



# Kiribati Annual Health Bulletin 2017

Produced by the Health Information Unit  
Ministry of Health and Medical Services  
Nawerewere, Tarawa, Kiribati



## Minister's Foreword

*Kam na bane ni mauri!*

I am delighted to introduce the Kiribati Health Bulletin: an important tool which provides useful statistical health information for the Republic of Kiribati, internal and external organizations, as well as individuals with a keen interest in the nation's health status.

The "2017 Kiribati Health Bulletin" is an annual report based on the Ministry of Health and Medical Services' (MHMS) achievements from both curative and preventative medicines. The vision and mission this year has been continuously used since 2016 and were derived from the Ministry Strategic Plan 2016 to 2019.

**VISION: Akea token te tamaroa towards "healthy population that is well supported by quality health services".**

**MISSION: To deliver a safe quality service through hospital, public health, and nursing services.**

The vision and mission seeks to set a direction for MHMS over four years with fixed indicators to help monitor progress against the strategic objectives. Annually, the year is concluded with the provision of the Kiribati Health Bulletin which draws data from the indicators as well as additional relevant information to project whether the strategic objectives are being met or not.

Furthermore, the bulletin targets efforts for public accountability and transparency in the provision and delivery of public goods and services. On that note, MHMS encourages all interested entities, young and old, to utilize the report in order to make well-informed decisions for resource allocation, funding distribution, implementation, research, and many more.



Honorable Tauanei Marea  
Minister for Health and Medical Services

## Table of Contents

Minister's Foreword.....	2
Table of Contents .....	3
List of Figures .....	6
Acronyms & Abbreviations .....	7
Key Health Related Indicators at a glance .....	8
<b>1. General Information .....</b>	<b>9</b>
Country Background.....	9
Administrative divisions .....	10
Ethnic groups .....	10
Language.....	10
Religion.....	10
Health situation and trends.....	10
Organization of the Health Sector.....	11
Primary Health Care .....	11
Hospital Care .....	11
Private Health Sector .....	11
Kiribati health system .....	12
<b>2. Key Health Related Indicators with definitions .....</b>	<b>13</b>
Table 1: Key Health Related Indicators with definitions.....	13
<b>3. Demographic Information .....</b>	<b>16</b>
<b>4. Health Resources .....</b>	<b>17</b>
Table 2: Health institutions in Kiribati .....	17
Table 3: Bed strength and location of leading hospitals .....	17
Table 4: In-patient days, Bed days and Bed occupancy rates for TCH .....	18
<b>5. Country Health Manpower .....</b>	<b>19</b>
Table 5: Health manpower for Kiribati health institutions .....	21
Table 6: Location and staff availability of Health Centers and Village Clinics .....	22
<b>6. Morbidity and mortality statistics for Tungaru Central Hospital (TCH) .....</b>	<b>24</b>
Table 7: Basic patient statistics for TCH .....	26
Table 8: Indoor Morbidity Statistics for TCH: according to Age, Sex and Ward category .....	26
Table 9: Inpatient Morbidity Statistics for Health Centers and Clinics.....	27
Table 10: Outpatient Morbidity Statistics for Health Centers and Clinics .....	28
Table 11: Outpatient Morbidity Statistics according to districts .....	29
Table 12: Referrals to TCH from Health Centers and Clinics.....	30
Table 13: Leading Causes of Hospitalization for TCH .....	31

Table 14: Indoor Mortality Statistics for TCH: according to Age, Sex and Ward category	33
Table 15: Leading Causes of Hospital Inpatient Deaths* for TCH (Categorized list)	35
Table 16: Leading Causes of Hospital Inpatient Deaths* for TCH (Expanded list)	36
<b>7. Country mortality statistics</b>	<b>38</b>
Table 17: Neonatal deaths according to districts*	38
Table 18: Infant deaths according to districts	39
Table 19: Under 5 year child deaths according to districts*	40
Table 20: Maternal deaths for Kiribati	41
Table 21: Maternal deaths according to districts*	41
Table 22: Adult deaths due to NCDs according to districts*	42
Table 23: Leading Causes of Death for Kiribati (Categorized list)*	43
Table 24: Leading Causes of Death for Kiribati (Expanded list)*	45
Table 25: Deaths due to cancer for Kiribati*	49
Table 26: Ill-defined causes of death for Kiribati*	50
<b>8. Maternal &amp; Child Health and Family Planning Services</b>	<b>51</b>
Table 27: Visits to Island Health Centers and Clinics	52
Table 28: PHN Home Visits	54
Table 29: Malnutrition among <5yr children according to districts	55
Table 30: Malnutrition among <5yr children	56
Table 31: Family Planning services	58
<b>9. Immunization Services</b>	<b>59</b>
Table 32: Immunization Overview (Children <1yr) according to districts	60
Table 33: Immunization Overview (Children <1yr)*	62
Table 34: Immunization Overview (Children 6-14yrs)	63
Table 35: Immunization Overview (>15yrs)	63
Table 36: Immunization Overview (Others)	64
Table 37: Immunization Overview for TCH (Children <1yr)	65
<b>10. Birth information: TCH</b>	<b>66</b>
Table 38: Birth outcomes according to mode of delivery at TCH	66
Table 39: Births outcomes according to type of delivery at TCH	66
<b>11. Birth information: Island Hospitals, Health Centers and Clinics. (Excluding TCH births)</b>	<b>67</b>
Table 40: Birth outcomes reported from island Health Centers and clinics*	67
Table 41: Deliveries at Island Hospital, Health Centers and clinics	68
<b>12. Birth information: District Breakdown</b>	<b>68</b>
Table 42: Births according to districts*	68
<b>13. Country birth information</b>	<b>69</b>
Table 43: Births reported from Hospitals, Health Centers and Clinics*	69

<b>14. Non Communicable Disease (NCD) burden .....</b>	<b>70</b>
Table 44: NCD burden in Island Health Centers and Village Clinics .....	71
<b>15. Tuberculosis burden .....</b>	<b>72</b>
Table 45: Tuberculosis Reporting.....	73
<b>16. Leprosy burden .....</b>	<b>74</b>
Table 46: Leprosy Reporting .....	74
Births and Deaths trend 2011-2017 .....	75
Indicator tracker 2015 - 2017.....	76
Monthly reports submitted in 2017.....	78
Notes .....	83

## List of Figures

<b>Figure</b>	<b>Description</b>	<b>Page</b>
Figure 1	Map of Republic of Kiribati displaying the groups of islands.....	9
Figure 2	Leading Causes of Hospitalization for TCH.....	32
Figure 3	Indoor mortality statistics according to wards: TCH.....	34
Figure 4	Neonatal deaths according to districts.....	38
Figure 5	Infant deaths according to districts.....	39
Figure 6	Under 5 year deaths according to districts.....	40
Figure 7	Maternal deaths according to districts.....	41
Figure 8	Adult deaths due to NCDs according to districts.....	42
Figure 9	Leading Causes of Death for Kiribati.....	44
Figure 10	Mortality from cancers.....	49
Figure 11	Ill-defined cause(s) of deaths as percentage of total deaths.....	50
Figure 12	PHN home visits (as a percentage) .....	54
Figure 13	Malnutrition among <5yrs according to districts.....	55
Figure 14	Immunization coverage (Children <1yr) district breakdowns.....	61
Figure 15	Birth outcomes at TCH.....	66
Figure 16	Birth outcomes reported from island Health Centers and clinics.....	67
Figure 17	Births according to districts.....	68
Figure 18	Country birth outcomes.....	69
Figure 19	Tuberculosis case notifications (new & relapsed) .....	72
Figure 20	Births and deaths trend 2011 to 2017.....	75

## **Acronyms & Abbreviations**

ARI	Acute Respiratory Infection
BH	Betio Hospital
CBR	Crude Birth Rate
CDR	Crude Death Rate
HIU	Health Information Unit
ICD	International Classification of Diseases
IMCI	Integrated Management of Children's Illness
IMF	International Monetary Fund
IMO	Intern Medical Officer
IMR	Infant Mortality Rate
IUCD	Intra Uterine Contraceptive Device
KFHA	Kiribati Family Health Association
KHIS	Kiribati Health Information System
LBW	Low Birth Weight
LKH	London Kiritimati Hospital
MA	Medical Assistant
MHMS	Ministry of Health and Medical Services
MMR	Maternal Mortality Rate
MRD	Medical Records Department
MS1	Monthly Consolidated Statistical Report
NCD	Non Communicable Diseases
NMR	Neonatal Mortality Rate
OPD	Out Patients Department
PHN	Public Health Nurse
SKH	Southern Kiribati Hospital
STI	Sexually Transmitted Infections
TCH	Tungaru Central Hospital
U5MR	Under-five Mortality Rate



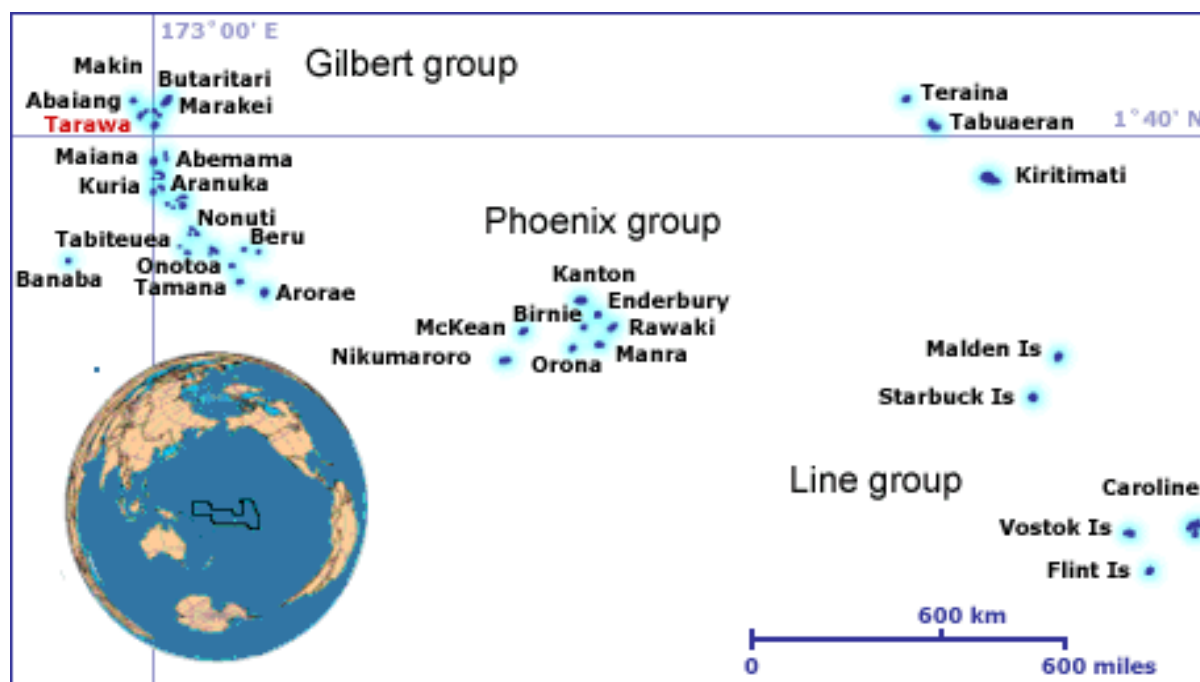
## Key Health Related Indicators at a glance

Indicator		Year	No.	Rate	Source
Demographic					
Total population		2015	110,136		National Statistics Office
Crude Birth Rate (per 1,000 population)		2017	3,069	27.9	KHIS & MS1
Crude Death Rate (per 1,000 population)		2017	719	6.5	
Life expectancy at birth (years)	Male	2017	61.7	66.6	WHO, ANACoD 2017
	Female	2017	72.1		
Land area (Sq. km)		2015	726		National Statistics Office
Health and Nutrition					
Neonatal Mortality Rate (per 1,000 live births)		2017	34	11.1	KHIS & MS1
Infant Mortality Rate (per 1,000 live births)		2017	81	26.4	
Under-five Mortality Rate (per 1,000 live births)		2017	135	44.0	
Maternal Mortality Rate (per 100,000 live births)		2017	1	32.6	
Adult mortality rate from NCDs (30-69 years) (per 10,000 population 30-69 years)		2017	211	55.9	
Mortality rate from road traffic injuries (per 100,000 population)		2017	12	10.9	
Adolescent birth rate for 10-14 years (per 1,000 girls in age group 10-14 years)		2017	9	1.8	
Adolescent birth rate for 15-19 years (per 1,000 girls in age group 15-19 years)		2017	263	45.2	
Contraceptive contacts (all forms) seen at health facilities per 1,000 population		2017	29,147	264.6	MS1
Percentage of pregnant mothers received at least one home visit by PHN		2017	328	10.4	
Access to antenatal care		2017	12,421	4.0	KHIS & MS1
Percentage of Low Birth Weight		2017	220	7.2	
Malnourished children <5 years		2017	704	5.0	MS1
Tuberculosis case notification rate (all forms, per 100,000 population)		2017	389	353.2	
TB treatment success rate		2016	460	88.9	MS1 & TB control program
Number of Leprosy cases (new and relapses)		2017	200		MS1
Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital (TCH)		2017	229	15.9	KHIS
Children immunized against measles		2017	2,524	92.2	MS1
Diabetes - Occasions of service (per 1000 population)		2017	17,820	162	KHIS & MS1
Hypertension - Occasions of service (per 1000 population)		2017	16,203	147	
Outpatient consultations per capita		2017	532,349	4.8	MS1
Outpatient consultations per capita for TCH		2017	31,527	0.3	KHIS
Tungaru Central Hospital (patient discharges/week)		2017	5448	104.8	
Tungaru Central Hospital (bed occupancy)		2017		85.3	
Tungaru Central Hospital (average length-of-stay)		2017		6.5	
Health Resources					
Number of Hospital Beds per 1,000 population		2017	205	1.9	KHIS
Availability of Medical Officers		2017	66	6.0	MHMS Admin Division
Population per Medical Officer		2017		1668.7	
Availability of Dental Surgeons		2017	6	0.5	
Population per Dental Surgeon		2017		18,356.0	
Availability of Medical Assistants		2017	41	3.7	
Population per Medical Assistant		2017		2,686.2	
Availability of Nurses		2017	383	34.8	
Population per Nurse		2017		287.6	
Availability of Midwives		2017	75	6.8	
Population per Midwife		2017		1,468.5	
Number of Pharmacists available		2017	5		
Number of Physiotherapists available		2017	3		
Number of Hospitals		2017	4		KHIS
Number of Health Centers		2017	22		MS1
Number of Village Clinics		2017	84		
Number of Hospital Beds		2017	205		KHIS

## 1. General Information

### Country Background

Kiribati officially the Republic of Kiribati, is an island nation in the Central Pacific ocean. The nation comprises 33 atolls and reef islands and one raised coral island, Banaba. Kiribati has a total land area of 726 square kilometers and are dispersed over 3.5 million square kilometers of Ocean. Their spread straddles the equator and the International Date Line (Figure 1).



**Figure 1: Map of Republic of Kiribati displaying the groups of islands**

According to 2015 population and housing census the total population of Kiribati is 110,136 with 51% of that living on South Tarawa an island of 14 km<sup>2</sup>. The vast majority (>95%) of people inhabit the Gilbert Islands with a population density of 152 and an average household size of 6.

Kiribati became independent from the United Kingdom in 1979. The capital and now most populated area, South Tarawa, consists of a number of islets, connected by a series of causeways. These comprise about half the area of Tarawa Atoll. Kiribati is a member of the Commonwealth of Nations, the IMF and the World Bank, and became a full member of the United Nations in 1999.

### **Administrative divisions**

There are a total of 22 inhabited islands in Kiribati. Kiribati is divided into three island groups, and include Gilbert, Phoenix and Line Islands group. Most of the country's population lives in the Gilbert Islands group including the capital South Tarawa. Five of the Line Islands are uninhabited (Malden Island, Starbuck Island, Caroline Island, Vostok Island and Flint Island). The Phoenix Islands are uninhabited except for Kanton. Banaba itself is sparsely inhabited. Each of the 22 inhabited islands has a local council that takes care of the daily affairs. Tarawa Atoll has three councils; Betio Town Council, Te Inainano Urban Council (for the rest of South Tarawa) and Eutan Tarawa Council (for North Tarawa).

### **Ethnic groups**

The native people of Kiribati are called I-Kiribati. Ethnically, the I-Kiribati are Micronesians. Recent archaeological evidence indicates that Austronesians originally settled the islands thousands of years ago. Around the 14<sup>th</sup> century, Fijians, Samoans, and Tongans invaded the islands, thus diversifying the ethnic range and introducing Polynesian linguistic traits. Inter-marriage among all ancestral groups, however, has led to a population reasonably homogeneous in appearance and traditions.

### **Language**

The people of Kiribati speak an Oceanic language called 'Gilbertese'. Although English is also an official language, it is not used very often outside the island capital of Tarawa. It is more likely that English is mixed in its use with Gilbertese.

### **Religion**

Christianity is the major religion, having been introduced by missionaries in the 19<sup>th</sup> century. The population is predominantly Roman Catholic (57%), although a substantial portion of the population is Kiribati Uniting Church (31%). Many other Protestant denominations, including more evangelical types, are also represented. The Bahá'í faith religion also exists in Kiribati (2.1%), Latter Day Saints (5.3%) as well as other smaller denominations.

### **Health situation and trends**

While the country only has a total land area of 726 square kilometres, it covers over 3.5 million kilometres of ocean, presenting significant challenges for both the healthcare and social service systems. With such a widely dispersed population, those living on outlying islands are not always able to access (or afford) an airlift or boat to the nearest medical facilities. Furthermore, the low-lying atolls of Kiribati are very vulnerable to climate change and rising sea-levels, with issues already arising from groundwater depletion, marine-life and sea-water contamination from human and solid waste, and over-fishing of the reefs and lagoons. Protection of water sources from pollution, mainly from nearby sanitation systems, is a constant public health concern. High internal migration from the outer islands to the capital, South Tarawa, coupled with ad-hoc urban planning and management has resulted in overcrowding, and inadequate sanitation. As with many countries in the Pacific region, Kiribati now faces a 'double burden of diseases'. While many challenges remain in the areas of maternal and child health and in communicable diseases, there has been an important shift

in the burden of diseases – from infectious to non-communicable diseases (NCDs). Overall, life expectancy in Kiribati is low for the Pacific region. In 2017, life expectancy at birth was estimated at 61.7 for males and 72.1 for females according to 2017 Annual Health Bulletin.

### **Organization of the Health Sector**

Kiribati Ministry of Health and Medical Services (MHMS) functions and operate at four levels namely Central, District, Island and Community. The entire system from central to community level is publicly financed. Primary health care is provided through a network of health centres and outreach village clinics extending from district to community level. Essential referral care is provided through 4 referral hospitals and the main being the Tungaru Central Hospital (TCH) in South Tarawa.

### **Primary Health Care**

Administratively Kiribati is divided into six health districts namely Tarawa & Banaba, Central, Northern, South Eastern, South Western and Linnix. Primary health care services are provided within the district health structure through a network of island health centres and village clinics.

The smallest and lower most facility based primary care service at grass root level is named as village clinics and are manned by a specially trained Public Health Nurse (PHN). They are able to deliver a minimum package of curative and preventive health care. Village clinics are situated in each village and number at present stand at 84.

At island level, health centres provides a higher and wider range of services than a village clinic. They provide both inpatient and outpatient services manned by a Medical Assistant (MA). The MAs either possess a degree in bachelor of nursing or a public health degree. At least one health centre is situated in each inhabited island and at present the number stands at 22.

### **Hospital Care**

In Kiribati, secondary care is provided through four hospitals. TCH is the specialized 139 bedded hospital in the country located in Nowerewere, South Tarawa. It provides emergency & outpatient care facilities and inward facilities in four major specialties namely Internal Medicine, Surgery, Paediatrics and Gynaecology & Obstetrics. In addition a special ward for Tuberculosis patients and a paying ward is also present at TCH. TCH is staffed with medical specialists as well as general medical officers. It also functions as a training centre for Intern Medical Officers (IMO) and for primary health care workers. Southern Kiribati Hospital (SKH) situated in Tabiteuea North is a 20 bed hospital while Betio Hospital (BH) located in Betio, South Tarawa consist of 29 beds. Another 17 bedded facility is located in Kiritimati, Line & Phoenix Islands called London Kiritimati Hospital (LKH).

### **Private Health Sector**

The private health care facilities are not available in Kiribati at present, except for a couple of registered shops selling pharmaceuticals.

