



MINISTRY OF HEALTH
BRUNEI DARUSSALAM



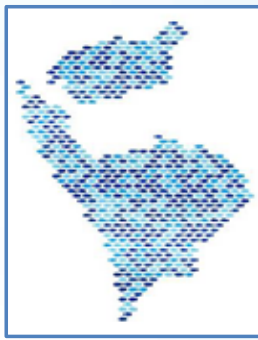
Health

Information Booklet 2017

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Brunei Darussalam's Health Status at A Glance



POPULATION

1

421,300 people lived in Brunei Darussalam in 2017 compared to 332,844 in 2011, an increase of 26.6%. There were about 37,800 (9.0% of the total population) people aged 60 years or above.

2

LIVE BIRTH

Total live birth was 15.3 per 1000 population in 2017.



3

LIFE EXPECTANCY

Life expectancy continues to increase, so as a Bruneian male today can expect to live to 76.3 years and a female at 78.3 years in 2017.

4

INFANT MORTALITY RATE

Infant Mortality Rate was 9.5 per 1000 live births in 2017, a significant reduction from 17.5 per 1000 live births in 1980.



5

IMMUNISATION

Immunisation coverage has consistently been above 95.0% for all vaccinations in the National Immunisation Programme which met the targets set by the WHO.

6

MATERNAL DEATH

Four (4) maternal deaths were registered in 2017 and has been maintained at a low rate over the last 50 years, which is comparable to other developed countries. Almost all deliveries in Brunei Darussalam are attended by skilled health personnel.



7

INFECTIOUS DISEASES

Remarkable success in eliminating infectious diseases. Brunei is officially proclaimed by WHO as Malaria free in 1987, Poliomyelitis free in 2000 and Measle-free in 2015. HIV/AIDS, Tuberculosis and other infectious disease incidences are at low level.



Brunei Darussalam's Health Status at A Glance

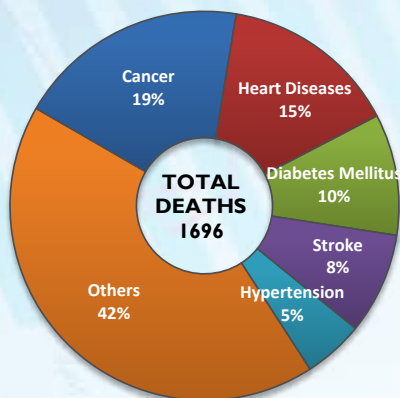
TOP 5 NCDs DEATHS IN 2017



Male
31.2 %



Female
26.4 %



TOP 4 TYPES OF CANCER DEATHS AMONG MALE IN 2017



Lung
18.2%



Rectum & Anus
14.5%



Stomach
10.1%



Colon
8.2%

Total Male Deaths of Cancer : 159

TOP 4 TYPES OF CANCER DEATHS AMONG FEMALE IN 2017



Breast
17.9%



Lung
13.7%



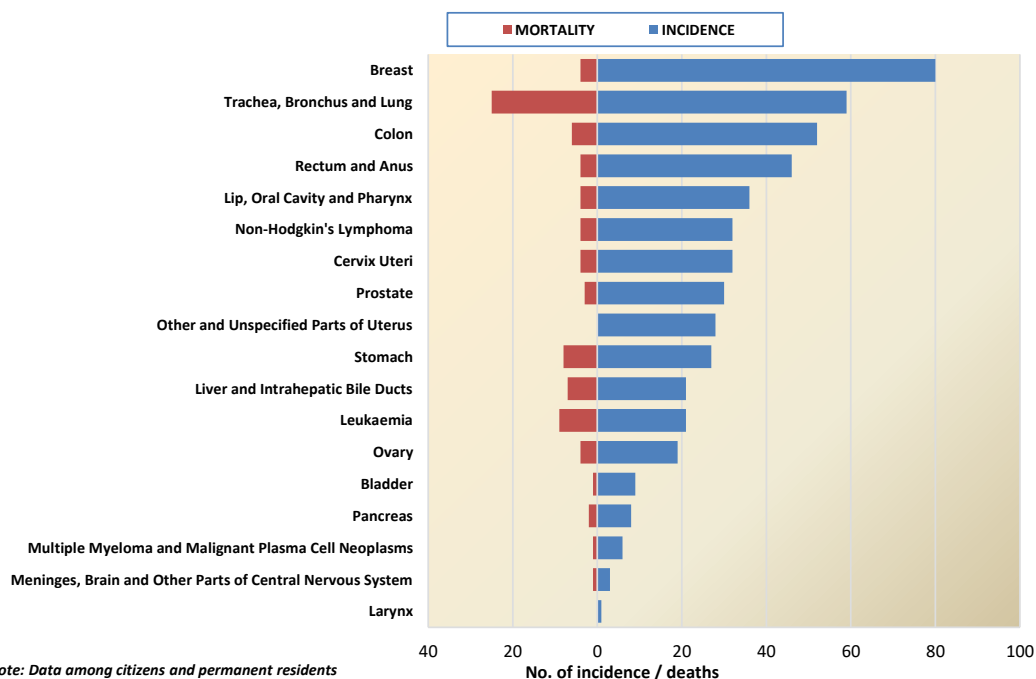
Rectum & Anus
9.5%



Cervix Uteri
6.5%

Total Female Deaths of Cancer : 168

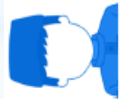
INCIDENCE AND MORTALITY OF MALIGNANT CANCER IN BRUNEI DARUSSALAM (2017)



Population (2017)



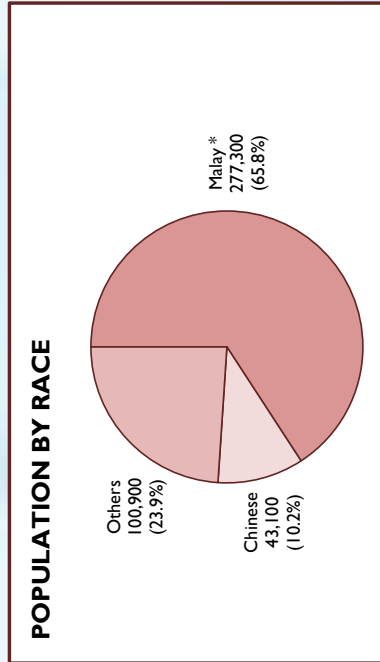
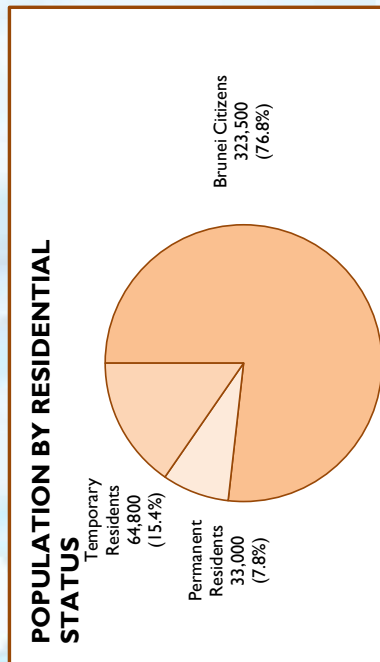
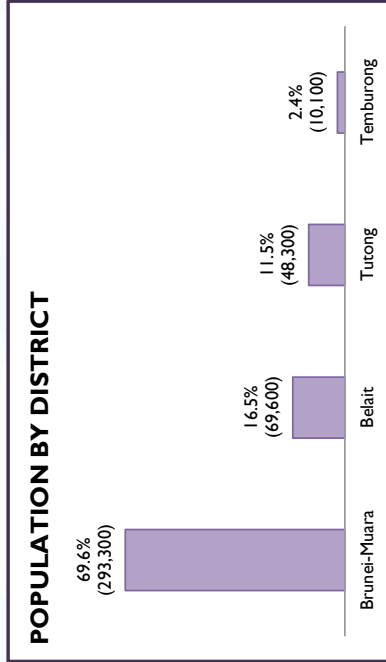
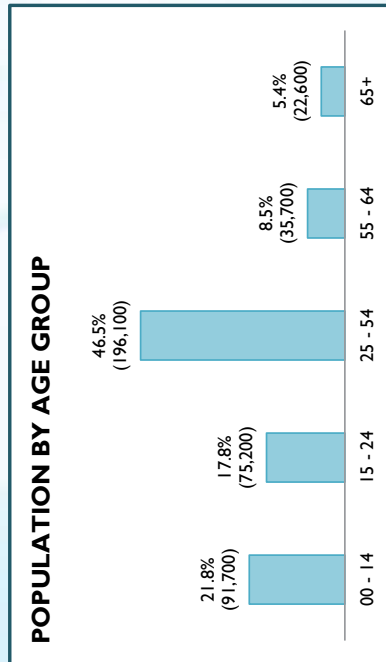
TOTAL POPULATION
421,300 PEOPLE



MALE
216,400 PEOPLE



FEMALE
204,900 PEOPLE



Note :

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

Source :

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

Population Distribution by Age - Groups

Age Group (in thousands)	2013 ^(r)	2014 ^(r)	2015 ^(r)	2016 ^(r)	2017
0 - 4	29.6	29.2	28.8	28.4	28.4
5 - 9	32.4	31.7	31.1	30.4	30.6
10 - 14	35.0	34.8	34.5	34.3	32.7
15 - 19	35.5	35.8	36.1	36.4	36.8
20 - 24	38.6	38.7	38.9	39.0	38.4
25 - 29	39.5	39.6	39.7	39.8	39.6
30 - 34	36.9	36.9	36.9	36.9	37.5
35 - 39	34.1	34.2	34.4	34.5	35.3
40 - 44	30.5	30.7	31.0	31.2	31.7
45 - 49	25.9	26.5	27.1	27.7	28.8
50 - 54	21.3	21.8	22.5	23.2	23.2
55 - 59	16.1	17.2	18.2	19.2	20.5
60 - 64	10.9	12.2	13.4	14.6	15.2
65 - 69	6.6	7.4	8.2	9.0	9.8
70 - 74	4.4	4.6	4.9	5.1	5.4
75 - 79	3.1	3.3	3.5	3.8	4.2
80 - 84	1.7	1.9	2.0	2.2	2.0
85 & Over	1.2	1.1	1.2	1.6	1.2

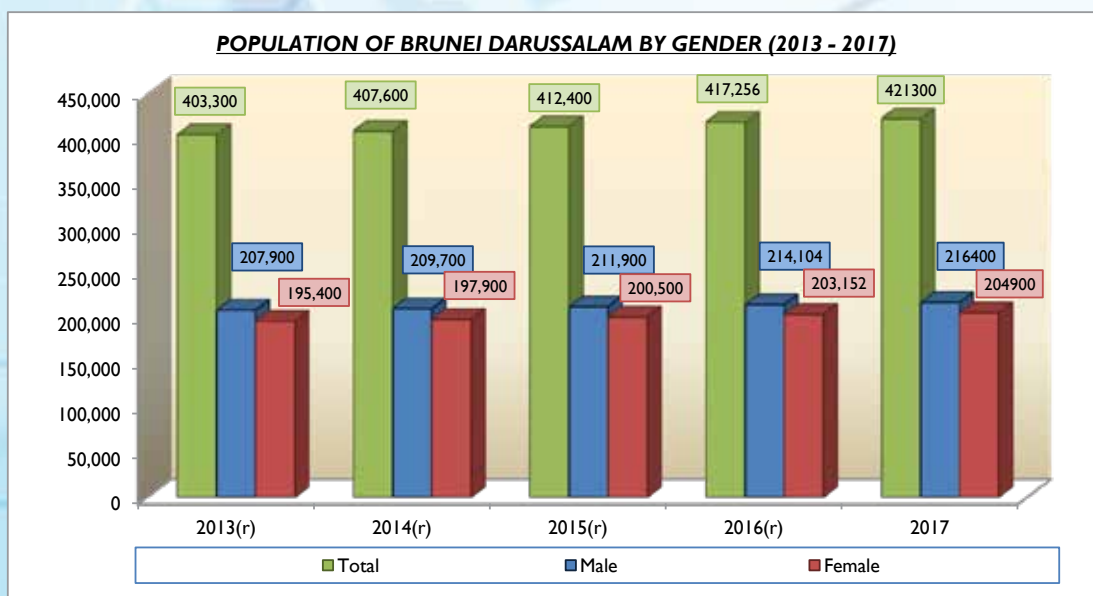
Note:

The population data for the years 2012-2015 have been recalculated due to the revised population based on 2016 census data.

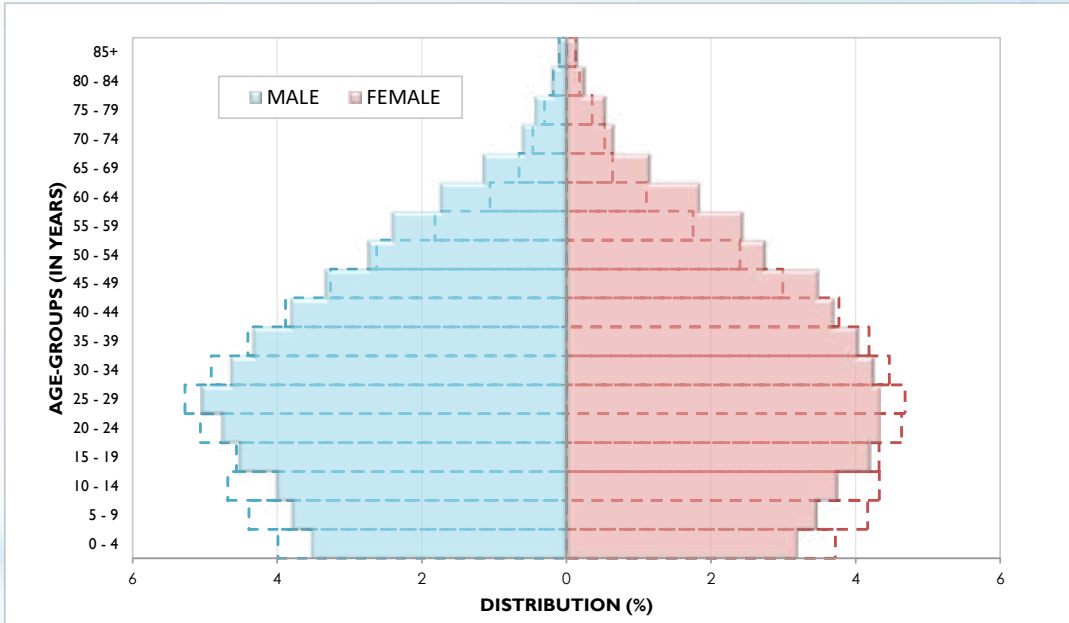
(r) - revised.

Source :

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



Population Pyramid (2017)



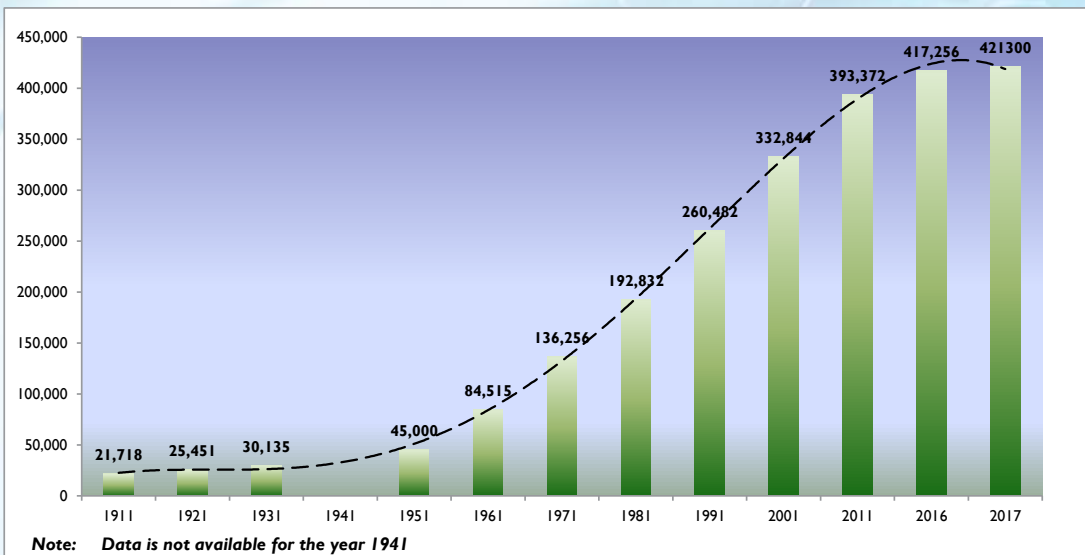
Total population in 2011 -----
Total population in 2017 —————

Note:

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

For example, (0 - 4) age-group for the year 2017 is represented with 6.7% of total population in which 3.5% and 3.2% are made up of male and female population respectively.

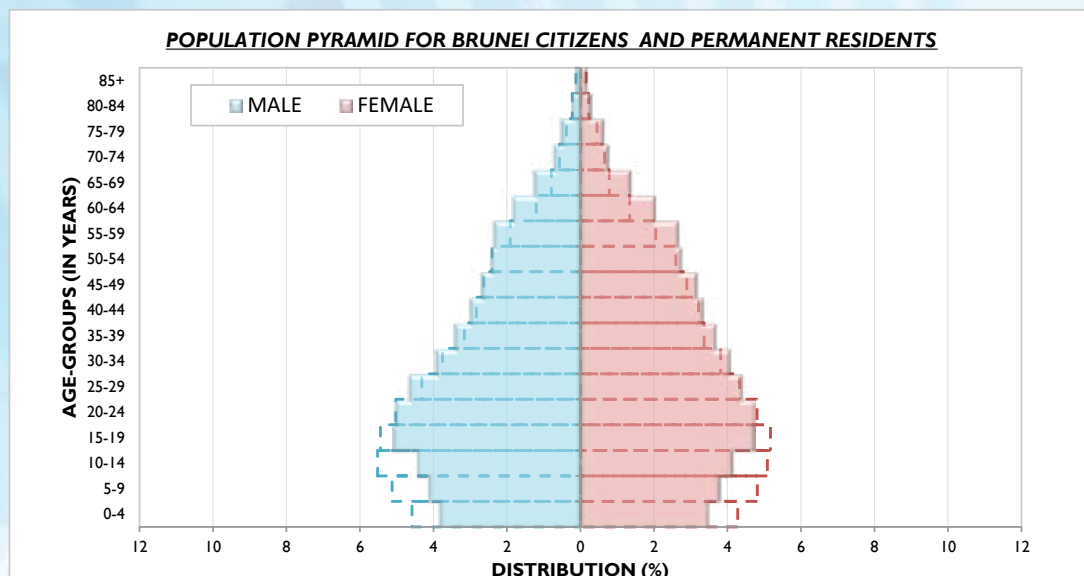
Population Trend of Brunei Darussalam (1911-2017)



Source :

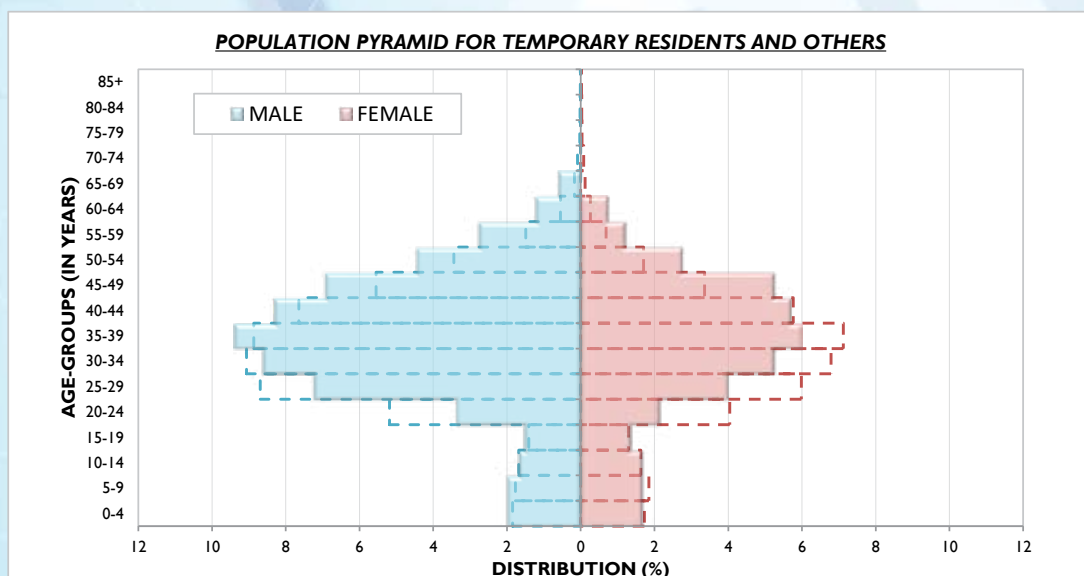
Department of Economic Planning and Development, Prime Minister's Office

Population Pyramid by Residential Status for the Years 2011 and 2017



Total population in 2011 -----

Total population in 2017 _____



Population aged 60 years and above for the year 2017 is represented with 9.0% of total population in which 4.3% and 4.7% are made up of male and female population respectively.

On the residential status, the share of the Brunei Citizens was around 76.8%, Permanent Residents 7.8% and Temporary Residents 15.4%. As is the case of affluent countries with small populations, the foreign proportion of the population is rather high. The relatively high number of foreign population is being contributed by the number of working immigrants.

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

Vital Statistics

	2013	2014	2015	2016	2017
Crude Birth Rate (per 1,000 Population) :	16.6	16.9	16.2	15.4	15.3
General Fertility Rate (per 1,000 Female Population Aged (15-49)) :	57.2	58.6	56.5	54.5	54.0
Total Fertility Rate (per Female Population Aged (15-49)) :	1.9	1.9	1.8	1.8	1.8
Crude Death Rate (per 1,000 Population) :	3.5	3.6	3.8	3.9	4.0
Infant Mortality Rate (per 1,000 Live Births) :	7.8	7.3	8.8	8.2	9.5
Late Fetal Death Ratio (per 1,000 Live Births) :	5.5	6.4	5.1	3.1	7.4
Perinatal Mortality Ratio (per 1,000 Live Births) :	8.4	9.0	8.7	6.8	12.6
Early Neonatal Mortality Rate (per 1,000 Live Births) :	2.8	2.6	3.6	3.7	5.1
Late Neonatal Mortality Rate (per 1,000 Live Births) :	0.9	1.2	1.8	1.1	1.4
Neonatal Mortality Rate (per 1,000 Live Births) :	3.7	3.8	5.4	4.8	6.5
Post Neonatal Mortality Rate (per 1,000 Live Births) :	4.0	3.5	3.4	3.4	2.9
Under 5 Mortality Rate (per 1,000 Live Births) :	9.7	8.7	10.3	10.4	11.5
Number of Maternal Deaths * :	1	1	4	0	4
Maternal Mortality Ratio (per 100,000 Live Births) :	15.0	14.5	59.7	0.0	62.0
Maternal Mortality Ratio (per 1,000 Live Births) :	0.15	0.15	0.60	0.00	0.62
Life Expectancy At Birth - Total :	78.0	77.2	77.7	77.8	77.3 ^(p)
- Male :	77.7	75.8	77.8	76.9	76.3 ^(p)
- Female :	78.3	78.5	77.5	78.7	78.3 ^(p)
Percentage of Newborns Weighing At Least 2500g At Birth :	88.2	88.1	88.2	89.6	88.7
Percentage of Deliveries by Trained Health Personnel :	99.7	99.9	100.0	100.0	100.0
Per Capita GDP at current prices (B\$) Thousand :	56.1	53.1	43.1	37.7	39.8

Note :

* - 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.

