17	34	17.9	16.3	17.1
75 - 79	25	27	52	31.7	29.3	30.4
80 - 84	19	22	41	41 24.7 28.6		26.6
85 +	26	22	48	32.8	27.7	30.2
ALL AGES	222	152	374	191.1	145.4	168.6

Age Standardised Mortality Rate - Chronic Respiratory Disease (2012)

AGE-GROUP	No. of Re	spiratory Diseas	se Deaths	Age Stand	lardized Mortalit 100,000	y Rate per
	Male	Female	Total	Male	Female	Total
0 - 4	2	0	2	1.1	0.0	0.6
5 - 9	0	0	0	0.0	0.0	0.0
10 - 14	0	0	0	0.0	0.0	0.0
15 - 19	0	0	0	0.0	0.0	0.0
20 - 24	0	0	0	0.0	0.0	0.0
25 - 29	0	0	0	0.0	0.0	0.0
30 - 34	0	0	0	0.0	0.0	0.0
35 - 39	0	2	2	0.0	0.9	0.4
40 - 44	2	2	4	0.8	0.9	0.8
45 - 49	0	0	0	0.0	0.0	0.0
50 - 54	0	0	0	0.0	0.0	0.0
55 - 59	0	0	0	0.0	0.0	0.0
60 - 64	3	0	3	2.4	0.0	1.2
65 - 69	1	2	3	1.1	2.3	1.7
70 - 74	4	1	5	4.2	1.0	2.5
75 - 79	6	7	13	7.6	7.6	7.6
80 - 84	5	5	10	6.5	6.5	6.5
85 +	8	5	13	10.1	6.3	8.2
ALL AGES	31	24	55	33.8	25.4	29.5

Renal Services

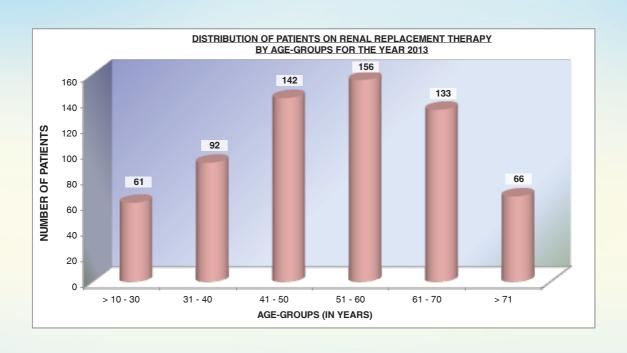
	N	O. OF PAT	TIENTS AT	TENDING	FOR REN	IAL REPL	ACEMENT	THERAP	Υ	
DIALYSIS CENTRE / UNIT		2011			2012			2013		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
Rimba Dialysis Centre	106	128	234	118	138	256	115	125	240	
Kiarong Dialysis Centre	25	35	60	28	30	58	30	34	64	
Dialysis Centre RIPAS Hospital	32	28	60	33	37	70	53	52	105	
Dialysis Centre SSB Hospital, Belait	50	37	87	46	47	93	52	41	93	
Tutong Dialysis Centre				11	16	27	21	16	37	
Continuous Ambulatory Peritoneal Dialysis	34	26	60	26	27	53	19	26	45	
Transplant Unit	21	13	34	22	12	34	23	13	36	
Dialysis Centre PIHM Hospital, Temburong	12	15	27	16	13	29	11	19	30	
TOTAL	280	282	562	300	320	620	324	326	650	

Note:

... - Tutong Dialysis Centre started its operation in February 2012

Source

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



Dental Health Services

COVERAGE OF THE POPULATION (2011 - 2013)

YEAR	New Patients	Catchment Population	Coverage		
2011	59,526	393,372	15.1%		
2012	59,182	399,800	14.8%		
2013	69,988	406,200	17.2%		

COVERAGE AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2013

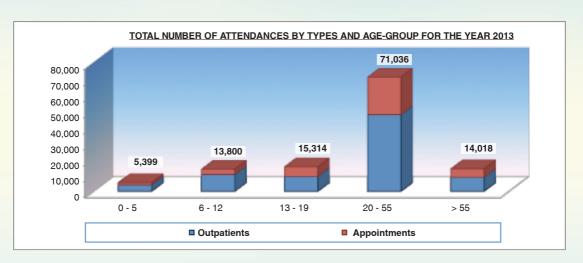
COVERAGE	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
New Patients	3,159	7,675	6,991	45,250	6,913	69,988