### **Kiribati health system**

The government of Kiribati is the main provider of health services in the country. Government health facilities includes the four hospitals, 22 health centres and 84 village clinics. In addition to these health facilities there are 12 other health care providers that also report to the Health Information Unit (HIU) that include Integrated Management of Children's Illness (IMCI) clinic, TCH Outpatient Clinic, Gynaecology clinic, Kiribati Family Health Association (KFHA), Diabetic, ANC and Postnatal, TB, Leprosy Clinics, Youth Friendly Health Service, Healthy Family Clinic (GBV), Anaieta Pharmacy and Prison Clinic. All health care services are provided free to all Kiribati residents by the government and there is very minimal out-of-pocket spending for health. In 2017, the government spent approximately 14.2% of its total recurrent budget on health, a per capita expenditure on Health of AUD \$282 for Kiribati.

## 2. Key Health Related Indicators with definitions

Table 1: Key Health Related Indicators with definitions			
#	Indicator and Definition		2017
Demographic			
1.	<b>Total population*</b> <i>2015 census population (National Statistics Office)</i>		110,136
2.	<b>Crude Birth Rate (per 1,000 population*)</b> <i>Number of live births per year (per 1,000 population)</i>		27.9
3.	<b>Crude Death Rate (per 1,000 population*)</b> <i>Number of deaths per year (per 1,000 population)</i>		6.5
4.	<b>Life Expectancy at Birth (years)</b> <i>2017 Annual Report MHMS</i>	Male Female	66.6
5.	<b>Land area (km<sup>2</sup>)</b> <i>2015 Census (National Statistics Office)</i>		726
Health and Nutrition			
6.	<b>Neonatal Mortality Rate</b> <i>Probability of dying between birth and age 28 days (per 1,000 live births)</i>		11.1
7.	<b>Infant Mortality Rate</b> <i>Probability of dying between birth and age 1 year (per 1,000 live births)</i>		26.4
8.	<b>Under-five Mortality Rate</b> <i>Probability of dying by age 5 years (per 1,000 live births)</i>		44.0
9.	<b>Maternal Mortality Rate</b> <i>Probability of a female dying due to a maternal cause (per 100,000 live births)</i>		32.6
10.	<b>Adult mortality rate from NCDs*</b> <i>Probability of dying between age 30-69 years from NCDs in a given year (per 10,000 population age 30-69 years)</i>		55.9
11.	<b>Mortality rate from road traffic injuries*</b> <i>Probability of dying from road traffic injuries in a given year (per 100,000 population)</i>		10.9
12.	<b>Adolescent birth rate for 10-14 years*</b> <i>Probability of giving birth between the age 10-14 years in a given year (per 1,000 girls age 10-14 years)</i>		1.8
13.	<b>Adolescent birth rate for 15-19 years*</b> <i>Probability of giving birth between the age 15-19 years in a given year (per 1,000 girls age 15-19 years)</i>		45.2
14.	<b>Contraceptive use*</b> <i>Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population)</i>		264.6
15.	<b>Access to antenatal care</b> <i>The average number of antenatal clinic visits attended per mother in one year</i>		4.0
16.	<b>Percentage of pregnant mothers received at least one home visit by PHN</b> <i>The average number of home visits by PHN per mother in one year</i>		10.4

**Table 1: (continued) Key Health Related Indicators with definitions**

#	Indicator / Definition	2017
17.	<b>Percentage of Low Birth Weight</b> <i>Percentage of having a low birth weight (&lt;2500g) baby (per 100 live births)</i>	7.2
18.	<b>Malnourished children &lt;5 years</b> <i>Percentage of children (aged &lt;5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form</i>	5.0
19.	<b>Tuberculosis case notification rate*</b> <i>The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year (per 100,000 population)</i>	353.2
20.	<b>Tuberculosis treatment success rate</b> <i>Percentage of new, bacteriologically confirmed smear-positive tuberculosis cases that were cured or in which a full course of treatment was completed</i>	88.9
21.	<b>Number of Leprosy cases (new and relapses)</b>	200
22.	<b>Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital*</b> <i>Number of children (aged 0-59) months who had 'presumed pneumonia' (moderate or severe ARI) and were taken to Tungaru Central Hospital (per 1,000 population)</i>	15.9
23.	<b>Children immunized against measles*</b> <i>Percent of children (aged &lt;1 year) who have received one dose of measles-containing vaccine in one year</i>	92.9
24.	<b>Diabetes</b> <i>Occasion of service for diabetic cases to facilities, confirmed or suspected (per 1000 population)</i>	162
25.	<b>Hypertension</b> <i>Occasion of service for hypertension cases to facilities, confirmed or suspected (per 1000 population)</i>	147
26.	<b>Outpatient consultations per capita*</b> <i>Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita</i>	4.8
27.	<b>Outpatient consultations per capita for Tungaru Central Hospital*</b> <i>Number of visits to Tungaru Central Hospital for ambulant care, not including immunizations, for the total population (including repeat visits) per capita</i>	0.3
28.	<b>Tungaru Central Hospital (patient discharges)</b> <i>Weekly average number of patients discharged from all TCH wards in a given year</i>	104.8
29.	<b>Tungaru Central Hospital (bed occupancy)</b> <i>Proportion of available acute inpatient beds that have been occupied over one year</i>	85.3
30.	<b>Tungaru Central Hospital (average length-of-stay)</b> <i>Average number of days patients spend in hospital</i>	6.5

**Table 1: (continued) Key Health Related Indicators with definitions**

#	Indicator / Definition	2017
<b>Health Resources</b>		
31.	<b>Number of Hospital Beds per 1,000 population*</b>	<b>1.9</b>
32.	<b>Availability of Medical Officers*</b> <i>Number of Medical Officers in a given year (per 10,000 population)</i>	<b>6.0</b>
33.	<b>Population per Medical Officer*</b> <i>Population: Medical Officer ratio</i>	<b>1668.7</b>
34.	<b>Availability of Dental Surgeons*</b> <i>Number of Dental Surgeons in a given year (per 10,000 population)</i>	<b>0.5</b>
35.	<b>Population per Dental Surgeon*</b> <i>Population: Dental Surgeon ratio</i>	<b>18,356.0</b>
36.	<b>Availability of Medical Assistants*</b> <i>Number of Medical Assistants in a given year (per 10,000 population)</i>	<b>3.7</b>
37.	<b>Population per Medical Assistant*</b> <i>Population: Medical Assistant ratio</i>	<b>2,686.2</b>
38.	<b>Availability of Nurses*</b> <i>Number of Nurses in a given year (per 10,000 population)</i>	<b>34.8</b>
39.	<b>Population per Nurse*</b> <i>Population: Nurse ratio</i>	<b>287.6</b>
40.	<b>Availability of Midwives*</b> <i>Number of Midwives in a given year (per 10,000 population)</i>	<b>6.8</b>
41.	<b>Population per Midwife*</b> <i>Population: Midwife ratio</i>	<b>1,468.5</b>
42.	<b>Number of Pharmacists available</b>	<b>5</b>
43.	<b>Number of Physiotherapists available</b>	<b>3</b>
44.	<b>Number of Hospitals</b>	<b>4</b>
45.	<b>Number of Health Centers</b>	<b>22</b>
46.	<b>Number of Village Clinics</b>	<b>84</b>
47.	<b>Number of Hospital Beds</b>	<b>205</b>



### 3. Demographic Information

**Crude Birth Rate:** Number of live births per year (per 1,000 population): **27.9**

CBR =	$\frac{\text{Number of live births (3,069)}}{\text{Total population (110,136)}} \times 1,000$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• 2015 census population is used as the base population</li> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting</li> <li>• Births with unrecorded outcomes were counted as live births.</li> </ul>	

**Crude Death Rate:** Number of deaths per year (per 1,000 population): **6.5**

CDR =	$\frac{\text{Number of deaths (719)}}{\text{Total population (110,136)}} \times 1,000$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• 2015 census population is used as the base population</li> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting</li> <li>• Mortality data is weak</li> <li>• Mortality data is derived from the final diagnoses documented in the Medical Records (MRs) since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.</li> <li>• Strengthened use of Death Certificate at TCH would also contribute to better quality number of deaths and cause of deaths.</li> </ul>	

## 4. Health Resources

**Table 2: Health institutions in Kiribati**

Type of health facility	No.
Hospitals	4
Island Health Centers	22
Village Clinics/Dispensaries	84
<b>Total number of health institutions</b>	<b>110</b>

Source: KHIS and MS1 as of 31.12.2015

**Number of Hospital Beds: 205**

**Table 3: Bed strength and location of leading hospitals**

Hospital	Location	No. of Beds
Tungaru Central Hospital (TCH)	Nawerewere, Tarawa	139
Southern Kiribati Hospital (SKH)	Tabiteuea, Southern Island	20
Betio Hospital (BH)	Betio, South Tarawa	29
London Kiritimati Hospital (LKH)	Kiritimati, Line & Phoenix Islands	17
<b>Total bed strength</b>		<b>205</b>

Source: KHIS as of 31.12.2015

**Number of Hospital Beds per 1,000 population: 1.9**

Number of Hospital Beds per 1,000 population =	$\frac{\text{Total number of Hospital Beds available (205)}}{\text{Total population (110,136)}} \times 1,000$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Data for 2017 has been sourced from the KHIS.</li> </ul>	

**TCH Bed Occupancy Rate:** Proportion of available acute inpatient beds that have been occupied over one year: **85.3**

TCH Bed Occupancy Rate = $\frac{\text{Total In-patient Service Days (35,500)}}{\text{Total Bed Days (41,610)}} \times 100$		
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS and is likely to be affected by under-counting.</li> <li>• Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.</li> </ul>		

**TCH (average length-of-stay):** Average number of day's patients spend in hospital: **6.5**

TCH Average Length-of-stay = $\frac{\text{Total In-patient Service Days (35,500)}}{\text{Total number of admissions (5,448)}}$		
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS and is likely to be affected by under-counting.</li> <li>• Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.</li> </ul>		

**Table 4: In-patient days, Bed days and Bed occupancy rates for TCH**

Ward	In-patients days	Bed days	Bed occupancy [%]
TCH-Medical	7,633	8,030	95.1
TCH-Surgical	7,110	8,030	88.5
TCH-Paediatric	6,289	9,855	63.8
TCH-Obstetric	11,338	7,665	147.92
TCH-Private	1,781	2,920	61.0
TCH-ICU	1,349	5,110	26.4
<b>Total</b>	<b>35,500</b>	<b>41,610</b>	<b>85.3</b>

*Source: KHIS as of 31.12.2017*

## 5. Country Health Manpower

**Availability of Medical Officers:** Number of Medical Officers (per 10,000 population): **6.0**

Medical Officers per 10,000 population =	$\frac{\text{Total number of Medical Officers enrolled for the year (66)}}{\text{Total population (110,136)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Population per Medical Officer:** Population: Medical Officer Ratio: **1,668.7**

Population per Medical Officer =	$\frac{\text{Total population for the year (110,136)}}{\text{Total number of Medical Officers enrolled for the year (66)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Availability of Dental Surgeons:** Number of Dental Surgeons (per 10,000 population): **0.5**

Dental Surgeons per 10,000 population =	$\frac{\text{Total number of Dental Surgeons enrolled for the year (6)}}{\text{Total population (110,136)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Population per Dental Surgeon:** Population: Dental Surgeon ratio: **18,356**

Population per Dental Surgeon =	$\frac{\text{Total population for the year (110,136)}}{\text{Total number of Dental Surgeons enrolled for the year (6)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Availability of Medical Assistants:** Number of Medical Assistants (per 10,000 population): **3.7**

Medical Assistants per 10,000 population =	$\frac{\text{Total number of Medical Assistants enrolled for the year (41)}}{\text{Total population (110,136)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Population per Medical Assistant:** Population: Medical Assistant ratio: **2,686.2**

Population per Medical Assistant =	$\frac{\text{Total population for the year (110,136)}}{\text{Total number of Medical Assistants enrolled for the year (41)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Availability of Nurses:** Number of Nurses (per 10,000 population): **34.8**

Nurses per 10,000 population =	$\frac{\text{Total number of Nurses enrolled for the year (383)}}{\text{Total population (110,136)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Population per Nurse:** Population: Nurse ratio: **287.6**

Population per Nurse =	$\frac{\text{Total population for the year (110,136)}}{\text{Total number of Nurses enrolled for the year (383)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Availability of Midwives:** Number of Midwives (per 10,000 population): **6.8**

Midwives per 10,000 population =	$\frac{\text{Total number of Midwives enrolled for the year (75)}}{\text{Total population (110,136)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Population per Midwife:** Population: Midwife ratio: **1,468.5**

Population per Midwife =	$\frac{\text{Total population for the year (110,136)}}{\text{Total number of Midwives enrolled for the year (75)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Health manpower data for 2017 has been sourced from the Admin division, MHMS.</li> </ul>	

**Table 5: Health manpower for Kiribati health institutions**

Hospital	Medical Consultants	MOs	IMOs	Dental Surgeons	MAAs	Nurses	PHN	Pharmacists	Physio's	Total
TCH	13	34	7	5	4	158		5	3	229
SKH	3	1				14				18
BH		3				29				32
LKH	3			1		15				19
Health Centre					22					22
Village Clinic					14		114			128
Mental Ward		2			1	12				15
<b>Total</b>	<b>19</b>	<b>40</b>	<b>7</b>	<b>6</b>	<b>41</b>	<b>228</b>	<b>114</b>	<b>5</b>	<b>3</b>	<b>463</b>

Source: Admin, MHMS

**Table 6: Location and staff availability of Health Centers and Village Clinics**

Island	Health Centre	Village Clinic	Staff availability		
			MA*	SCH/N	PHN**
Makin	Makin	Anrawa	1		1
		Kiebu			1
Butaritari	Butaritari	Kuma	1	1	1
		Nakiroro			1
		Tekananuea			1
		Tanimaiaki (Butaritari)			1
		Ukiangang			1
		Bikati			1
		Keuea			1
Marakei	Rawannawi	Tekarakan	1		1
		Bainuea			1
		Terawarawa			1
		Raweai			1
Abaiang	Taburao	Nuotaea	1	1	1
		Taniau			1
		Ribono			1
		Tebunginako			1
		Koinawa			1
		Tanimaiaki (Abaiang)			1
		Ubwarano			1
		Tuarabu			1
Tarawa North	Abaokoro	Tearinibai	1	1	1
		Buariki (Tarawa North)			1
		Tabonibara			1
		Taratai			1
		Tabiteuea			1
		Nabeina			1
		Notoue			1
TUC		Bonriki	1		2
		Temwaiku	1		2
		Bikenibeu East	1		2
		Bikenibeu West	1		2
		Eita	1		2
		Ambo	1		1
		Banraeaba	1		2
		Teaoraereke	1		2
		Nanikai			1
		Bairiki	1		5
BTC		Temanoku (BTC)	1		2
		Takoronga	1		2
		Temakin	1		2
Banaba	Banaba	-	1		1
Maiana	Tabontekeekee	Tekaranga	1		1
		Bubutei			1
		Tebikera			1

Island	Health Centre	Village Clinic	Staff availability		
			MA*	SCH/N	PHN**
		Tanimaeao			
Kuria	Kuria	Oneke	1		1
Aranuka	Aranuka	Takaeang	1		1
		Baurua			1
Abemama	Kariatebike	Abatiku	1	1	1
		Tabiang			1
		Tekatirirake			1
		Baretoa			1
		Kabangaki			1
		Tebwanga			1
Nonouti	Tebobonga	Temotu	1		1
		Teuabu			1
		Abamakoro			1
		Mataboou			1
		Rotimwa			1
		Taboiaki			1
		Temanoku (Nonouti)			1
Tab North	Utiroa	Tanaeang	1	1	1
		Buota			1
		Tenatorua			1
		Aiwa			1
		Tekabuibui			1
		Kabuna			1
		Tauma			1
Tab South	Buariki	Tewai	1		1
		Taku			1
Onotoa	Buraitan	Aiaki	1		1
		Tabuarorae			1
		Tekatana			1
		Otoae			1
Beru	Temara	Namon	1	1	1
		Aonnati			1
Nikunau	Nikumatang	Muritoa	1		1
		Mwanrunga			1
Tamana	Motoia	-	1		1
Arorae	Taribo	-	1		1
Kiritimati	London	London	2		2
		Banana			1
		Poland	1		
		Tabwakea			1
Tabuaeran	Paelau	Napali	1		1
		Aramari			1
Teraina	Arabata	Mwakeuea	1		1
Kanton	Canton	-	1		
Total			36	6	102

Source: MHMS Admin



## 6. Morbidity and mortality statistics for Tungaru Central Hospital (TCH)

**Outpatient consultations per capita for Tungaru Central Hospital:** Number of visits to Tungaru Central Hospital for ambulant care, not including immunizations, for the total population (including repeat visits) per capita: **0.3**

OPD consultations per capita (for TCH) =	$\frac{\text{Total number of outpatient consultations at TCH for the year (31,527)}}{\text{Total population (110,136)}}$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>Data for 2017 has been sourced from the KHIS and is likely to be affected by under-counting.</li> <li>Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.</li> </ul>	

**TCH (patient discharges):** Weekly average number of patients discharged from all TCH wards in a given year: **104.8**

TCH (weekly patient discharges) =	$\frac{\text{Total number of discharges for the year from TCH (5,448)}}{\text{Number of weeks per year (52)}}$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>Data for 2017 has been sourced from the KHIS and is likely to be affected by under-counting.</li> <li>Strengthened reporting and timely completion of data loading to KHIS from TCH would contribute to more accurate figures.</li> </ul>	

**ARI in children treated at TCH:** Number of children (aged 0-5) years who had 'presumed pneumonia' (moderate or severe ARI) and were taken to TCH (per 1,000 population): **15.9**

TCH ARI Moderate/Severe =	$\frac{\text{Total number of ARI cases (0-5 years) seen at TCH (229)}}{\text{Total (0-5 years) population (14,393)}} \times 1,000$
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Data for 2017 has been sourced from the KHIS and is likely to be affected by under-counting.</li> <li>Morbidity data is aggregated in MS1 and therefore unable to disaggregate into disease groups. Hence unable to separate 0-5 years ARI cases.</li> <li>This indicator requires a survey to be undertaken.</li> </ul>	

**Outpatient consultations per capita:** Number of visits for ambulant care, not including immunizations, for the total population (including repeat visits) per capita: **4.8**

OPD consultations per capita (all health institutes) =	<u>Total number of outpatient consultations for the year (531,939)</u> Total population (110,136)
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• 2015 census population is used as base population.</li> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting or multiple counting.</li> </ul>	

**Table 7: Basic patient statistics for TCH**

Category	Grand Total	Total		Less than 1yr		1-4yrs		5-15yrs		16-29yrs		30-69yrs		70+yrs		Age unrecorded	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
OPD visit	10,854	4,952	5,902	134	131	328	296	262	329	380	323	1,650	2,192	84	83	18	19
Special Clinics	20,576	9,689	10,887	372	301	576	406	1,002	896	1,656	1,986	5,688	6,845	380	333	73	62
EOPD Encounter	3,540	1,618	1,922	185	121	236	200	172	165	292	466	677	887	55	81	1	2
Hospital Admissions	5,448	1,723	3,725	314	262	149	115	106	114	241	1,578	850	1,572	63	84	0	0
EOPD Deaths	39	25	14	2		1			1	3	1	19	8		4	0	0
Inpatient Deaths	264	156	108	23	17	9	11	1	0	17	4	94	60	12	16	0	0

Source: KHIS as of 31.12.2017

**Table 8: Indoor Morbidity Statistics for TCH: according to Age, Sex and Ward category**

Ward Category	Sub Total	Total		Less than 1yr		1-4yrs		5-15yrs		16-29yrs		30-69yrs		70+yrs		Age Unrecorded	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
TCH-Gynae	99		99									3	49		47		
TCH-ICU	106	23	83				4					7	9	32	13	39	
TCH-Medical	987	499	488					3	7	100	65	361	368	35	48		
TCH-Obstetric	2,022		2,022						16		1,278		728				
TCH-Paediatric	960	533	427	302	257	145	105	86	65								
TCH-Private	281	120	161	10	6	4	5	4	2	10	25	80	105	12	18		
TCH-Surgical	874	481	393	2			1	12	10	102	106	351	261	14	15		
TCH-TB	119	66	53					1	4	20	23	44	24	1	2		
<b>Grand Total</b>	<b>5,448</b>	<b>1,723</b>	<b>3,725</b>	<b>314</b>	<b>262</b>	<b>149</b>	<b>115</b>	<b>106</b>	<b>114</b>	<b>241</b>	<b>1,578</b>	<b>850</b>	<b>1,572</b>	<b>63</b>	<b>84</b>		

Source: KHIS as of 31.12.2017

**Table 9: Inpatient Morbidity Statistics for Health Centers and Clinics**

Service	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Admissions	186	226	230	273	242	273	249	234	229	191	153	182	2668
Discharges	126	157	118	159	178	204	174	166	150	124	102	139	1797
Patient days	943	827	817	1068	812	989	841	751	703	715	1013	787	10266