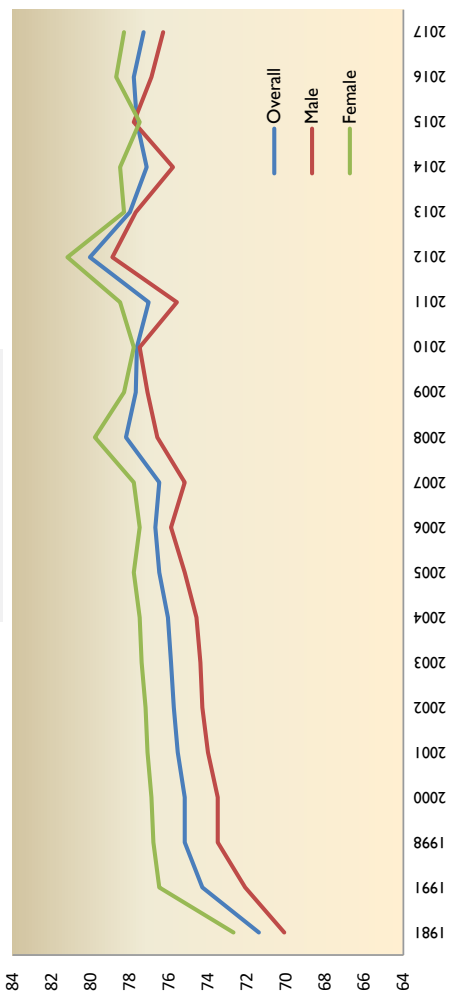
(p) - Provisional

Life Expectancy at Birth

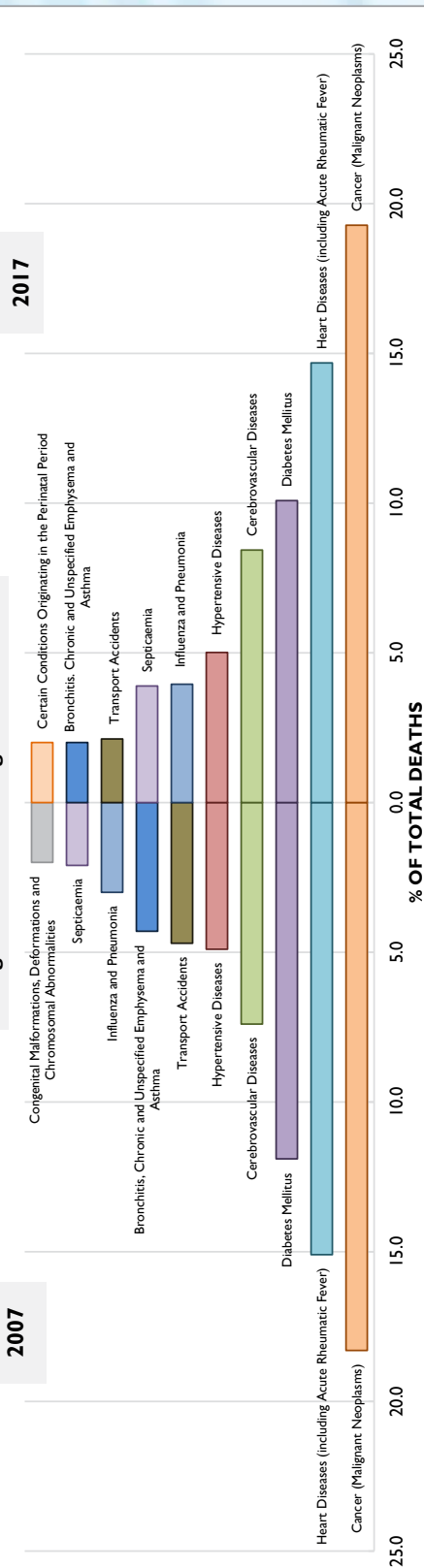
Year	Life Expectancy (in years)		
	Male	Female	Overall
1981	70.1	72.7	71.4
1991	72.1	76.5	74.3
2001	74.0	77.1	75.6
2011	75.6	78.5	77.1
2012 ^(r)	78.9	81.2	80.1
2013 ^(r)	77.7	78.3	78.0
2014 ^(r)	75.8	78.5	77.2
2015 ^(r)	77.8	77.5	77.7
2016 ^(r)	76.9	78.7	77.8
2017 ^(p)	76.3	78.3	77.3

Note: (r) - revised; (p) - provisional

Life expectancy at birth

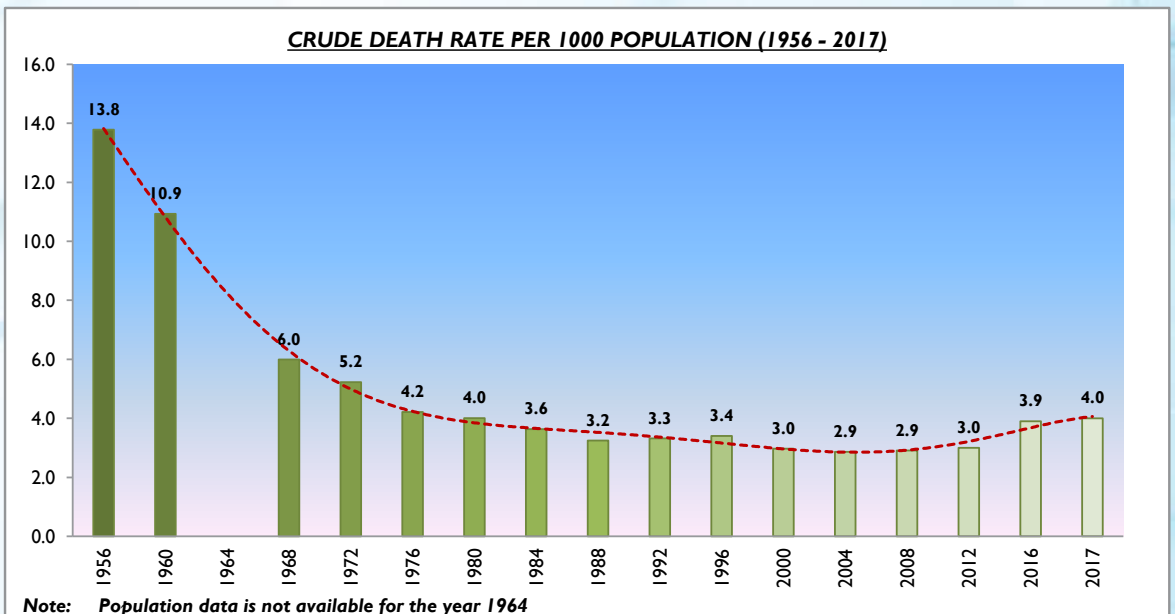
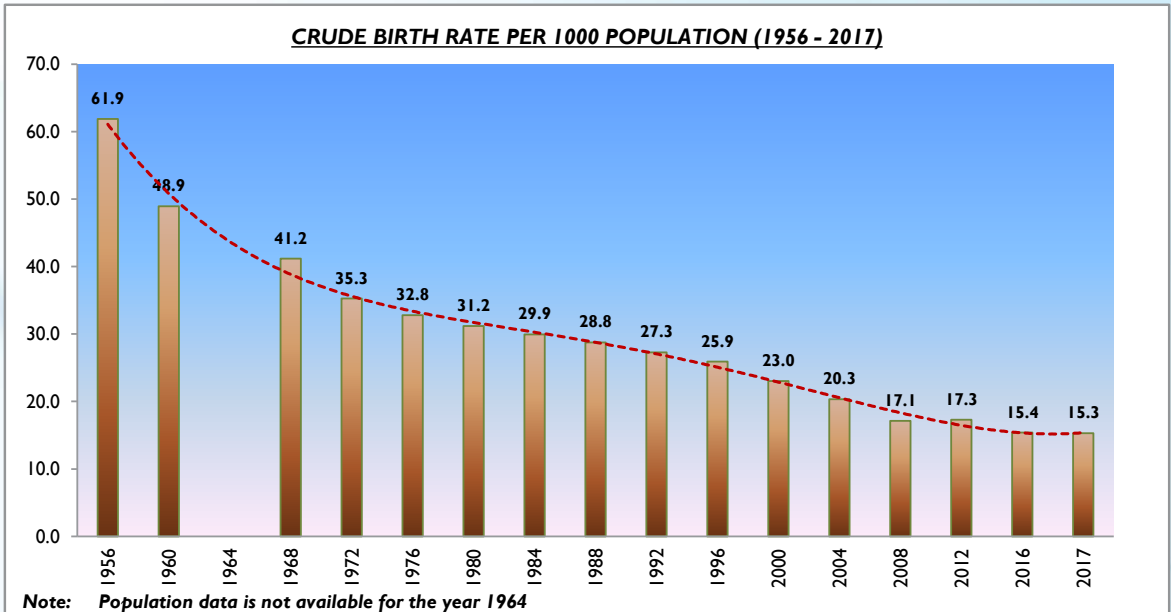


Changes in the 10 Leading Causes of Death



Crude Birth and Crude Death Rate

The crude birth rate of Brunei Darussalam has declined from 23.0 in 2000 to 15.3 per 1000 population in 2017 whilst the crude death rate is 4.0 per 1000 population in 2017.



Sustainable Development Goals (SDGs)

In 2015, the Millennium Development Goals (MDGs) has come to the end of their term. On 25 September 2015, the United Nations (UN) General Assembly adopted the new development agenda "Transforming our world: the 2030 agenda for sustainable development". The post-2015 agenda comprising 17 Sustainable Development Goals (SDGs) and 169 targets, including one specific goal for health with 13 targets.



Goals and Targets	Indicators for Monitoring progress	Brunei Darussalam's Status Related to Health	
		2016 Data	2017 Data
Goal 3 : Good Health and Well-Being			
Target 3.1 : By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1 Maternal mortality ratio (per 100,000 live births)	0.0 per 100,000 livebirths (no maternal death)	62.0 per 100,000 livebirths (4 maternal deaths)
	3.1.2 Proportion of births attended by skilled health personnel (%)	100.0 %	100.0 %
Target 3.2: By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1 Under-five mortality rate (per 1,000 live births)	10.4 per 1,000 livebirths	11.5 per 1,000 livebirths
	3.2.2 Neonatal mortality rate	4.8 per 1,000 livebirths	6.5 per 1,000 livebirths

Sustainable Development Goals (SDGs) (cont'd)

Goals and Targets	Indicators for Monitoring progress	Brunei Darussalam's Status Related to Health	
		2016 Data	2017 Data
Goal 3 : Good Health and Well-Being			
Target 3.3: By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	0.09 per 1,000 population	0.08 per 1,000 population
	3.3.2 Tuberculosis incidence per 1,000 population	0.58 per 1,000 population	0.57 per 1,000 population
	3.3.3 Malaria incidence per 1,000 population	0.02 per 1,000 population	0.02 per 1,000 population
	3.3.4 Hepatitis B incidence per 100,000 population	0.08 per 1,000 population	0.06 per 1,000 population
	3.3.5 Number of people requiring interventions against neglected tropical diseases	Chikugunya 1; Dengue Fever 83; Dengue Haemorrhagic Fever 1; Filariasis 5; Leptospirosis 0	Chikugunya 0; Dengue Fever 73; Dengue Haemorrhagic Fever 2; Filariasis 1; Leptospirosis 0
Target 3.4: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Probability of dying between the ages of 30 and 70 years from non-communicable diseases (cardiovascular diseases, cancer, diabetes or chronic respiratory diseases) : 14.4 % *	Probability of dying between the ages of 30 and 70 years from non-communicable diseases (cardiovascular diseases, cancer, diabetes or chronic respiratory diseases) : 14.3 % *
	3.4.2 Suicide mortality rate	0.0 per 100,000 population *	0.5 per 100,000 population *
Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1 Death rate due to road traffic injuries	4.1 per 100,000 population	7.0 per 100,000 population

Note :

* - data among citizens and permanent residents

... - not available.

Sustainable Development Goals (SDGs) (cont'd)

Goals and Targets	Indicators for Monitoring progress	Brunei Darussalam's Status Related to Health	
		2016 Data	2017 Data
Goal 3 : Good Health and Well-Being			
Target 3.7: By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1 Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	...	...
	3.7.2 Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group	9.7 per 1,000 (aged 15-19) female population	9.3 per 1,000 (aged 15-19) female population
Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Mortality rate attributed to household and ambient air pollution	...	...
	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	...	...
	3.9.3 Mortality rate attributed to unintentional poisoning	0	0
Target 3.a: Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	...	...
Target 3.c: Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1 Health worker density and distribution	Doctors 16 per 10,000; Dentist 3 per 10,000; Pharmacist 2 per 10,000; Nurses and Midwives 70 per 10,000	Doctors 16 per 10,000; Dentist 3 per 10,000; Pharmacist 2 per 10,000; Nurses and Midwives 71 per 10,000
Target 3.d: Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness	84.6%	...

Note :

... - not available.

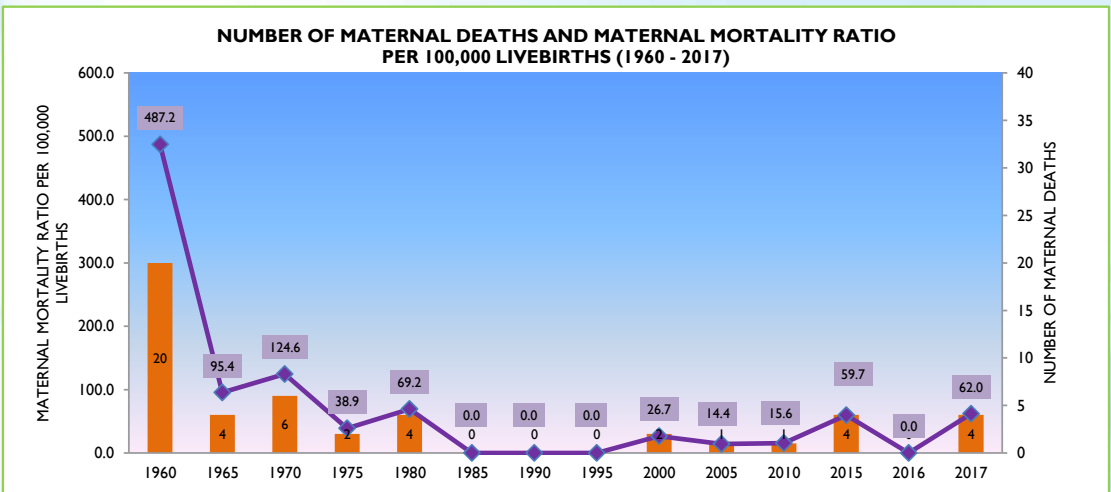
Sustainable Development Goals (SDGs)

GOAL 3: GOOD HEALTH AND WELL-BEING

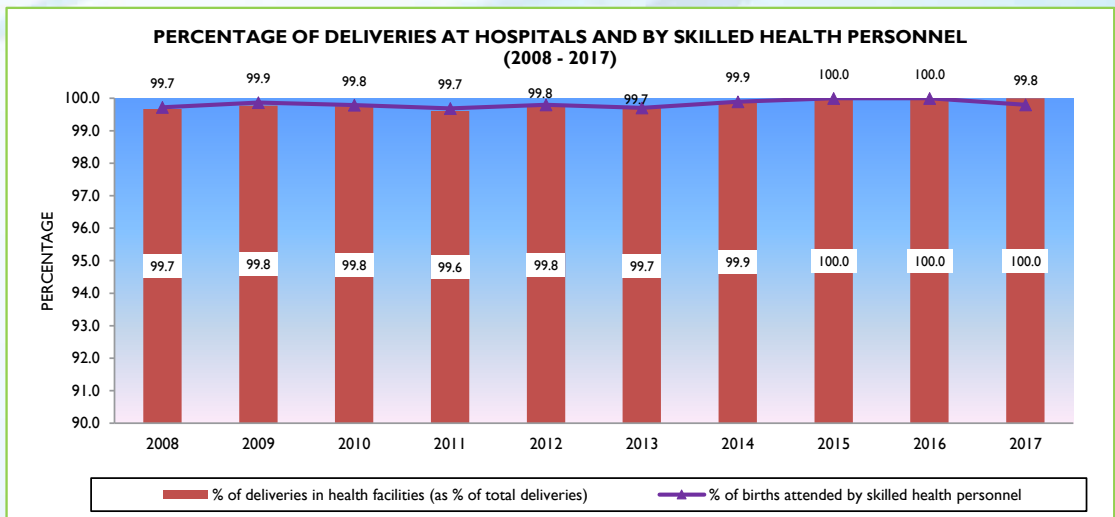
Target 3.1: By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

The Maternal Mortality Ratio (MMR) in Brunei Darussalam has shown a marked decline since the 1960s - from 487.2 per 100,000 live births in 1960 down to 0.0 per live birth in 1990. Since then, the MMR has shown slight fluctuations and consistently very low maternal mortality ratio (MMR). In 2017, four (4) maternal death was registered.

It must be noted that Brunei Darussalam'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 rise 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.



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



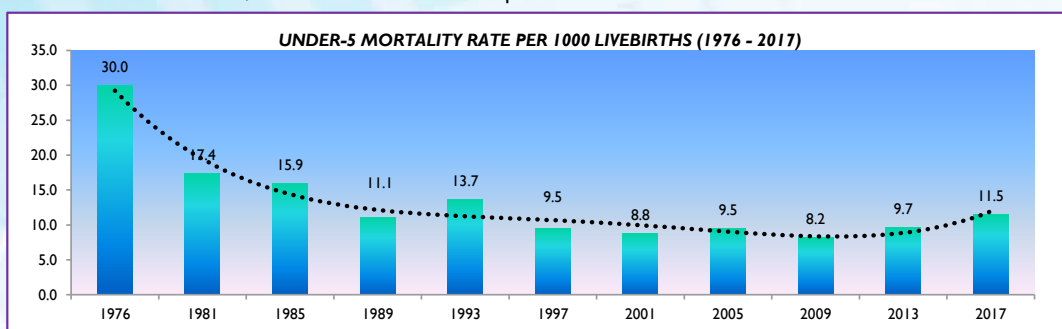
Sustainable Development Goals (SDGs)

GOAL 3: GOOD HEALTH AND WELL-BEING

Target 3.2: By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

Brunei Darussalam has been able to gradually reduce the under-5 mortality rate (U5MR) from 30 deaths per 1000 livebirths in 1976 to 11.5 deaths per 1000 livebirths in 2017. The current challenge is to achieve further reductions in U5MR where the data analysis from 2004 to 2017 showed a high proportion of neonatal deaths, mainly due to perinatal conditions and congenital abnormalities.

Abortion in Brunei Darussalam is only legal when it will save a woman's life. The prohibition does not permit the termination of a pregnancy even when there is a high risk to the baby's life. For example, in certain conditions originating in the perinatal period or congenital malformations, which are the leading causes of infant mortality in Brunei Darussalam. In 2017, this caused more than 71.2 percent of total under five deaths.



	2013	2014	2015	2016	2017
1	Certain Conditions Originating In The Perinatal Period 26	Certain Conditions Originating In The Perinatal Period 24	Certain Conditions Originating In The Perinatal Period 27	Certain Conditions Originating In The Perinatal Period 29	Certain Conditions Originating In The Perinatal Period 34
2	Congenital Malformations, Deformations and Chromosomal Abnormalities 15	Congenital Malformations, Deformations and Chromosomal Abnormalities 17	Congenital Malformations, Deformations and Chromosomal Abnormalities 26	Congenital Malformations, Deformations and Chromosomal Abnormalities 13	Congenital Malformations, Deformations and Chromosomal Abnormalities 19
3	Cancer 3	Septicaemia 2	Heart Diseases 2	Cancer 7	Heart Diseases 3
4	Transport Accidents 3	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1	Accidental Drowning and Submersion 2	Septicaemia 4	Cancer 2
5	Heart Diseases 2	Other Intestinal Infectious Diseases 1	Cancer 1	Heart Diseases 2	Accidental Drowning and Submersion 2
6	Septicaemia 1	Cancer 1	Exposure to Smoke, Fire and Flames 1	Influenza & Pneumonia 1	Influenza & Pneumonia 2
7	Influenza & Pneumonia 1	Anaemias 1		Bronchitis, Chronic & Unspecified Emphysema & Asthma 1	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1
8	Unspecified Acute Lower Respiratory Infection 1	Heart Diseases 1		Transport Accidents 1	Septicaemia 1
OTHERS**	13	12	8	9	10
TOTAL	65	60	67	67	74

Note: * - No other single cause of death.

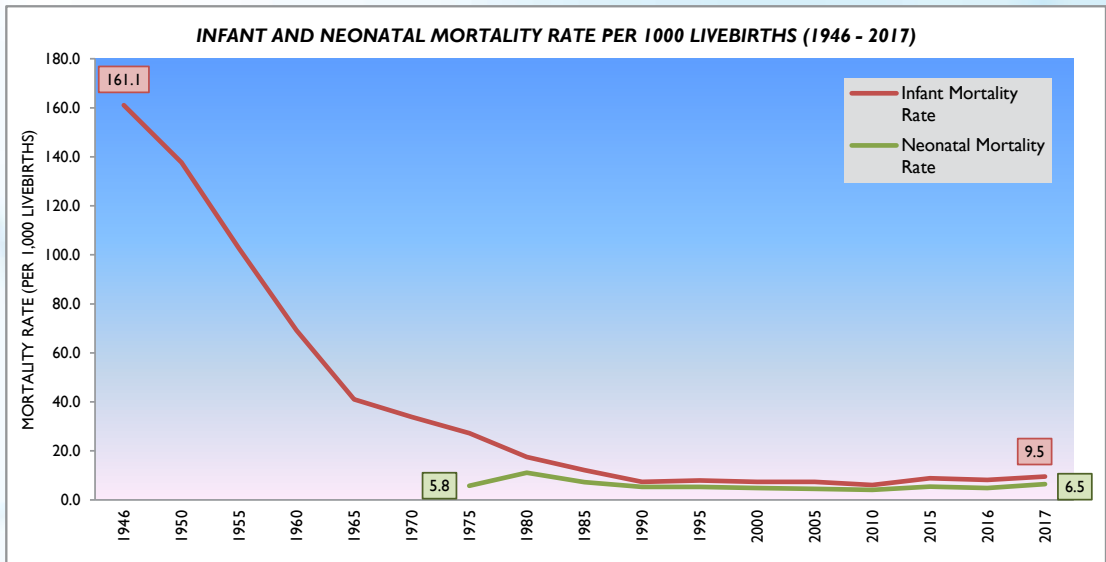
** - Remainders.