TOTAL ATTENDANCES AT DENTAL HEALTH SERVICES BY AGE-GROUP FOR THE YEAR 2013

TYPE OF ATTENDANCES	0 - 5	6 - 12	13 - 19	20 - 55	> 55	TOTAL
Outpatients*	3,936	10,447	9,231	47,663	8,686	79,963
Appointments	1,463	3,353	6,083	23,373	5,332	39,604
TOTAL	5,399	13,800	15,314	71,036	14,018	119,567

Note:

^{* -} Outpatients = New Patients + Repeat Outpatients



Source

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

Nutritional Status

	SCHOOL HEALTH	PERCENTAGE OF STUDENTS SCREENED FOR WEIGHT STATUS (%) (2009 - 2013)						
	(YEAR I, 4, 6 and 8 only)	2009	2010	2011	2012	2013		
1.	Normal weight	68.9	67.1	49.7	43.7	55.6		
2.	Overweight	14.0	14.7	11.5	12.1	13.9		
3.	Obese	12.4	13.4	16.9	16.9	17.3		
4.	Severe Underweight			8.2	11.3	4.0		
4.	Underweight	4.7	4.8	13.8	15.9	9.3		

Note:

In 2013, the Total Number of School Target Population is 17,602for Year 1, 3, 4 & 6 and 8,041 for Year 8.

Source:

School Health Services, Ministry of Health

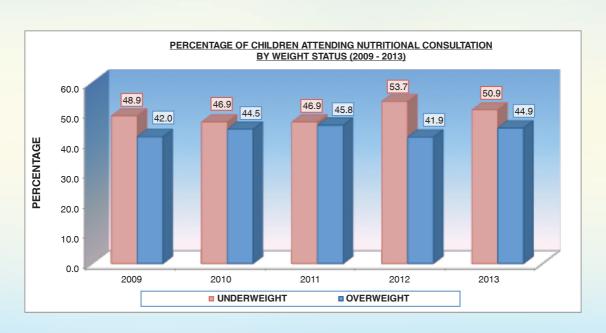
	MOTHER & CHILD HEALTH CLINICS	PERCENTAGE OF CHILDREN ATTENDING NUTRITIONAL CONSULTATION BY WEIGHT STATUS (%) (2009 - 2013)						
	(BELOW 5 YEARS)	2009	2010	2011	2012	2013		
1.	Underweight	48.9	46.9	46.9	53.7	50.9		
2.	Overweight	42.0	44.5	45.8	41.9	44.9		
3.	Others*	9.2	8.6	7.3	4.4	4.2		
то	TAL NUMBER OF CASES	1,158	960	1,025	881	790		

Note:

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

Source:

Community Nutrition Unit, Ministry of Health



Nutritional Status

The 2nd NHANSS Phase 1 was a cross-sectional survey conducted from March till August 2009. The target population of the survey was 1,300 children aged from birth to less than 5 years old.

SUMMARY ANTHROPOMETRIC DATA FOR 0 - 5 YEARS OLD

Nut	ritional Status	Male (%)	Female (%)	Total (%)
Weight for Age	Moderately Underweight	10.8	8.5	9.6
(n = 1, 126)	Severely Underweight	erately Underweight 10.8 8.5 erely Underweight 2.0 0.7 derately Stunting 22.8 16.7 everely Stunting 6.9 2.8 everely Stunting 6.9 2.8 everely Stunting 0.4 0.5 evere Wasting 0.4 0.5 Overweight 8.8 7.8 evere Wasting 1.6 2.8 evere Wasting 0.7 0.7 everely Stunting 0.7 0.7 everely Stunting 0.8 evere Wasting 0.9 everely Stunting	1.3	
Weight for Age	Moderately Stunting	22.8	16.7	19.7
(n = 1,114)	Severely Stunting	6.9	10.8 8.5 9.6 2.0 0.7 1.3 22.8 16.7 19.7 6.9 2.8 4.8 2.7 3.0 2.9 0.4 0.5 0.4 8.8 7.8 8.3 1.6 2.8 2.2 0.7 0.7 0.7	4.8
	Moderate Wasting	2.7	3.0	2.9
Weight for Height (n = 1,104)	Severe Wasting	0.4	0.5	0.4
(11 = 1,104)	Overweight	8.8	7.8	8.3
	Moderate Wasting	1.6	2.8	2.2
BMI for Age	Severe Wasting	0.7	0.7	0.7
(n = 1,104)	Overweight	9.0	8.7	8.8
	Obese	4.4	2.3	3.3