*Source: MS1 as of 31.12.2017*

**Table 10: Outpatient Morbidity Statistics for Health Centers and Clinics**

Illness	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
(01)Diarrhoea	1,461	1,336	1,327	670	690	1,058	1,379	1,797	1,141	1,220	1,449	1,355	<b>14,883</b>
(02)Dysentery	549	579	528	407	389	438	573	532	451	488	462	522	<b>5,918</b>
(03)ILI - Influenza like illness	3,297	3,931	4,684	5,115	3,800	5,064	4,879	5,059	4,117	5,692	4,084	3,161	<b>52,883</b>
(04)ARI-Pneumonia	540	671	809	896	660	646	481	479	353	413	466	370	<b>6,784</b>
(05)Meningitis	39	38	62	70	139	25		1	19	1	2	3	<b>399</b>
(06)Conjunctivitis	3455	2596	1991	1046	589	486	624	471	415	430	459	346	<b>12,908</b>
(07)STI	14	29	26	28	35	35	30	14	11	11	8	12	<b>253</b>
(08)Prolonged Fever	1,470	1,446	1,792	1,452	725	577	1,006	1,066	1,846	941	989	927	<b>14,237</b>
(09)Acute fever + rash	48	53	35	91	31	106	23	76	37	86	88	13	<b>687</b>
(10)Diabetes	165	153	89	83	85	87	58	36	164	81	50	70	<b>1,121</b>
(11)Hypertension	188	115	91	78	104	90	61	74	123	128	54	73	<b>1,179</b>
(12)Mental illness	7	3	3	6	3	2	2	51	2	4	2	9	<b>94</b>
(13)Fish poisoning	32	67	91	56	68	65	87	45	52	53	69	47	<b>732</b>
(14)Night blindness	90	95	117	108	129	127	81	144	121	134	136	160	<b>1,442</b>
(15)Tinea Vesicolor	359	215	400	346	402	343	412	451	323	171	223	309	<b>3,954</b>
(16)Tinea Corporis	619	605	636	616	710	623	628	652	638	639	524	531	<b>7,421</b>
(17)Worm Infestation	453	397	447	402	480	370	497	451	484	359	395	349	<b>5,084</b>
(18)Scabies	143	181	249	165	151	167	234	131	166	224	150	161	<b>2,122</b>
(19)Others	26,936	28,009	30,454	24,165	27,693	28,827	31,444	31,287	30,960	27,413	26,243	21,959	<b>335,390</b>
<b>Total</b>	<b>39,865</b>	<b>40,519</b>	<b>43,831</b>	<b>35,800</b>	<b>36,883</b>	<b>39,136</b>	<b>42,499</b>	<b>42,817</b>	<b>41,423</b>	<b>38,488</b>	<b>35,853</b>	<b>30,377</b>	<b>467,491</b>

Source: MS1 as of 31.12.2015

**Table 11: Outpatient Morbidity Statistics according to districts**

Illness	District						Total
	Central	Linnix	Northern	South Eastern	South Western	Tarawa & Banaba	
ILI - Influenza like illness	4,257	3,882	6,745	3,809	3,148	31,042	<b>52,883</b>
Diarrhoea	917	958	1,288	538	716	10,466	<b>14,883</b>
Conjunctivitis	680	1463	1,115	601	726	8,323	<b>12,908</b>
Prolonged Fever	1307	2159	1,960	848	1,111	6,852	<b>14,237</b>
Dysentery	710	548	759	299	442	3,160	<b>5,918</b>
Tinea Corporis	425	818	1005	256	280	4,637	<b>7,421</b>
ARI-Pneumonia	554	326	1,331	297	492	3,784	<b>6,784</b>
Worm Infestation	405	100	838	249	220	3,272	<b>5,084</b>
Tinea Vesicolor	233	378	335	108	116	2,784	<b>3,954</b>
Scabies	65	627	336	104	67	923	<b>2,122</b>
Night blindness	214	109	201	76	168	674	<b>1,442</b>
Hypertension	107	26	83	97	109	757	<b>1,179</b>
Diabetes	140	31	73	99	83	695	<b>1,121</b>
Fish poisoning	36	26	271	54	58	287	<b>732</b>
Acute fever + rash	106	121	75	61	44	280	<b>687</b>
STI	29	16	24	15	15	154	<b>253</b>
Meningitis	2	67	15	4	51	260	<b>399</b>
Mental illness	7	1	11	9	5	61	<b>94</b>
Others	20,713	34,841	28,249	16,198	22,223	213,166	<b>335,390</b>
<b>Grand Total</b>	<b>30,907</b>	<b>46,497</b>	<b>44,714</b>	<b>23,722</b>	<b>30,074</b>	<b>291,577</b>	<b>467,491</b>

Source: MS1 as of 31.12.2017

**Table 12: Referrals to TCH from Health Centers and Clinics**

Service	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
BTC	28	36	36	35	30	46	26	21	18	14		15	305
Abaiang	7	4	10	11	8	9	11	7	53	10	8	6	144
Tarawa North	8	4	14	7	19	10	9	15	19	17	12	7	141
Butaritari	8	4	6	30	8	8	5	8	14	5	7	14	117
Aranuka	14	6	5	31	11	4	4	5	5	4	8	6	103
Onotoa	8	10	8	18	8	3	11	8	4	11	4	7	100
Marakei	4	5	14	7	4	3	5	7	7	8	6	5	75
Maiana	4	6	6	6	6	8	5	4	9	7	6	6	73
Nikunau	4	3	6	20	4	2	8	5	6	6	5	1	70
Abemama	8	3	7	12	3	7	3	2	5	7	6	3	66
Kuria	1	6	6	5		3	2	5	2	5	4	3	42
Tab North		5	10	4	8			8	6	1			42
Beru	3		2	2	17			2	4	4	6		40
Makin	1	2	3	1	8	4	4	3		7	4		37
Nonouti	2	3	2	9	3		1		1	7	2	2	32
Tab South	3		2			5		1	9	2	3		25
Arorae	3		4	3	1	1	1	4	2	1	2		22
Tamana		2	2	8		1		2	2		2	1	20
TUC/KHFA			1			4	3	2			4	1	15
Banaba	2							2		1	4	3	12
Kanton						1		1		1			3
Kiritimati										1			1
<b>Grand Total</b>	<b>108</b>	<b>99</b>	<b>144</b>	<b>209</b>	<b>138</b>	<b>119</b>	<b>98</b>	<b>112</b>	<b>166</b>	<b>119</b>	<b>93</b>	<b>80</b>	<b>1,485</b>

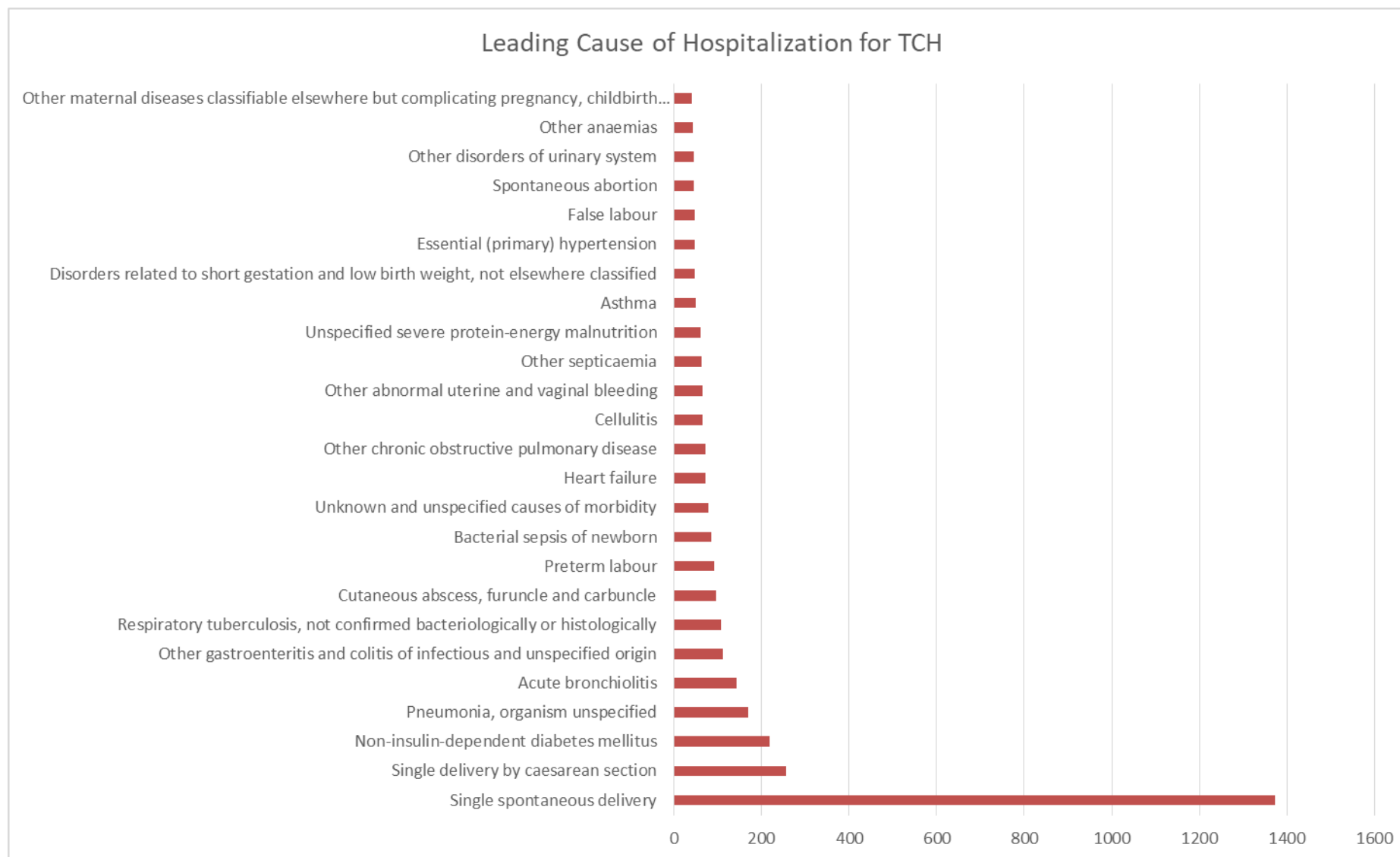
Source: MS1 as of 31.12.2017

**Table 13: Leading Causes of Hospitalization for TCH**

Rank	ICD 10-3	Cause of Hospitalization	Gender		Total
			Male	Female	
1	O80	Single spontaneous delivery		1373	1373
2	O82	Single delivery by caesarean section		256	256
3	E11	Non-insulin-dependent diabetes mellitus	100	118	218
4	J18	Pneumonia, organism unspecified	92	78	170
5	J21	Acute bronchiolitis	85	58	143
6	A09	Other gastroenteritis and colitis of infectious and unspecified origin	56	55	111
7	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	60	47	107
8	L02	Cutaneous abscess, furuncle and carbuncle	53	44	97
9	O60	Preterm labour		92	92
10	P36	Bacterial sepsis of newborn	39	47	86
11	R69	Unknown and unspecified causes of morbidity	19	60	79
12	I50	Heart failure	43	30	73
13	J44	Other chronic obstructive pulmonary disease	35	37	72
14	L03	Cellulitis	35	31	66
15	N93	Other abnormal uterine and vaginal bleeding		66	66
16	A41	Other septicaemia	35	29	64
17	E43	Unspecified severe protein-energy malnutrition	37	23	60
18	J45	Asthma	27	23	50
19	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	28	20	48
20	I10	Essential (primary) hypertension	24	24	48
21	O47	False labour		47	47
22	O03	Spontaneous abortion		45	45
23	N39	Other disorders of urinary system	12	33	45
24	D64	Other anaemias	12	30	42
25	O99	Other maternal diseases classifiable elsewhere but complicating pregnancy, childbirth and the puerperium		41	41
		Morbidity from all other causes	930	1019	1949
		<b>Grand Total</b>	<b>1722</b>	<b>3726</b>	<b>5448</b>
***	R00-R99	Ill-defined causes hospitalization (pooled)	65	72	137

Source: KHIS as of 31.12.20167



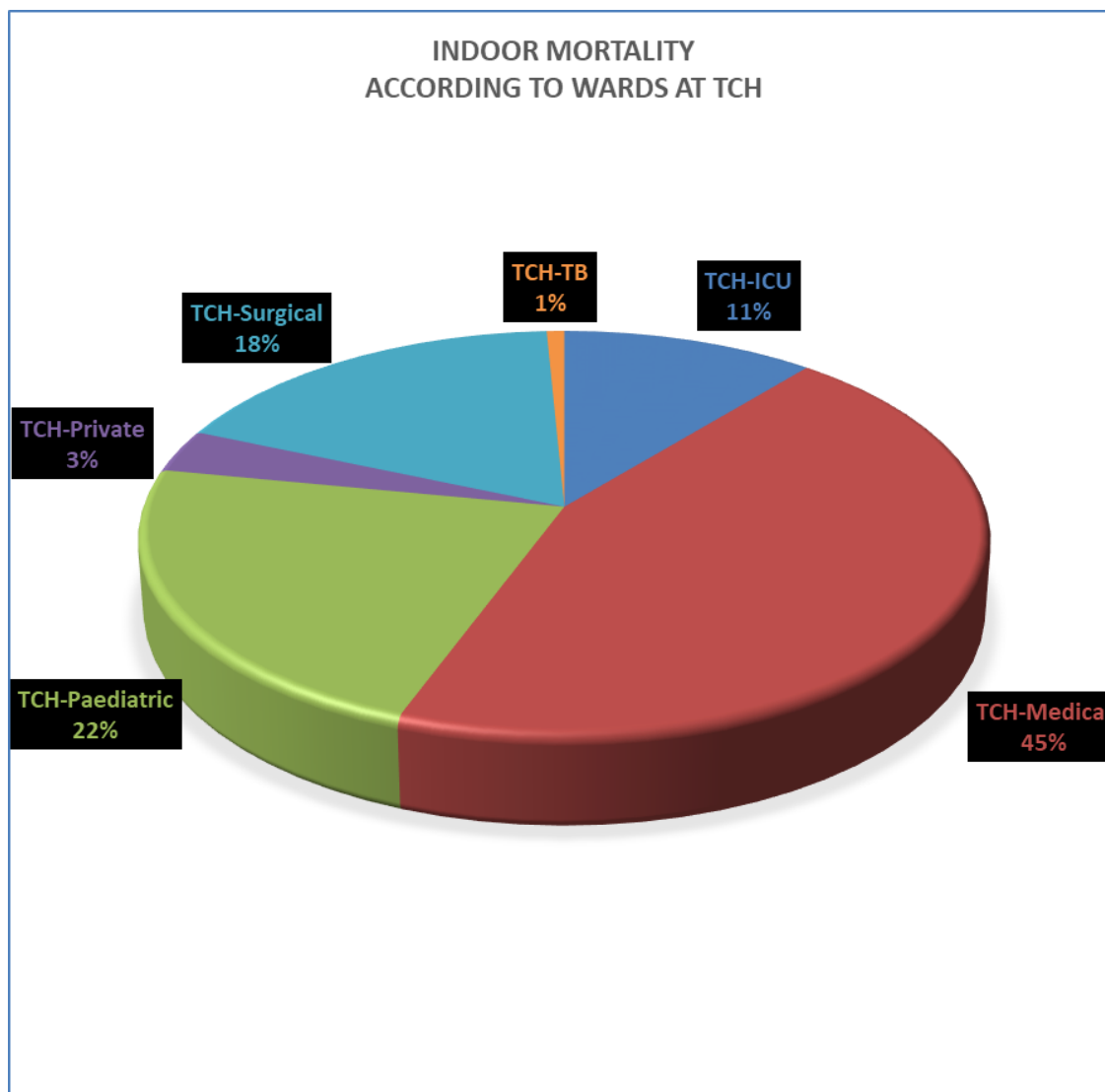


**Figure 2: Leading Causes of Hospitalization for TCH**

**Table 14: Indoor Mortality Statistics for TCH: according to Age, Sex and Ward category**

Ward Category	Sub Total	Total		Less than 1yr		1-4yrs		5-15yrs		16-29yrs		30-69yrs		70+yrs		Age Unknown	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
TCH-GYNAE																	
TCH-ICU	29	18	11			2				6	1	12	7		1		
TCH-Medical	118	69	49							9	3	51	35	9	11		
TCH-Paediatric	59	33	26	23	17	9	9	1									
TCH-Private	9	5	4							1		3	3	1	1		
TCH-Surgical	47	29	18							1		26	15	2	3		
TCH-TB	2	2	0									2					
TCH-OB																	
Grand Total	264	156	108	23	17	9	11	1		17	4	94	60	12	16		

Source: KHIS as of 31.12.2017



**Figure 3: Indoor mortality statistics according to wards: TCH**

**Table 15: Leading Causes of Hospital Inpatient Deaths\* for TCH (Categorized list)**

Rank	Cause of Death	Gender		Total
		Male	Female	
1	Non-insulin-dependent diabetes mellitus	15	13	28
2	Other septicaemia	13	10	23
3	Unspecified severe protein-energy malnutrition	6	10	16
4	Disorders related to short gestation and low birth weight, not elsewhere classified	12	3	15
5	Unattended death	3	5	8
6	Heart failure	5	3	8
7	Acute hepatitis B	6	1	7
8	Other diseases of liver	5	1	6
9	Acute myocardial infarction	3	3	6
10	Other chronic obstructive pulmonary disease	4	2	6
11	Shock, not elsewhere classified	2	3	5
12	Pneumonia, organism unspecified	3	2	5
13	Other inflammatory liver diseases	4	1	5
14	Fibrosis and cirrhosis of liver	3	2	5
15	Malignant neoplasm of bronchus and lung	2	3	5
16	Cerebral infarction	3	1	4
17	Hepatic failure, not elsewhere classified	1	3	4
18	Chronic kidney disease	1	3	4
19	Abscess of anal and rectal regions	3	1	4
20	Unspecified diabetes mellitus	2	1	3
21	Motor-or nonmotor-vehicle accident, type of vehicle unspecified	3		3
22	Cutaneous abscess, furuncle and carbuncle	2	1	3
23	Intracerebral haemorrhage	3		3
24	Malignant neoplasm of breast		3	3
25	Nonrheumatic aortic valve disorders	2	1	3
	Mortality from all other causes (pooled)	50	32	82
Grand Total		156	108	264

Source: KHIS as of 31.12.2017

\* Derived from data extracted from medical records

**Table 16: Leading Causes of Hospital Inpatient Deaths\* for TCH (Expanded list)**

Rank	ICD 10-3	Cause of Death	Gender		Total
			Male	Female	
1	E11	Non-insulin-dependent diabetes mellitus	15	13	28
2	A41	Other septicaemia	13	10	23
3	E43	Unspecified severe protein-energy malnutrition	6	10	16
4	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	12	3	15
5	I50	Heart failure	5	3	8
6	R98	Unattended death	3	5	8
7	B16	Acute hepatitis B	6	1	7
8	K76	Other diseases of liver	5	1	6
9	I21	Acute myocardial infarction	3	3	6
10	J44	Other chronic obstructive pulmonary disease	4	2	6
11	K74	Fibrosis and cirrhosis of liver	3	2	5
12	R57	Shock, not elsewhere classified	2	3	5
13	K75	Other inflammatory liver diseases	4	1	5
14	C34	Malignant neoplasm of bronchus and lung	2	3	5
15	J18	Pneumonia, organism unspecified	3	2	5
16	K72	Hepatic failure, not elsewhere classified	1	3	4
17	K61	Abscess of anal and rectal regions	3	1	4
18	N18	Chronic kidney disease	1	3	4
19	I63	Cerebral infarction	3	1	4
20	L02	Cutaneous abscess, furuncle and carbuncle	2	1	3
21	I61	Intracerebral haemorrhage	3		3
22	I35	Nonrheumatic aortic valve disorders	2	1	3
23	C50	Malignant neoplasm of breast		3	3
24	E14	Unspecified diabetes mellitus	2	1	3
25	V89	Motor-or nonmotor-vehicle accident, type of vehicle unspecified	3		3
26	L03	Cellulitis		2	2
27	J69	Pneumonitis due to solids and liquids		2	2
28	A09	Other gastroenteritis and colitis of infectious and unspecified origin	1	1	2
29	I09	Other rheumatic heart diseases	2		2
30	E46	Unspecified protein-energy malnutrition	2		2
31	I25	Chronic ischaemic heart disease	1	1	2
32	R19	Other symptoms and signs involving the digestive system and abdomen		2	2
33	I38	Endocarditis, valve unspecified	1	1	2
34	J45	Asthma	2		2
35	I46	Cardiac arrest	1	1	2
36	B19	Unspecified viral hepatitis	2		2
37	I49	Other cardiac arrhythmias	2		2
38	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	1	1	2
39	A15	Respiratory tuberculosis, bacteriologically and histologically confirmed	1	1	2
40	P77	Necrotizing enterocolitis of fetus and newborn		2	2
41	I64	Stroke, not specified as haemorrhage or infarction	2		2
42	A17	Tuberculosis of nervous system	2		2
43	G03	Meningitis due to other and unspecified causes		2	2
44	B18	Chronic viral hepatitis	1		1
45	L08	Other local infections of skin and subcutaneous tissue		1	1
46	Q79	Congenital malformations of the musculoskeletal system, not elsewhere classified		1	1
47	I12	Hypertensive renal disease	1		1
48	N17	Acute renal failure		1	1
49	I26	Pulmonary embolism	1		1
50	J15	Bacterial pneumonia, not elsewhere classified	1		1
51	I34	Nonrheumatic mitral valve disorders	1		1
52	F03	Unspecified dementia		1	1