Sustainable Development Goals (SDGs)

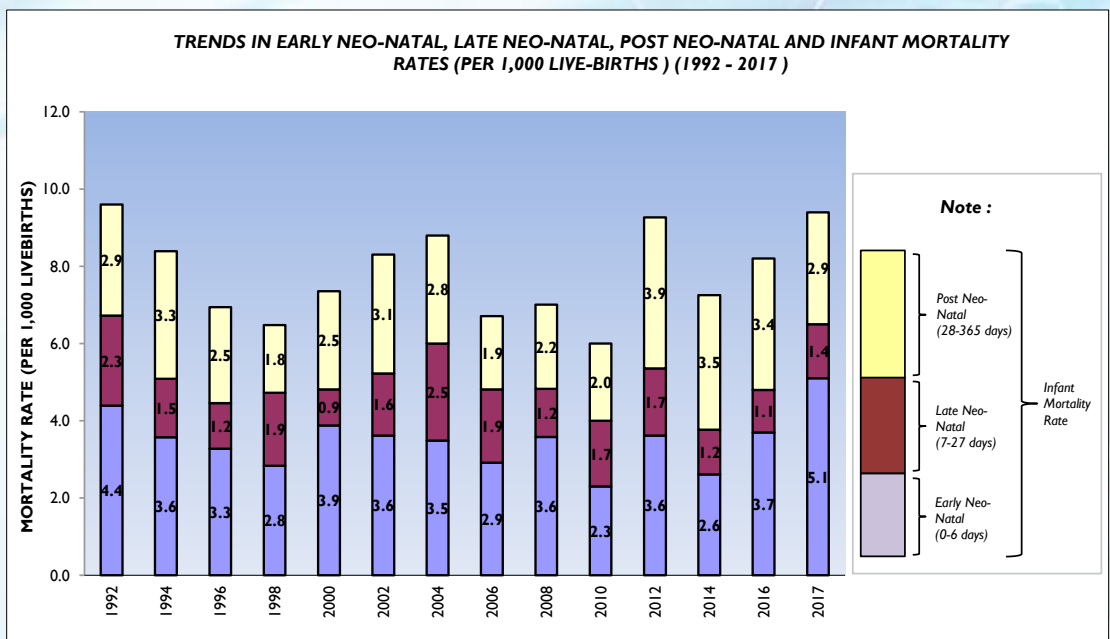
GOAL 3: GOOD HEALTH AND WELL-BEING

Target 3.2: By 2030, end preventable deaths of new-borns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births

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 9.5 per 1000 livebirths in 2017.



Data from 2004-2017 showed over two thirds of deaths occurred during early and late neonatal periods, mainly due to perinatal conditions and congenital abnormalities. In 2017, deaths occurring at infant period (less than 1 year) account for 82.4% of total deaths in USMR.



Health Facilities (2017)

GOVERNMENT MEDICAL CARE

NUMBER

- | | |
|---|---|
| - HOSPITALS | 4 |
| - MEDICAL CLINICS (Ministry of Defence) | 8 |
| - DIALYSIS CENTRES | 7 |

HEALTH SERVICES

- | | |
|-------------------------------------|----|
| - HEALTH CENTRES | 14 |
| - HEALTH CLINICS | 3 |
| - MATERNAL AND CHILD HEALTH CLINICS | 4 |
| - TRAVELLING HEALTH CLINICS | 3 |
| - FLYING MEDICAL SERVICES | 2 |

DENTAL SERVICES

- | | |
|--------------------------|----|
| - DENTAL SERVICES AT: | |
| HOSPITALS | 4 |
| HEALTH CENTRES | 1 |
| HEALTH CLINICS | 16 |
| STATIC SCHOOL CLINICS | 44 |
| MOBILE SQUAD | 9 |
| TRAVELLING (FLYING TEAM) | 0 |

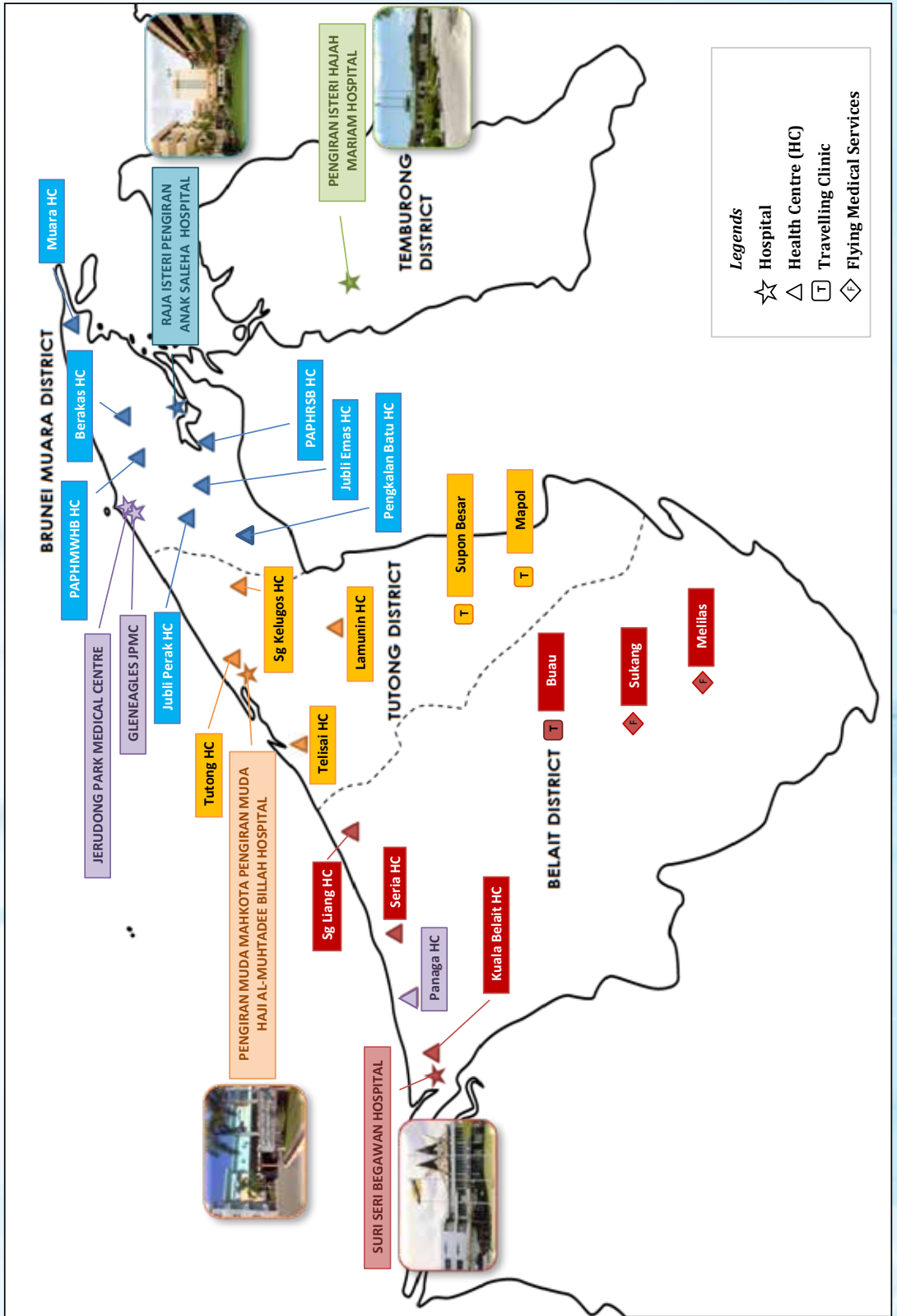
PRIVATE HEALTH SERVICES

- | | |
|----------------------------|-------------------|
| - HOSPITALS ⁽¹⁾ | 2 |
| - HEALTH CENTRE | 1 ⁽²⁾ |
| - HEALTH CLINICS | 33 ⁽³⁾ |
| - DENTAL CLINICS | 8 ⁽⁴⁾ |

Note :

- (1) - Jerudong Park Medical Centre (JPMC) and Gleneagles Jerudong Park Centre (GJPMC)
- (2) - Panaga Health Centre
- (3) - Including 12 health clinic branches
- (4) - Including 1 dental clinic branch

Distribution Map of Health Care Facilities



Human Resource in Health

Human Resources (2017)			Government	Army	Private	Total
Doctors ⁽¹⁾	Male	Local	90	6	16	112
		Foreign	210	3	18	231
	Female	Local	168	4	17	189
		Foreign	109	8	34	151
	TOTAL		577	21	85	683
Population per Doctor						617
Doctor per 10,000 Population						16
Dentists ⁽²⁾	Male	Local	16	4	4	24
		Foreign	12	3	6	21
	Female	Local	47	2	1	50
		Foreign	8	1	2	11
	TOTAL		83	10	13	106
Population per Dentist						3975
Dentist per 10,000 Population						3
Pharmacists ⁽³⁾	Male	Local	5	5	1	11
		Foreign	1	...	2	3
	Female	Local	40	...	15	55
		Foreign	0	...	9	9
	TOTAL		46	5	27	78
Population per Pharmacist						5401
Pharmacist per 10,000 Population						2
Nurses ⁽⁴⁾	Male	Local	412	91	35	538
		Foreign	53	...	47	100
	Female	Local	1595	33	116	1744
		Foreign	138	...	193	331
	TOTAL		2198	124	391	2713
Population per Nurse						155
Nurse per 10,000 Population						64
Midwives ⁽⁴⁾	Male	Local	...	...	...	...
		Foreign	...	...	...	...
	Female	Local	259	10	3	272
		Foreign	9	...	8	17
	TOTAL		268	10	11	289
Population per Midwife						1458
Midwife per 10,000 Population						7

Source :

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

Human Resource in Health

Allied Health Professionals for 2017	Male	Female	TOTAL
Audiologist	0	5	5
Clinical Psychologist	3	19	22
Dietician / Nutritionist	6	20	26
Health Education Officer	3	6	9
Maxillofacial Prosthetist & Technologist	2	0	2
Medical Social Worker	1	10	11
Occupational Therapist	3	23	26
Optometrist	0	9	9
Orthoptist	0	2	2
Paramedic	0	2	2
Physiotherapist	6	12	18
Podiatrist	1	7	8
Prosthetist and Orthotist	1	0	1
Public Health Officer	5	12	17
Radiographer	6	28	34
Scientific Officer in Scientific / Diagnostic Laboratory	22	61	83
Speech Language Therapist	0	5	5
Teacher for the Hearing Impaired	1	1	2

Note: - excluding officers who have transferred (seconded) to other departments.
 - Paramedic (Division II only)

Source: Department of Administration and Finance, Ministry of Health

Government Health Expenditure

	2015/16	2016/17	2017/18
Total Health Budget (B\$ Millions)	385.12	349.60	316.11
Health Budget as % of National Budget	8.19	8.32	8.78
Per Capita Health Budget (B\$)	934	838	750
Health Budget as % of GDP	2.17	2.22	1.89
Total Health Expenditure (B\$ Millions)	403.27	381.32	...
Health Expenditure as % of Government Expenditure	9.16	8.54	...
Per Capita Health Expenditure (B\$)	978	914	...
Health Expenditure as % of GDP	2.27	2.42	...

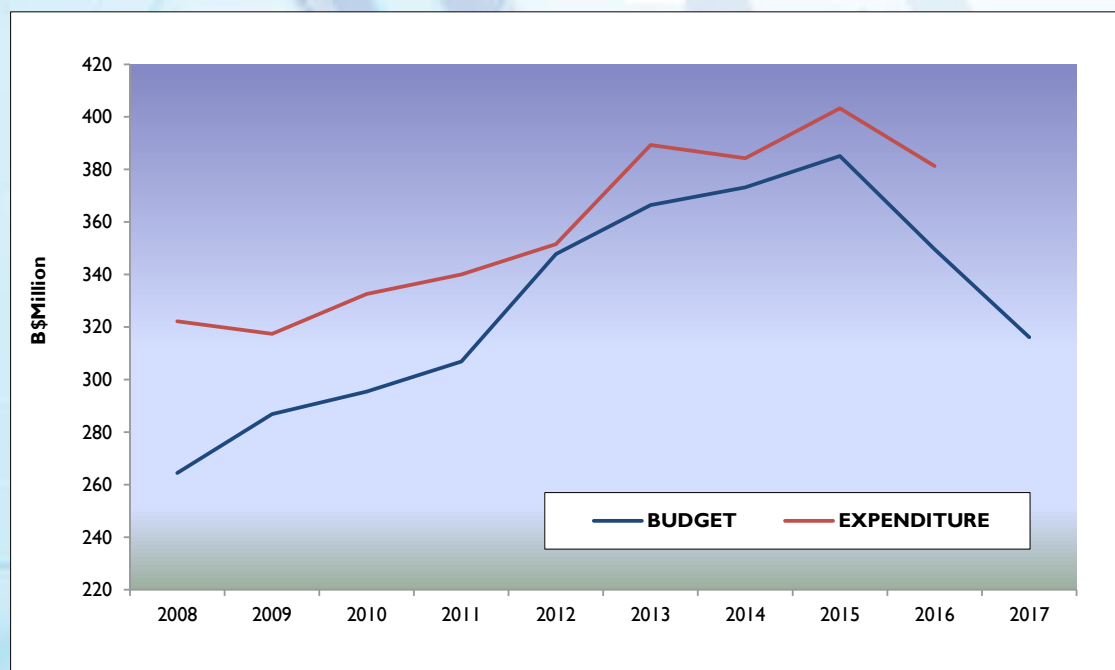
Note:

GDP - Gross Domestic Product

Source:

(Budget) - Budget Section, Ministry of Finance

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



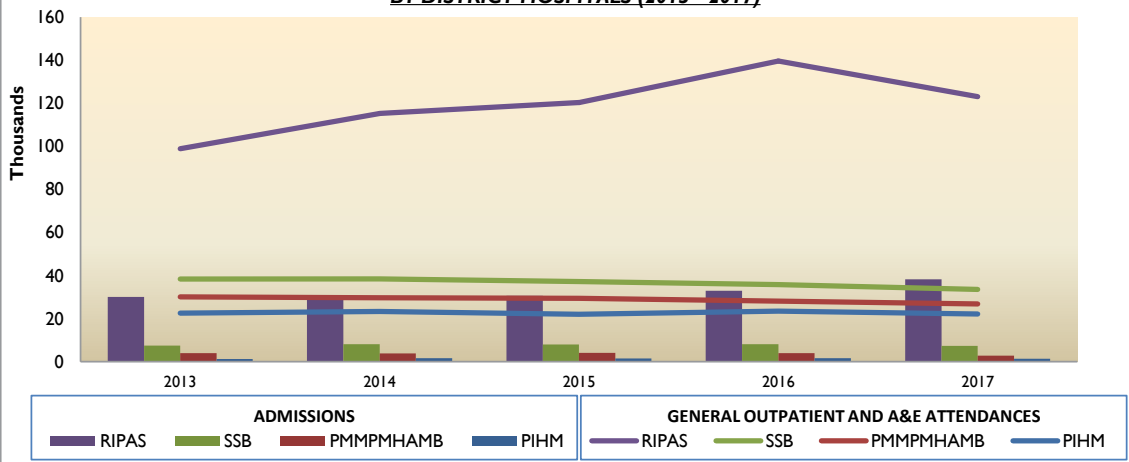
Hospital Services

The Department of Medical Services is responsible for the delivery of hospital services in all four districts. The hospital services in the country have developed and progressed tremendously in providing secondary and tertiary care. This includes providing highly specialized care in almost all areas of specialties in line with the current disease trends and enabling patients to access medical care in the country.

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.

ACTIVITIES FOR THE YEAR 2017	RIPAS	SSB	PMMPMHAMB	PIHM	TOTAL
OUTPATIENT ACTIVITIES					
General Outpatient Attendances	...	...	...	15,817	15,817
Accident & Emergency (A&E) Outpatient Attendances	123,086	33,544	26,812	6,273	189,715
Specialist Outpatient Attendances	327,542	90,183	49,869	25,766	493,360
TOTAL OUTPATIENT ATTENDANCES	450,628	123,727	76,681	47,856	698,892
INPATIENT ACTIVITIES					
Available Beds	847	222	109	46	1,224
Admissions	38,233	7,364	2,770	1,324	49,691
Discharges & Deaths	38,185	7,359	2,793	1,324	49,661
Deaths only	763	140	17	4	924
Patient Days	295,651	47,252	16,129	4,617	363,649
Day Patients	1,770	444	469	128	2,811
TOTAL (ADMISSIONS + DAY PATIENTS)	40,003	7,808	3,239	1,452	52,502
PERFORMANCE INDICES					
Average Number of Inpatients per Day	810	129	44	13	996
Bed Occupancy Rate	96	58	41	27	81
Average Duration of Stay (Days)	7.7	6.4	5.8	3.5	7.3
Average Turnover of Patients per Bed	45	33	26	29	41
Average Turnover Interval (Days)	0.4	4.6	8.5	9.2	1.7

**GENERAL OUTPATIENT AND A&E ATTENDANCES AND ADMISSIONS
BY DISTRICT HOSPITALS (2013 - 2017)**



Hospital Services

VISIT STATISTICS BY SPECIALTY FOR THE YEAR 2017 (RAJA ISTERI PENGIRAN ANAK SALEHA HOSPITAL, BRUNEI MUARA)

SPECIALTY	CITIZEN		NON-CITIZEN		TOTAL		
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	TOTAL
A & E	5	11	0	0	5	11	16
Acute Medicine	122	154	5	14	127	168	295
Audiology & Hearing	3,960	2,875	272	203	4,232	3,078	7,310
Cardiology & Vasc GS	254	226	26	28	280	254	534
Cardiovascular Medicine	9,685	7,800	1,444	755	11,129	8,555	19,684
Circumcision	1	0	0	0	1	0	1
Clinical Haematology	5,531	6,157	433	263	5,964	6,420	12,384
Clinical Psychology	1,097	958	109	61	1,206	1,019	2,225
DNE	1,355	1,754	79	72	1,434	1,826	3,260
Dietetic	1,042	1,252	73	90	1,115	1,342	2,457
Endocrinology	4,585	8,060	346	626	4,931	8,686	13,617
Eye	11,550	10,592	1,447	932	12,997	11,524	24,521
Gastroenterology & Hepatology	5,448	4,417	618	529	6,066	4,946	11,012
General Paediatrics	5,737	4,569	579	424	6,316	4,993	11,309
Geriatric Medicine	218	385	35	34	253	419	672
Gynaecology		16,675		1,607		18,282	18,282
Haj Medical Centre	873	886	4	23	877	909	1,786
HNCC	83	133	10	16	93	149	242
Infectious Control	523	242	25	24	548	266	814
Maxillo-Facial, PRS & Tech	7,886	8,765	1,458	899	9,344	9,664	19,008
Medical Social Worker	102	118	16	8	118	126	244
Neonatology	409	352	37	47	446	399	845
Nephrology	1,354	1,623	142	175	1,496	1,798	3,294
Neurology	2,174	2,573	193	193	2,367	2,766	5,133
Obstetrics		22,814		2,673		25,487	25,487
Occupational Health	1,117	837	803	240	1,920	1,077	2,997
Occupational Therapy	3,893	3,017	422	225	4,315	3,242	7,557
Orthotic / Prosthetic	346	327	37	53	383	380	763
Palliative Medicine	544	627	79	76	623	703	1,326
Physiotherapy	5,500	7,487	562	500	6,062	7,987	14,049
Podiatry	2,256	2,473	165	125	2,421	2,598	5,019
Psychiatry	2,985	3,014	276	421	3,261	3,435	6,696
Rehabilitative Medicine	335	226	42	9	377	235	612
Respiratory Medicine	2,105	2,900	449	269	2,554	3,169	5,723
Rheumatology	764	2,270	86	187	850	2,457	3,307
Skin (Dermatology)	9,679	10,656	899	779	10,578	11,435	22,013
Speech Therapy	2,578	812	205	67	2,783	879	3,662
Colorectal Surgery	5	7	2	0	7	7	14
Dental Surgery	1,620	1,958	140	159	1,760	2,117	3,877
General Surgery	5,247	7,893	482	823	5,729	8,716	14,445
Neuro Surgery	1,268	1,428	136	160	1,404	1,588	2,992
ORL Surgery	5,728	6,275	549	479	6,277	6,754	13,031
Paediatrics Surgery	1,275	550	120	65	1,395	615	2,010
Paediatrics Dental Surgery	1,092	733	85	51	1,177	784	1,961
Urology Surgery	7,121	1,762	1,023	167	8,144	1,929	10,073
Ortho Surgery	9,457	9,098	1,585	843	11,042	9,941	20,983
TOTAL	128,909	167,741	15,498	15,394	144,407	183,135	327,542

Source: Bru-HIMS Report - Visit Statistics By Specialty.