Reference:

2nd National Health and Nutritional Status Survey (NHANSS), Phase 1:0-5 years old

INFANT FEEDING PRACTICES USING WHO BREASTFEEDING INDICATORS BY AGE

			PREVALENCE		
AGE OF INFANTS (months)	Ever / Any Breastfeeding	Exclusive Breastfeeding	Introduction of solid	Introduction of breast-milk substitutes	Introduction of plain water
0	98.7	98.7	0.0	0.0	0.0
1	93.4	67.9	0.0	16.9	19.6
2	86.5	50.5	0.0	32.6	29.9
3	78.8	39.9	1.8	43.4	38.8
4	71.0	33.1	7.3	52.8	46.2
5	67.4	26.7	17.3	58.1	52.8
6	56.6	0.1	93.2	70.2	90.4
7	53.9	0.0	94.8	72.9	91.8
8	49.0		97.3	75.5	94.7
9	46.5		98.6	77.2	95.0
10	45.1		99.3	77.9	95.4
11	44.6		99.3	78.8	95.4
12	37.5		99.7	88.0	99.1

Reference:

2nd National Health and Nutritional Status Survey (NHANSS), Phase 1:0-5 years old

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 86 work accidents were reported to the Occupational Health Division in 2013. 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.

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
- 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
- Q. 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

		NON HEALTHCARE				HEALTHCARE				
PURPOSE	2009	2010	2011	2012	2013	2009	2010	2011	2012	2013
Occupational Safety and Health 1st Inspection (Comprehensive)	22	22	12	14	15	29	37	12	0	0
2. Workplace Survey	37	38	158	26	47	0	0	0	0	0
Others - Complaints, Follow-Up, Periodic Inspection, Accidents at Workplace, Occupational / Work-Related Disease Investigation, Requests	20	68	63	51	74	14	0	0	12	16
TOTAL	79	128	233	91	136	43	37	12	12	16

Source:

Occupational Health Division, Ministry of Health

Occupational Health Services

TYI	PES OF INJURY (NON HEALTHCARE)	2009	2010	2011	2012	2013
1.	Construction	28	30	57	21	21
2.	Manufacturing	20	20	59	4	7
3.	Engineering	14	16	6	15	0
4.	Community Service	6	11	22	8	5
5.	Electricity	2	1	3	0	2
6.	Agriculture	1	6	3	1	3
7.	Transport	8	1	2	0	2
8.	Business Activities	7	8	15	0	6
9.	Private Households	6	6	0	0	2
10.	Unspecified	0	0	0	184	15
	TOTAL	92	99	167	233	63

TYPES OF INJURY (HEALTHCARE)	2009	2010	2011	2012	2013
Needle Prick Other Injuries*	44 6	28 9	52 9	16 14	20 3
TOTAL	50	37	61	30	23

Note:

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

OCCUPATIONAL AND WORK RELATED DISEASES

	DISEASES	2009	2010	2011	2012	2013
1.	Noise Induced Deafness	48	50	72	37	45
2.	Occupational Dermatitis	4	4	2	1	2
3.	Occupational Asthma	0	1	0	0	1
4.	Occupational Lung Disease	-	-	-	-	1
	TOTAL	52	55	74	38	49

Source:

Occupational Health Division, Ministry of Health

Tobacco Control (2013)

			NEW			RENEWAL	
	TYPE OF LICENSE	No. of Application	Application Approved Approved Approval Letter Issuec	Application Approved / Approval Letter Issued	No. of Application	Application Approved/ Approval Letter Issued	Application Approved / Approval Letter Issued
		Received	No.	%	Received	No.	%
	RETAIL	24	19	79.2	309	254	82.2
2011	IMPORT & WHOLESALE	0	0	:	9	9	100.0
	RETAIL	10	3	30.0	236	02	29.7
2012	IMPORT & WHOLESALE	1	1	100.0	2	2	100.0
	RETAIL	2	0	0.0	32	21	65.6
2013	IMPORT & WHOLESALE	0	0	::	1	- 1	100.0

Source:

Licencing Unit, Department of Environmental Health Services, Department of Health Services.