**Table 16: (Continued) Leading Causes of Hospital Inpatient Deaths\* for TCH (Expanded list)**

Rank	ICD 10-3	Cause of Death	Gender		Total
			Male	Female	
53	D50	Iron deficiency anaemia	1		1
54	M72	Fibroblastic disorders		1	1
55	W03	Other fall on same level due to collision with, or pushing by, another person	1		1
56	N39	Other disorders of urinary system	1		1
57	C25	Malignant neoplasm of pancreas		1	1
58	P24	Neonatal aspiration syndromes		1	1
59	J90	Pleural effusion, not elsewhere classified	1		1
60	Q24	Other congenital malformations of the heart		1	1
61	J96	Respiratory failure, not elsewhere classified	1		1
62	J21	Acute bronchiolitis	1		1
63	K27	Peptic ulcer, site unspecified	1		1
64	J05	Acute obstructive laryngitis [croup] and epiglottitis	1		1
65	K31	Other diseases of stomach and duodenum		1	1
66	M00	Pyogenic arthritis		1	1
67	F20	Schizophrenia	1		1
68	N13	Obstructive and reflux uropathy	1		1
69	C49	Malignant neoplasm of other connective and soft tissue	1		1
70	F10	Mental and behavioural disorders due to use of alcohol	1		1
71	K65	Peritonitis	1		1
72	N49	Inflammatory disorders of male genital organs, not elsewhere classified	1		1
73	K71	Toxic liver disease	1		1
74	P20	Intrauterine hypoxia	1		1
75	E41	Nutritional marasmus	1		1
76	P74	Other transitory neonatal electrolyte and metabolic disturbances	1		1
77	A18	Tuberculosis of other organs		1	1
78	Q20	Congenital malformations of cardiac chambers and connections		1	1
79	D61	Other aplastic anaemias		1	1
80	Q77	Osteochondrodysplasia with defects of growth of tubular bones and spine		1	1
81	C73	Malignant neoplasm of thyroid gland		1	1
82	A40	Streptococcal septicaemia	1		1
83	K80	Cholelithiasis		1	1
84	K92	Other diseases of digestive system	1		1
85	K57	Diverticular disease of intestine	1		1
86	J84	Other interstitial pulmonary diseases	1		1
87	Y09	Assault by unspecified means	1		1
88	J85	Abscess of lung and mediastinum	1		1
Grand Total			156	108	264

Source: KHIS as of 31.12.2017 \* Derived from data extracted from medical records

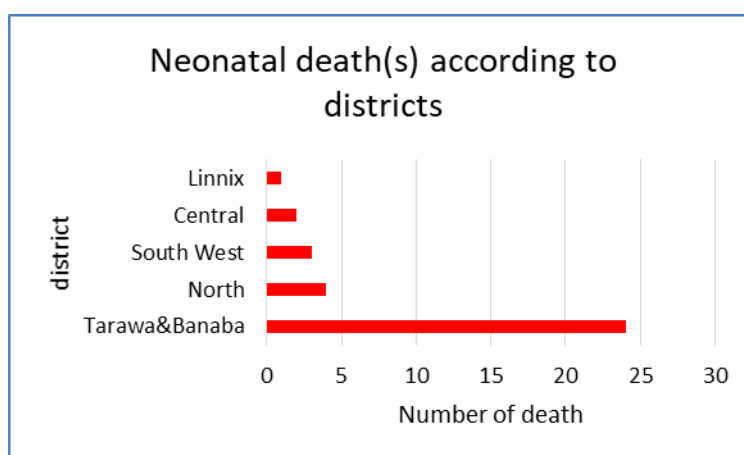
## 7. Country mortality statistics

**Neonatal Mortality Rate:** Probability of dying between birth and age 28 days (per 1,000 live births): **11.1**

NMR =	$\frac{\text{Number of deaths of neonates aged 0-28 days (34)}}{\text{Number of live births (3,069)}} \times 1,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>• Births with unrecorded outcomes were counted as live births.</li> <li>• Certification of cause(s) of death is poor resulting in weak mortality data</li> <li>• It is likely that the number of neonatal deaths is under-reported.</li> <li>• Mortality data is derived from the final diagnoses documented in the MRs since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.</li> </ul>	

**Table 17: Neonatal deaths according to districts\***

District	No.
Central	2
Linnix	1
Northern	4
South Eastern	0
South Western	3
Tarawa & Banaba	24
<b>Total</b>	<b>34</b>



**Figure 4: Neonatal deaths according to districts**

Sources: KHIS & MS1 as of 31.12.2017

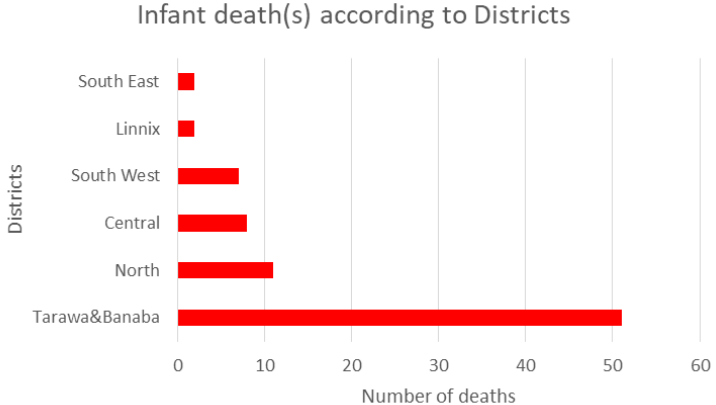
**Infant Mortality Rate:** Probability of dying between birth and age 1 year (per 1,000 live births): **26.4**

$$\text{IMR} = \frac{\text{Number of deaths of infants aged } <1 \text{ year (81)}}{\text{Number of live births 3,069}} \times 1,000$$

**Methodological/System Issues:**

- Data for 2017 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting.
- Births with unrecorded outcomes were counted as live births.
- Certification of cause(s) of death is poor in the country.
- It is likely that the number of infant deaths is under-reported.
- Mortality data is derived from the final diagnoses documented in the MRs since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.

**Table 18: Infant deaths according to districts**

District	No.	<p>Infant death(s) according to Districts</p> 
Central	8	
Linnix	2	
Northern	11	
South Eastern	2	
South Western	7	
Tarawa & Banaba	51	
<b>Total</b>	<b>81</b>	

**Figure 5: Infant deaths according to districts**

Sources: KHIS & MS1 as of 31.12.2017



**Under-five Mortality Rate:** Probability of dying by age 5 years (per 1,000 live births): **44.0**

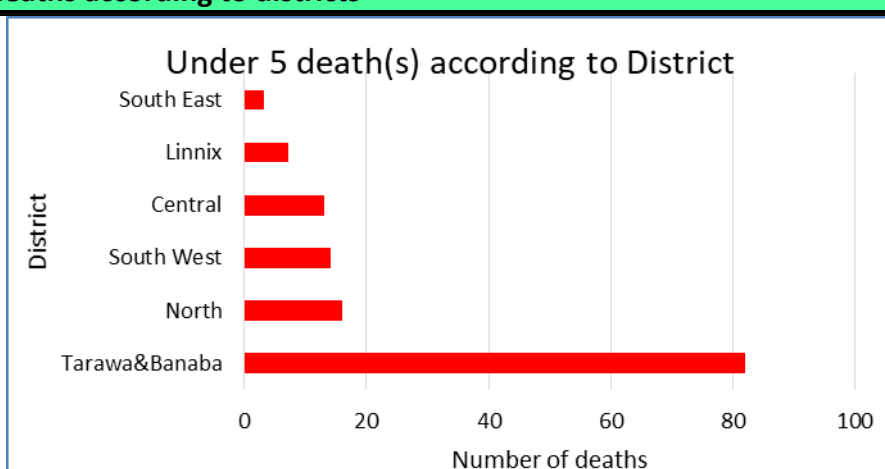
$$\text{U5MR} = \frac{\text{Number of deaths of children aged <5 years (135)}}{\text{Number of live births (3,069)}} \times 1,000$$

**Methodological/System Issues:**

- Data for 2017 has been sourced from the KHIS & MS1 and is likely to be affected by under-counting.
- Births with unrecorded outcomes were counted as live births.
- Certification of cause(s) of death is poor resulting in weak mortality data
- It is likely that the number of under 5 year deaths is under-reported.
- Mortality data is derived from the final diagnoses, since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.

**Table 19: Under 5 year child deaths according to districts\***

District	No.
Central	13
Linnix	7
Northern	16
South Eastern	3
South Western	14
Tarawa & Banaba	82
<b>Total</b>	<b>135</b>



Sources: KHIS & MS1 as of 31.12.2017

**Figure 6: Under 5 year deaths according to districts**

**Maternal Mortality Rate:** Probability of a female dying due to a maternal cause (per 100,000 live births): **32.6**

MMR =	$\frac{\text{Number of maternal deaths (1)}}{\text{Number of live births (3,069)}} \times 100,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>• Births with unrecorded outcomes were counted as live births.</li> <li>• Certification of cause(s) of death is poor resulting in weak mortality data</li> <li>• It is likely that the number of under 5 year deaths is under-reported.</li> <li>• Mortality data is derived from the final diagnoses, since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.</li> </ul>	

**Table 20: Maternal deaths for Kiribati**

Rank	ICD-10-3	Cause of Death	Total
1	O72	Postpartum Hemorrhage	1
<b>Total Maternal Deaths*</b>			<b>1</b>

*Sources: KHIS & MS1 as of 31.12.2017*

**Table 21: Maternal deaths according to districts\***

District	No.
Central	0
Linnix	0
Northern	0
South Eastern	
South Western	0
Tarawa & Banaba	1
<b>Total</b>	<b>1</b>

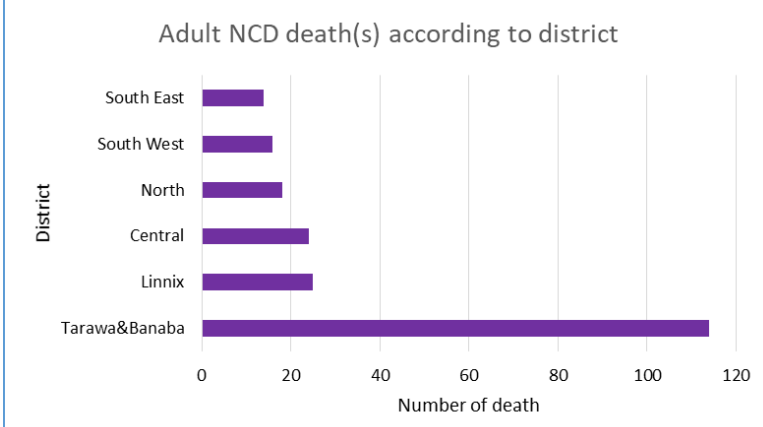
**Figure 7: Maternal deaths according to districts**

*Sources: KHIS & MS1 as of 31.12.2017*

**Adult Mortality Rate from NCDs:** Probability of dying between age 30-69 years from NCDs in a given year (per 10,000 population age 30-69 years): **55.9**

Adult mortality rate from NCDs (30-69 years) =	$\frac{\text{Total number of deaths due to NCDs for the year (211)}}{\text{Total population (30-69 years) (37,774)}} \times 10,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>• Births with unrecorded outcomes were counted as live births.</li> <li>• Certification of cause(s) of death is poor resulting in weak mortality data</li> <li>• It is likely that the number of under 5 year deaths is under-reported.</li> <li>• Mortality data is derived from the final diagnoses, since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.</li> </ul>	

**Table 22: Adult deaths due to NCDs according to districts\***

District	No.	
Central	24	
Linnix	25	
Northern	18	
South Eastern	14	
South Western	16	
Tarawa & Banaba	114	
<b>Total</b>	<b>211</b>	

Sources: KHIS & MS1 as of 31.12.2017

**Figure 8: Adult deaths due to NCDs according to districts**

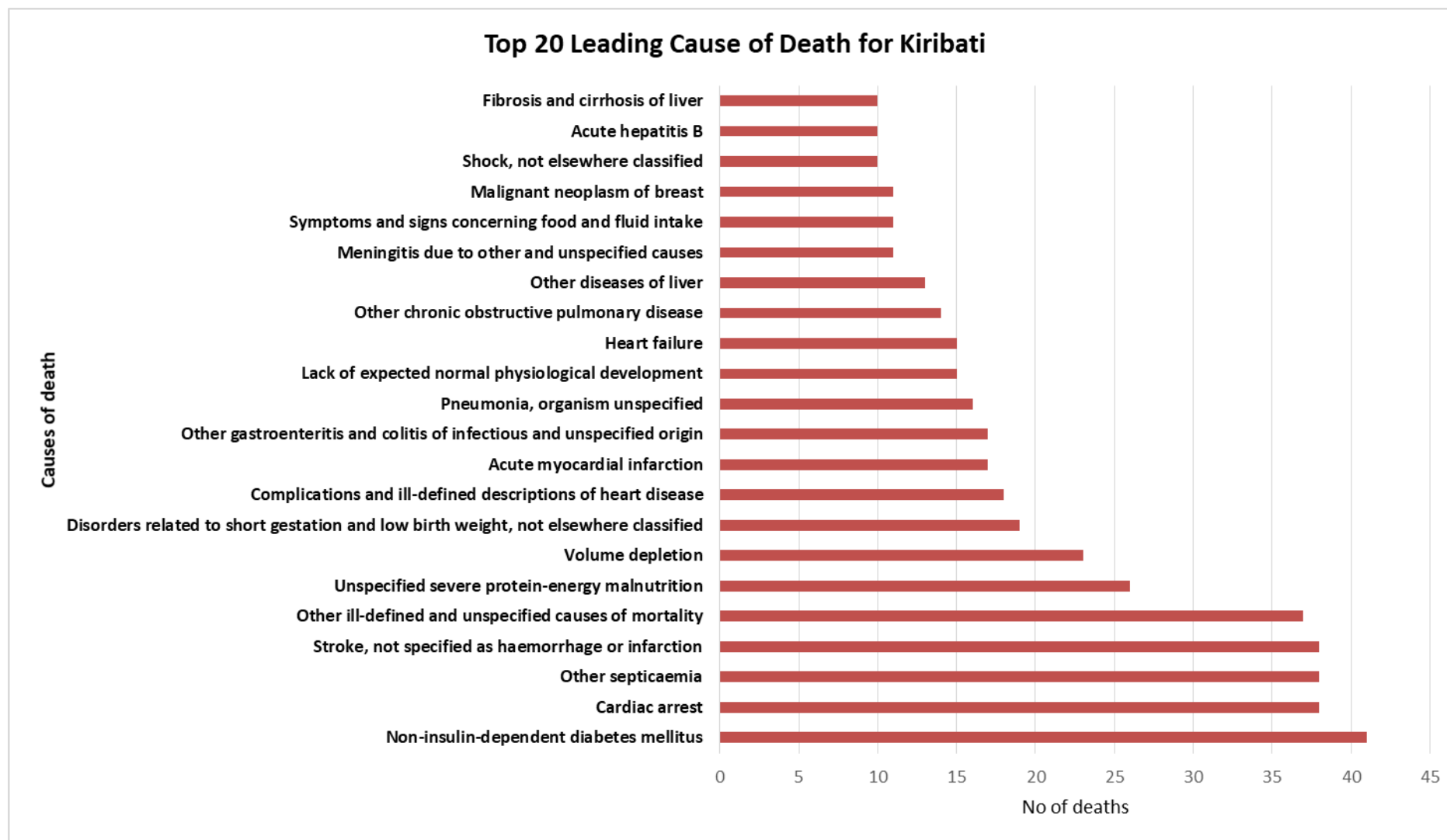
**Mortality rate from road traffic injuries:** Probability of dying from road traffic injuries in a given year (per 100,000 population) **10.9**

Mortality rate from Road Traffic Injuries =	$\frac{\text{Total number of deaths due to RTIs for the year (12)}}{\text{Total population (110,136)}} \times 100,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>• Births with unrecorded outcomes were counted as live births.</li> <li>• Certification of cause(s) of death is poor resulting in weak mortality data</li> <li>• It is likely that the number of under 5 year deaths is under-reported.</li> <li>• Mortality data is derived from the final diagnoses, since death certificates are not issued to majority of deaths. Hence the actual underlying cause(s) of death could be deferent from the current cause(s) of death data.</li> </ul>	

**Table 23: Leading Causes of Death for Kiribati (Categorized list)\***

Rank	Cause of Death*	Gender		Total
		Male	Female	
1	Non-insulin-dependent diabetes mellitus	19	22	41
2	Cardiac arrest	25	13	38
3	Other septicaemia	23	15	38
4	Stroke, not specified as haemorrhage or infarction	26	12	38
5	Other ill-defined and unspecified causes of mortality	25	12	37
6	Unspecified severe protein-energy malnutrition	11	15	26
7	Volume depletion	12	11	23
8	Disorders related to short gestation and low birth weight, not elsewhere classified	14	5	19
9	Complications and ill-defined descriptions of heart disease	14	4	18
10	Acute myocardial infarction	12	5	17
11	Other gastroenteritis and colitis of infectious and unspecified origin	12	5	17
12	Pneumonia, organism unspecified	9	7	16
13	Lack of expected normal physiological development	7	8	15
14	Heart failure	8	7	15
15	Other chronic obstructive pulmonary disease	9	5	14
16	Other diseases of liver	8	5	13
17	Meningitis due to other and unspecified causes	7	4	11
18	Symptoms and signs concerning food and fluid intake	7	4	11
19	Malignant neoplasm of breast	1	10	11
20	Motor-or nonmotor-vehicle accident, type of vehicle unspecified	8	3	11
21	Shock, not elsewhere classified	4	6	10
22	Acute hepatitis B	8	2	10
23	Fibrosis and cirrhosis of liver	7	3	10
24	Chronic kidney disease	2	6	8
25	Unattended death	3	5	8
26	Asthma	5	3	8
27	Abnormalities of breathing	2	6	8
28	Other inflammatory liver diseases	6	1	7
29	Hepatic failure, not elsewhere classified	3	4	7
30	Respiratory tuberculosis, not confirmed bacteriologically or histologically	5	1	6
31	Malignant neoplasm of bronchus and lung	3	3	6
32	Peptic ulcer, site unspecified	6		6
	Mortality from all other causes (pooled)	121	81	203
Grand Total		433	293	726

Sources: KHIS &amp; MS1 as of 31.12.2017



**Figure 9: Leading Causes of Death for Kiribati**

**Table 24: Leading Causes of Death for Kiribati (Expanded list)\***

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
1	E11	Non-insulin-dependent diabetes mellitus	19	22	41
2	I46	Cardiac arrest	25	13	38
3	A41	Other septicaemia	23	15	38
4	I64	Stroke, not specified as haemorrhage or infarction	26	12	38
5	R99	Other ill-defined and unspecified causes of mortality	25	12	37
6	E43	Unspecified severe protein-energy malnutrition	11	15	26
7	E86	Volume depletion	12	11	23
8	P07	Disorders related to short gestation and low birth weight, not elsewhere classified	14	5	19
9	I51	Complications and ill-defined descriptions of heart disease	14	4	18
10	A09	Other gastroenteritis and colitis of infectious and unspecified origin	12	5	17
11	I21	Acute myocardial infarction	12	5	17
12	J18	Pneumonia, organism unspecified	9	7	16
13	R62	Lack of expected normal physiological development	7	8	15
14	I50	Heart failure	8	7	15
15	J44	Other chronic obstructive pulmonary disease	9	5	14
16	K76	Other diseases of liver	8	5	13
17	G03	Meningitis due to other and unspecified causes	7	4	11
18	R63	Symptoms and signs concerning food and fluid intake	7	4	11
19	C50	Malignant neoplasm of breast	1	10	11
20	V89	Motor-or nonmotor-vehicle accident, type of vehicle unspecified	8	3	11
21	K74	Fibrosis and cirrhosis of liver	7	3	10
22	B16	Acute hepatitis B	8	2	10
23	R57	Shock, not elsewhere classified	4	6	10
24	R06	Abnormalities of breathing	2	6	8
25	R98	Unattended death	3	5	8
26	N18	Chronic kidney disease	2	6	8
27	J45	Asthma	5	3	8
28	K75	Other inflammatory liver diseases	6	1	7
29	K72	Hepatic failure, not elsewhere classified	3	4	7
30	A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically	5	1	6
31	K27	Peptic ulcer, site unspecified	6		6
32	C34	Malignant neoplasm of bronchus and lung	3	3	6
33	I09	Other rheumatic heart diseases	4	1	5
34	I10	Essential (primary) hypertension	4	1	5
35	R10	Abdominal and pelvic pain	3	2	5
36	I63	Cerebral infarction	3	2	5
37	C53	Malignant neoplasm of cervix uteri	1	4	5
38	K61	Abscess of anal and rectal regions	3	1	4
39	X70	Intentional self-harm by hanging, strangulation and suffocation	2	2	4
40	E46	Unspecified protein-energy malnutrition	4		4