Hospital Services

VISIT STATISTICS BY SPECIALTY FOR THE YEAR 2017 (SURI SERI BEGAWAN HOSPITAL, BELAIT)

SPECIALTY	CITIZEN		NON-CITIZEN		TOTAL		
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	TOTAL
Anaesthesia	177	148	31	30	208	178	386
Audiology & Hearing	146	134	15	39	161	173	334
Cardiovascular Medicine	1,080	783	316	172	1,396	955	2,351
Clinical Psychology	132	79	15	11	147	90	237
Community Psych	45	11	5	2	50	13	63
Dietetic	364	522	47	81	411	603	1,014
Endocrinology	1,578	2,293	211	318	1,789	2,611	4,400
Eye	2,615	2,953	637	587	3,252	3,540	6,792
Gastroenterology & Hepatology	801	674	174	181	975	855	1,830
General Internal Medicine	2,681	3,139	689	589	3,370	3,728	7,098
General Paediatrics	3,754	2,846	841	646	4,595	3,492	8,087
Gynaecology		2,466		477		2,943	2,943
Haj Medical Centre	141	144	4	11	145	155	300
Home Based	181	317	48	174	229	491	720
Infectious Control	2	4	1	0	3	4	7
Laboratory	533	472	202	127	735	599	1,334
Maxillo-Facial & PRS	91	123	21	25	112	148	260
Medical Social Worker	19	35	1	7	20	42	62
Nephrology	6,497	5,559	1,432	842	7,929	6,401	14,330
Neurology	68	61	11	18	79	79	158
Obstetrics		1,940		361		2,301	2,301
Occupational Health	11	9	1	0	12	9	21
Occupational Therapy	1,161	663	86	149	1,247	812	2,059
Physiotherapy	1,328	1,597	222	348	1,550	1,945	3,495
Podiatry	473	477	38	56	511	533	1044
Psychiatry	1,262	1,405	306	386	1,568	1,791	3,359
Respiratory Medicine	323	416	71	71	394	487	881
Rheumatology	18	87	3	7	21	94	115
Skin (Dermatology)	333	328	33	46	366	374	740
Speech Therapy	535	155	32	32	567	187	754
Breast Surgery	2	78	0	20	2	98	100
Colorectal Surgery	1	0	0	0	1	0	1
Dental Surgery	4,335	5,372	702	801	5,037	6,173	11,210
General Surgery	2,286	1,640	561	437	2,847	2,077	4,924
Neuro Surgery	8	5	2	4	10	9	19
ORL Surgery	1,155	1,133	280	254	1,435	1,387	2,822
Ortho Surgery	1,535	1,456	366	275	1,901	1,731	3,632
TOTAL	35,671	39,524	7,404	7,584	43,075	47,108	90,183

Source:

Bru-HIMS Report - Visit Statistics By Specialty

Hospital Services

VISIT STATISTICS BY SPECIALTY FOR THE YEAR 2017

(PENGIRAN MUDA MAHKOTA PENGIRAN MUDA HAJI AL-MUHTADEE BILLAH HOSPITAL, TUTONG)

SPECIALTY	CITIZEN		NON-CITIZEN		TOTAL		
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	TOTAL
Cardiovascular Medicine	435	335	10	4	445	339	784
Circumcision	246	0	0	0	246	0	246
Clinical Psychology	19	19	0	0	19	19	38
Community Paediatrics	3	0	0	0	3	0	3
Community Psych	6	2	0	0	6	2	8
DNE	134	263	1	0	135	263	398
Dietetic	273	402	4	5	277	407	684
Endocrinology	513	823	12	6	525	829	1,354
Endoscopy	352	348	26	26	378	374	752
Eye	3,314	3,716	115	66	3,429	3,782	7,211
Gastroenterology & Hepatology	415	401	39	23	454	424	878
General Internal Medicine	2,273	2,723	62	41	2,335	2,764	5,099
General Paediatrics	1,094	712	12	25	1,106	737	1,843
Geriatric Medicine	41	16	0	0	41	16	57
Gynaecology		961		32		993	993
Haj Medical Centre	107	120	0	0	107	120	227
Home Based	191	158	27	0	218	158	376
Maxillo-Facial & PRS	36	53	1	4	37	57	94
Medical Social Worker	1	2	0	0	1	2	3
Nephrology	3,935	2,998	2	108	3,937	3,106	7,043
Neurology	45	40	2	2	47	42	89
Obstetrics		1,499		42		1,541	1,541
Occupational Therapy	856	562	2	14	858	576	1,434
Physiotherapy	1,883	1,529	12	46	1,895	1,575	3,470
Podiatry	154	191	0	3	154	194	348
Psychiatry	690	731	1	22	691	753	1,444
Skin (Dermatology)	338	348	4	3	342	351	693
Dental Surgery	4,337	6,251	127	177	4,464	6,428	10,892
General Surgery	238	207	11	1	249	208	457
ORL Surgery	512	550	19	13	531	563	1,094
Ortho Surgery	142	168	0	6	142	174	316
TOTAL	22,583	26,128	489	669	23,072	26,797	49,869

Source:

Bru-HIMS Report - Visit Statistics By Specialty

Hospital Services

VISIT STATISTICS BY SPECIALTY FOR THE YEAR 2017 (PENGIRAN ISTERI HAJAH MARIAM HOSPITAL, TEMBURONG)

SPECIALTY	CITIZEN		NON-CITIZEN		TOTAL		
	MALE	FEMALE	MALE	FEMALE	MALE	FEMALE	TOTAL
Clinical Psychology	2	0	0	0	2	0	2
Dental Surgery	1,227	1,519	54	34	1,281	1,553	2,834
DNE	25	42	2	1	27	43	70
Dietetic	34	75	2	1	36	76	112
Eye	480	642	32	19	512	661	1,173
General Internal Medicine	6,959	8,959	415	267	7,374	9,226	16,600
General Paediatrics	29	40	0	1	29	41	70
Haj Medical Centre	14	10	0	0	14	10	24
Home Based	29	46	0	0	29	46	75
Maxillo-Facial & PRS	15	31	0	0	15	31	46
Nephrology	1,716	1,350	155	29	1,871	1,379	3,250
Occupational Health	2	1	0	0	2	1	3
Occupational Therapy	13	3	0	0	13	3	16
ORL Surgery	99	92	8	3	107	95	202
Ortho Surgery	77	102	6	1	83	103	186
Physiotherapy	403	402	14	8	417	410	827
Podiatry	18	29	1	0	19	29	48
Primary Health Care	25	81	0	0	25	81	106
Psychiatry	78	41	0	3	78	44	122
TOTAL	11,245	13,465	689	367	11,934	13,832	25,766

Source:

Bru-HIMS Report - Visit Statistics By Specialty

Leading Causes of Deaths for the Year 2017 (Based on ICD-10)

The four leading causes of deaths which accounted for 52.5 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)	159	168	327	19.3	77.6
2	I00 - I09, I20 - I52	Heart Diseases (Including Acute Rheumatic Fever)	163	87	250	14.7	59.3
3	E10 - E14	Diabetes Mellitus	79	92	171	10.1	40.6
4	I60 - I69	Cerebrovascular Diseases	78	65	143	8.4	33.9
5	I10 - I15	Hypertensive Diseases	51	34	85	5.0	20.2
6	J10 - J18	Influenza and Pneumonia	31	36	67	4.0	15.9
7	A40 - A41	Septicaemia	28	38	66	3.9	15.7
8	V01 - V99	Transport Accidents	32	4	36	2.1	8.5
9	J40 - J46	Bronchitis, Chronic & Unspecified Emphysema & Asthma	16	18	34	2.0	8.1
10	P00 - P96	Certain Conditions Originating In The Perinatal Period	19	15	34	2.0	8.1
Others			255	228	483	28.5	114.6
TOTAL DEATHS			911	785	1,696	100.0	402.6

Leading Causes of Deaths (2013 - 2017)

No.	2013	2014	2015	2016	2017
1	Cancer (Malignant Neoplasms) 295 (21.1%)	Cancer (Malignant Neoplasms) 298 (20.3%)	Cancer (Malignant Neoplasms) 312 (20.2%)	Cancer (Malignant Neoplasms) 353 (21.6%)	Cancer (Malignant Neoplasms) 327 (19.3%)
2	Heart Diseases (Including Acute Rheumatic Fever) 183 (13.1%)	Heart Diseases (Including Acute Rheumatic Fever) 228 (15.5%)	Heart Diseases (Including Acute Rheumatic Fever) 193 (12.5%)	Heart Diseases (Including Acute Rheumatic Fever) 211 (12.9%)	Heart Diseases (Including Acute Rheumatic Fever) 250 (14.7%)
3	Diabetes Mellitus 131 (9.4%)	Diabetes Mellitus 141 (9.6%)	Diabetes Mellitus 147 (9.5%)	Diabetes Mellitus 149 (9.1%)	Diabetes Mellitus 171 (10.1%)
4	Cerebrovascular Diseases 82 (5.9%)	Cerebrovascular Diseases 103 (7.0%)	Cerebrovascular Diseases 102 (6.6%)	Cerebrovascular Diseases 123 (7.5%)	Cerebrovascular Diseases 143 (8.4%)
5	Hypertensive Diseases 71 (5.1%)	Hypertensive Diseases 64 (4.4%)	Influenza and Pneumonia 75 (4.8%)	Influenza and Pneumonia 82 (5.0%)	Hypertensive Diseases 85 (5.0%)
6	Bronchitis, Chronic and Unspecified Emphysema & Asthma 54 (3.9%)	Influenza and Pneumonia 63 (4.3%)	Hypertensive Diseases 54 (3.5%)	Hypertensive Diseases 72 (4.4%)	Influenza and Pneumonia 67 (4.0%)
7	Influenza and Pneumonia 48 (3.4%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 48 (3.3%)	Septicaemia 51 (3.3%)	Septicaemia 61 (3.7%)	Septicaemia 66 (3.9%)
8	Septicaemia 35 (2.5%)	Septicaemia 42 (2.9%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 44 (2.8%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 38 (2.3%)	Transport Accidents 36 (2.1%)
9	Transport Accidents 30 (2.1%)	Transport Accidents 28 (1.9%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 34 (2.2%)	Certain Conditions Originating In The Perinatal Period 29 (1.8%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 34 (2.0%)
10	Certain Conditions Originating In The Perinatal Period 26 (1.9%)	Certain Conditions Originating In The Perinatal Period 24 (1.6%)	Transport Accidents 34 (2.2%)	Senility Without Mention of Psychosis 28 (1.7%)	Certain Conditions Originating In The Perinatal Period 34 (2.0%)
OTHERS	445 (31.8%)	431 (29.3%)	501 (32.4%)	486 (29.8%)	483 (28.5%)
GRAND TOTAL	1,400 (100.0%)	1,470 (100.0%)	1,547 (100.0%)	1,632 (100.0%)	1,696 (100.0%)

Leading Causes of Deaths for Population Below 19 Years (2017)

In 2017, 5.7 percent of total deaths were for the age-group (0-18) years old.

No.	Under 1 year	1 - 4 years	5 - 9 years	10 - 14 years	15 - 18 years	TOTAL (< 19 years)
1	Certain Conditions Originating In The Perinatal Period 34 (55.7%)	Heart Diseases (Including Acute Rheumatic Fever) 3 (23.0%)	Cancer (Malignant Neoplasms) 1 (12.5%)	Cancer (Malignant Neoplasms) 1 (14.2%)	Cancer (Malignant Neoplasms) 2 (25.0%)	Certain Conditions Originating In The Perinatal Period 34 (35.1%)
2	Congenital Malformations, Deformations and Chromosomal Abnormalities 19 (31.1%)	Accidental Drowning and Ssubmersion 2 (15.3%)	Cerebrovascular Diseases 1 (12.5%)	Cerebrovascular Diseases 1 (14.2%)	Septicaemia 1 (12.5%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 20 (20.6%)
3	Cancer (Malignant Neoplasms) 1 (1.6%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1 (7.6%)	Diseases of Musculoskeletal System and Connective Tissue 1 (12.5%)	Transport Accidents 1 (14.2%)	Diseases of Musculoskeletal System and Connective Tissue 1 (12.5%)	Cancer (Malignant Neoplasms) 6 (6.2%)
4	Influenza and Pneumonia 1 (1.6%)	Septicaemia 1 (7.6%)	Congenital Malformations, Deformations and Chromosomal Abnormalities 1 (12.5%)	Accidental Drowning and Ssubmersion 1 (14.2%)	-	Accidental Drowning and Ssubmersion 4 (4.1%)
5	Chronic Liver Diseases and Cirrhosis 1 (1.6%)	Leukaemia 1 (7.6%)	Accidental Drowning and Ssubmersion 1 (12.5%)	-	-	Heart Diseases (Including Acute Rheumatic Fever) 3 (3.1%)
6	-	Influenza and Pneumonia 1 (7.6%)	-	-	-	Septicaemia 2 (2.1%)
7	-	Transport Accidents 1 (7.6%)	-	-	-	Cerebrovascular Diseases 2 (2.1%)
8	-	-	-	-	-	Influenza and Pneumonia 2 (2.1%)
9	-	-	-	-	-	Diseases of Musculoskeletal System and Connective Tissue 2 (2.1%)
10	-	-	-	-	-	Transport Accidents 2 (2.1%)
OTHER DISEASES	5 (8.2%)	3 (23.0%)	3 (37.5%)	3 (42.8%)	4 (50.0%)	20 (20.6%)
GRAND TOTAL	61 (100.0%)	13 (100.0%)	8 (100.0%)	7 (100.0%)	8 (100.0%)	97 (100.0%)

Leading Causes of Premature Deaths (For Aged 30 - 69 years) (2013 - 2017)

In 2017, about 47 percent of total deaths were for the age 30-69 years and the top five leading causes of deaths were comprised Non-Communicable Diseases: Cancer, Heart Diseases, Diabetes Mellitus, Cerebrovascular Diseases; and Hypertensive Diseases.

No.	2013	2014	2015	2016	2017
1	Cancer (Malignant Neoplasms) 176 (27.5%)	Cancer (Malignant Neoplasms) 173 (25.5%)	Cancer (Malignant Neoplasms) 197 (25.8%)	Cancer (Malignant Neoplasms) 217 (26.6%)	Cancer (Malignant Neoplasms) 193 (24.4%)
2	Heart Diseases (Including Acute Rheumatic Fever) 93 (14.5%)	Heart Diseases (Including Acute Rheumatic Fever) 123 (18.1%)	Heart Diseases (Including Acute Rheumatic Fever) 105 (13.8%)	Heart Diseases (Including Acute Rheumatic Fever) 122 (15.0%)	Heart Diseases (Including Acute Rheumatic Fever) 134 (17.0%)
3	Diabetes Mellitus 68 (10.6%)	Diabetes Mellitus 71 (10.5%)	Diabetes Mellitus 91 (11.9%)	Diabetes Mellitus 96 (11.8%)	Diabetes Mellitus 90 (11.4%)
4	Cerebrovascular Diseases 32 (5.0%)	Cerebrovascular Diseases 43 (6.3%)	Cerebrovascular Diseases 56 (7.3%)	Cerebrovascular Diseases 58 (7.1%)	Cerebrovascular Diseases 72 (9.1%)
5	Hypertensive Diseases 22 (3.4%)	Hypertensive Diseases 23 (3.4%)	Influenza and Pneumonia 31 (4.1%)	Influenza and Pneumonia 34 (4.2%)	Hypertensive Diseases 37 (4.7%)
6	Septicaemia 18 (2.8%)	Influenza and Pneumonia 18 (2.7%)	Septicaemia 28 (3.7%)	Septicaemia 32 (3.9%)	Septicaemia 28 (3.5%)
7	Influenza and Pneumonia 18 (2.8%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 13 (1.9%)	Hypertensive Diseases 25 (3.3%)	Hypertensive Diseases 27 (3.3%)	Influenza and Pneumonia 20 (2.5%)
8	Bronchitis, Chronic and Unspecified Emphysema & Asthma 12 (1.9%)	Transport Accidents 13 (1.9%)	Transport Accidents 23 (3.0%)	Transport Accidents 13 (1.6%)	Transport Accidents 15 (1.9%)
9	Transport Accidents 11 (1.7%)	Septicaemia 12 (1.8%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 12 (1.6%)	Chronic Liver Diseases and Cirrhosis 11 (1.3%)	Diseases of Musculoskeletal System and Connective Tissue 8 (1.0%)
10	Diseases of Musculoskeletal System and Connective Tissue 10 (1.6%)	Diseases of Skin and Subcutaneous Tissue 10 (1.5%)	Chronic Liver Diseases and Cirrhosis 11 (1.4%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 9 (1.1%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 7 (0.9%)
OTHERS	180 (28.1%)	179 (26.4%)	184 (24.1%)	197 (24.1%)	186 (23.5%)
GRAND TOTAL	640 (100.0%)	678 (100.0%)	763 (100.0%)	816 (100.0%)	790 (100.0%)

Leading Causes of Deaths for Elderly Population Aged 60 years and Above (2013 - 2017)

In 2017, about 62 percent of total deaths were for the age 60 years and above and the top five leading causes of deaths were comprised Non-Communicable Diseases: Cancer, Heart Diseases, Diabetes Mellitus, Cerebrovascular Diseases; and Hypertensive Diseases.

No.	2013	2014	2015	2016	2017
1	Cancer (Malignant Neoplasms) 169 (20.5%)	Cancer (Malignant Neoplasms) 182 (20.5%)	Cancer (Malignant Neoplasms) 178 (19.3%)	Cancer (Malignant Neoplasms) 190 (20.1%)	Cancer (Malignant Neoplasms) 204 (19.5%)
2	Heart Diseases (Including Acute Rheumatic Fever) 105 (12.7%)	Heart Diseases (Including Acute Rheumatic Fever) 133 (15.0%)	Heart Diseases (Including Acute Rheumatic Fever) 115 (12.5%)	Heart Diseases (Including Acute Rheumatic Fever) 110 (11.6%)	Heart Diseases (Including Acute Rheumatic Fever) 146 (13.9%)
3	Diabetes Mellitus 98 (11.9%)	Diabetes Mellitus 95 (10.7%)	Diabetes Mellitus 94 (10.2%)	Diabetes Mellitus 89 (9.4%)	Diabetes Mellitus 117 (11.2%)
4	Cerebrovascular Diseases 60 (7.3%)	Cerebrovascular Diseases 76 (8.5%)	Cerebrovascular Diseases 66 (7.1%)	Cerebrovascular Diseases 81 (8.6%)	Cerebrovascular Diseases 98 (9.4%)
5	Hypertensive Diseases 57 (6.9%)	Hypertensive Diseases 50 (5.6%)	Influenza and Pneumonia 62 (6.7%)	Influenza and Pneumonia 61 (6.4%)	Hypertensive Diseases 61 (5.8%)
6	Bronchitis, Chronic and Unspecified Emphysema & Asthma 50 (6.1%)	Influenza and Pneumonia 48 (5.4%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 39 (4.2%)	Hypertensive Diseases 55 (5.8%)	Influenza and Pneumonia 52 (5.0%)
7	Influenza and Pneumonia 29 (3.5%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 38 (4.3%)	Hypertensive Diseases 35 (3.8%)	Septicaemia 40 (4.2%)	Septicaemia 44 (4.2%)
8	Senility Without Mention of Psychosis 23 (2.8%)	Septicaemia 29 (3.3%)	Septicaemia 31 (3.3%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 33 (3.5%)	Bronchitis, Chronic and Unspecified Emphysema & Asthma 29 (2.8%)
9	Septicaemia 22 (2.7%)	Senility Without Mention of Psychosis 21 (2.4%)	Senility Without Mention of Psychosis 26 (2.8%)	Senility Without Mention of Psychosis 28 (3.0%)	Diseases of Musculoskeletal System and Connective Tissue 15 (1.4%)
10	Diseases of Skin and Subcutaneous Tissue 11 (1.3%)	Tuberculosis 8 (0.9%)	Tuberculosis 8 (0.8%)	Diseases of Skin and Subcutaneous Tissue 11 (1.2%)	Tuberculosis 10 (1.0%)
OTHERS	201 (24.4%)	209 (23.5%)	266 (28.9%)	248 (26.2%)	272 (26.0%)
GRAND TOTAL	825 (100.0%)	889 (100.0%)	920 (100.0%)	946 (100.0%)	1,048 (100.0%)

Health Services

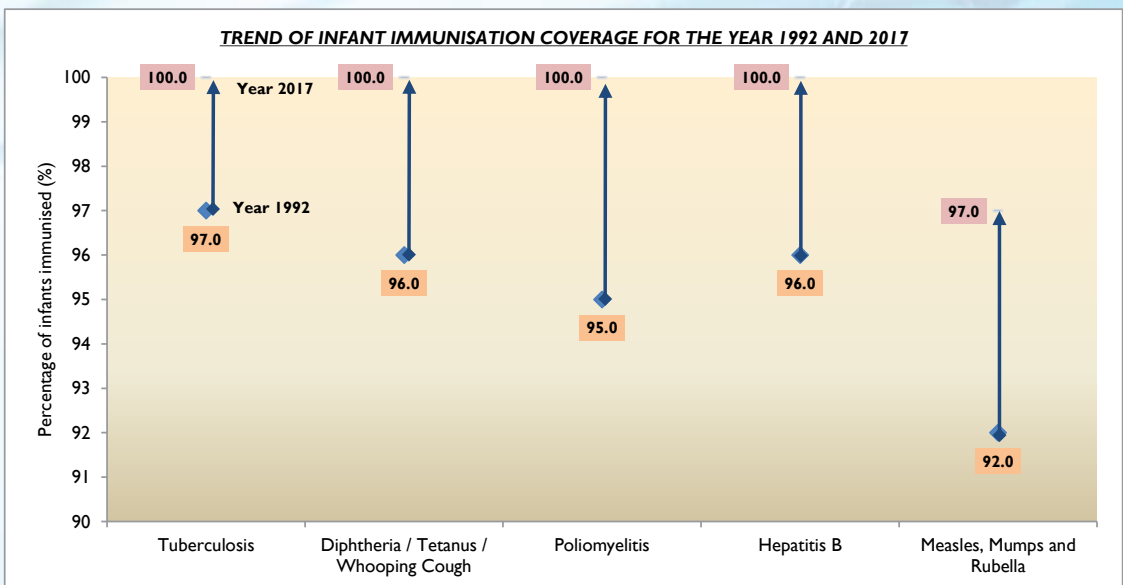
The Department of Health Services, Ministry of Health is responsible for providing public health services in the country. The mission of the department is to promote well-being and prevent ill health, through various activities and programmes that have been developed and established under three main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

WORKLOAD INDICATORS	2013	2014	2015	2016	2017
1. Ante Natal Clinic attendances	44,418	44,812	46,471	46,147	47,722
2. Post Natal Clinic attendances	10,167	9,188	9,986	10,545	10,584
3. Well Women Clinic Attendances	10,342	10,964	11,525	11,795	13,935
4. Child (<5) attendances	94,501	86,785	89,929	91,167	86,149

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. In 2003, it was made compulsory in line with the Infectious Disease Order for all children in Brunei Darussalam to be vaccinated according to the Expanded Program of Immunisation. 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	2013	2014	2015	2016	2017
% of infants immunised against					
- Tuberculosis (at birth)	100.0	100.0	100.0	100.0	100.0
- Diphtheria/Tetanus/Whooping Cough (Tetract-HIB)3	99.6	99.0	99.0	100.0	100.0
- Poliomyelitis IPV3	99.1	99.0	99.0	100.0	100.0
- Hepatitis B3	97.9	99.5	99.0	100.0	100.0
- Measles, Mumps and Rubella I (MMR1)	96.0	97.0	96.0	98.0	97.0

Source: Maternal and Child Health (MCH) Clinic Data



Maternal and Child Health

PREVALENCE OF ANAEMIA AMONG PREGNANT WOMEN AT FIRST ANTENATAL CLINIC PRESENTATION (2017)

	MATERNAL AND CHILD HEALTH (MCH) CLINIC DATA				
	BRUNEI MUARA	BELAIT	TUTONG	TEMBURONG	TOTAL
NO. OF WOMEN WITH DOCUMENTED RESULT	4,409	846	569	97	5,921
NORMAL [11 g/dl & above]	3,779	715	481	92	5,067
MILD ANAEMIA [10 to 10.9 g/dl]	367	79	57	3	506
MODERATE ANAEMIA [7 to 9.9 g/dl]	207	51	30	2	290
SEVERE ANAEMIA [6.9 g/dl or less]	36	1	1	0	38
TOTAL NO. OF PREGNANT WOMEN WITH ANAEMIA	610	131	88	5	834
% ANAEMIA	13.8	15.5	15.5	5.2	14.1

Source: Maternal and Child Health (MCH) Clinic Data

REGISTERED LIVEBIRTHS BY BIRTH WEIGHT (2013 - 2017)

Birth Weight	NUMBER OF LIVEBIRTHS				
	2013	2014	2015	2016	2017
At Least 2500g	5,850	6,037	5,877	5,737	5,684
Less Than 2500g (LOW BIRTH WEIGHT)	791	819	791	667	730
- Less Than 1500g (VERY LOW BIRTH WEIGHT)	88	100	97	84	98
- Less Than 1000g (EXTREMELY LOW BIRTH WEIGHT)	37	38	32	40	49
Not Known	39	35	31	33	37
TOTAL	6,680	6,891	6,699	6,437	6,451
% Low Birth Weight (Less Than 2500g)	11.84	11.89	11.81	10.36	11.32

Source:

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

Maternal and Child Health

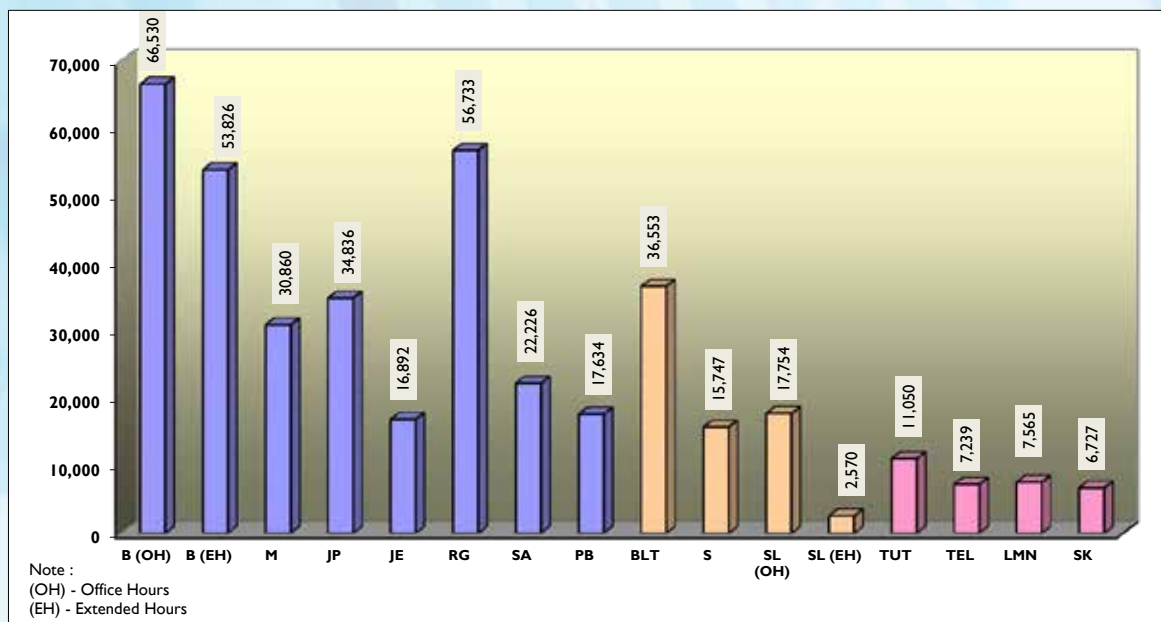
TOTAL NUMBER OF REGISTERED LIVEBIRTHS BY AGE OF MOTHER (2013 - 2017)

Age Group of Mother	2013	2014	2015	2016	2017
Under 15	7	5	4	3	2
15 - 19	221	197	195	170	164
20 - 24	1,097	1,083	987	920	880
25 - 29	2,124	2,212	2,233	2,101	2,015
30 - 34	1,886	2,042	1,939	1,896	2,030
35 - 39	1,044	1,079	1,064	1,064	1,068
40 - 44	279	254	264	269	271
45 - 49	20	16	13	12	20
50 above	1	2	0	1	0
unknown	1	1	0	1	1
TOTAL	6,680	6,891	6,699	6,437	6,451
Adolescent Fertility Rate (per 1,000 female population aged (15-19))	12.8	11.3	11.1	9.7	9.3
General Fertility Rate (per 1,000 female population aged (15-49))	57.2	58.6	56.5	54.5	54.0
Total Fertility Rate (per female population aged (15-49))	1.9	1.9	1.8	1.8	1.8

Source:

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

General Outpatient Attendances for Health Centres (2017)



BRUNEI MUARA HEALTH CENTRES

- B : Berakas Health Centre
- M : Muara Health Centre
- JP : Jubli Perak Health Centre
- JE : Jubli Emas Health Centre
- RG : PAP Hjh Muta-Wakkilah Hayatul Bolkihah Health Centre
- SA : PAP Hjh Rashidah Sa'adatul Bolkihah Health Centre
- PB : Pengkalan Batu Health Centre

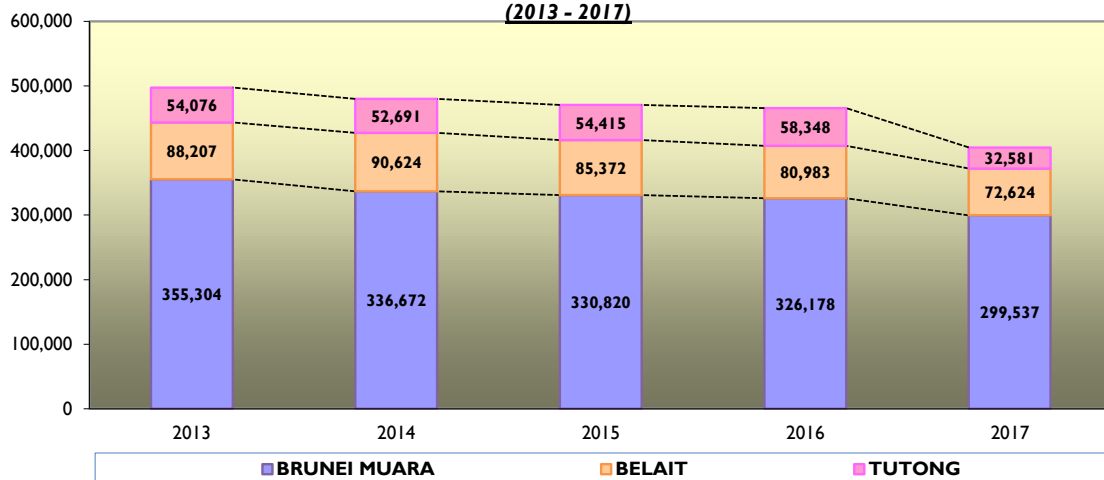
BELAIT HEALTH CENTRES

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

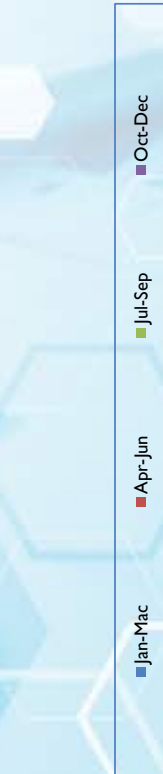
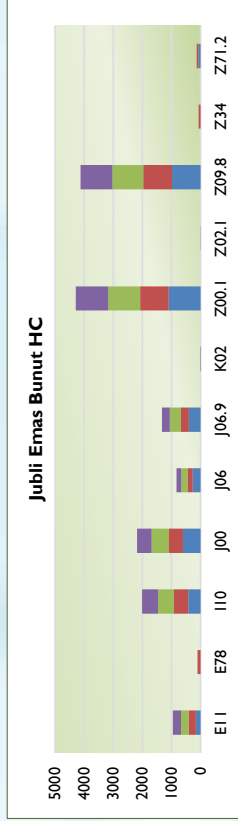
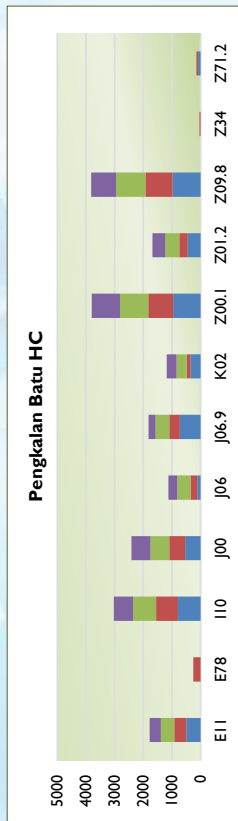
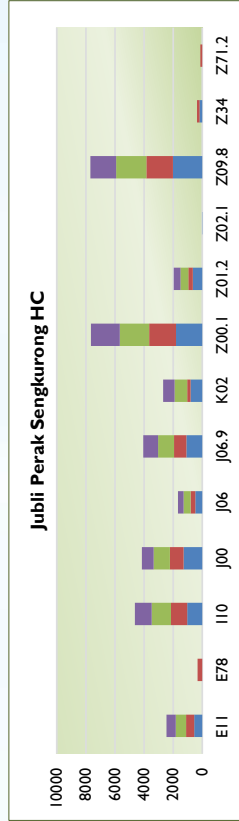
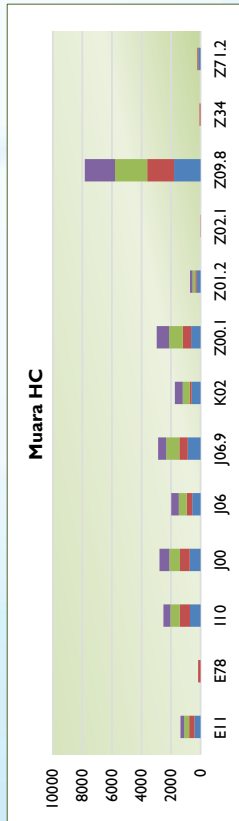
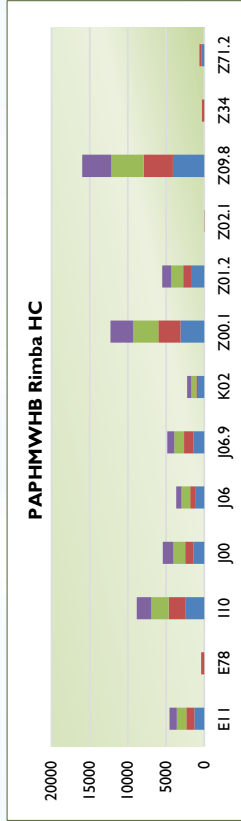
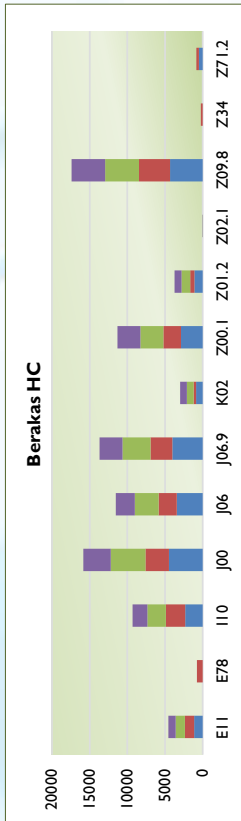
TUTONG HEALTH CENTRES

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

TOTAL OUTPATIENT ATTENDANCES OF HEALTH CENTRES BY DISTRICT (2013 - 2017)



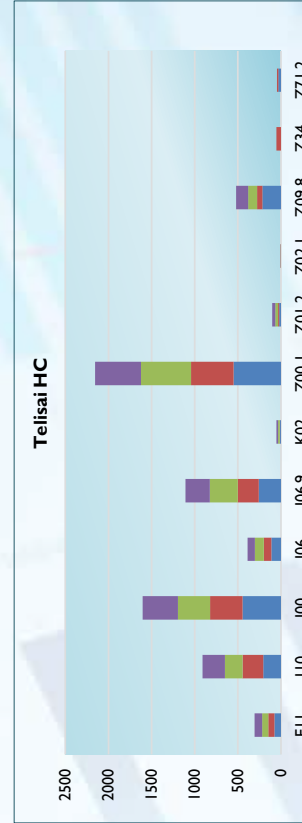
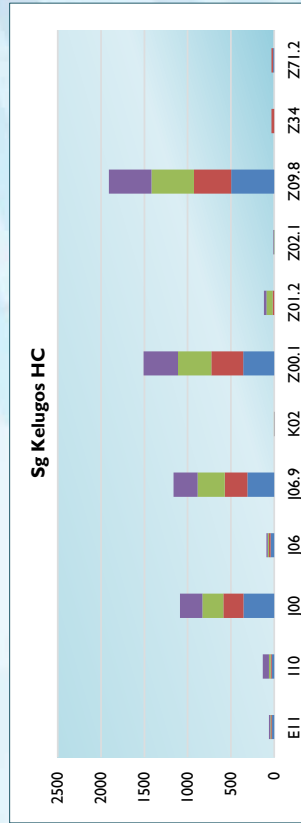
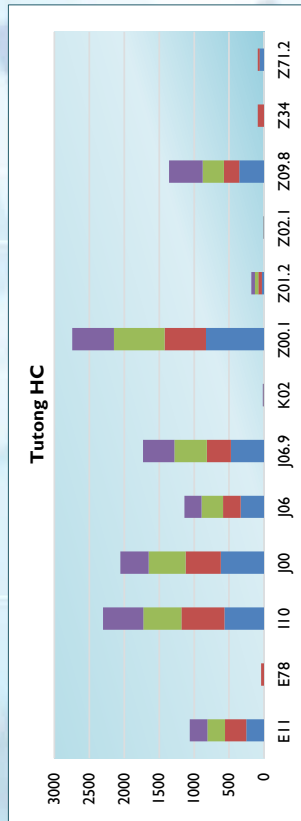
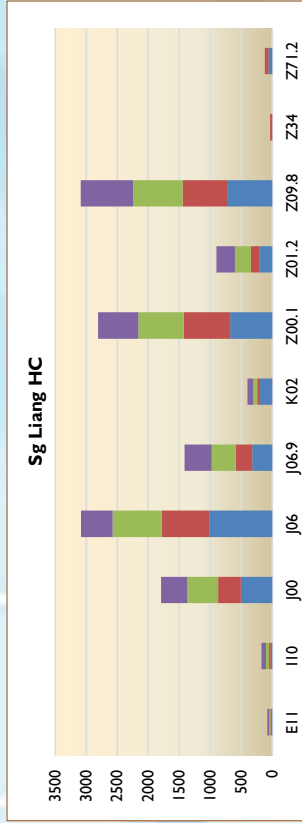
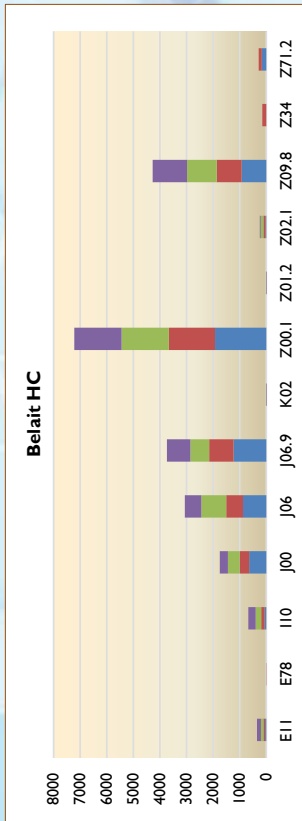
Leading Morbidity Attendances of Health Centres in Brunei Muara District by quarterly (2017)



Note: Refer to Appendix (page 70) for the diseases' description of ICD 10 codes

Source: Bru-HIMS EIS Data

Leading Morbidity Attendances of Health Centres in Belait and Tutong Districts by quarterly (2017)



Note: Refer to Appendix (page 70) for the diseases' description of ICD 10 codes
 Source: Bru-HIMS EIS Data

Notifiable Infectious Diseases (2017)

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	BM	TUT	TEM	KB	TOTAL
FOOD AND WATER BORNE DISEASES					
Campylobacter Upsaliensis	0	0	0	0	0
Cholera	0	0	0	0	0
Dysentery (Shigella)	0	0	0	0	0
Food Poisoning	18	4	1	15	38
Gastroenteritis	3,228	230	80	938	4,476
Hepatitis A	7	0	0	0	7
Para/Typhoid Fever	0	0	0	0	0
Salmonella Infection	16	1	0	5	22
Total	3,269	235	81	958	4,543
PERSON TO PERSON TRANSMITTED DISEASES					
Chicken Pox	1,495	274	137	620	2,526
Ebola Fever	0	0	0	0	0
Hand, Foot & Mouth Disease	1,395	119	63	424	2,001
Influenza A	3	0	0	7	10
Influenza B	0	0	0	0	0
Influenza Others	0	0	0	0	0
Leprosy	1	1	0	0	2
Meningitis	5	0	0	1	6
Scarlet Fever	2	0	0	1	3
Severe Acute Respiratory Syndrome	0	0	0	0	0
Total	2,901	394	200	1,053	4,548
VACCINE PREVENTABLE DISEASES					
Diphtheria	0	0	0	0	0
Hepatitis B	26	0	0	1	27
Measles	0	0	0	0	0
Mumps	0	0	0	0	0
Pertussis	0	0	0	0	0
Acute Flaccid Paralysis (AFP)	1	0	0	0	1
Rubella	1	0	0	0	1
Smallpox	0	0	0	0	0
Tetanus	0	0	0	0	0
Tetanus Neonatorum	0	0	0	0	0
Tuberculosis	161	31	6	42	240
Total	189	31	6	43	269

Notifiable Infectious Diseases (2017) (cont'd)

DISEASES	BM	TUT	TEM	KB	TOTAL
SEXUALLY TRANSMITTED DISEASES					
AIDS	0	0	0	0	0
Chancroid	1	0	0	0	1
Chlamydial Infection	30	0	0	0	30
Genital Herpes	1	0	0	0	1
Gonococcal Infections	13	1	0	0	14
Hepatitis C	9	0	0	1	10
HIV * (Local only)	21	5	2	4	32
Non Gonococcal Urethritis	0	0	0	0	0
Ophthalmia Neonatorum	0	0	0	0	0
Syphilis (All forms)	246	40	19	50	355
Other STI - Genital Warts, Trichomonas Vaginalis	11	0	0	0	11
Total	332	46	21	55	454
VECTOR BORNE DISEASES					
Chikungunya	0	0	0	0	0
Dengue Fever	34	14	21	4	73
Dengue Haemorrhagic Fever	1	0	1	0	2
Filariasis	0	1	0	0	1
Leptospirosis	0	0	0	0	0
Malaria	1	0	7	0	8
Plague	0	0	0	0	0
Typhus	0	0	0	0	0
West Nile Fever	0	0	0	0	0
Yellow Fever	0	0	0	0	0
Zika Virus Infection	0	0	0	0	0
Total	36	15	29	4	84
ZOO NOTIC DISEASES					
Anthrax	0	0	0	0	0
Bovine Spongiform Encephalitis	0	0	0	0	0
Nipah Virus	0	0	0	0	0
Rabies	0	0	0	0	0
Total	0	0	0	0	0
OTHER INFECTIOUS DISEASES					
Conjunctivitis (Chlamydia)	1	0	0	0	1
Encephalitis	0	0	0	0	0
Japanese Encephalitis	0	0	0	0	0
Puerperal Infection	0	0	0	0	0
Scabies	5	0	0	0	5
Viral Encephalitis	0	0	0	0	0
Viral Hepatitis	0	0	0	0	0
Total	6	0	0	0	6
GRAND TOTAL	6,733	721	337	2,113	9,904

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

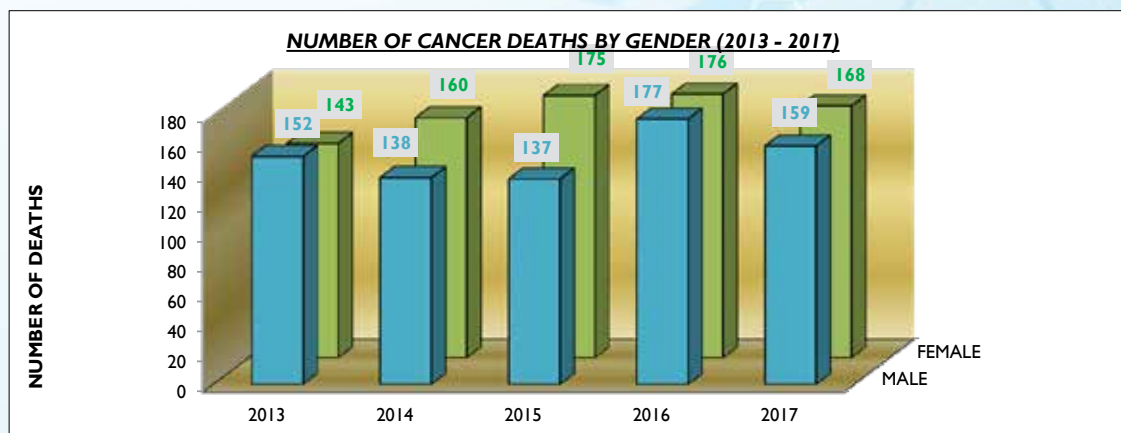
Mortality Due to Cancer for the Year 2017

The top three types of cancer deaths among male in Brunei Darussalam for 2017 were Trachea, Bronchus and Lung; Rectum and Anus; and Stomach; and for female cancer deaths were Breast; Trachea, Bronchus and Lung; and; and Rectum and Anus.

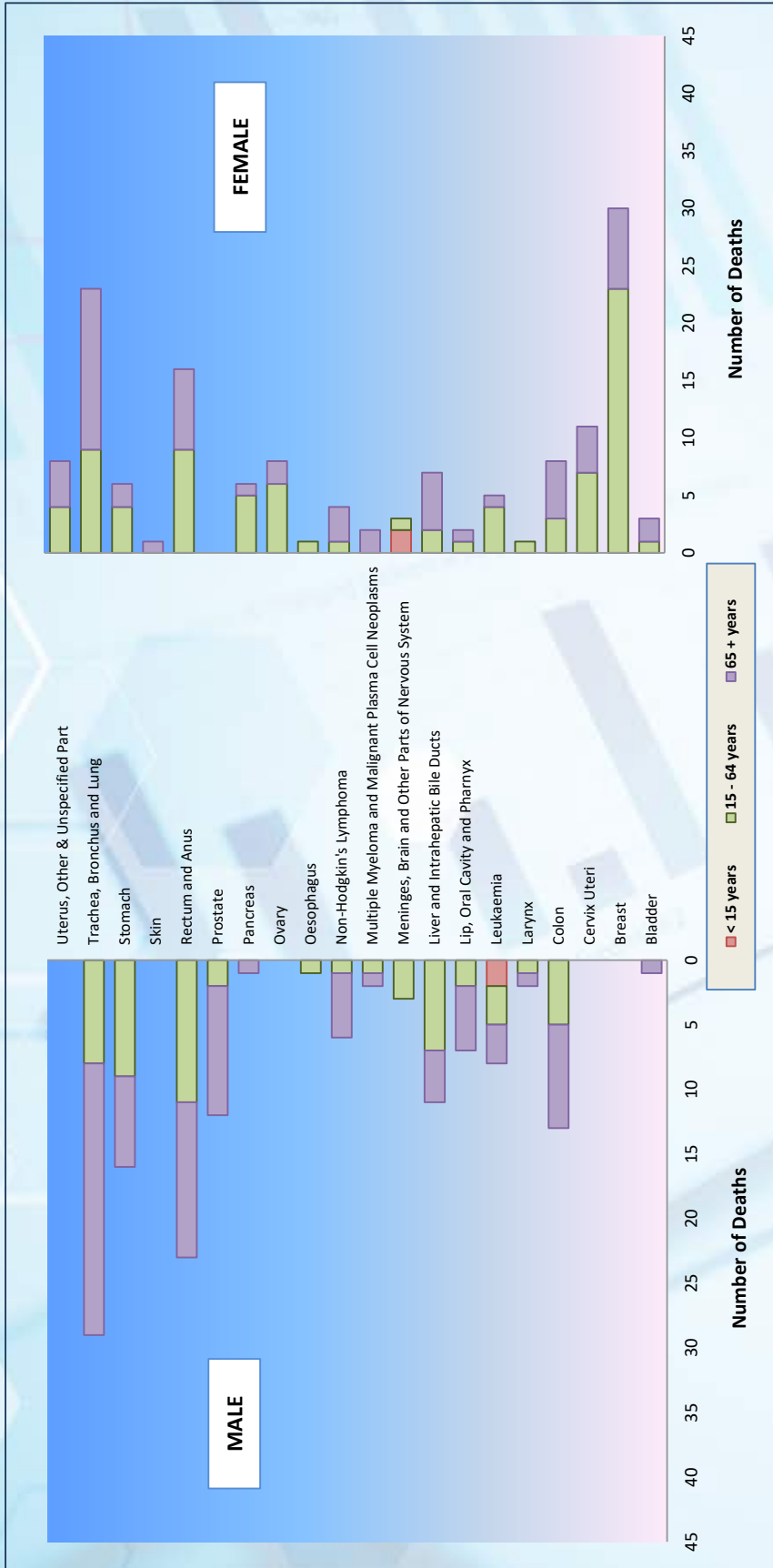
TYPE OF CANCER	MALE	FEMALE	TOTAL
Trachea, Bronchus and Lung	29	23	52
Rectum and Anus	23	16	39
Breast	0	30	30
Stomach	16	6	22
Colon	13	8	21
Liver and Intrahepatic Bile Ducts	11	7	18
Leukaemia	8	5	13
Prostate	12		12
Cervix Uteri		11	11
Non-Hodgkin's Lymphoma	6	4	10
Lip, Oral Cavity and Pharynx	7	2	9
Other and Unspecified Parts of Uterus		8	8
Ovary		8	8
Pancreas	1	6	7
Meninges, Brain and Other Parts of Central Nervous System	3	3	6
Multiple Myeloma and Malignant Plasma Cell Neoplasms	2	2	4
Bladder	1	3	4
Larynx	2	1	3
Oesophagus	1	1	2
Skin	0	1	1
Others	24	23	47
TOTAL	159	168	327