Note:

Percentage of Application Approved = Number of Application Approved x 100

Number of Application Received

	REMARKS	6 offenders, each committed 2 different offences under the Tobacco Order 2005 in the same year, 2010	4 offenders, each committed 2 different offences under the Tobacco Order 2005 in the same year, 2011	2 offenders, each commited the same offence twice in the same year 2012.	4 offenders, each committed 2 different offences under the Tobacco Order 2005 and 3 offenders, each committed the same offence twice in the same year, 2013.
	NUMBER OF OFFENDERS RECORDED	526	216	192	322
NUMBER OF OFFENCES RECORDED (TOBACCO ORDER 2005)	TOTAL NUMBER OF OFFENCES	232	220	194	329
	CASES TRANSFERRED TO CUSTOMS AND EXCISE DEPT.		3	•	
	REQUIRED TO ATTEND SMOKING CESSATION CLINIC	0	0	3	14
	STERN WARNING ISSUED	26	0 0		6
	COMPOUND FINES ISSUED	206	177	191	306
	MONTH / YEAR	2010 (May - Dec)	2011	2012	2013

Source:

Health Enforcement Unit, Ministry of Health

Pharmacy Services

NUMBER OF PRESCRIPTIONS AND ITEMS BY HOSPITAL FOR THE YEAR 2013

		RIPAS		S	SSB	PMMPA	PMMPMHAMB		
	IPD	QAO	A&E	adl	OPD	IPD	QAO	PIHM	TOTAL
		NUMB	NUMBER OF PRESCRIPTIONS	SIPTIONS					
- Prescription Chit	872	65,278	45,128	322	41,395	0	4,058	14,174	171,227
- Treatment Chart	31,452	0	0	5,785	0	2,791	0	279	40,307
Total (Prescription Chit and Treatment Chart)	32,324	65,278	45,128	6,107	41,395	2,791	4,058	14,453	211,534
- PHY Cards	3,949	169,194	0	3,618	64,948	0	25,694	19,378	286,781
- Discharges	15,357	0	0	3,415	0	3,034	0	581	22,387
Total (PHY Cards and Discharges)	19,306	169,194	0	2,033	64,948	3,034	25,694	19,959	309,168
Grand Total (Prescriptions)	51,630	234,472	45,128	13,140	106,343	5,825	29,752	34,412	520,702
			NUMBER OF ITEMS	EMS					
- Prescription Chit	1,481	130,600	113,308	909	129,940	0	16,165	36,694	428,793
- Treatment Chart	48,707	0	0	9,461	0	4,337	0	449	62,954
Total (Prescription Chit and Treatment Chart)	50,188	130,600	113,308	10,066	129,940	4,337	16,165	37,143	491,747
- PHY Cards	21,645	732,141	0	15,817	271,392	1,082	92,530	76,958	1,211,565
- Discharges	42,137	0	0	8,912	0	11,144	7,648	1,813	71,654
Total (PHY Cards and Discharges)	63,782	732,141	0	24,729	271,392	12,226	100,178	78,771	1,283,219
Grand Total (Items)	113,970	862,741	113,308	34,795	401,332	16,563	116,343	115,914	1,744,966
A comment of the comment									
Average No. or items / Prescription Chit and Treatment Chart	1.55	2.00	2.51	1.65	3.14	1.55	3.98	2.57	2.32
Average No. of Items / PHY Cards and Discharges	3.30	4.33	0.00	3.52	4.18	4.03	3.90	3.95	4.15

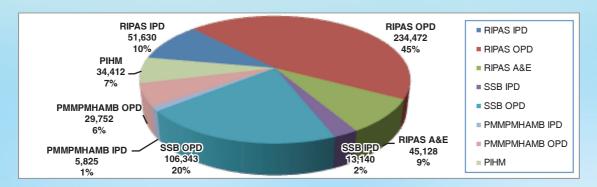
Source:

Department of Pharmacy, Ministry of Health

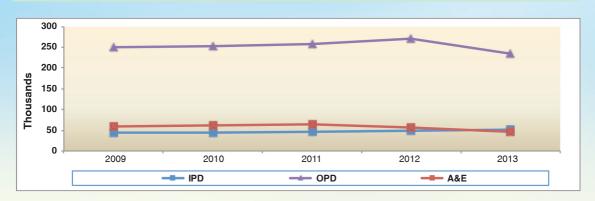
Note: IPD - Inpatient ; OPD - Outpatient ; A&E - Accident & Emergency

Pharmacy Services

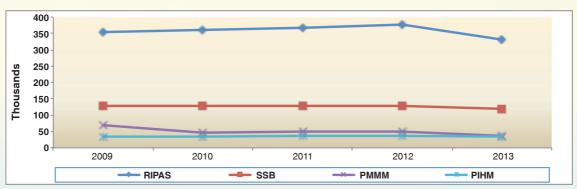
DISTRIBUTION OF PRESCRIPTIONS BY HOSPITAL FOR THE YEAR 2013



ANNUAL TOTAL NUMBER OF PRESCRIPTIONS DISPENSED FOR RIPAS HOSPITAL BY DEPARTMENTS (2009 - 2013)



ANNUAL TOTAL NUMBER OF PRESCRIPTIONS DISPENSED FOR DISTRICT HOSPITALS (2009 - 2013)



Note:

IPD - Inpatient; OPD - Outpatient; A&E - Accident & Emergency

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

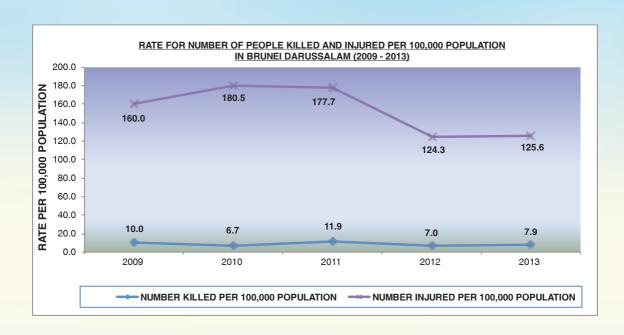
Road Traffic Accidents

Road traffic accidents remain as one of the top ten leading causes of deaths in Brunei Darussalam. In 2013, Brunei Darussalam reported 3338 road accidents, an increase of 0.8% from the previous year, which had inflicted 510 injuries and caused 32 deaths.

				C ACCIDENTS - 2013)			
Y E A R	ACCIDENTS	KILLED	NUMBER KILLED PER 100,000 POPN.	INJURED	NUMBER INJURED FOR EACH PERSON KILLED	CASE FATALITY RATE % (CPR)	NEWLY REGISTERED VEHICLES (revised)
2009	3,110	38	10.0	608	16.0	5.9	14,386
2010	3,414	26	6.7	698	26.8	3.6	15,069
2011	3,598	47	11.9	699	14.9	6.3	15,900
2012	3,310	28	7.0	497	17.8	5.3	18,651
2013	3,338	32	7.9	510	15.9	5.9	18,950

Sources:

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





- 1. **INFANT DEATHS**: Deaths aged less than 1 year
- 2. **EARLY NEONATAL DEATHS**: Deaths aged less than 7 days
- 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

- 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.
- 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
- 11. MATERNAL MORTALITY RATIO = (MATERNAL DEATHS / LIVEBIRTHS) x 100000

HOSPITAL PERFORMANCE INDICES

- AV. INPATIENTS / DAYS = PATIENTS DAYS / NO OF DAYS
- 2. BED OCCUPANCY RATE = [(AV. INPATIENTS / DAYS) / AVAILABLE BEDS] x 100
- 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

For further information please contact:

Statistics Unit
Research and Development Section
Department of Policy and Planning
2nd Floor, Ministry of Health
Commonwealth Drive
Brunei Darussalam

Tel: +673 - 2381640 Fax: +673 - 2383016

Email: statistics@moh.gov.bn
Website: www.moh.gov.bn

Acknowledgements

We wish to acknowledge and express sincere appreciation to the relevant departments in the Ministry of Health and other government departments who have given their continuous assistance and invaluable support and commitment in providing the data for the publication of Health Information Booklet 2013.

Prime Minister's Office

Department of Economic Planning and Development Royal Brunei Police Force

Ministry of Finance

Budget Section
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