**Table 24: (Continued) Leading Causes of Death for Kiribati (Expanded list)\***

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
41	B19	Unspecified viral hepatitis	4		4
42	I38	Endocarditis, valve unspecified	1	3	4
43	R11	Nausea and vomiting	1	2	3
44	I35	Nonrheumatic aortic valve disorders	2	1	3
45	I11	Hypertensive heart disease	2	1	3
46	E14	Unspecified diabetes mellitus	2	1	3
47	W74	Unspecified drowning and submersion	2	1	3
48	J21	Acute bronchiolitis	2	1	3
49	R50	Fever of other and unknown origin	2	1	3
50	L02	Cutaneous abscess, furuncle and carbuncle	2	1	3
51	I25	Chronic ischaemic heart disease	2	1	3
52	L03	Cellulitis	1	2	3
53	I61	Intracerebral haemorrhage	3		3
54	X84	Intentional self-harm by unspecified means	3		3
55	J69	Pneumonitis due to solids and liquids	1	2	3
56	P96	Other conditions originating in the perinatal period	1	2	3
57	C25	Malignant neoplasm of pancreas		2	2
58	J85	Abscess of lung and mediastinum	2		2
59	P24	Neonatal aspiration syndromes	1	1	2
60	P77	Necrotizing enterocolitis of fetus and newborn		2	2
61	C73	Malignant neoplasm of thyroid gland		2	2
62	I49	Other cardiac arrhythmias	2		2
63	P22	Respiratory distress of newborn		2	2
64	E87	Other disorders of fluid, electrolyte and acid-base balance	1	1	2
65	R56	Convulsions, not elsewhere classified	2		2
66	K71	Toxic liver disease	1	1	2
67	N19	Unspecified kidney failure	1	1	2
68	A15	Respiratory tuberculosis, bacteriologically and histologically confirmed	1	1	2
69	N39	Other disorders of urinary system	2		2
70	R19	Other symptoms and signs involving the digestive system and abdomen		2	2
71	P21	Birth asphyxia	2		2
72	R41	Other symptoms and signs involving cognitive functions and awareness	1	1	2
73	W80	Inhalation and ingestion of other objects causing obstruction of respiratory tract	1	1	2
74	A17	Tuberculosis of nervous system	2		2
75	R54	Senility	1	1	2
76	F10	Mental and behavioural disorders due to use of alcohol	2		2
77	J90	Pleural effusion, not elsewhere classified	2		2
78	W17	Other fall from one level to another		1	1
79	R17	Unspecified jaundice		1	1
80	Q24	Other congenital malformations of the heart		1	1
81	K52	Other noninfective gastroenteritis and colitis		1	1

**Table 24: (Continued) Leading Causes of Death for Kiribati (Expanded list)\***

Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
82	F03	Unspecified dementia		1	1
83	K56	Paralytic ileus and intestinal obstruction without hernia	1		1
84	Y09	Assault by unspecified means	1		1
85	K57	Diverticular disease of intestine	1		1
86	R07	Pain in throat and chest	1		1
87	G83	Other paralytic syndromes	1		1
88	A18	Tuberculosis of other organs		1	1
89	K63	Other diseases of intestine		1	1
90	J84	Other interstitial pulmonary diseases	1		1
91	K65	Peritonitis	1		1
92	W87	Exposure to unspecified electric current	1		1
93	B18	Chronic viral hepatitis	1		1
94	C03	Malignant neoplasm of gum		1	1
95	A39	Meningococcal infection	1		1
96	Q79	Congenital malformations of the musculoskeletal system, not elsewhere classified		1	1
97	C95	Leukaemia of unspecified cell type	1		1
98	I69	Sequelae of cerebrovascular disease	1		1
99	I12	Hypertensive renal disease	1		1
100	J05	Acute obstructive laryngitis [croup] and epiglottitis	1		1
101	I13	Hypertensive heart and renal disease		1	1
102	J22	Unspecified acute lower respiratory infection	1		1
103	K80	Cholelithiasis		1	1
104	R95	Sudden infant death syndrome		1	1
105	K92	Other diseases of digestive system	1		1
106	W03	Other fall on same level due to collision with, or pushing by, another person	1		1
107	D48	Neoplasm of uncertain or unknown behaviour of other and unspecified sites	1		1
108	G40	Epilepsy	1		1
109	D50	Iron deficiency anaemia	1		1
110	J96	Respiratory failure, not elsewhere classified	1		1
111	L08	Other local infections of skin and subcutaneous tissue		1	1
112	K31	Other diseases of stomach and duodenum		1	1
113	M00	Pyogenic arthritis		1	1
114	Q20	Congenital malformations of cardiac chambers and connections		1	1
115	M72	Fibroblastic disorders		1	1
116	Q77	Osteochondrodysplasia with defects of growth of tubular bones and spine		1	1
117	M79	Other soft tissue disorders, not elsewhere classified	1		1
118	A40	Streptococcal septicaemia	1		1
119	N13	Obstructive and reflux uropathy	1		1
120	C32	Malignant neoplasm of larynx		1	1



**Table 24: (Continued) Leading Causes of Death for Kiribati (Expanded list)\***

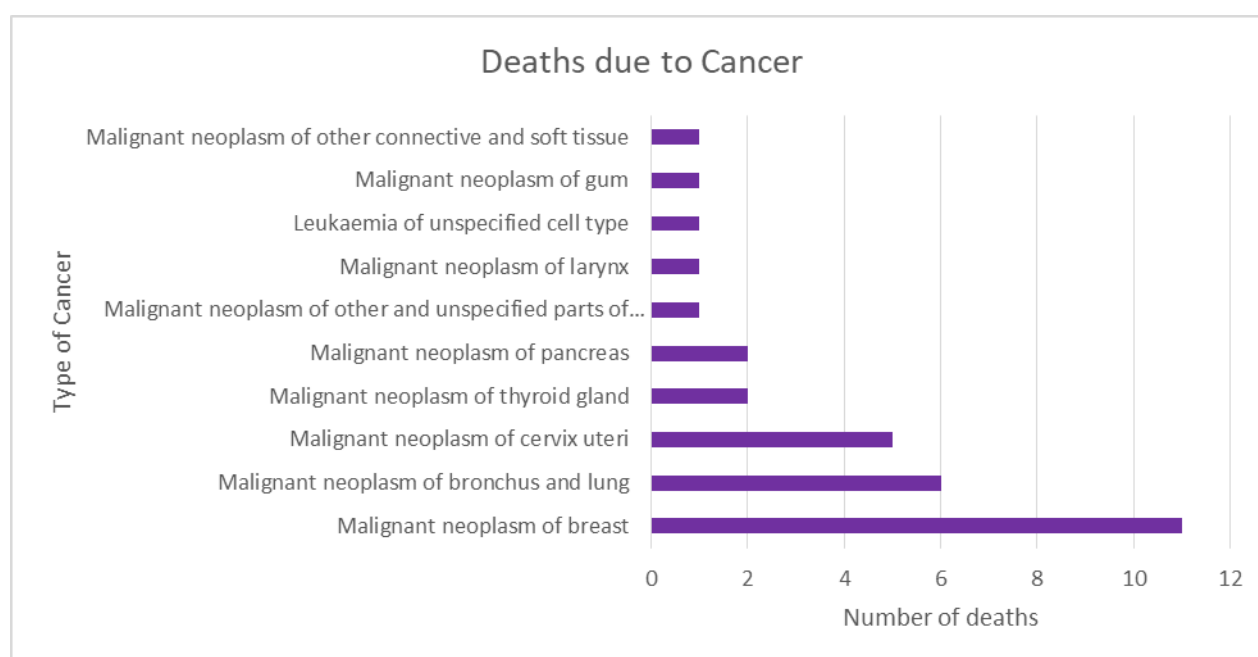
Rank	ICD-10-3	Cause of Death	Gender		Total
			Male	Female	
121	N17	Acute renal failure		1	1
122	R13	Dysphagia	1		1
123	I26	Pulmonary embolism	1		1
124	i95	Hypotension		1	1
125	I34	Nonrheumatic mitral valve disorders	1		1
126	J15	Bacterial pneumonia, not elsewhere classified	1		1
127	D61	Other aplastic anaemias		1	1
128	E88	Other metabolic disorders	1		1
129	N49	Inflammatory disorders of male genital organs, not elsewhere classified	1		1
130	R59	Enlarged lymph nodes	1		1
131	N93	Other abnormal uterine and vaginal bleeding		1	1
132	C49	Malignant neoplasm of other connective and soft tissue	1		1
133	D64	Other anaemias		1	1
134	F20	Schizophrenia	1		1
135	P20	Intrauterine hypoxia	1		1
136	A30	Leprosy [Hansen's disease]		1	1
137	B37	Candidiasis		1	1
138	W14	Fall from tree	1		1
139	C02	Malignant neoplasm of other and unspecified parts of tongue	1		1
140	J86	Pyothorax	1		1
141	E16	Other disorders of pancreatic internal secretion		1	1
142	W84	Unspecified threat to breathing	1		1
143	P28	Other respiratory conditions originating in the perinatal period		1	1
144	X49	Accidental poisoning by and exposure to other and unspecified chemicals and noxious substances		1	1
145	P36	Bacterial sepsis of newborn	1		1
146	G44	Other headache syndromes	1		1
147	P74	Other transitory neonatal electrolyte and metabolic disturbances	1		1
148	E41	Nutritional marasmus	1		1
149	P81	Other disturbances of temperature regulation of newborn		1	1
150	K52	Other noninfective gastroenteritis and colitis		1	1
151	V02	Pedestrian injured in collision with two- or three-wheeled motor vehicle	1		1
151	O72	Postpartum Hemorrhage		1	1
Grand Total			433	293	726

Sources: KHIS &amp; MS1as of 31.12.2017

**Table 25: Deaths due to cancer for Kiribati\***

Rank	ICD-10-3	Type of Cancer	Gender		Total
			Male	Female	
1	C50	Malignant neoplasm of breast	1	10	11
2	C34	Malignant neoplasm of bronchus and lung	3	3	6
3	C53	Malignant neoplasm of cervix uteri	1	4	5
4	C73	Malignant neoplasm of thyroid gland		2	2
5	C25	Malignant neoplasm of pancreas		2	2
6	C02	Malignant neoplasm of other and unspecified parts of tongue	1		1
7	C32	Malignant neoplasm of larynx		1	1
8	C95	Leukaemia of unspecified cell type	1		1
9	C03	Malignant neoplasm of gum		1	1
10	C49	Malignant neoplasm of other connective and soft tissue	1		1
<b>Total cancer deaths occurred at a health facility*</b>			<b>8</b>	<b>23</b>	<b>31</b>

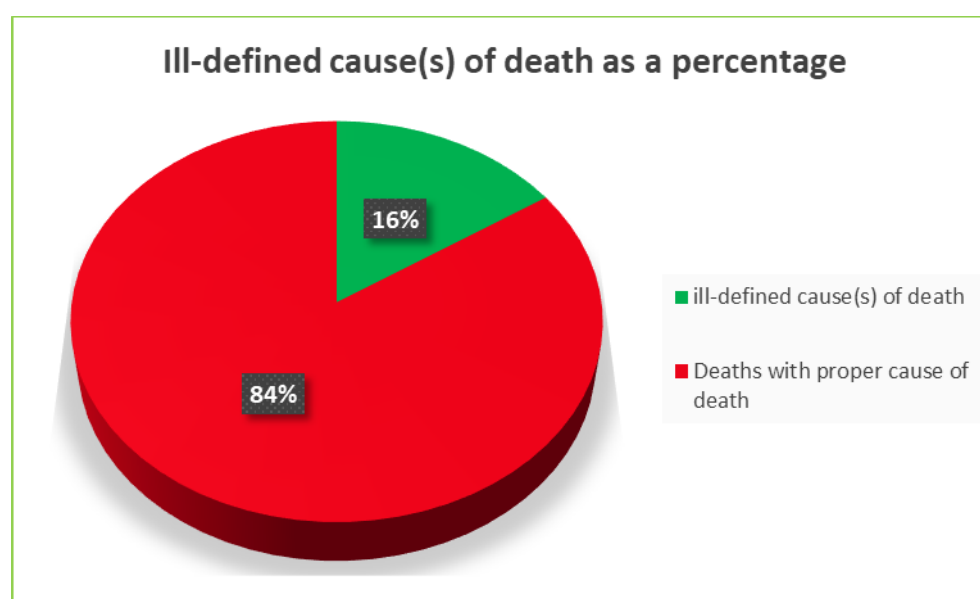
Sources: KHIS & MS1 as of 31.12.2017

**Figure 10: Mortality from cancers**

**Table 26: Ill-defined causes of death for Kiribati\***

Rank	ICD-10-3	Ill-defined cause of death	Gender		Total
			Male	Female	
1	R99	Other ill-defined and unspecified causes of mortality	25	12	37
2	R62	Lack of expected normal physiological development	7	8	15
3	R63	Symptoms and signs concerning food and fluid intake	7	4	11
4	R57	Shock, not elsewhere classified	4	6	10
5	R98	Unattended death	3	5	8
6	R06	Abnormalities of breathing	2	6	8
7	R10	Abdominal and pelvic pain	3	2	5
8	R11	Nausea and vomiting	1	2	3
9	R50	Fever of other and unknown origin	2	1	3
10	R41	Other symptoms and signs involving cognitive functions and awareness	1	1	2
11	R19	Other symptoms and signs involving the digestive system and abdomen		2	2
12	R54	Senility	1	1	2
13	R56	Convulsions, not elsewhere classified	2		2
14	R95	Sudden infant death syndrome		1	1
15	R13	Dysphagia	1		1
16	R07	Pain in throat and chest	1		1
17	R59	Enlarged lymph nodes	1		1
18	R17	Unspecified jaundice		1	1
<b>Total ill-defined deaths occurred at a health facility</b>			<b>61</b>	<b>52</b>	<b>133</b>

Sources: KHIS & MS1 as of 31.12.2017

**Figure 11: Ill-defined cause(s) of deaths as a percentage of total deaths**

## 8. Maternal & Child Health and Family Planning Services

**Access to antenatal care:** The average number of antenatal clinic visits attended per mother in one year: **4.0**

Access to antenatal care =	$\frac{\text{Total number of antenatal visits (first \& revisits) (12,421)}}{\text{Total number of deliveries reported (3,143)}}$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the MS1 and is likely to be affected by under-counting.</li> <li>• It is likely that the number of deliveries is under-reported.</li> </ul>	

**Table 27: Visits to Island Health Centers and Clinics**

First Visits	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Antenatal	319	261	282	259	354	295	286	314	274	261	281	202	3,388
Postnatal	215	176	178	169	210	217	208	207	207	182	205	162	2,336
Child Health: <1yr	389	295	247	223	271	274	249	316	237	264	297	268	3,330
Child Health: 1-4yrs	405	241	126	207	226	130	192	191	166	153	226	236	2,499
MCH Aides	298	334	478	286	347	300	169	244	507	391	316	546	4,216
Pap Smears	48	124	76	239	144	220	48	21	75	165	141	263	1,564
<b>Re-visits</b>													
Antenatal 2nd	435	303	288	399	294	239	252	235	241	245	231	171	3,333
Antenatal 3rd	103	105	158	159	214	248	209	178	143	159	203	152	2,031
Antenatal 4 <sup>th</sup>	86	120	140	120	138	182	168	159	127	111	123	116	1,590
Antenatal 4<	190	142	148	100	173	261	283	167	137	139	169	170	2,079
Postnatal	91	83	18	44	38	22	33	16	31	53	27	21	4,77
Child Health: < 1yr	1,308	1,464	1,056	1,003	997	1,026	967	1,143	1,098	1,057	1,124	1,021	13,264
Child Health: 1-4yrs	1,916	2,523	2,070	2,027	1,968	2,477	2,366	2,246	2,489	2,276	2,331	1,608	26,297
MCH Aides	181	247	268	234	86	168	171	187	268	157	204	159	2,330
Pap Smears		6	8	0	32	28	6	17	38	8	4	3	150

**Source: MS1 as of 31.12.2017**

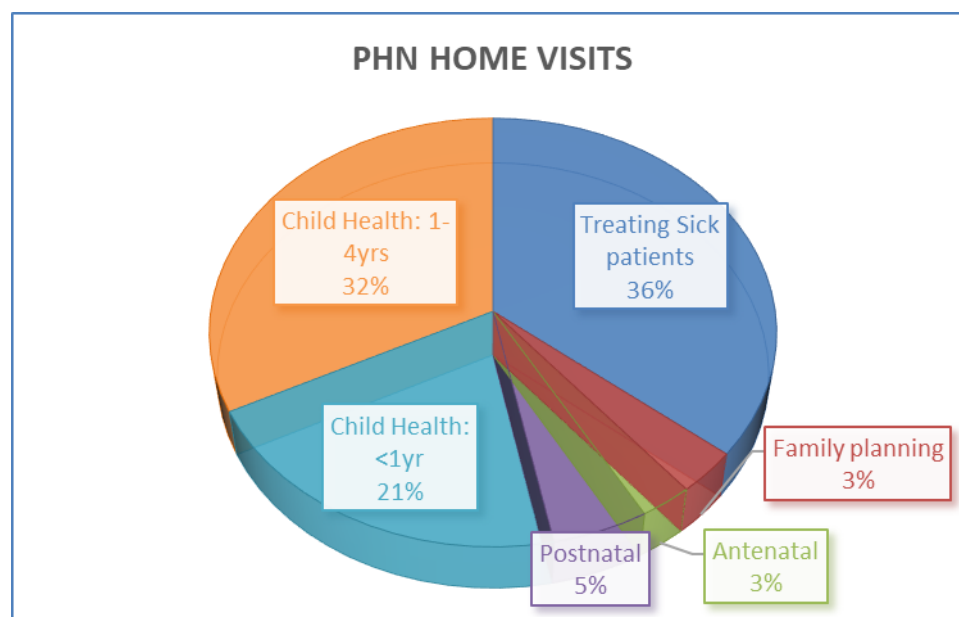
**Percentage of pregnant mothers received at least one home visit by PHN:** The average number of home visits by PHN per mother in one year: **10.4**

$\frac{\text{\% of pregnant mothers received at least one home visit by PHN} \times \text{Number of home visits (328)}}{\text{Total number of deliveries reported (3,143)}} \times 100$	
<b>Methodological/System Issues:</b> <ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the MS1 and is likely to be affected by under-counting.</li> <li>• It is likely that the number of deliveries is under-reported.</li> </ul>	

**Table 28: PHN Home Visits**

Service offered	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Sick patients treated	536	371	309	350	354	316	291	350	362	409	342	298	4,288
Family planning	47	46	20	40	32	26	20	31	30	19	49	27	387
Antenatal	30	20	13	18	30	28	23	30	42	36	35	23	328
Postnatal	84	38	26	30	43	29	35	76	78	64	62	37	602
Child Health: <1yr	195	220	245	198	155	137	220	258	184	232	243	184	2,471
Child Health: 1-4yrs	364	301	363	270	278	247	342	331	268	387	413	318	3,882