Note: Top three leading types of cancer death for male  / female 

YEAR	2013	2014	2015	2016	2017
TOTAL NUMBER OF CANCER DEATHS	295	298	312	353	327



Cancer Deaths by Gender, Type and Age-Groups in Brunei Darussalam (2017)



Trend in Leading Types of Cancer Deaths in Brunei Darussalam (2013 - 2017)

No.	2013	2014	2015	2016	2017
1	Trachea, Bronchus and Lung 64 (21.7%)	Trachea, Bronchus and Lung 62 (20.8%)	Trachea, Bronchus and Lung 52 (16.7%)	Trachea, Bronchus and Lung 68 (19.3%)	Trachea, Bronchus and Lung 52 (15.9%)
2	Rectum and Anus 30 (10.2%)	Breast 30 (10.1%)	Breast 33 (10.6%)	Breast 42 (11.9%)	Rectum and Anus 39 (11.9%)
3	Liver and Intrahepatic Bile Duct 21 (7.1%)	Liver and Intrahepatic Bile Duct 23 (7.7%)	Rectum and Anus 32 (10.3%)	Rectum and Anus 32 (9.1%)	Breast 30 (9.2%)
4	Breast 20 (6.8%)	Stomach 21 (7.0%)	Liver and Intrahepatic Bile Duct 28 (9.0%)	Lip, Oral Cavity and Pharynx 21 (5.9%)	Stomach 22 (6.7%)
5	Colon 17 (5.8%)	Rectum and Anus 18 (6.0%)	Non-Hodgkin's Lymphoma 16 (5.1%)	Liver and Intrahepatic Bile Duct 20 (5.7%)	Colon 21 (6.4%)
6	Lip, Oral Cavity and Pharynx 13 (4.4%)	Non-Hodgkin's Lymphoma 18 (6.0%)	Lip, Oral Cavity and Pharynx 14 (4.5%)	Stomach 18 (5.1%)	Liver and Intrahepatic Bile Duct 18 (5.5%)
7	Ovary 13 (4.4%)	Colon 17 (5.7%)	Ovary 12 (3.8%)	Colon 14 (4.0%)	Leukaemia 13 (4.0%)
8	Leukaemia 13 (4.4%)	Leukaemia 15 (5.0%)	Colon 11 (3.5%)	Pancreas 14 (4.0%)	Prostate 12 (3.7%)
9	Cervix Uteri 11 (3.7%)	Prostate 12 (4.0%)	Pancreas 11 (3.5%)	Cervix Uteri 12 (3.4%)	Cervix Uteri 11 (3.4%)
10	Non-Hodgkin's Lymphoma 11 (3.7%)	Cervix Uteri 11 (3.7%)	Stomach 10 (3.2%)	Prostate 11 (3.1%)	Non-Hodgkin's Lymphoma 10 (3.1%)
OTHERS	82 (27.8%)	71 (23.8%)	93 (29.8%)	101 (28.6%)	99 (30.3%)
GRAND TOTAL	295 (100.0%)	298 (100.0%)	312 (100.0%)	353 (100.0%)	327 (100.0%)

Incidence and Mortality of Malignant Cancer (2013 - 2017)

TYPE OF CANCER	NUMBER OF CASES									
	INCIDENCE					MORTALITY				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
Breast	77	81	90	101	80	25	26	13	10	4
Trachea, Bronchus and Lung	70	64	70	66	59	60	49	51	31	25
Colon	57	44	55	64	52	27	15	18	11	6
Rectum	29	31	50	40	46	19	14	17	13	4
Lip, Oral Cavity and Pharynx	27	16	35	31	36	14	5	14	6	4
Cervix Uteri	31	29	33	28	32	9	8	7	4	4
Non-Hodgkin's Lymphoma	39	27	32	31	32	14	17	9	8	4
Prostate	18	21	25	21	30	12	9	3	1	3
Other and Unspecified Parts of Uterus	22	21	37	25	28	6	6	7	7	0
Stomach	20	21	15	18	27	14	18	9	11	8
Leukaemia	8	22	21	13	21	5	12	11	5	9
Liver and Intrahepatic Bile Ducts	31	29	30	20	21	26	23	21	15	7
Ovary	27	26	26	19	19	14	9	10	5	4
Bladder	9	9	5	14	9	5	6	2	3	1
Pancreas	10	11	5	14	8	7	9	4	11	2
Multiple Myeloma and Malignant Plasma Cell Neoplasms	4	3	6	5	6	3	1	3	3	1
Meninges, Brain and Other Parts of Central Nervous System	8	4	9	7	3	7	4	4	4	1
Larynx	3	2	2	3	1	1	1	0	1	0
Oesophagus	2	5	3	5	0	1	4	3	1	0
Anus	1	1	2	0	0	0	1	0	0	0
Skin	1	2	0	1	0	0	1	0	0	0
Others	69	83	85	139	109	25	35	25	29	20
ALL SITES	563	552	636	665	619	294	273	231	179	107

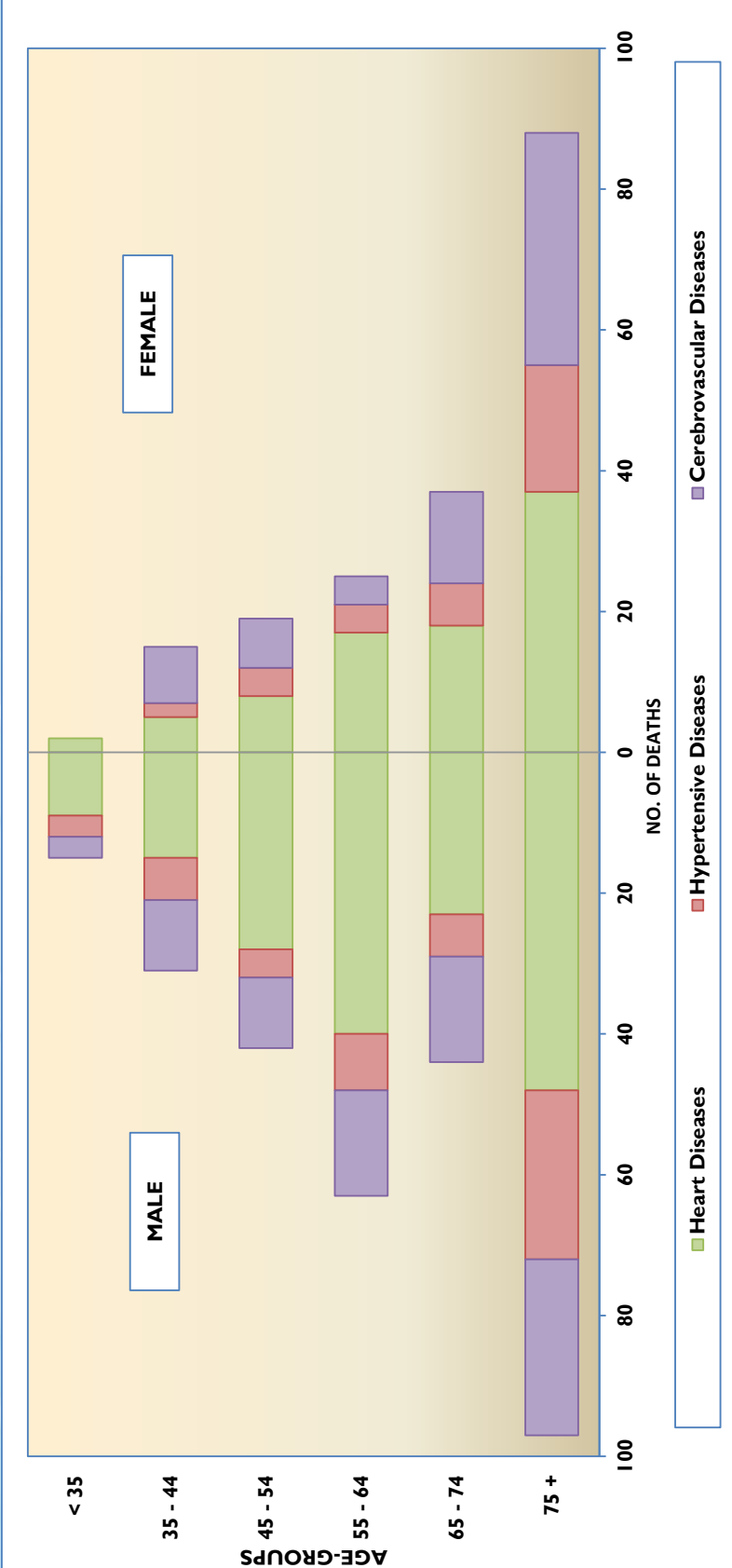
Note: Incidence and mortality data on malignant cancers among citizens and permanent residents.

Source: Brunei Darussalam Cancer Registry, NCD Prevention and Control Unit

Mortality due to Cardiovascular Diseases for the Year 2017 (Based on ICD-10)

ICD-10 CODE	TYPE OF DISEASE	AGE-GROUP IN YEARS														TOTAL		
		<35		35 - 44		45 - 54		55 - 64		65 - 74		75+		M	F	T		
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	T		
1	Heart Diseases	9	2	15	5	28	8	40	17	23	18	48	37	163	87	250		
		Acute Rheumatic Fever & Chronic Rheumatic Heart Diseases		1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
		Ischaemic Heart Diseases		4	0	13	3	24	4	36	13	16	11	38	22	131	53	184
2	Acute Myocardial Infarction	3	0	8	2	13	2	22	8	10	7	19	14	75	33	108		
		Other Ischaemic Diseases		1	0	5	1	11	2	14	5	6	4	19	8	56	20	76
		Diseases of Pulmonary Circulation & Other Forms of Heart Diseases		4	2	2	2	3	4	4	4	6	7	10	15	29	34	63
3	Hypertensive Diseases	3	0	6	2	4	4	8	4	6	6	24	18	51	34	85		
		Cerebrovascular Diseases		3	0	10	8	10	7	15	4	15	13	25	33	78	65	143
		Other Diseases of the Circulatory System		0	0	1	1	1	0	2	1	1	1	2	3	7	6	13
4	Atherosclerosis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
		Others		0	0	1	1	1	0	2	1	1	2	3	7	6	13	
		All Cardiovascular Diseases		15	2	32	16	43	19	65	26	45	38	99	91	299	192	491

Mortality due to Cardiovascular Diseases by Age-Groups and Gender in Brunei Darussalam (2017)

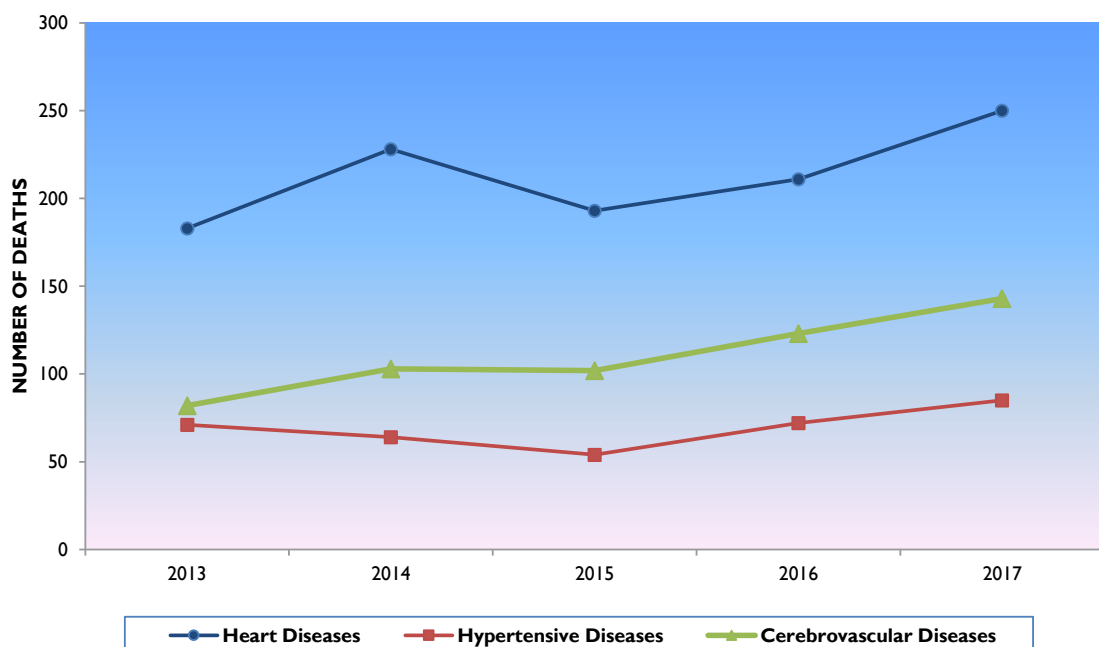


Mortality Trend of Cardiovascular Diseases (2013 - 2017)

MORTALITY DUE TO CARDIOVASCULAR DISEASES BY GENDER



MORTALITY DUE TO HEART, HYPERTENSIVE AND CEREBROVASCULAR DISEASES



Age Standardised Mortality Rate - Noncommunicable Diseases (NCDs) (2011-2017)

Mortality Rate by Diseases		2011	2012 ^(f)	2013 ^(f)	2014 ^(f)	2015 ^(f)	2016 ^(f)	2017
Noncommunicable Diseases (NCDs) (Cancer, Cardiovascular, Diabetes Mellitus, and Chronic Respiratory Diseases)	Male	395.4	374.7	411.9	434.2	329.5	337.9	362.8
	Female	330.9	345.0	388.9	344.5	345.0	275.5	290.8
	Total	360.6	358.0	397.6	388.3	334.3	304.6	323.3
Cancer	Male	129.6	142.5	126.2	116.1	106.1	115.0	107.9
	Female	104.3	115.4	125.1	127.3	124.0	101.4	93.7
	Total	116.0	128.9	125.4	120.9	115.0	107.5	99.5
Cardiovascular Diseases	Male	155.9	132.2	163.0	200.7	141.7	140.0	179.6
	Female	128.7	126.0	156.7	130.5	123.8	111.6	118.7
	Total	141.0	127.3	157.3	166.0	130.6	125.2	146.6
Diabetes Mellitus	Male	62.5	64.5	62.3	72.9	55.9	58.6	51.0
	Female	57.9	70.2	67.2	51.7	48.9	37.7	55.4
	Total	60.1	67.3	64.8	61.9	52.1	47.5	53.5
Chronic Respiratory Disease	Male	47.4	35.5	60.3	44.5	25.7	24.2	24.3
	Female	40.0	33.4	39.9	35.0	48.3	24.8	22.9
	Total	43.4	34.5	50.1	39.5	36.6	24.3	23.7

Note: Age standardised mortality rate per 100,000 for NCDs among citizens and permanent residents
Data for the years 2012-2015 have been revised due to the revised population data based on 2016 census data.

Premature Age Standardised Mortality Rate - Noncommunicable Diseases (NCDs) (2011-2017)

Mortality Rate by Diseases		2011	2012 ^(c)	2013 ^(c)	2014 ^(c)	2015 ^(c)	2016	2017
Noncommunicable Diseases (NCDs) (Cancer, Cardiovascular, Diabetes Mellitus, and Chronic Respiratory Diseases)	Male	302.3	323.4	330.1	347.8	319.8	367.7	334.1
	Female	260.9	266.2	293.1	264.9	303.2	254.2	262.3
	Total	281.3	295.3	312.1	307.4	311.7	307.4	296.3
Cancer	Male	129.9	134.1	125.3	109.1	103.7	132.1	104.8
	Female	112.0	140.5	142.6	145.7	160.6	127.0	117.3
	Total	121.1	137.1	133.7	126.6	131.4	129.4	111.4
Cardiovascular Diseases	Male	111.2	114.5	115.6	161.3	146.3	142.1	162.8
	Female	88.9	81.4	73.8	61.1	66.6	82.4	84.0
	Total	99.7	98.4	95.3	112.8	107.5	110.4	121.3
Diabetes Mellitus	Male	47.3	63.1	62.6	58.1	57.2	81.6	58.3
	Female	43.7	34.5	59.6	45.2	54.6	39.4	48.3
	Total	45.4	49.1	61.2	51.8	55.9	59.1	53.0
Chronic Respiratory Disease	Male	13.9	11.7	26.5	19.3	12.6	11.9	8.2
	Female	16.3	9.7	17.1	12.9	21.5	5.4	12.7
	Total	15.1	10.7	21.9	16.2	16.9	8.4	10.6

Note: Premature age standardised mortality rate per 100,000 (for aged 30 - 69 years) among citizens and permanent residents
Data for the years 2012-2015 have been revised due to the revised population data based on 2016 census data.

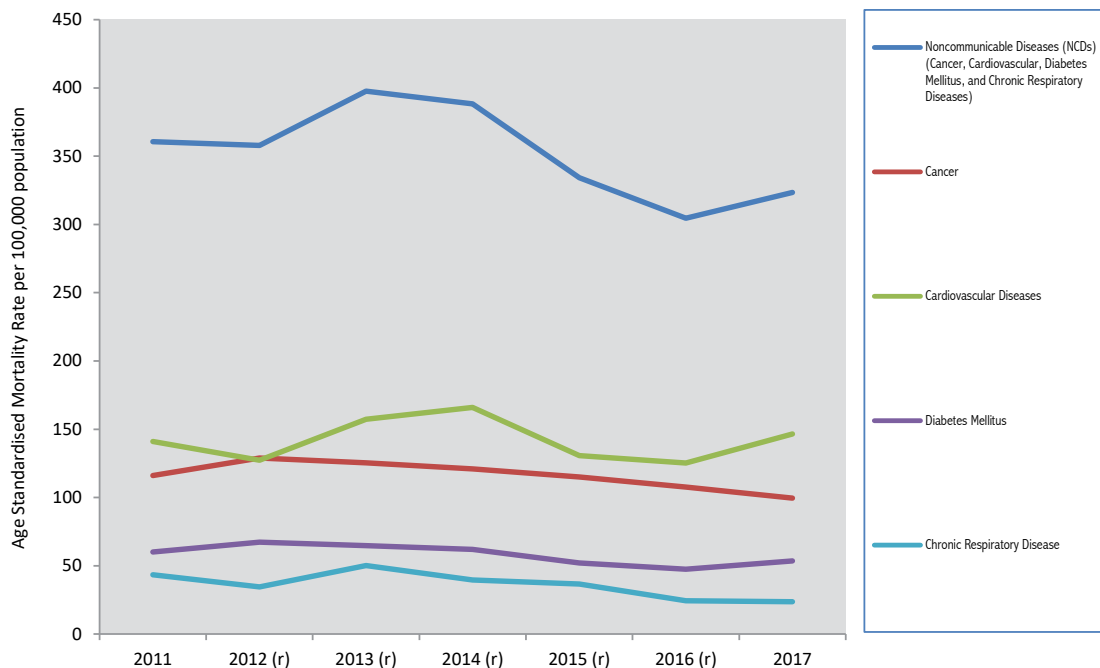
Probability of Premature Deaths - Noncommunicable Diseases (NCDs) (2011-2017)

Mortality Rate by Diseases		2011	2012 ^(c)	2013 ^(c)	2014 ^(c)	2015 ^(c)	2016	2017
Noncommunicable Diseases (NCDs) (Cancer, Cardiovascular, Diabetes Mellitus, and Chronic Respiratory Diseases)	Male	14.8%	16.2%	16.4%	17.2%	15.6%	16.7%	15.7%
	Female	13.2%	13.2%	14.8%	13.4%	15.0%	12.4%	12.9%
	Total	14.0%	14.7%	15.6%	15.4%	15.3%	14.4%	14.3%
Cancer	Male	7.2%	6.9%	6.6%	5.9%	5.5%	6.6%	5.6%
	Female	5.6%	7.0%	7.4%	7.2%	8.1%	6.1%	5.8%
	Total	6.4%	7.0%	7.0%	6.5%	6.8%	6.3%	5.7%
Cardiovascular Diseases	Male	5.2%	6.0%	5.6%	8.2%	7.3%	6.6%	7.8%
	Female	4.8%	4.5%	3.8%	3.6%	3.5%	4.3%	4.4%
	Total	5.0%	5.3%	4.7%	6.0%	5.5%	5.4%	6.0%
Diabetes Mellitus	Male	2.4%	3.5%	3.5%	3.2%	3.0%	3.9%	2.7%
	Female	2.5%	1.7%	3.4%	2.6%	2.9%	2.2%	2.6%
	Total	2.4%	2.7%	3.5%	2.9%	3.0%	3.0%	2.6%
Chronic Respiratory Disease	Male	0.7%	0.7%	1.7%	1.0%	0.7%	0.7%	0.5%
	Female	0.9%	0.6%	1.0%	0.7%	1.2%	0.3%	0.7%
	Total	0.8%	0.6%	1.4%	0.8%	0.9%	0.5%	0.6%

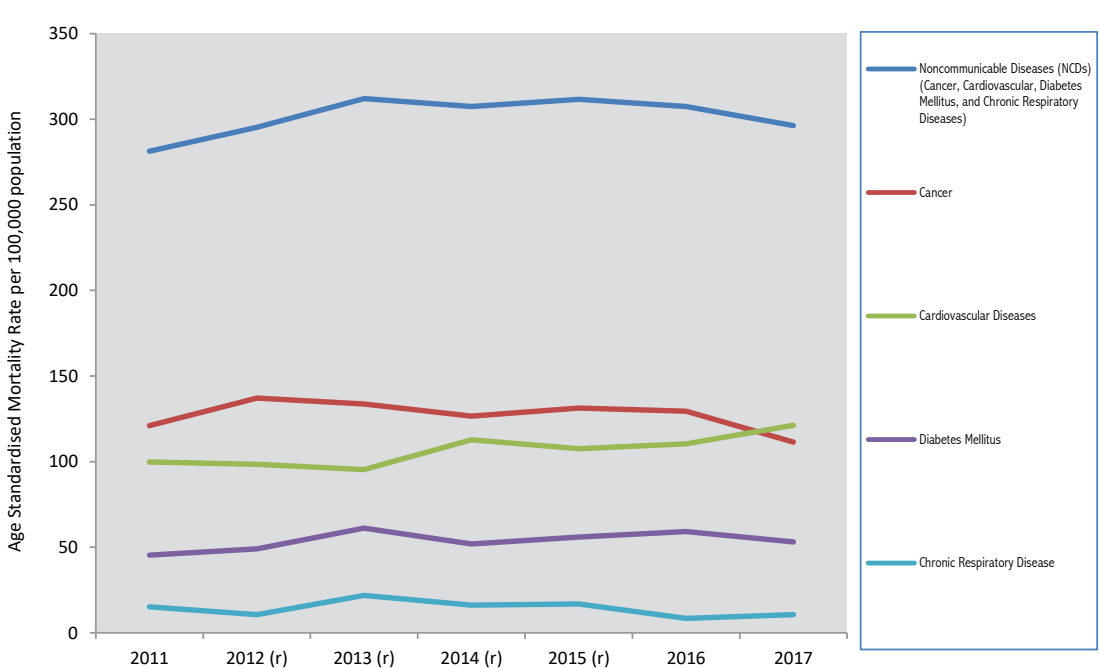
Note: Probability of premature deaths from NCDs (for aged 30 - 69 years) among citizens and permanent residents Data for the years 2012-2015 have been revised due to the revised population data based on 2016 census data.