Source: MS1 as of 31.12.2017



**Figure 12: PHN home visits (as a percentage)**

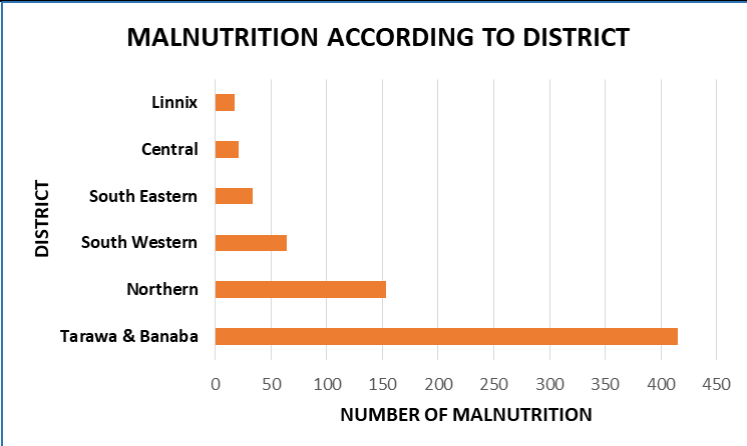
**Percentage of Low Birth Weight:** Percentage of having a low birth weight (<2500g) baby (per 100 live births): **7.2**

Percentage of LBW =	$\frac{\text{Number of Low Birth Weight babies (<2500 gm) (220)}}{\text{Total number of live births (3,069)}} \times 100$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>• Births with unrecorded outcomes were counted as live births.</li> <li>• It is likely that the number of deliveries is under-reported.</li> </ul>	

**Malnourished children:** Percentage of children (aged <5 years) classified as malnourished or severely malnourished in the MS1 Health Facility Monthly Reporting Form: **5.0**

Percentage of Malnourished Children =	$\frac{\text{Total number of malnourished children <5 years (704)}}{\text{Total population of children (<5 years) (14,393)}} \times 100$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• 2015 census population is used as base population.</li> <li>• Data for 2017 has been sourced from the MS1 and is likely to be affected by under-counting.</li> <li>• Strengthened and timely reported would contribute to more accurate figures.</li> </ul>	

**Table 29: Malnutrition among <5yr children according to districts**

District	No.	
Central	21	
Linnix	17	
Northern	153	
South Eastern	34	
South Western	64	
Tarawa & Banaba	415	
<b>Total</b>	<b>704</b>	

Source: MS1 as of 31.12.2017

**Figure 13: Malnutrition among <5yrs according to districts**



**Table 30: Malnutrition among <5yr children**

Island	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TUC	9	12	10	13	16	8	18	18	14	17	13	7	155
BTC	30	24	5	2	8	42	9	13			5	9	147
Tarawa North	5		1	9	5	11	2	25	21	18	9	5	111
Abaiang	10	12	5	6	1	7	5	8	16	1	2		73
Marakei	1	5			1	3	2	21	21	2		3	59
Onotoa	4	1	5	3		1	1	8	8	2		4	37
Tab North		6	4	1		2	4	2	1				20
Nikunau	2		3	4	4	1					2		16
Beru	5	3			5				1				14
Butaritari		4	1	2			2	3	1	1			14
Kiritimati		2	1		1	3				2			9
Abemama	1			3			1		1	1	1		8
Makin	3	1			1		2						7
Maiana			3				2					1	6
Nonouti		1	2			1				1	1		6
Aranuka	1			1						3			5
Tabuaeran			1	1				1	1		1		5
Teraina												3	3
Arorae						3							3
Kuria						1	1						2
TCH		2											2
Tamana							1						1
Tab South							1						1
Kanton													
<b>Total</b>	<b>71</b>	<b>73</b>	<b>41</b>	<b>45</b>	<b>42</b>	<b>82</b>	<b>51</b>	<b>99</b>	<b>85</b>	<b>48</b>	<b>34</b>	<b>32</b>	<b>704</b>

Source: MS1 as of 31.12.2017

**Contraceptive use:** Total number of contraceptive contacts (all forms) seen at health facilities in one year (per 1,000 population): **264.6**

Contraceptive contacts (all forms) seen at health facilities =	<u>Contraceptive contacts (all forms) seen at health facilities (29,147)</u> Total population (110,136)	X 1,000
<b>Methodological/System Issues:</b>		
<ul style="list-style-type: none"> <li>• 2015 census population is used as base population.</li> <li>• Data for 2017 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple-counting.</li> <li>• Strengthened and timely reporting would contribute to more accurate figures.</li> </ul>		

**Table 31: Family Planning services**

Method of FP	Category	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Micro-lute	Continuers from last month	27	15	23	14	14	7	10	38	57	55	44	39	343
	New clients		3	2		6	4	31	27	7	5	1	5	91
	Restart		2			1	2		4		0		0	9
	Discontinuers	5		5	1	2		3	1	2	14	1	8	42
	Lost contact	3		1					5				2	11
	Continuers at end of month	19	21	16	12	19	11	47	66	61	46	36	33	387
Micro-gynon	Continuers from last month	107	106	106	97	101	98	151	165	167	153	131	123	1,505
	New clients	21	10	16	12	14	32	61	40	12	11	12	14	255
	Restart		3	7	3	1	3	7	3	2	3	3	2	37
	Discontinuers	5	9	9	3	15	7	24	17	26	33	18	13	179
	Lost contact	4		8			2		8	2	7	1	11	43
	Continuers at end of month	119	114	111	112	103	124	200	187	156	134	120	106	1,586
Depo Provera	Continuers from last month	1,439	1,360	1,346	1,303	1,395	1,444	1,379	1,198	1,277	1,381	1,412	1,300	16,234
	New clients	99	120	94	96	117	105	57	112	147	122	99	110	1,278
	Restart	28	26	42	31	59	52	31	56	61	59	38	18	501
	Discontinuers	98	73	115	53	70	113	219	89	54	63	98	121	1,166
	Lost contact	11	15	10	11	15	20	15	23	6	10	17	11	164
	Continuers at end of month	1,427	1,454	1,370	1,402	1,482	1,441	1,226	1,247	1,430	1,477	1,408	1,300	16,664
Condoms	For Male	320	684	481	2,786	4,399	3,106	4,445	2,293	3,511	2,817	609	380	25,831
	For Female	7	104	24	88	19	23	39	24	16	9	6	6	365
Ovulation		26	13	23	10	29	29	31	18	17	16	16	11	239
	Inserted this month				0						6	3	1	10
IUCD	Removed this month		1	1	0					2			2	6
	Inserted this month	50	27	21	24	37	26	24	41	47	50	45	37	429
Jedell	Removed this month	39	45	46	54	52	32	29	37	33	47	27	31	472
Vasectomy		2	2		1	1				1		1		8
Tubectomy		3	7	7	8	11	2	1	16	17		10	12	94

Source: MS1 as of 31.12.2017

## 9. Immunization Services

**Children immunized against measles:** Percent of children (aged <1 year) who have received one dose of measles-containing vaccine in one year: **92.9**

Measles Coverage =	$\frac{\text{Number of children aged <1 years receiving the MCV1 in a year (2,524)}}{\text{Total number of children aged <1 years (2,716)}} \times 100$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>• 2015 census population is used as base population.</li> <li>• Data for 2017 has been sourced from the MS1 and is likely to be affected by under-counting and/or multiple-counting.</li> <li>• Strengthened and timely reporting would contribute to more accurate figures.</li> </ul>	

**Table 32: Immunization Overview (Children <1yr) according to districts**

Vaccine type	District						Grand Total
	Central	Linnix	Northern	South Eastern	South Western	Tarawa & Banaba	
BCG	84	194	210	62	157	2,247	<b>2,954</b>
Failed BCG (no scar)	4		7	2	3	34	<b>50</b>
HepB (<24 hrs)	86	230	204	62	159	2,234	<b>2,975</b>
HepB (>=24 hrs)	4	7	5	3	2	42	<b>63</b>
IPV	172	268	272	109	230	1,655	<b>2,706</b>
MR1	192	207	336	115	170	1,504	<b>2524</b>
OPV1	165	297	289	95	216	1,849	<b>2,911</b>
OPV2	169	300	316	111	247	1,696	<b>2,839</b>
OPV3	183	262	341	104	229	1,684	<b>2,803</b>
PENTAVALENT1	171	297	292	98	215	1,850	<b>2,923</b>
PENTAVALENT2	184	297	315	109	246	1,715	<b>2,866</b>
PENTAVALENT3	188	266	319	109	241	1,682	<b>2,805</b>
PNEUMOCCOCAL1	180	295	288	96	219	1,848	<b>2,926</b>
PNEUMOCCOCAL2	186	296	316	108	235	1,727	<b>2,868</b>
PNEUMOCCOCAL3	187	282	319	110	241	1,695	<b>2,834</b>
ROTA1	177	298	287	97	206	1,851	<b>2,916</b>
ROTA2	188	293	309	108	233	1,722	<b>2,853</b>
<b>Grand Total</b>	<b>2,520</b>	<b>4,089</b>	<b>4,425</b>	<b>1,498</b>	<b>3,249</b>	<b>27,035</b>	<b>42,816</b>

Sources: KHIS and MS1 as of 31.12.2017

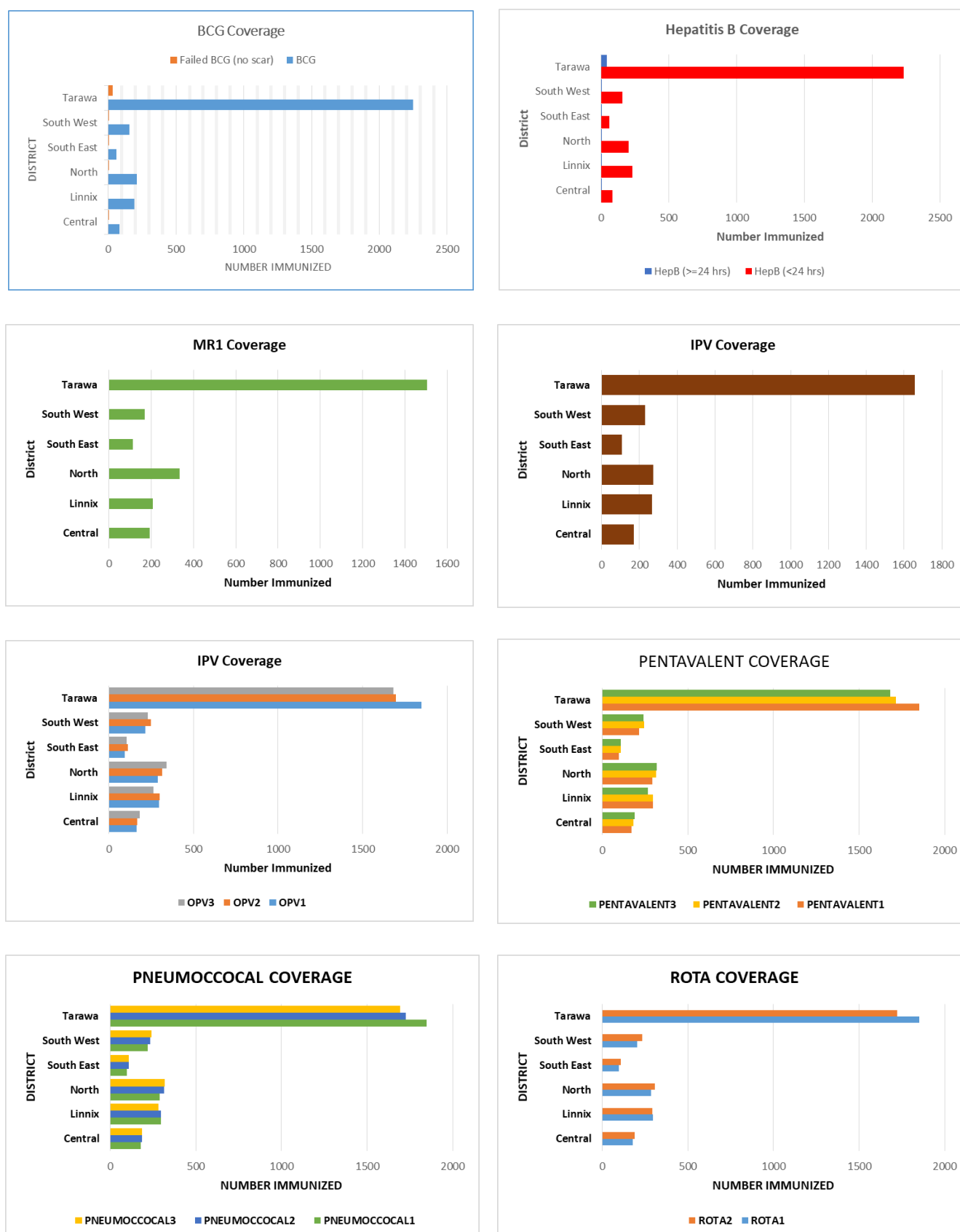


Figure 14: Immunization coverage (Children <1yr): district breakdowns

**Table 33: Immunization Overview (Children <1yr)\***

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
HepB (<24hrs)	231	205	229	217	254	242	254	291	265	273	245	269	<b>2,975</b>
HepB (>=24hrs)	2	9	6	4	4	6	8	4	9	2	2	7	<b>63</b>
BCG	241	192	221	220	255	242	256	292	251	273	245	266	<b>2,954</b>
Failed BCG (no scar)	2	15	6	5	4	9	11	5	12	2	2	11	<b>86</b>
Pentavalent1	262	210	224	191	247	233	210	307	260	294	260	225	<b>2,923</b>
Pentavalent2	222	233	223	216	212	225	229	261	259	265	297	224	<b>2,866</b>
Pentavalent3	232	206	220	196	245	197	216	269	224	293	271	236	<b>2,805</b>
IPV	220	211	206	184	230	195	215	262	223	261	268	231	<b>2,706</b>
Rota1	260	218	222	190	239	231	207	300	263	300	264	222	<b>2,916</b>
Rota2	228	245	227	204	190	211	239	260	252	270	306	221	<b>2,853</b>
Pneumococcal1	261	204	231	188	244	232	211	303	266	286	276	224	<b>2,926</b>
Pneumococcal2	234	230	221	208	206	229	228	267	264	264	297	220	<b>2,868</b>
Pneumococcal3	233	209	232	187	246	186	216	269	239	289	291	237	<b>2,834</b>
OPV1	264	208	224	183	238	218	223	305	273	290	264	221	<b>2,911</b>
OPV2	237	222	226	209	204	215	222	262	256	277	291	218	<b>2,839</b>
OPV3	223	208	225	195	227	180	215	259	249	301	283	238	<b>2,803</b>
MR1	219	198	181	142	234	210	235	260	195	218	245	187	<b>2,524</b>

Sources: KHIS and MS1 as of 31.12.2017

**Table 34: Immunization Overview (Children 6-14yrs)**

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
MR2 (All class 1)	2	41	17	254	216	251	227	79	288	337	157	5	<b>1,874</b>
DPT4 (All class 1)			14	113		133	114	133	354	246	197		<b>1,304</b>
TT5 (Form 1 girls)		8		0	20	105	26	44	41	323	110		<b>671</b>

Source: MS1 as of 31.12.2017

**Table 35: Immunization Overview (>15yrs)**

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
TT6 (1st pregnancy)	81	51	75	52	76	73	75	94	81	61	59	51	<b>765</b>
TT7 (2nd pregnancy)	50	57	38	37	50	55	60	70	56	48	49	38	<b>550</b>
TT8 (subsequent pregnancy)	106	89	88	93	75	87	93	113	89	87	95	72	<b>987</b>

Source: MS1 as of 31.12.2017



**Table 36: Immunization Overview (Others)**

		Month												Total	
	Category	Sex	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vit A (prophylaxis)	6 - <= 12 mths		17	5	141	59	143	95	84	21	83	358	406	175	1,587
	1 - <= 5 yr		243	43	1,542	536	1,287	875	688	191	777	3,190	2,958	1,236	13,566
	Mothers P/partum					0						7			7
Deworming	1 yr	Male		2	260	77	159	83	116	13	65	349	425	301	1,850
		Female		5	228	75	165	75	103	13	48	339	381	263	1,695
	2 - 5 yr	Male	100	24	843	297	601	359	246	32	401	1,343	1,093	945	6,284
		Female	85	18	836	280	499	378	242	34	358	1,206	1,144	1,016	6,096
	6 - 14 yr	Male	232	40	1,666	535	874	748	853	191	962	2,338	2,365	1,496	12,300
		Female	181	30	1,701	521	939	784	768	168	853	2,311	2,387	1,501	12,144
	15 - 45 yr	Male	96		286	0	25	255		98	26	219	8	378	1,391
		Female	313	49	4,253	1,006	1,961	1,421	1,575	274	1,479	4,618	4,353	2,920	24,222
Exclusive breastfeeding	0 - <= 6 mths		791	792	786	704	844	816	818	821	693	830	803	827	9,525

Source: MS1 as of 31.12.2017

**Table 37: Immunization Overview for TCH (Children <1yr)**

Vaccine type	Month												Total
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Hepatitis B													
Vaccinated <24hrs after birth	135	123	120	126	137	125	156	154	138	144	134	168	1,660
Vaccinated >24hrs after birth	1	6	0	1	0	3	3	1	3	0	1	4	23
Not given													
Total	136	129	120	127	137	128	159	155	141	144	135	172	1,683
BCG													
Given	135	123	120	126	137	125	156	154	138	144	134	168	1,660
Not given	1	6	0	1	0	3	3	1	3	0	1	4	23
Total	136	129	120	127	137	128	159	155	141	144	135	172	1,683

Source: KHIS as of 31.12.2017

## 10. Birth information: TCH

**Table 38: Birth outcomes according to mode of delivery at TCH**

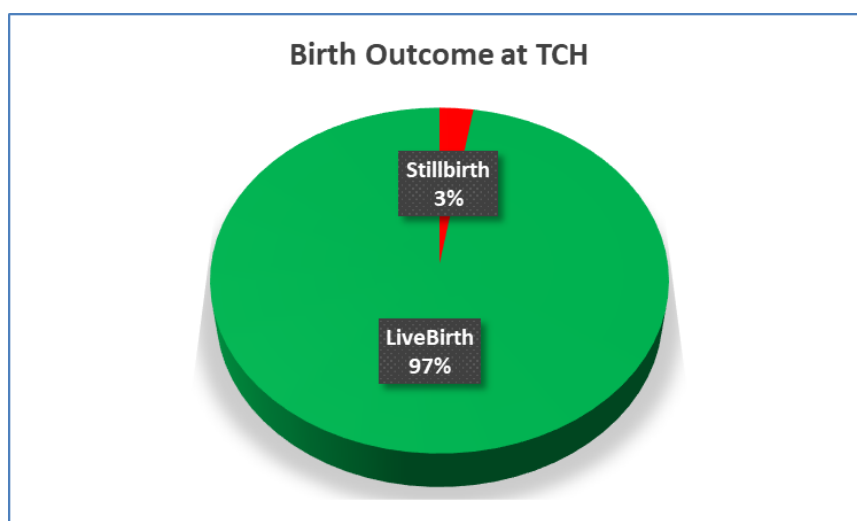
Mode of Delivery	Outcome		Sub Total
	Live birth	Stillbirth	
Normal	1,412	38	<b>1,450</b>
Caesarean Section	267	7	<b>274</b>
Forceps	2		<b>2</b>
Other	2		<b>2</b>
<b>Grand Total</b>	<b>1,683</b>	<b>45</b>	<b>1,728</b>

Source: KHIS as of 31.12.2017

**Table 39: Births outcomes according to type of delivery at TCH**

Type of delivery	Outcome		Sub Total
	Live birth	Stillbirth	
Vertex	1,655	44	<b>1,699</b>
Breech	25	1	<b>26</b>
Face	3		<b>3</b>
<b>Grand Total</b>	<b>1,683</b>	<b>45</b>	<b>1,728</b>

Source: KHIS as of 31.12.2017



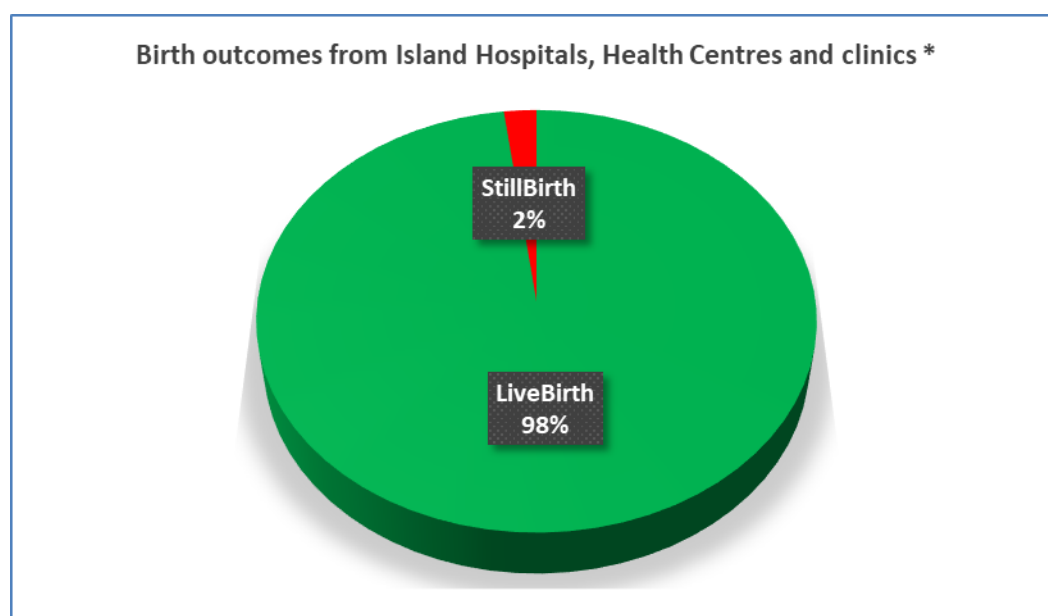
**Figure 15: Birth outcome at TCH**

## 11. Birth information: Island Hospitals, Health Centers and Clinics. (Excluding TCH births)

**Table 40: Birth outcomes reported from island Health Centers and clinics\***

Outcome	Number
Live birth	1,386
Stillbirth	28
Miscarriage	1
Outcome unrecorded	
<b>Grand Total</b>	<b>1,415</b>

*\*Data extracted from MS1 as at 31.12.2017*



**Figure 16: Birth outcomes reported from island Health Centres and clinics \*excluding TCH**

**Table 41: Deliveries at Island Hospital, Health Centers and clinics**

	Total No. of Births		Sub Total
	HC/Clinics	Hospital	
Abaiang	83		83
Abemama	54		54
Aranuka	6		6
Arorae	9		9
Banaba	7		7
Beru	26		26
BTC	32	435	467
Butaritari	61		61
Kiritimati	8	179	187
Kuria	16		16
Maiana	15		15
Makin	22		22
Marakei	50		50
Nikunau	21		21
Nonouti	63		63
Onotoa	21		21
Tab North	8	74	82
Tab South	15		15
Tabuaeran (Fanning)	37		37
Tamana	8		8
Tarawa North	70		70
Teraina (Washington)	50		50
TUC	45		45
<b>Grand Total</b>	<b>727</b>	<b>688</b>	<b>1,415</b>

Source: MS1 as at 31.12.2017

**12. Birth information: District Breakdown****Table 42: Births according to districts\***

District	No. of Births	Count of First Name (Mother)
Central	91	
Linnix	274	<p>Central 3% Linnix 8% North 7% South East 2% South West 6% Tarawa &amp; Banaba 74%</p>
Northern	216	
South Eastern	64	
South Western	181	
Tarawa & Banaba	2,317	
<b>Grand Total</b>	<b>3,143</b>	

Source: KHIS &amp; MS1 as at 31.12.2017

**Figure 17: Births according to districts**

### 13. Country birth information

**Adolescent birth rate for 10-14 years:** Probability of giving birth between the age 10-14 years in a given year (per 1,000 girls age 10-14 years): **1.8**

Adolescent birth rate (10-14 years) =	$\frac{\text{Total number of births in age group 10-14 years for the year (9)}}{\text{Total population of girls (10-14 years) (5,136)}} \times 1,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>It is likely that the number of deliveries is under-reported.</li> </ul>	

**Adolescent birth rate for 15-19 years:** Probability of giving birth between the age 15-19 years in a given year (per 1,000 girls age 15-19 years): **45.2**

Adolescent birth rate (15-19 years) =	$\frac{\text{Total number of births in age group 15-19 years for the year (263)}}{\text{Total population of girls (15-19 years) (5,824)}} \times 1,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as base population.</li> <li>Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting.</li> <li>It is likely that the number of deliveries is under-reported.</li> <li>2015 census population is used as base population.</li> </ul>	

**Table 43: Births reported from Hospitals, Health Centers and Clinics\***

Outcome	No.
Live birth	3,069
Stillbirth	74
Outcome unrecorded	0
<b>Grand Total</b>	<b>3,143</b>



Sources: KHIS & MS1 as at 31.12.2017

**Figure 18: Country birth outcomes**

## 14. Non Communicable Disease (NCD) burden

**Diabetes:** Occasion of service of diabetic cases to health facilities, confirmed or suspected:  
162

% of Diabetes =	<u>Number of people presenting to health facilities with Diabetes (17,820)</u>	X 1,000
	Total population (110,136)	
<b>Methodological/System Issues:</b>		
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting and/or multiple counting.</li> <li>• 1<sup>st</sup> and revisits for diabetic cases over the total population</li> <li>• Strengthened and timely reporting of MS1 would contribute to more accurate figures</li> </ul>		

**Hypertension:** Occasion of service of hypertension cases to health facilities, confirmed or suspected: 147

% of Hypertension =	<u>Number of people presenting to health facilities with Hypertension (16,203)</u>	X 1,000
	Total population (110,136)	
<b>Methodological/System Issues:</b>		
<ul style="list-style-type: none"> <li>• Data for 2017 has been sourced from the KHIS &amp; MS1 and is likely to be affected by under-counting and/or multiple counting.</li> <li>• 1<sup>st</sup> and revisits for hypertension cases over the total population</li> <li>• Strengthened and timely reporting of MS1 would contribute to more accurate figures</li> </ul>		

**Table 44: NCD burden in Island Health Centers and Village Clinics**

NCD	Patient registration & visit	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Hypertension	Patients registered	2,264	2,518	2,588	2,528	2,505	2,575	2,603	2,462	2,737	2,860	2,892	2,297	<b>2,297</b>
	1 <sup>st</sup> Visit + Revisits	1,435	1,292	1,426	1,165	1,548	1,397	1,282	1,334	1,362	1,424	1,459	1,079	<b>16,203</b>
Diabetes	Patients registered	2,490	2,651	2,725	2,615	2,584	2,569	2,735	2,518	2,881	2,906	3,020	2,305	<b>2,305</b>
	1 <sup>st</sup> Visit + Revisits	1,531	1,446	1,594	1,285	1,521	1,616	1,521	1,421	1,535	1,518	1,641	1,191	<b>17,820</b>
Mental illnesses	Patients registered	62	65	59	60	58	61	63	64	71	68	69	43	<b>43</b>
	1 <sup>st</sup> Visit + Revisits	28	17	28	30	28	33	25	27	43	40	37	45	<b>381</b>

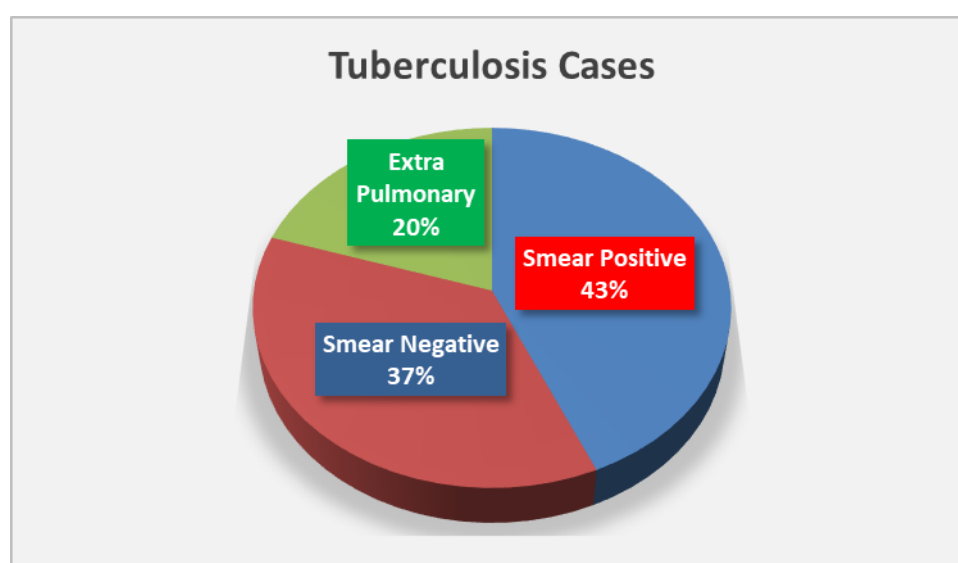
*Source: MS1 as at 31.12.2017*



## 15. Tuberculosis burden

**Tuberculosis case notification rate:** The number of bacteriologically confirmed (new and relapse) tuberculosis cases in a given year (per 100,000 population): **353.2**

Tuberculosis case notification rate =	$\frac{\text{Number of bacteriologically confirmed (new \& relapse) TB cases (389)}}{\text{Total Population (110,136)}} \times 100,000$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>2015 census population is used as the base population</li> <li>Data for 2017 has been sourced form MS1 (from TB reports only)</li> <li>Strengthened and timely reporting of MS1 would contribute to more accurate figures</li> </ul>	



**Figure 19: Tuberculosis case notifications (new & relapsed) for 2016**

**Tuberculosis treatment success rate:** Percentage of new, bacteriologically confirmed smear-positive tuberculosis cases that were cured or in which a full course of treatment was completed: **89.9**

Tuberculosis treatment success rate =	$\frac{\text{Treatment completed + cured TB cases (460)}}{\text{Number of (new + relapsed) TB cases registered for the year (517)}} \times 100$
<b>Methodological/System Issues:</b>	
<ul style="list-style-type: none"> <li>There is a one year lag in reporting for TB treatment success rate</li> <li>Data on treatment completed/Cured TB Cases (for 2016) were sourced form National Tb control program</li> <li>Data for 2016 has been sourced from the MS1 (from TB reports only)</li> <li>Strengthened and timely reporting of MS1 would contribute to more accurate figures.</li> </ul>	

**Table 45: Tuberculosis Reporting**

Type	Category	Month												Total
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Smear Positive	New Cases	16	15	11	14	16	14	15	11	12	12	14	9	159
	Retreatment	3		1		4		1				1		10
	Defaulted													
	Fail													
Smear Negative	New Cases	12	18	12	5	12	5	21	7	5	11	12	19	139
	Retreatment									1			2	3
Extra Pulmonary	New Cases	5	7	3	4	5	4	15	6	3	8	7	7	74
	Retreatment	1				1							2	4

**Source: MS1 as at 31.12.2017**

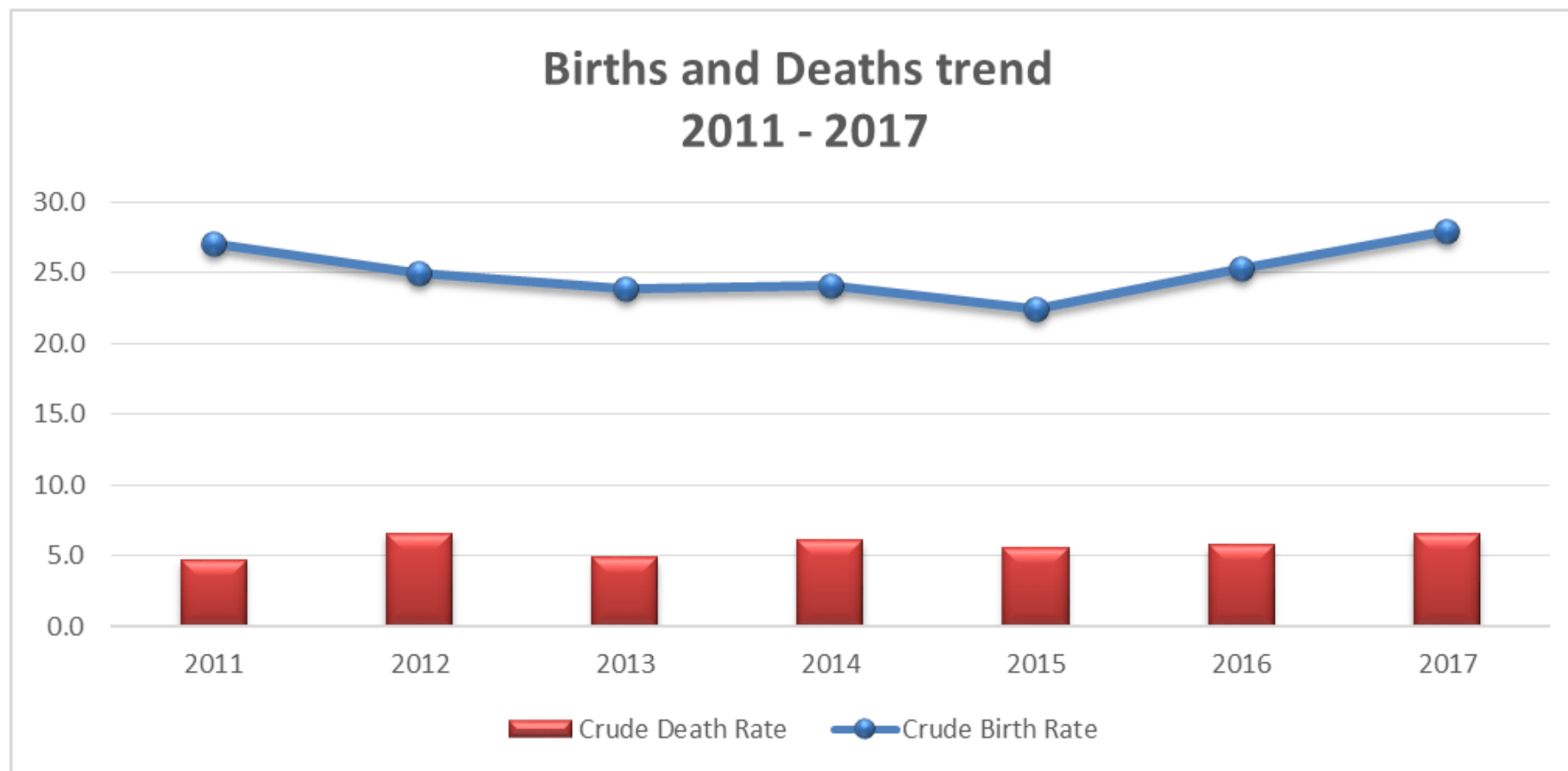
## 16. Leprosy burden

**Table 46: Leprosy Reporting**

Type		Category	Month												Total
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
MB	Adult	Continuers from last month	74	73	72	77	85	81	88	93	98	109	107	109	1,066
		New clients	1		5	8	1	7	5	5	9	3	2	19	65
		Restart													
		Discontinuers	2	1			1								4
		Lost contact													
		Continuers at end of month	73	72	77	85	88	88	93	98	109	107	109	123	1,122
	Child	Continuers from last month	12	12	13	13	12	15	16	16	16	16	17	20	178
		New clients	1	1			3	1				1	3		10
		Restart													
		Discontinuers	1			1									2
	Lost contact														
		Continuers at end of month	12	13	13	12	16	16	16	16	16	17	20	18	185
PB	Adult	Continuers from last month	62	68	76	77	56	64	74	80	88	93	91	97	926
		New clients	8	10	1	7	8	7	6	8	8	6	7	6	82
		Restart						3							3
		Discontinuers	2	2		28	4								36
		Lost contact													
		Continuers at end of month	68	76	77	56	65	74	80	88	93	91	97	101	966
	Child	Continuers from last month	49	53	56	56	36	39	52	53	55	57	56	59	621
		New clients	4	3	1	1	3	11	1	2	1	2	5	4	38
		Restart						2							2
		Discontinuers			1	21	2								24
	Lost contact														
		Continuers at end of month	53	56	56	36	37	52	53	55	57	56	59	62	632

Source: MS1 as at 31.12.2017

# **Births and Deaths trend 2011-2017**



**Figure 20: Births and deaths trend 2011 to 2017**

## Indicator tracker 2015 - 2017

Indicator Tracker	2015	2016	2017	Δ
Total Population	103,058	110,136	110,136	⇔
Crude Birth Rate	20	25.2	27.9	↑
Crude Death Rate	5.9	5.8	6.5	↑
Life Expectancy at Birth	75.1	68.9	66.6	↓
Land Area (klm2)	811	726	726	⇔
Neonatal Mortality Rate	10.2	14	11.1	↓
Infant Mortality Rate	32.4	32.6	26.4	↓
Under-five Mortality Rate	59.1	52.4	44	↓
Maternal Mortality Rate	193.6	179	32.6	↓
Adult mortality rate from NCDs	45.9	43.4	55.9	↑
Mortality rate from road traffic injuries	1.9	1.8	10.9	↑
Adolescent birth rate for 10-14 years	3.4	0	1.8	↑
Adolescent birth rate for 15-19 years	33.1	37	45.2	↑
Contraceptive use	531.2	336	264.6	↓
Access to antenatal care	5.4	3.8	4	↑
Percentage of pregnant mothers received at least one home visit by PHN	15.2	15.2	10.4	↓
Percentage of Low Birth Weight	6.2	5.6	7.2	↑
Malnourished children <5 years	5.7	6.2	5	↓
Tuberculosis case notification rate	421.1	470	353.2	↓
Tuberculosis treatment success rate	79.7	90	88.9	↓
Number of Leprosy cases (new and relapses)	162	241	200	↓
Acute respiratory infection (ARI) in children treated at Tungaru Central Hospital	11.3	14.4	15.9	↑
Children immunized against measles	89.2	82.9	92.2	↑
Diabetes - Occasions of Service	129	150	162	↑
Hypertension - Occasions of Service	123	145	147	↑
Outpatient consultations per capita	5.2	4.9	4.8	⇔
Outpatient consultations per capita for Tungaru Central Hospital (TCH)	0.1	0.1	0.3	↑
Tungaru Central Hospital (patient discharges)	96.1	104.8	104.8	⇔
Tungaru Central Hospital (bed occupancy)	102.8	83.4	85.3	↑
Tungaru Central Hospital (average length-of-stay)	9.5	7.2	6.5	↓

Number of Hospital Beds per 1,000 population	1.7	1.9	1.9	↔
Availability of Medical Officers	4.7	4.7	6	↑
Population per Medical Officer	2,454	2,248	1,669	↓
Availability of Dental Surgeons	0.6	0.5	0.5	↔
Population per Dental Surgeon	17,176	18,356	18,356	↑
Availability of Medical Assistants	3.8	3.2	3.7	↑
Population per Medical Assistant	2,463	3,147	2,686	↓
Availability of Nurses	20.2	31.8	34.8	↑
Population per Nurse	495.5	315	287.6	↓
Availability of Midwives	10.2	7	6.8	↓
Population per Midwife	982	1,430	1,469	↔
Number of Pharmacists available	5	5	5	↔
Number of Physiotherapists available	3	3	3	↔
Number of Hospitals	4	4	4	↔
Number of Health Centers	21	22	22	↑
Number of Village Clinics	81	82	84	↑
Number of Hospital Beds	172	205	205	↔