Trend of Age Standardised Mortality Rate - Noncommunicable Diseases (NCDs) (2011-2017)

**MORTALITY RATE FOR NON-COMMUNICABLE DISEASES (NCDs)
IN BRUNEI DARUSSALAM SINCE 2011**



**PREMATURE MORTALITY RATE FOR NON-COMMUNICABLE DISEASES (NCDs)
IN BRUNEI DARUSSALAM SINCE 2011**



Brunei STEPS Survey 2015 / 16

The STEPS survey of NCD risk factors in Brunei Darussalam was carried out from August 2015 to April 2016. Brunei Darussalam carried out three (3) steps to collect data : Step 1 on Socio Demographic and Behavioural Information; Step 2 on Physical Measurements such as Height, Weight and Blood Pressure; and Step 3 on Biochemical Measurements to Access Blood Glucose and Cholesterol Levels. A total of 3808 adults aged 18-69 years old participated in the survey.

TOBACCO USE	Male	Female	Total
1. Percentage who currently smoke tobacco	36.3	3.7	19.9
2. Percentage who currently smoke tobacco daily	24.8	1.8	13.3
<i>- For those who smoke tobacco daily</i>			
3. Average age started smoking (years)	16.9	19.4	17.1
4. Percentage of daily smokers smoking manufactured cigarettes	99.2	97.2	99.1
5. Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	9.1	10.0	9.1

DIET	Male	Female	Total
1. Mean number of days fruit consumed in a typical week	3.1	3.2	3.2
2. Mean number of servings of fruit consumed on average per day	0.9	0.9	0.9
3. Mean number of days vegetables consumed in a typical week	4.9	5.2	5.0
4. Mean number of servings of vegetables consumed on average per day	1.5	1.6	1.6
5. Percentage who ate less than 5 servings of fruit and/or vegetables on average per day	92.3	91.0	91.7
6. Percentage who always or often add salt or salty sauce to their food before eating or as they are eating	22.8	20.9	21.8
7. Percentage who always or often eat processed foods high in salt	21.4	17.7	19.5

PHYSICAL MEASUREMENTS	Male	Female	Total
1. Mean body mass index	27.3	27.2	27.2
2. Percentage who are overweight	0.9	0.9	0.9
3. Percentage who are obese	4.9	5.2	5.0
4. Average waist circumference	1.5	1.6	1.6
5. Percentage with raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg or currently on medication for raised BP)	30.2	25.8	28.0
6. Percentage with raised BP (SBP \geq 140 and/or DBP \geq 90 mmHg) who are not currently on medication for raised BP)	58.7	37.6	48.9

BIOCHEMICAL MEASUREMENTS	Male	Female	Total
1. Percentage with raised total cholesterol (\geq 5.0mmol/L or \geq 190 mg/dl or currently on medication for raised cholesterol) or currently on medication for raised BP)	51.6	51.0	51.3
2. Mean intake of salt per day (in grams)	11.5	8.5	10.0

CARDIOVASCULAR (CVD) DISEASE RISK	Male	Female	Total
1. Percentage aged 40-69 years with a 10-year CVD risk \geq 30%, or with existing CVD **	9.7	8.2	8.9

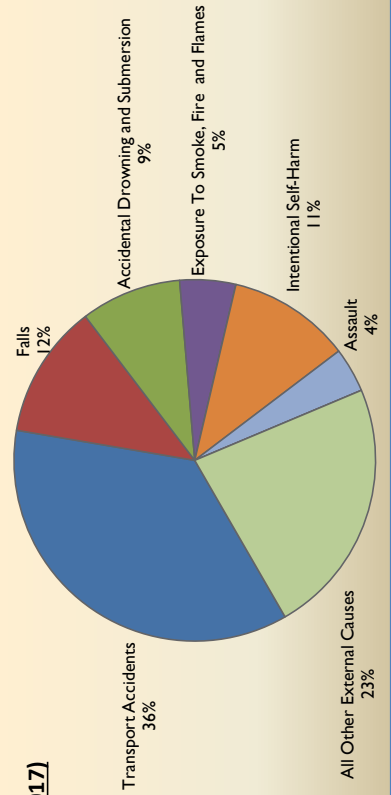
Note :

** - A 10-year CVD risk of \geq 30% is defined to age, sex, blood pressure, smoking status (current smokers or those who quit smoking less than 1 year before the assessment), total cholesterol, and diabetes (previously diagnosed OR a fasting plasma glucose concentration $>$ 7.0 mmol/l (126mg/dl)).

Mortality due to External Causes for the Year 2017 (Based on ICD-10)

ICD-10 CODE	TYPE OF DISEASE	AGE-GROUP IN YEARS																	
		<35		35 - 44		45 - 54		55 - 64		65 - 74		75+		TOTAL					
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	T			
V01-V99	Transport Accidents	17	3	4	0	5	1	0	0	1	0	5	0	32	4	36			
W00-W19	Falls	2	0	0	0	1	0	0	0	1	6	2	9	3	12				
W65-W74	Accidental Drowning and Submersion	6	0	0	0	1	0	0	0	2	0	0	0	9	0	9			
X00-X09	Exposure To Smoke, Fire and Flames	0	0	0	0	1	0	2	0	2	0	0	3	2	5				
X40-X49	Accidental Poisoning By and Exposure To Noxious Substance	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
X60-X84	Intentional Self-Harm	8	0	2	0	0	0	1	0	0	0	0	11	0	11				
X85-Y09	Assault	0	1	2	0	0	0	0	0	1	0	0	2	2	4				
Y40-Y59	Drugs, Medicaments Causing Adverse Effects In Therapeutic Use	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
W20-W64, W75-W99, X10-X39, X50-X59, Y10-Y36, Y60-Y98	All Other External Causes	2	1	2	0	2	0	4	1	1	1	2	7	13	23				
V01 - Y98	Total External Causes of Mortality	35	5	10	0	10	1	7	1	4	5	13	9	79	21	100			

DISTRIBUTION OF MORTALITY DUE TO EXTERNAL CAUSES (2017)



Leading Causes of Hospital Inpatient Morbidity for the Year 2017 (Based on ICD-10)

No.	ICD-10 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%	RATE PER 100,000 POPULATION
1	J10 - J22	Acute Lower Respiratory Infections	1,378	1,164	2,542	4.2	603.4
2	A09	Diarrhoea and Gastroenteritis of Presumed Infections Origin	778	575	1,353	2.2	321.1
3	J00 - J06	Acute Upper Respiratory Infections	685	635	1,320	2.2	313.3
4	D50 - D64	Iron Deficiency Anaemias	664	603	1,267	2.1	300.7
5	J45 - J46	Asthma	708	548	1,256	2.1	298.1
6	I00 - I09, I20 - I52	Heart Diseases	679	463	1,142	1.9	271.1
7	N17 - N19	Renal Failure	563	473	1,036	1.7	245.9
8	O00 - O08	Pregnancy With Abortive Outcome		1,021	1,021	1.7	242.3
9	L00 - L08	Infections of Skin and Subcutaneous Tissue	543	376	919	1.5	218.1
10	N80 - N98	Non-Inflammatory Disorders of Female Genital Tract		900	900	1.5	213.6
11	S02, S12, S22, S32, S42, S52, S62, S72, S82, S92, T02, T08, T10, T12	Fracture of Specified and Multiple Body Regions	547	335	882	1.4	209.4
12	K80 - K81	Cholelithiasis and Cholecystitis	318	392	710	1.2	168.5
13	N20 - N23	Urolithiasis	471	204	675	1.1	160.2
14	A40 - A41	Septicaemia	295	377	672	1.1	159.5
15	E10 - E14	Diabetes Mellitus	297	309	606	1.0	143.8
Others			18,213	26,605	44,819 *	73.3	10638.3
TOTAL INPATIENT MORBIDITY			26,139	34,980	61,120	100.0	14507.5

Note: * - Including / unknown

Source: Bru-HIMS Data

Leading Causes of Hospital Inpatient Morbidity by Hospital for the Year 2017

No.	HOSPITALS				ALL DISTRICTS
	RIPAS	SSB	PMMPMHAMB	PIHM	
1	Acute Lower Respiratory Infections 1,821 (3.8%)	Acute Lower Respiratory Infections 401 (4.9%)	Acute Lower Respiratory Infections 283 (8.2%)	Fever of Unknown Origin 175 (12.1%)	Acute Lower Respiratory Infections 2,542 (4.2%)
2	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 891 (1.9%)	Acute Upper Respiratory Infections 253 (3.1%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 180 (5.2%)	Hypertensive Diseases 77 (5.3%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 1,353 (2.2%)
3	Iron Deficiency Anaemias 871 (1.8%)	Heart Diseases 219 (2.7%)	Asthma 175 (5.0%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 73 (5.1%)	Acute Upper Respiratory Infections 1,320 (2.2%)
4	Acute Upper Respiratory Infections 855 (1.8%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 209 (2.5%)	Cataract 147 (4.2%)	Abdominal and Pelvic Pain 72 (5.0%)	Iron Deficiency Anaemias 1,267 (2.1%)
5	Asthma 851 (1.8%)	Asthma 198 (2.4%)	Acute Upper Respiratory Infections 141 (4.1%)	Acute Upper Respiratory Infections 71 (4.9%)	Asthma 1,256 (2.1%)
6	Pregnancy With Abortive Outcome 849 (1.8%)	Non-Inflammatory Disorders of Female Genital Tract 174 (2.2%)	Diabetes Mellitus 137 (4.0%)	Diabetes Mellitus 60 (4.2%)	Heart Diseases 1,142 (1.9%)
7	Renal Failure 800 (1.7%)	Renal Failure 166 (2.0%)	Heart Diseases 103 (3.0%)	Gastritis and Duodenitis 40 (2.7%)	Renal Failure 1,036 (1.7%)
8	Fractures of Specified and Multiple Body Regions 794 (1.7%)	Pregnancy With Abortive Outcome 157 (1.9%)	Hypertensive Diseases 103 (3.0%)	Acute Lower Respiratory Infections 37 (2.6%)	Pregnancy With Abortive Outcome 1,021 (1.7%)
9	Heart Diseases 793 (1.7%)	Infections of Skin and Subcutaneous Tissue 151 (1.8%)	Respiratory TB 94 (2.7%)	Asthma 32 (2.2%)	Infections of Skin and Subcutaneous Tissue 919 (1.5%)
10	Non-Inflammatory Disorders of Female Genital Tract 708 (1.5%)	Iron Deficiency Anaemias 145 (1.8%)	Bronchitis Emphysema and Other Chronic Obstructive Pulmonary Diseases 55 (1.5%)	Infections of Skin and Subcutaneous Tissue 29 (2.0%)	Non-Inflammatory Disorders of Female Genital Tract 900 (1.5%)
OTHERS	38,765 (80.8%)	6,145 (74.8%)	2,048 (59.1%)	772 (53.7%)	48,364 (79.1%)
GRAND TOTAL	47,998 (100.0%)	8,218 (100.0%)	3,466 (100.0%)	1,438 (100.0%)	61,120 (100.0%)

Source: Bru-HIMS Data

Leading Causes of Hospital Outpatient Morbidity for the Year 2017 (Based on ICD-10)

No.	ICD-10 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%	RATE PER 100,000 POPULATION
1	E10 - E14	Diabetes Mellitus	8,220	10,369	18,589	3.7	4412.3
2	K00 - K01, K03 - K08	Other Disorders of Teeth and Supporting Structures	6,774	8,411	15,185	3.1	3604.3
3	N17 - N19	Renal Failure	7,275	5,882	13,157	2.7	3123.0
4	I10 - I15	Hypertensive Diseases	5,321	5,828	11,149	2.2	2646.3
5	O20 - O29, O60 - O63, O67 - O71, O73 - O75, O81 - O84	Other Complications of Pregnancy and Delivery		9,135	9,135	1.8	2168.3
6	N80 - N98	Non-Inflammatory Disorders of Female Genital Tract		8,453	8,453	1.7	2006.4
7	K02	Dental Caries	3,578	4,473	8,051	1.6	1911.0
8	H52	Disorders of Refraction and Accommodation	3,627	4,268	7,895	1.6	1874.0
9	S02, S12, S22, S32, S42, S52, S62, S72, S82, S92, T02, T08, T10, T12	Fracture of Specified and Multiple Body Regions	4,350	2,755	7,105	1.4	1686.4
10	I00 - I09, I20 - I52	Heart Diseases	2,800	2,092	4,892	1.0	1161.2
11	J00 - J06	Acute Upper Respiratory Infections	2,269	2,596	4,865	1.0	1154.8
12	J40 - J46	Bronchitis, Chronic and Unspecified Emphysema and Asthma	2,371	2,321	4,692	0.9	1113.7
13	D50 - D64	Anaemias	1,731	2,760	4,491	0.9	1066.0
14	F20 - F29	Schizophrenia, Schizotypal, and Delusional Disorders	1,954	1,550	3,504	0.7	831.7
15	N20 - N23	Urolithiasis	2,422	1,011	3,433	0.7	814.9
Others			171,129	200,124	371,253	74.9	88120.8
TOTAL OUTPATIENT MORBIDITY			223,821	272,028	495,849	100.0	117695.0

Source: Bru-HIMS Data

Leading Causes of Hospital Outpatient Morbidity by Hospital for the Year 2017

No.	HOSPITALS				ALL DISTRICTS
	RIPAS	SSB	PMPMHAMB	PIHM	
1	Diabetes Mellitus 8,971 (2.7%)	Other Disorders of Teeth and Supporting Structures 5,855 (6.5%)	Renal Failure 6,663 (13.2%)	Hypertensive Diseases 3,860 (14.4%)	Diabetes Mellitus 18,589 (3.7%)
2	Other Complications of Pregnancy and Delivery 7,826 (2.4%)	Diabetes Mellitus 4,763 (5.3%)	Other Disorders of Teeth and Supporting Structures 4,894 (9.7%)	Renal Failure 3,295 (12.3%)	Other Disorders of Teeth and Supporting Structures 15,185 (3.1%)
3	Non-Inflammatory Disorders of Female Genital Tract 6,399 (1.9%)	Dental Caries 3,205 (3.6%)	Dental Caries 2,937 (5.8%)	Acute Upper Respiratory Infections 3,036 (11.3%)	Renal Failure 13,157 (2.7%)
4	Fracture of Specified and Multiple Body Regions 5,880 (1.8%)	Disorders of Refraction and Accomodation 1,980 (2.0%)	Diabetes Mellitus 2,535 (5.0%)	Diabetes Mellitus 2,320 (8.6%)	Hypertensive Diseases 11,149 (2.2%)
5	Disorders of Refraction and Accomodation 4,432 (1.4%)	Hypertensive Diseases 1,811 (2.0%)	Hypertensive Diseases 1,292 (2.6%)	Dental Caries 944 (3.5%)	Other Complications of Pregnancy and Delivery 9,135 (1.8%)
6	Hypertensive Diseases 4,186 (1.3%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 1,050 (1.2%)	Disorders of Refraction and Accomodation 1,267 (2.5%)	Other Disorders of Teeth and Supporting Structures 936 (3.5%)	Non-Inflammatory Disorders of Female Genital Tract 8,453 (1.7%)
7	Iron Deficiency Anaemias 3,794 (1.2%)	Mood Disorders 948 (1.1%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 879 (1.7%)	Fever of Unknown Origin 410 (1.5%)	Dental Caries 8,051 (1.6%)
8	Heart Diseases 3,517 (1.1%)	Schizophrenia, Schizotypal and Delusional Disorders 870 (1.0%)	Schizophrenia, Schizotypal and Delusional Disorders 624 (1.2%)	Conjunctivitis and Other Disorders of Conjunctiva 310 (1.2%)	Disorders of Refraction and Accomodation 7,895 (1.6%)
9	Other Disorders of Teeth and Supporting Structures 3,500 (1.1%)	Renal Failure 853 (0.9%)	Heart Diseases 609 (1.2%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 221 (0.8%)	Fracture of Specified and Multiple Body Regions 7,105 (1.4%)
10	Urolithiasis 3,123 (1.0%)	Other Complications of Pregnancy and Delivery 775 (0.9%)	Cataract and Disorder of Lens 533 (1.1%)	Iron Deficiency Anaemias 174 (0.6%)	Heart Diseases 4,892 (1.0%)
OTHERS	276,663 (84.3%)	68,080 (75.5%)	28,241 (56.0%)	11,388 (42.3%)	392,238 (79.1%)
GRAND TOTAL	328,291 (100.0%)	90,190 (100.0%)	50,474 (100.0%)	26,894 (100.0%)	495,849 (100.0%)

Source: Bru-HIMS Data

Leading Causes of Health Centres Outpatient Morbidity for the Year 2017 (Based on ICD-10)

No.	ICD-10 CODE	TYPE OF DISEASE	MALE	FEMALE	TOTAL	%	RATE PER 100,000 POPULATION
1	J00 - J06	Acute Upper Respiratory Infections	62,021	68,311	130,332	15.6	30935.7
2	I10 - I15	Hypertensive Diseases	16,947	22,763	39,710	4.7	9425.6
3	K00 - K01, K03 - K08	Other Disorders of Teeth and Supporting Structures	14,825	19,330	34,155	4.1	8107.0
4	E10 - E14	Diabetes Mellitus	8,905	12,023	20,928	2.5	4967.5
5	K02	Dental Caries	8,305	11,303	19,608	2.3	4654.2
6	H10 - H13	Disorders of Conjunctiva	5,489	5,530	11,019	1.3	2615.5
7	J40 - J46	Bronchitis, Chronic and Unspecified Emphysema and Asthma	4,055	4,412	8,467	1.0	2009.7
8	A09	Diarrhoea and Gastroenteritis of Presumed Infectious Origin	2,580	2,652	5,232	0.6	1241.9
9	L00 - L08	Infections of the Skin and Subcutaneous Tissue	2,628	2,481	5,109	0.6	1212.7
10	M05 - M14	Rheumatoid Arthritis and Other Inflammatory Polyarthropathies	3,942	634	4,576	0.5	1086.2
11	S03, S13, S23, S33, S43, S53, S63, S73, S83, S93, T03	Dislocations, Sprains and Strains of Specified and Multiple Body Regions	2,235	2,022	4,257	0.5	1010.4
12	K29	Gastritis and Duodenitis	1,845	2,218	4,063	0.5	964.4
13	R10	Abdominal and Pelvic Pain	1,197	2,482	3,679	0.4	873.2
14	H00 - H01	Inflammation of Eyelid	1,610	2,001	3,611	0.4	857.1
15	J10 - J22	Acute Lower Respiratory Infections	1,868	1,660	3,528	0.4	837.4
Others			196,911	342,050	538,961	64.4	127928.1
TOTAL OUTPATIENT MORBIDITY			335,363	501,872	837,235	100.0	198726.6

Source: Bru-HIMS Data

Leading Causes of Health Centres Outpatient Morbidity by District for the Year 2017

No.	DISTRICTS			ALL DISTRICTS
	BRUNEI MUARA	BELAIT	TUTONG	
1	Acute Upper Respiratory Infections 99,485 (15.1%)	Acute Upper Respiratory Infections 16,539 (17.9%)	Acute Upper Respiratory Infections 14,308 (16.7%)	Acute Upper Respiratory Infections 130,332 (15.6%)
2	Hypertensive Diseases 33,265 (5.0%)	Other Disorders of Teeth and Supporting Structures 2,354 (2.5%)	Hypertensive Diseases 5,552 (6.5%)	Hypertensive Diseases 39,710 (4.7%)
3	Other Disorders of Teeth and Supporting Structures 30,283 (4.6%)	Disorders of Conjunctiva 1,235 (1.3%)	Diabetes Mellitus 2,568 (3.0%)	Other Disorders of Teeth and Supporting Structures 34,155 (4.1%)
4	Diabetes Mellitus 17,895 (2.7%)	Infections of the Skin and Subcutaneous Tissue 920 (1.0%)	Other Disorders of Teeth and Supporting Structures 1,518 (1.8%)	Diabetes Mellitus 20,928 (2.5%)
5	Dental Caries 17,451 (2.6%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 904 (1.0%)	Dental Caries 1,364 (1.6%)	Dental Caries 19,608 (2.3%)
6	Disorders of Conjunctiva 8,944 (1.4%)	Hypertensive Diseases 893 (1.0%)	Disorders of Conjunctiva 840 (1.0%)	Disorders of Conjunctiva 11,019 (1.3%)
7	Bronchitis, Chronic and Unspecified Emphysema and Asthma 6,845 (1.0%)	Dental Caries 793 (0.9%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 838 (1.0%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 8,467 (1.0%)
8	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 3,848 (0.6%)	Gastritis and Duodenitis 786 (0.8%)	Infections of the Skin and Subcutaneous Tissue 612 (0.7%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 5,232 (0.6%)
9	Rheumatoid Arthritis and Other Inflammatory Polyarthropathies 3,702 (0.6%)	Bronchitis, Chronic and Unspecified Emphysema and Asthma 784 (0.8%)	Gastritis and Duodenitis 491 (0.6%)	Infections of the Skin and Subcutaneous Tissue 5,109 (0.6%)
10	Infections of the Skin and Subcutaneous Tissue 3,577 (0.5%)	Abdominal and Pelvic Pain 778 (0.8%)	Diarrhoea and Gastroenteritis of Presumed Infectious Origin 480 (0.6%)	Rheumatoid Arthritis and Other Inflammatory Polyarthropathies 4,576 (0.5%)
OTHERS	433,742 (65.8%)	66,604 (71.9%)	57,037 (66.6%)	558,099 (66.7%)
GRAND TOTAL	659,037 (100.0%)	92,590 (100.0%)	92,364 (100.0%)	837,235 (100.0%)

Note : There is no health centre in Temburong District. Patients will receive outpatient services at PIHM Hospital.
Source: Bru-HIMS Data

Renal Services

DIALYSIS CENTRE / UNIT	NO. OF PATIENTS ATTENDING FOR RENAL REPLACEMENT THERAPY				
	2013	2014	2015	2016	2017
Rimba Dialysis Centre	248	248	244	263	290
Kiarong Dialysis Centre	60	60	60	60	58
Dialysis Centre RIPAS Hospital	132	132	112	131	130
Dialysis Centre SSB Hospital, Belait	85	85	83	93	93
Tutong Dialysis Centre	51	51	56	61	63
Continuous Ambulatory Peritoneal Dialysis	53	53	67	78	75
Transplant Unit	39	39	45	47	47
Dialysis Centre PIHM Hospital, Temburong	30	30	27	21	22
TOTAL	698	698	694	754	778