## Monthly reports submitted in 2017

Island	Health Center	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Makin	MAKIN	15-02-17	15-03-17	14-04-17	12-05-17	15-06-17	11-07-17	09-08-17	07-09-17	14-10-17	15-11-17	21-12-17	16-01-18
	ANRAWA	15-02-17	15-03-17	14-04-17	09-05-17	05-06-17	05-09-17	11-08-17	15-09-17	29-01-18	15-11-17	14-12-17	18-01-18
	KIEBU	12-05-17	12-05-17	12-05-17	12-05-17	14-06-17	04-08-17	09-08-17	14-09-17	29-01-18	15-11-17	12-12-17	16-01-18
Butaritari	BUTARITARI	13-02-17	08-03-17	12-04-17	11-05-17	15-06-17	11-07-17	15-08-17	11-09-17	12-10-17	14-11-17	13-12-17	11-01-18
	KUMA	13-02-17	08-03-17	12-04-17	11-05-17	07-06-17	11-07-17	15-08-17	11-09-17	10-10-17	09-11-17	13-12-17	11-01-18
	NAKIRORO	13-02-17	08-03-17	12-04-17	11-05-17	07-06-17	11-07-17	15-08-17	15-09-17	10-10-17	01-12-17	13-12-17	11-01-18
	TEKANANUEA	13-02-17	08-03-17	12-04-17	11-05-17	15-06-17	15-07-17	15-08-17	07-09-17	10-10-17	09-11-17	13-12-17	11-01-18
	TANIMAIAKI(Butaritari)	13-02-17	08-03-17	12-04-17	11-05-17	07-06-17	11-07-17	15-08-17	15-09-17	10-10-17	09-11-17	13-12-17	12-01-18
	UKIANGANG	13-02-17	06-03-17	12-04-17	12-05-17	07-06-17	11-07-17	15-08-17	11-09-17	10-10-17	09-11-17	13-12-17	11-01-18
	BIKATI	13-02-17	08-03-17	07-04-17	08-05-17	15-06-17	11-07-17	15-08-17	15-09-17	10-10-17	09-11-17	13-12-17	11-01-18
	KEUEA	13-02-17	08-03-17	12-04-17	11-05-17	15-06-17	11-07-17	15-08-17	07-09-17	10-10-17	12-11-17	13-12-17	11-01-18
Marakei	RAWANNAWI	13-02-17	08-03-17	14-06-17	15-05-17	15-06-17	10-07-17	03-08-17	11-09-17	10-10-17	08-11-17	13-12-17	30-01-18
	TEKARAKAN	13-02-17	08-03-17	07-04-17	15-05-17	15-06-17	10-07-17	03-08-17	11-09-17	10-10-17	08-11-17	13-12-17	30-01-18
	BAINUEA	13-02-17	08-03-17	15-04-17	15-05-17	15-06-17	10-07-17	09-08-17	11-09-17	10-10-17	08-11-17	13-12-17	30-01-18
	TERAWARAWA	13-02-17	08-03-17	15-04-17	15-05-17	15-06-17	10-07-17	03-08-17	11-09-17	10-10-17	09-11-17	13-12-17	30-01-18
	RAWEAI	13-02-17	08-03-17	07-04-17	15-05-17	15-06-17	10-07-17	09-08-17	11-09-17	10-10-17	08-11-17	13-12-17	12-01-18
Abaiang	TABURAO	13-02-17	15-03-17	14-04-17	15-05-17	27-07-17	24-07-17	15-08-17	14-09-17	09-10-17	15-11-17	23-01-18	15-01-18
	NUOTAEA	13-02-17	09-03-17	15-08-17	15-08-17	15-08-17	24-07-17	15-08-17	14-08-17	09-10-17	23-01-18	23-01-18	24-02-18
	TANIAU	13-02-17	15-03-17	15-08-17	15-05-17	15-06-17	24-07-17	15-08-17	14-08-17	09-10-17	15-11-17	05-12-17	18-01-18
	RIBONO	13-02-17	09-03-17	15-04-17	15-05-17	15-08-17	24-07-17	15-08-17	14-08-17	10-10-17	23-01-18	23-01-18	15-01-18
	TEBUNGINAKO	13-02-17	15-03-17	15-04-17	15-05-17	27-07-17	27-07-17	15-08-17	14-08-17	12-10-17	14-11-17	23-01-18	15-01-18
	KOINAWA	13-02-17	15-03-17	14-04-17	15-05-17	27-07-17	27-07-17	15-08-17	14-08-17	09-10-17	15-11-17	23-01-18	15-01-18
	TANIMAIAKI(Abaiang)	13-02-17	15-03-17	14-04-17	15-05-17	24-07-17	24-07-17	15-08-17	14-09-17	12-10-17	15-11-17	23-01-18	15-01-18

	UBWARANO	13-02-17	09-03-17	14-04-17	15-05-17	27-07-17	24-07-17	15-08-17	14-09-17	12-10-17	15-11-17	23-01-18	15-01-18
	TUARABU	13-02-17	15-03-17	14-04-17	15-05-17	02-08-17	10-07-17	15-08-17	14-09-17	12-10-17	15-11-17	23-01-18	15-01-18
Tarawa North	ABAOKORO	15-02-17	15-03-17	15-04-17	15-05-17	12-06-17	07-07-17	15-08-17	08-09-17	09-10-17	07-10-17	06-12-17	08-01-18
	TEARINIBAI	08-02-17	07-03-17	07-04-17	08-05-17	15-08-17	15-07-17	15-08-17	08-09-17	10-10-17	07-11-17	13-12-17	01-01-18
	BUARIKI(Tarawa.N)	13-02-17	15-03-17	15-04-17	15-05-17	13-06-17	15-07-17	15-08-17	15-09-17	13-11-17	14-11-17	05-12-17	16-01-18
	TARATAI	07-02-17	01-03-17	07-04-17	15-05-17	12-06-17	10-07-17	15-08-17	15-09-17	10-10-17	07-11-17	13-12-17	08-01-18
	TABITEUEA	12-02-17	15-03-17	13-04-17	02-05-17	02-06-17	03-07-17	02-08-17	15-09-17	13-10-17	15-11-17	15-12-17	15-01-18
	NABEINA	14-02-17	09-03-17	28-04-17	15-05-17	15-06-17	11-07-17	09-08-17	12-09-17	13-10-17	28-11-17	19-02-18	19-02-18
	TABONIBARA	15-02-17	15-06-17	15-06-17	15-06-17	15-06-17	31-07-17	07-09-17	14-09-17	13-10-17	13-11-17	20-12-17	17-01-18
	NOTOUE	New Clinic	New Clinic	New Clinic	New Clinic	New Clinic	03-08-17	21-08-17	15-09-17	27-10-17	01-03-18	01-03-18	15-02-18
TUC	TCH-OPD		14-03-17	12-04-17	15-05-17	13-06-17	14-07-17	15-08-17	15-09-17	15-09-17	14-11-17	15-12-17	19-01-18
	BUOTA(TUC)	06-02-17	08-03-17	11-04-17	10-05-17	12-06-17	10-07-17	09-08-17	06-09-17	10-10-17	10-11-17	14-12-17	12-01-18
	BONRIKI	02-02-17	08-03-17	12-04-17	10-05-17	12-06-17	10-07-17	09-08-17	06-09-17	04-10-17	10-11-17	14-12-17	12-01-18
	TEMWAIKU	15-03-17	15-03-17	12-04-17	12-05-17	15-06-17	15-07-17	15-08-17	15-09-17	12-10-17	14-11-17	27-02-18	15-01-18
	BIK.E	15-02-17	13-03-17	08-04-17	15-05-17	15-06-17	15-07-17	04-08-17	06-09-17	13-10-17	15-11-17	15-12-17	15-01-18
	BIK.W	06-02-17	13-03-17	05-04-17	02-05-17	01-06-17	04-07-17	09-08-17	01-09-17	02-10-17	03-11-17	05-12-17	05-01-18
	EITA	13-02-17	15-03-16	08-05-17	15-05-17	12-06-17	10-06-17	15-08-17	13-09-17	09-10-17	15-11-17	15-12-17	15-01-18
	AMBO	14-02-17	14-03-17	12-04-17	05-05-17	15-06-17	15-06-17	10-08-17	15-09-17	15-10-17	15-11-17	15-12-17	12-01-18
	BANRAEABA	09-02-17	13-03-17	11-04-17	11-05-17	14-06-17	11-07-17	15-08-17	04-09-17	13-10-17	06-11-17	13-12-17	11-01-18
	TEAORAEREKE	10-02-17	15-04-17	07-04-17	05-05-17	08-05-17	13-07-17	04-08-17	05-09-17	04-10-17	10-11-17	13-12-17	12-01-18
	NANIKAI	13-02-17	13-03-17	12-04-17	10-05-17	05-06-17	15-07-17	09-08-17	06-09-17	04-10-17	10-11-17	06-12-17	10-01-18
	BAIRIKI	03-02-17	15-03-17	13-04-17	08-05-17	02-06-17	07-07-17	08-08-17	01-09-17	05-10-17	11-11-17	05-12-17	05-01-18
BTC	BETIO HOSP	10-02-17	03-03-17	11-04-17	15-05-17	06-06-17	15-07-17	15-08-17	12-09-17	16-10-17	14-11-17		27-02-18
	TEMANOKU(BTC)	14-02-17	15-03-17	18-04-17	24-05-17	15-06-17	22-08-17	15-08-17	14-09-17	10-10-17	15-11-17	15-12-17	15-01-18
	TAKORONGA	02-02-17	06-03-17	03-04-17	01-05-17	02-06-17	03-07-17	09-08-17	01-09-17	02-10-17	08-11-17	04-12-17	08-01-18



	TEMAKIN	09-02-17	15-03-17	12-04-17	15-05-17	05-06-17	07-07-17	09-08-17	06-09-17	13-10-17	15-11-17	15-12-17	12-01-18
Banaba	BANABA	14-02-17	08-03-17	13-04-17	09-06-17	14-06-17	10-06-17	10-08-17	11-09-17	09-10-17	16-11-17	10-01-18	10-01-18
Maiana	TABONTEKEKE	15-03-17	15-03-17	02-08-17	02-08-17	02-08-17	02-08-17	11-08-17	14-09-17	15-12-17	15-12-17	15-12-17	11-01-18
	TEKARANGA	15-03-17	15-03-17	15-04-17	02-08-17	02-08-17	15-08-17	11-08-17	15-09-17	15-12-17	15-12-17	15-12-17	21-02-18
	BUBUTEI	15-02-17	15-03-17	14-04-17	22-05-17	17-07-17	15-07-17	15-08-17	15-09-17	15-12-17	29-01-18	15-12-17	29-01-18
	TEBIKERAI	15-02-17	15-03-17	11-04-17	10-05-17	14-06-17	02-08-17	15-08-17	14-09-17	14-10-17	14-11-17	15-12-17	11-01-18
	TANIMAEAO	15-02-17	15-03-17	24-04-17	09-05-17	02-08-17	02-08-17	15-08-17	15-09-17	15-12-17	15-12-17	15-12-17	11-01-18
Kuria	KURIA	13-02-17	15-03-17	14-04-17	15-05-17	15-06-17	15-07-17	09-08-17	08-09-17	09-10-17	12-11-17	15-12-17	15-01-18
	ONEKE	13-02-17	15-03-17	14-04-17	15-05-17	15-06-17	15-07-17	11-08-17	15-09-17	09-10-17	12-11-17	29-12-17	15-01-18
Aranuka	ARANUKA	15-02-17	07-03-17	10-04-17	10-05-17	17-07-17	10-07-17	09-08-17	15-08-17	09-10-17	07-11-17	16-01-18	09-01-18
	TAKAEANG	15-02-17	08-03-17	10-04-17	09-05-17	17-07-17	21-08-17	09-08-17	15-09-17	03-10-17	07-11-17	16-01-18	08-01-18
	BAURUA	01-02-17	08-03-17	10-04-17	09-05-17	09-06-17	07-07-17	02-08-17	06-09-17	09-10-17	14-11-17	16-01-18	03-01-18
Abemama	KARIATEBIKE	13-02-17	08-03-17	10-04-17	05-05-17	15-08-17	15-07-17	15-08-17	06-09-17	09-10-17	14-11-17	19-12-17	10-01-18
	ABATIKU	13-02-17	01-05-17	12-04-17	01-05-17	07-06-17	15-07-17	15-08-17	15-09-17	09-10-17	14-11-17	19-12-17	10-01-18
	TABIANG	13-02-17	08-03-17	10-04-17	05-05-17	07-06-17	15-07-17	15-08-17	11-09-17	09-10-17	14-11-17	27-12-17	19-01-18
	TEKATIRIRAKE	13-02-17	08-03-17	10-04-17	15-05-17	07-06-17	10-07-17	15-08-17	06-09-17	09-10-17	14-11-17	19-12-17	10-01-18
	BARETOA	13-02-17	13-03-17	14-05-17	15-05-17	15-08-17	15-07-17	15-08-17	06-09-17	12-10-17	14-11-17	19-12-17	10-01-18
	KABANGAKI	13-02-17	08-03-17	10-04-17	14-05-17	15-08-17	07-07-17	15-08-17	04-09-17	03-10-17	14-11-17	12-12-17	11-01-18
	TEBWANGA	New Clinic	New Clinic	New Clinic	New Clinic	New Clinic	New Clinic	15-08-17	06-09-17	09-10-17	14-11-17	19-12-17	19-02-18
Nonouti	TEBOBONGA	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	13-11-17	08-12-17	12-01-18
	TEMOTU	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	13-10-17	12-12-17	12-01-18
	TEUABU	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	15-11-17	29-12-17	12-01-18
	ABAMAKORO	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	13-11-17	08-12-17	12-01-18
	MATABOOU	13-02-17	12-06-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	14-09-17	13-10-17	13-11-17	08-12-17	12-02-18
	ROTIMWA	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	13-11-17	08-12-17	12-01-18

	TABOIAKI	13-02-17	15-04-17	14-04-17	09-05-17	01-06-17	07-07-17	15-08-17	14-09-17	13-09-17	15-11-17	08-12-17	12-01-18
	TEMANOKU(Nonouti)	13-02-17	15-03-17	11-04-17	09-05-17	01-06-17	07-07-17	15-08-17	15-09-17	15-10-17	13-11-17	08-12-17	12-01-18
Tab North	SKH	15-02-18	14-03-17	12-04-17	15-05-17	15-05-17	15-08-17	15-08-17	15-09-17	13-10-17		15-02-18	12-01-18
	UTIROA	13-02-17	13-03-17	14-04-17	15-05-17	15-06-17	03-08-17	15-08-17	14-09-14	13-09-17	15-11-17	13-12-17	12-01-18
	TANAEANG	13-02-17	14-03-17	14-04-17	15-05-17	15-06-17	03-08-17	14-08-17	14-09-17	15-10-17	15-11-17	13-12-17	12-01-18
	BUOTA(Tab.N)	13-02-17	13-03-17	14-04-17	15-05-17	15-06-17	03-08-17	15-08-17	14-09-17	09-10-17	15-11-17	15-12-17	12-01-18
	TENATORUA	15-03-17	14-03-17	14-04-17	15-05-17	15-06-17	03-08-17	15-08-17	14-09-17	13-09-17	15-11-17	13-12-17	12-01-18
	AIWA	14-01-17	08-03-17	14-04-17	15-05-17	05-06-17	03-08-17	15-08-17	14-09-17	13-09-17	15-11-17	15-12-17	12-01-18
	TEKABUIBUI	13-02-17	05-07-17	14-04-17	15-05-17	15-06-17	03-08-17	14-08-17	14-09-17	13-09-17	15-11-17	13-12-17	12-01-18
	KABUNA	13-02-17	13-03-17	14-04-17	15-05-17	15-06-17	03-08-17	15-08-17	14-09-17	13-09-17	15-11-17	13-12-17	12-01-18
	TAUMA	13-02-17	03-08-17	14-04-17	05-07-17	15-06-17	03-08-17	15-08-17	14-09-15	13-09-17	15-11-17	13-12-17	12-01-18
Tab South	BUARIKI(Tab.S)	14-02-17	14-03-17	15-04-17	11-05-17	07-06-17	10-06-17	09-08-17	14-09-17	09-10-17	15-11-17	15-12-17	12-01-18
	TEWAI	14-02-17	14-03-17	14-04-17	11-05-17	07-06-17	10-06-17	08-08-17	15-09-17	09-10-17	17-11-17	21-12-17	18-01-18
	TAKU	03-03-17	13-03-17	14-04-17	09-05-17	09-06-17	10-06-17	08-08-17	07-09-17	09-10-17	15-11-17	15-12-17	18-01-18
Onotoa	BURAITAN	13-02-17	08-03-17	12-04-17	10-05-17	02-06-17	07-07-17	15-08-17	15-09-17	06-10-17	14-11-17	15-12-17	15-01-18
	AIKI	13-02-17	08-03-17	12-04-17	10-05-17	02-06-17	06-07-17	15-08-17	15-09-17	14-10-17	11-11-17	15-12-17	15-01-18
	TABUARORAE	13-02-17	08-03-17	03-04-17	10-05-17	02-06-17	15-07-17	15-08-17	15-09-17	14-10-17	04-11-17	15-12-17	15-01-18
	TEKATANA	13-02-17	08-03-17	03-04-17	10-05-17	02-06-17	07-07-17	15-08-17	15-09-17	14-10-17	14-11-17	15-12-17	15-01-18
	OTOAE	13-02-17	08-03-17	12-04-17	10-05-17	02-06-17	03-08-17	15-08-17	14-09-17	14-10-17	14-11-17	15-12-17	15-01-18
Beru	TEMARA	13-02-17	13-03-17	12-04-17	12-06-17	12-06-17	11-07-17	15-08-17	10-11-17	05-10-17	10-11-17	12-12-17	
	NAMON	13-02-17	13-03-17	12-04-17	12-06-17	12-06-17	15-07-17	15-08-17	14-09-17	12-10-17	13-11-17	13-12-17	12-01-18
	AONNATI	13-02-17	13-03-17	12-04-17	12-06-17	12-06-17	11-07-17	15-08-17	14-09-17	05-10-17	10-11-17	14-12-17	15-01-18
Nikunau	MWANRUNGA	15-02-17	14-03-17	11-04-17	09-05-17	15-06-17	11-07-17	11-08-17	15-09-17	09-10-17	09-11-17	13-12-17	12-02-18
	MURITOA	15-02-17	14-03-17	11-04-17	09-05-17	15-06-17	11-07-17	11-08-17	14-09-17	09-10-17	09-11-17	13-12-17	12-02-18
	NIKUMATANG	15-02-17	13-03-17	11-04-17	09-04-17	15-06-17	11-07-17	11-08-17	14-09-17	13-10-17	09-11-17	13-12-17	12-02-18

Tamana	MOTOIA	13-01-17	10-03-17	12-04-17	10-05-17	14-06-17	15-07-17	11-08-17	15-09-17	11-10-17	16-11-17	08-12-17	15-01-18
Arorae	TARIBO	13-02-17	06-03-17	12-04-17	15-05-17	24-07-17	15-07-17	10-08-17	06-09-17	09-10-17	09-11-17	12-12-17	10-01-18
Kiritimati	LONDON HOSP	15-02-17	24-04-17	24-04-17	09-05-17	10-06-17	15-07-17	15-08-17	14-09-17	15-10-17	15-11-17	03-01-18	15-01-18
	BANANA	13-02-17	14-03-17	14-04-17	15-05-17	13-06-17	14-07-17	14-08-17	14-09-17	13-10-17	15-11-17	15-12-17	15-02-18
	POLAND	13-02-17	14-03-16	14-04-17	15-05-17	15-06-17	15-06-17	15-08-17	14-09-17	01-12-17	15-11-17	15-02-18	12-01-18
	TABWAKEA	13-02-17	14-03-17	14-04-17	15-05-17	14-06-17	15-06-17	15-08-17	14-09-17	27-11-17	15-11-17	15-02-18	12-01-18
	LONDON DISP	13-02-17	14-03-17	14-04-17	15-05-17	13-06-17	15-06-17	14-08-17	14-09-17	13-10-17	15-11-17	15-12-17	15-02-18
Tabuaeran(Fanning)	PAELAU	13-02-17	15-03-17	09-05-17	09-05-17	13-06-17	15-07-17	15-08-17	14-09-17	01-12-17	15-11-17	15-12-17	15-02-18
	NAPALI	13-02-17	14-03-17	14-04-17	15-05-17	13-06-17	14-08-17	15-08-17	14-09-17	04-10-17	15-11-17	15-02-18	12-01-18
	ARAMARI	13-02-17	15-03-17	14-04-17	09-05-17	13-06-17	14-08-17	14-08-17	14-09-17	01-12-17	15-11-17	15-12-17	12-01-18
Teraina(Washington)	ARABATA	03-02-17	13-03-17	14-04-17	01-05-17	15-08-17	15-06-17	14-08-17	14-09-17	01-12-17	15-11-17	01-12-17	12-01-18
Kanton	CANTON	13-02-17	15-03-17	14-04-17	15-05-17	13-07-17	13-07-17	08-08-17	04-09-17	04-09-17	15-11-17	15-02-18	12-01-18
Special Clinics	TCH-DIABETIC	14-02-17	15-03-17	05-06-17	05-06-17	05-06-17	04-07-17	09-08-17	21-02-18	21-02-18	21-02-18	21-02-18	21-02-18
	KFHA	10-02-17	15-04-17	04-05-17	15-04-17	15-06-17	10-07-17	07-08-17	05-09-17	13-10-17	07-11-17	15-02-18	03-01-18
	TCH-GYNAE	13-02-17	01-03-17	03-04-17		13-01-18	12-01-18	12-01-18	12-01-18	12-01-18	12-01-18	12-01-18	12-01-18
	TCH-TB	08-03-17	08-03-17	12-04-17	11-07-17	15-06-17	11-07-17	15-08-17	15-09-17	09-10-17	09-11-17	14-12-17	14-01-18
	TCH-ANC	02-06-17	02-06-17	02-06-17	02-06-17	02-06-17	07-07-17	11-08-17					
	TCH-Leprosy	27-06-17	27-06-17	27-06-17	27-06-17	27-06-17	03-08-17	03-08-17	21-12-17	21-12-17	21-12-17	21-12-17	14-02-18
	TCH-IMCI											26-01-18	26-01-18
	HEALTHY FAMILY	15-02-17	10-03-17	06-04-17	15-05-17	15-06-17	15-07-17	15-09-17		23-02-18	23-02-18	23-02-18	23-02-18
	Analeta Pharmacy	New Clinic	14-03-17	03-04-17	15-05-17								
	Prison	New Clinic	New Clinic	14-09-17	14-09-17	14-09-17	14-09-17	14-09-17	14-09-17	19-10-17	03-11-17	20-12-17	15-02-18

\*Green – Received on time

\*Yellow – Received late

\* Red – Not submitted

## Notes

This image shows a single sheet of white paper with horizontal black ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.