	NO. OF PATIENTS ATTENDING FOR RENAL REPLACEMENT THERAPY				
	2013	2014	2015	2016	2017
No. of New Patients	13	8	14	14	21
No. of Deaths	10	5	15	5	18
No. of Acute Patients	4	5	0	0	0
No. of Chronic Patients	653	698	698	754	778

Source:

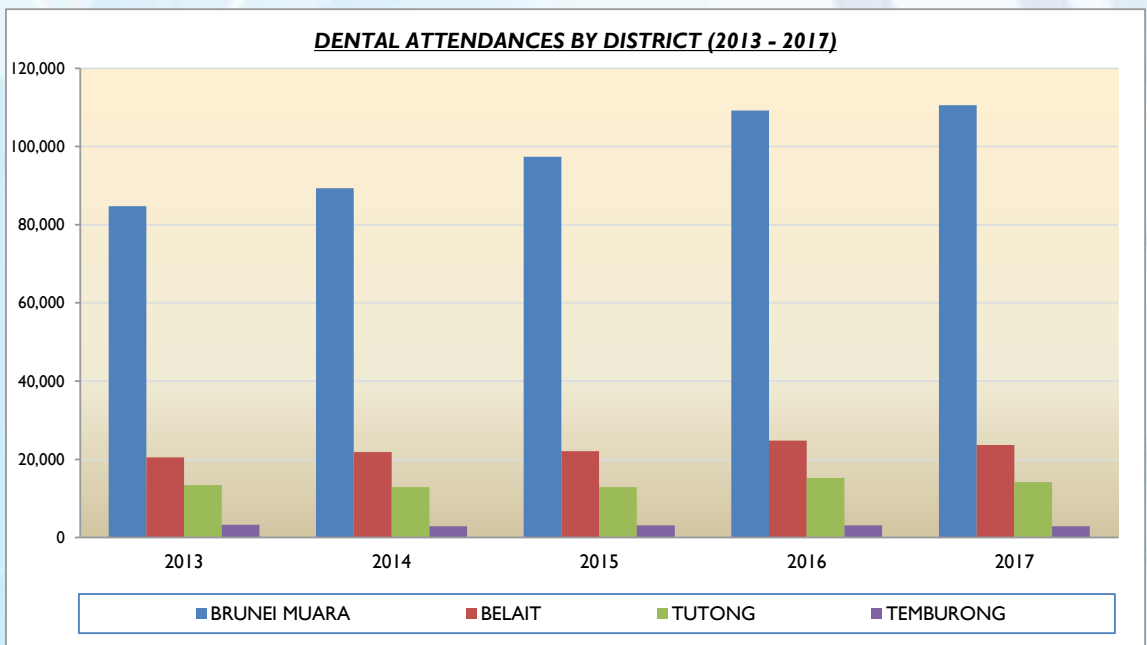
Renal Registry Unit, Department of Renal Services, Ministry of Health

Dental Health Services

TOTAL ATTENDANCES BY DISTRICT FOR THE YEARS (2013 - 2017)

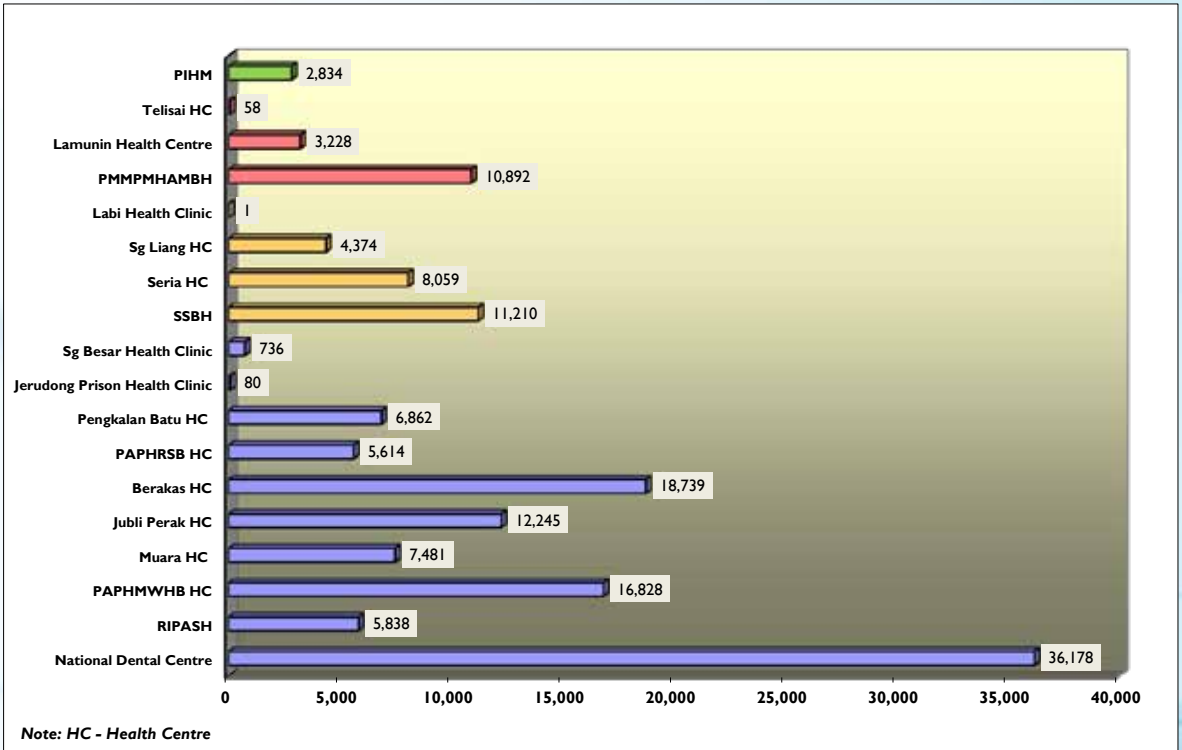
YEAR	BRUNEI MUARA	BELAIT	TUTONG	TEMBURONG	TOTAL
2013	84,715	20,477	13,439	3,271	121,902
2014	89,335	21,837	12,870	2,873	126,915
2015	97,430	22,109	12,918	3,116	135,573
2016	109,231	24,764	15,224	3,087	152,306
2017	110,601	23,644	14,178	2,834	151,257

Source: Dental Health Services, Ministry of Health

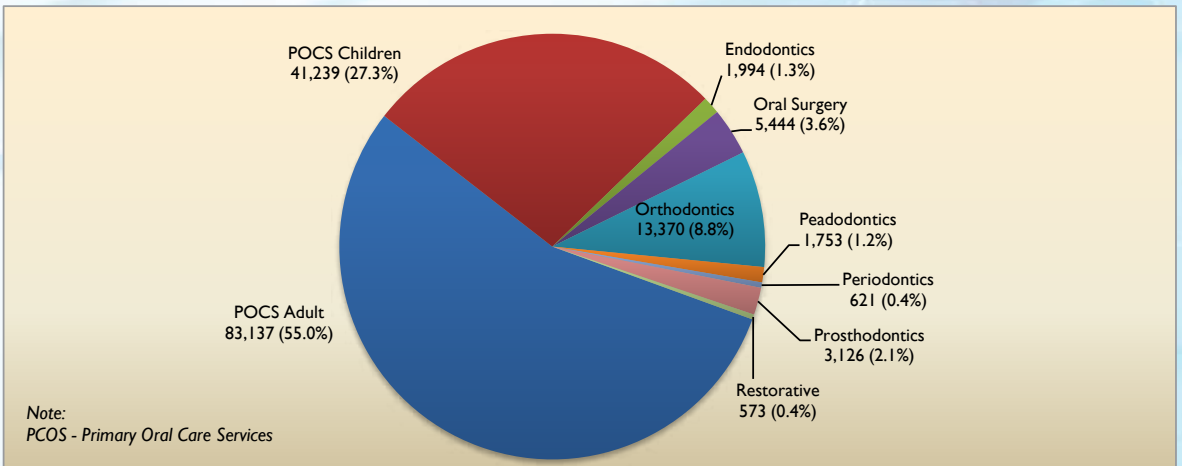


Dental Health Services

ATTENDANCES BY HOSPITALS / HEALTH CENTRES / HEALTH CLINICS FOR THE YEAR 2017



ATTENDANCES BY SPECIALTY FOR THE YEAR 2017



Occupational Health Services

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

A total of 130 workplace accidents were reported to the Occupational Health Division in 2017. 65% percent occurred 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
- 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
- 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

PURPOSE	2013		2014		2015		2016		2017	
	Non HC	HC	Non HC	HC	Non HC	HC	Non HC	HC	Non HC	HC
1. Workplace Inspection (First, Periodic & Follow-up Inspections)	51	3	48	7	77	22	110	1	62	34
2. Workplace Survey	47	0	177	0	223	0	127	0	58	4
3. Others (Accidents at Workplace Investigation, Occupational/Work-Related Disease Investigation, Requests, Complaints)	38	13	43	7	46	11	18	9	11	12
TOTAL	136	16	268	14	346	33	255	10	131	50
	152		282		379		265		181	

Note: Non HC - Non Health Care Sector; HC - Health Care Sector

Source : Occupational Health Division, Ministry of Health

Occupational Health Services

INCIDENCE OF WORKPLACE ACCIDENTS BY TYPE OF INDUSTRY (NON HEALTHCARE)

TYPE OF INDUSTRY	2013	2014	2015	2016	2017
A. Agriculture, Hunting and Forestry	3	0	0	0	6
B. Fishing	0	0	0	1	0
C. Mining and Quarrying	0	0	0	2	0
D. Manufacturing	7	12	6	6	4
E. Electricity, Gas and Water Supply	2	2	0	3	0
F. Construction	21	18	9	37	55
G. Wholesale and Retail trade, Repair of Motor Vehicle, Personal and Household goods	5	2	1	14	15
H. Hotel and Restaurant	1	0	1	2	4
I. Transport, Storage and Communication	2	1	2	3	0
J. Financial Intermediation	0	0	0	0	0
K. Rental Estate, Renting and Business Activities	0	0	0	2	0
L. Public Administration, Defense, Compulsory Social Security	0	0	0	0	0
M. Education	0	1	0	0	0
N. Health and Social Work	0	0	1	0	0
O. Other Community, Social, and Personal Service Activities	5	23	0	11	0
P. Private Household with Employed Persons	2	3	2	0	0
Q. Extra- Territorial Organizations and Bodies	0	0	0	0	0
Unknown	15	2	6	8	1
TOTAL	63	64	28	89	85

INCIDENCE OF WORKPLACE ACCIDENTS BY TYPE OF INJURY (HEALTHCARE)

TYPE OF INJURY	2013	2014	2015	2016	2017
1. Needle Prick	20	31	26	48	42
2. Other Injuries *	3	8	11	2	3
TOTAL	23	39	37	50	45

Note

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

OCCUPATIONAL AND WORK RELATED DISEASES

DISEASES	2013	2014	2015	2016	2017
1. Noise Induced Deafness	45	36	66	35	2
2. Occupational Dermatitis	2	0	0	0	1
3. Occupational Asthma	1	0	0	0	0
4. Occupational Lung Disease	1	0	0	0	1
TOTAL	49	36	66	35	4

Source : Occupational Health Division, Ministry of Health

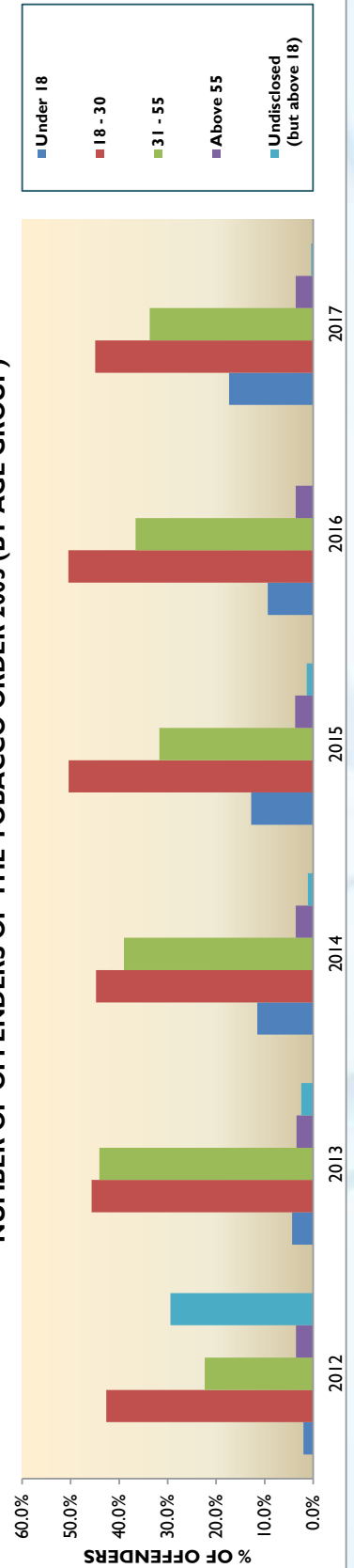
Tobacco Control

NUMBER OF OFFENCES RECORDED (TOBACCO ORDER 2005) FOR THE YEARS (2011 - 2017)

YEAR	COMPOUND FINES ISSUED	STERN WARNING ISSUED	REQUIRED TO ATTEND SMOKING CESSATION CLINIC	CASES TRANSFERRED TO CUSTOMS AND EXCISE DEPT.	TOTAL NUMBER OF OFFENCES	NUMBER OF OFFENDERS RECORDED
2011	177	40	0	3	219	216
2012	191	0	3	-	198	197
2013	306	9	14	-	329	322
2014	243	2	32	-	277	277
2015	325	1	50	-	376	375
2016	407	2	42	-	451	448
2017	437	1	95	-	532	525

Source: Health Enforcement Unit, Ministry of Health

NUMBER OF OFFENDERS OF THE TOBACCO ORDER 2005 (BY AGE GROUP)



Pharmacy Services

NUMBER OF PRESCRIPTIONS AND ITEMS BY HOSPITAL FOR THE YEAR 2017

	RIPAS Hospital					SSB Hospital				PMMPMHAMB Hospital				PIHM Hospital	TOTAL
	IPP	RIMBA RU	MHU	OPP	W&C Pcy	A&E	IPP	OPP	A&E	A&E	IPP	OPP	A&E		
NUMBER OF PRESCRIPTIONS															
Our-Patient Prescriptions / Discharge Prescriptions	25,705	11,770	5,330	196,220	24,161	72,320	5,578	105,486	11,747	2,273	35,259	2,513	31,520	529,882	
In-Patient Prescriptions	33,432	0	357	0	0	0	5,040	0	0	2,462	0	0	190	41,481	
Total Prescription	59,137	11,770	5,687	196,220	24,161	72,320	10,618	105,486	11,747	4,735	35,259	2,513	31,710	571,363	
NUMBER OF ITEMS															
Our-Patient Prescriptions / Discharge Prescriptions	81,411	73,633	11,955	661,028	51,693	181,188	18,652	390,938	32,891	7,271	117,791	7,160	114,573	1,750,184	
In-Patient Prescriptions	49,960	0	803	0	0	0	9,730	0	0	3,881	0	0	367	64,741	
Total Items	131,371	73,633	12,758	661,028	51,693	181,188	28,382	390,938	32,891	11,152	117,791	7,160	114,940	1,814,925	
Average No. of Items / OPP & DC Prescription	3.17	6.26	2.24	3.37	2.14	2.51	3.34	3.71	2.80	3.20	3.34	2.85	3.63	3.30	
Average No. of Items / In-Patient Prescriptions	1.49	0.00	2.25	0.00	0.00	0.00	1.93	0.00	0.00	1.58	0.00	0.00	1.93	1.56	

Source: Department of Pharmacy, Ministry of Health
 Note: IPP - In-Patient Prescriptions ; OPP - Out Patient Prescriptions ; DC - Discharge Prescriptions ; RIMBA RU - Rimba Renal Unit ; MHU - Mental Health Unit

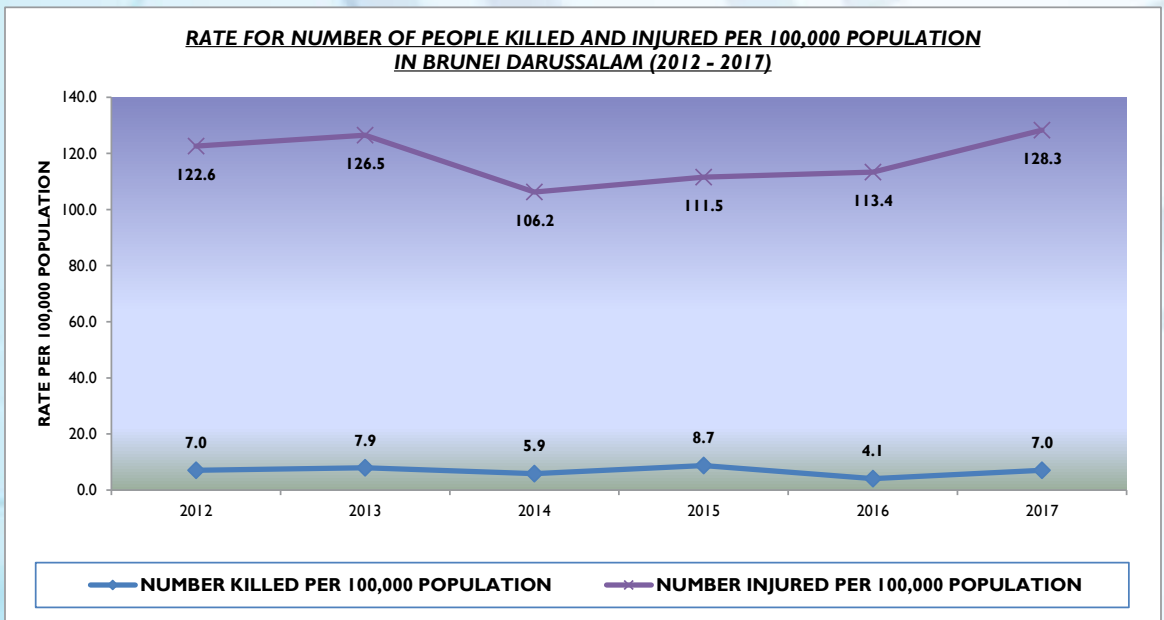
Road Traffic Accidents

Road traffic accidents remain as one of the top ten leading causes of deaths in Brunei Darussalam. In 2017, Brunei Darussalam reported 2684 road accidents.

ROAD TRAFFIC ACCIDENTS (2011 - 2017)						
Y E A R	ACCIDENTS	KILLED	NUMBER KILLED PER 100,000 POPN.	INJURED	NUMBER INJURED FOR EACH PERSON KILLED	CASE FATALITY RATE % (CFR)
2011	3,598	47	11.9	699	14.9	6.3
2012	3,310	28	7.0	489	17.5	5.4
2013	3,338	32	7.9	510	15.9	5.9
2014	3,366	24	5.9	433	18.0	5.3
2015	3,345	36	8.7	460	12.8	7.3
2016	3,375	17	4.1	473	27.8	3.5
2017	2,684	29	7.0	529	18.2	5.2

Sources :

The Royal Brunei Police Force, Prime Minister's Office



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 days to less than 28 days
- 4 **POST NEONATAL DEATHS** : Deaths aged 28 days to less than 365 days
- 5 **NEONATAL DEATHS** : Deaths aged less than 28 days
- 6 **PERINATAL DEATHS** : Stillbirths (Late Fetal Deaths) plus 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 KNOWN 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 (per 1,000 population)** = $(\text{LIVEBIRTHS} / \text{POP.}) \times 1000$
- 2 **GENERAL FERTILITY RATE** = $[(\text{LIVEBIRTHS} / \text{WOMEN POP. AGED (15-49)})] \times 1000$
- 3 **CRUDE DEATH RATE** = $(\text{NO. OF DEATHS} / \text{POP.}) \times 1000$
- 4 **UNDER 5 MORTALITY RATE** = $[(0-4) \text{ DEATHS} / \text{LIVEBIRTHS}] \times 1000$
- 5 **LATE FETAL DEATH RATIO** = $(\text{FETAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 6 **PERINATAL MORTALITY RATIO** = $(\text{PERINATAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 7 **EARLY NEONATAL MORTALITY RATE** = $(\text{EARLY NEONATAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 8 **LATE NEONATAL MORTALITY RATE** = $(\text{LATE NEONATAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 9 **NEONATAL MORTALITY RATE** = $(\text{NEONATAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 10 **POST NEONATAL MORTALITY RATE** = $(\text{POST NEONATAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 11 **INFANT MORTALITY RATE** = $(\text{INFANT DEATHS} / \text{LIVEBIRTHS}) \times 1000$
- 12 **MATERNAL MORTALITY RATIO (per 100,000 live births)** = $(\text{MATERNAL DEATHS} / \text{LIVEBIRTHS}) \times 100000$
- 13 **MATERNAL MORTALITY RATIO (per 1,000 live births)** = $(\text{MATERNAL DEATHS} / \text{LIVEBIRTHS}) \times 1000$

HOSPITAL PERFORMANCE INDICES

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

POPULATION BASED HOSPITAL ACTIVITIES

- 1 **OP ATTENDANCE RATE / 1000 POP.** = $(\text{GENERAL OP ATTENDANCES} / \text{POP.}) \times 1000$
- 2 **A&E OP ATTENDANCES RATE / 1000 POP.** = $(\text{A\&E OP ATTENDANCES} / \text{POP.}) \times 1000$
- 3 **HOSPITALISATION RATE / 1000 POP.** = $(\text{ADMISSION} / \text{POP.}) \times 1000$
- 4 **RATE OF PATIENT DAYS / 1000 POP.** = $(\text{PATIENT DAYS} / \text{POP.}) \times 1000$

Note:

AV. = Average

OP = Outpatient

POP. = Population

ICD10 CODES	DESCRIPTION OF DISEASES
E11	Type 2 Diabetes Mellitus
E78	Disorders of lipoprotein metabolism and other lipidaemias
I10	Essential (primary) hypertension
J00	Acute nasopharyngitis [common cold]
J06	Acute upper respiratory infections of multiple and unspecified sites
J06.9	Acute upper respiratory infection, unspecified
K02	Dental caries
Z00.1	Routine child health examination
Z01.2	Dental examination
Z02.1	Pre-employment examination
Z09.8	Follow-up examination after other treatment for other conditions
Z34	Supervision of normal pregnancy
Z71.2	Person consulting for explanation of investigation findings

Source: WHO ICD-10 International Statistical Classification of Diseases and Related Health Problems

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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

Collaborative efforts from various service delivery teams

All of the content in this book is true at time of publishing. Any representation or reference of the data used need to be quoted as:

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<http://www.moh.gov.bn/SitePages/Health%20Information%20Booklet.aspx>

For further information please contact:

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

Tel: **+673 - 2381640**
Fax: **+673 - 2383016**
E-mail: **statistics@moh.gov.bn**
Website: **www.moh.gov.bn**

